



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

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William C. Withycombe, Regional Administrator
FAA-Western-Pacific Region
Federal Aviation Administration
Box 92007 - Worldway Postal Center
Los Angeles, California 90009

September 24, 2001

Dear Mr. Withycombe:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement/Report (DEIS/R) for **LOS ANGELES INTERNATIONAL AIRPORT (LAX), PROPOSED MASTER PLAN IMPROVEMENTS, Los Angeles County, California** (CEQ #010024, #D-FAA-K51039-CA). Our comments on this DEIS/R were prepared prior to the tragic events of September 11, 2001. Along with all Americans, we are stunned by what has happened and continue to grieve the loss of so many innocent lives. We know our country is deeply affected, and recognize that the Federal Aviation Administration's (FAA's) priorities and future activities will respond to these events. As FAA develops a course of action, EPA stands ready, as a Federal partner, to provide assistance to FAA now and in the future.

The subject DEIS/R is a joint Federal/State document, prepared to meet the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The Federal Aviation Administration (FAA) is the lead agency for this document under NEPA and the City of Los Angeles is the lead agency under CEQA. Our comments are provided under NEPA, the Council on Environmental Quality's (CEQ) NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act (CAA). We sent scoping comments to FAA on the Notice of Intent to prepare the DEIS/R on July 31, 1997, and attended one of the three June 9, 2001 public workshops held in connection with the DEIS/R (Inglewood session). We have had a number of phone conversations with Mr. David Kessler of FAA to discuss issues raised by EPA's review of the DEIS/R. We acknowledge the extensive effort in preparing this DEIS/R and commend FAA's decision to conduct six additional public workshops and extend the comment period to September 24, 2001.

In addition to No Action, the DEIS/R fully evaluated three action alternatives: construction of a new north side runway, construction of a new south side runway, and relocation of an existing runway (Proposed Action, Alternative C). Each build alternative proposes the construction of new taxiways and runway extensions; construction of new terminal buildings and parking garages and a rental-car consolidated facility; construction of a ring road and connection to I-405; construction of new and relocated air cargo and maintenance facilities and roads; extension of the Metro Green Line into the airport; and land acquisition.

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Based on our review, we rate the DEIS/R as EO-2, Environmental Objections - Insufficient Information. Please refer to the attached '*Summary of EPA Rating Definitions*,' found in EPA's Policy and Procedures for the Review of Federal Actions Impacting the Environment (1984). EPA's policy provides for a rating of Environmental Objections (EO) where EPA's review finds that "an action might violate or be inconsistent with achievement or maintenance of a national environmental standard," and in cases where "there are no applicable standards...but there is a potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives." The "2" rating (Insufficient Information) serves to identify additional or clarifying information that FAA should provide in the Final EIS/R (FEIS/R). Issues upon which we base our EO-2 rating include:

- (a) The DEIS/R's acknowledgment that all three action alternatives, as well as No Action, cause violations of the National Ambient Air Quality Standards (NAAQS); additional information is needed to determine the project's contribution to the projected NAAQS violations and to assess the effectiveness of associated mitigation;
- (b) The DEIS/R's acknowledgment regarding disproportionately high, adverse impacts from aircraft noise to low-income and minority communities; additional information is needed to assess whether other reasonable alternatives and/or associated mitigation can successfully reduce these acknowledged disproportionate effects;
- (c) Potential adverse health effects associated with air pollution increases, especially diesel particulates; and
- (d) Failure to fully analyze a regionally-based alternative that may reduce disproportionately high, adverse impacts on low-income and minority communities.

These issues are summarized below and described in greater detail in our attached comments.

NAAQS Violations: The DEIS/R projects violations of the NAAQS for at least two criteria air pollutants for the three action alternatives (see p. 4-509). Due to the severity of existing and projected air quality challenges in the South Coast Air Basin, EPA is seriously concerned about Federally-approved actions projected to yield additional air quality burdens. The DEIS/R projects that all three action alternatives (as well as No Action) will cause NAAQS violations in one or more years, i.e., 2004, 2005, and/or 2015. For Alternative C (Proposed Action), the DEIS/R informs us that maximum concentrations for nitrogen dioxide (NO₂) and particulate matter (PM₁₀) are predicted to violate the annual NO₂ NAAQS, and the 24-hour and annual PM₁₀ NAAQS in 2004 and 2005. The PM₁₀ NAAQS are predicted to be exceeded in 2015. Documenting the project's contributions to these projected NAAQS violations, and how they would be successfully mitigated, is a critical consideration in terms of NEPA public disclosure. All affected agencies should participate in developing adequate, enforceable air quality mitigation that can be shown to have quantifiable emissions reductions such that any NAAQS violations are successfully avoided and/or mitigated. Absent this finding in the FEIS/R, the public has no assurance that the project complies with the CAA. EPA will continue working cooperatively with FAA and other parties as planning for this project moves forward.

We recognize that the DEIS/R identifies areas where mitigation can make a significant difference in the magnitude and occurrence of specific impacts. Recognizing that this project's

NEPA documentation needs a more detailed discussion of mitigation measures, we look forward to working with FAA in developing an effective, efficient package of mitigation with respect to air quality impacts. Such mitigation efforts could include diesel retrofits for construction equipment and support vehicles, the use of alternative-fueled vehicles at LAX, and other measures. It is important to involve local communities and local authorities in developing mitigation measures.

We note that, based on information in 4.6 (Air Quality), it appears that the project will cause significant emissions, which may make it difficult for FAA to make a positive conformity determination under CAA Section 176(c) and EPA's general conformity regulation. The DEIS/R does not discuss how FAA will address CAA general conformity, including whether an appropriate level of air quality mitigation will help ensure that the project conforms under the CAA. EPA recommends that the FEIS/R address how the project will meet the general conformity regulations.

Disproportionately High, Adverse Impacts: Executive Order 12898 requires that Federal agencies identify and address disproportionately high, adverse human health or environmental effects on minority and low-income populations as a result of Federal projects. The U.S. Department of Transportation's (DOT) Environmental Justice Strategy provides that when such disproportionate impacts are identified, DOT is to *"ensure that any of their respective...activities that will have a disproportionately high and adverse effect on minority populations or low-income populations will only be carried out if further mitigation measures or alternatives that would avoid or reduce the disproportionately high and adverse effects are not practicable."*

Page ES-46 acknowledges significant, disproportionate impacts to such communities due to aircraft noise, and potentially air quality and health. Pages 4-395 and 4-396 state that projected increases in aviation activity at LAX would have a disproportionate impact on minority and low-income communities under all three action alternatives, and that noise mitigation may be inadequate to eliminate associated impacts. The DEIS/R informs us that increased emissions of NO_x, particulate matter and toxic air pollutants could have significant impacts throughout the South Coast Air Basin, and that health effects associated with these pollutants (such as asthma) are more prevalent among low-income and minority populations. According to the DEIS/R, these air quality impacts have the potential to affect minority and low-income individuals "more severely than the general population." Although the DEIS/R refers to mitigation to avoid or minimize adverse impacts, the FEIS/R should identify what mitigation and/or alternatives will be implemented, and determine the extent to which adverse impacts can be reduced or eliminated. We are willing to assist FAA in developing mitigation such as the Environmental Justice Action Plan, which should be developed in close coordination with affected local communities, in keeping with the Council on Environmental Quality's guidance on environmental justice under NEPA.

Other Air Pollutants: The DEIS/R includes a major health effects analysis and we acknowledge this effort. However, the DEIS/R does not satisfactorily address two air pollutants of concern: toxic particulates and acrolein. Page 4-1008 acknowledges that diesel particulates, a State of California-listed carcinogen, account for 70% of the cancer risk due to air pollution in the air

basin. Diesel particulate emissions are linked to adverse respiratory effects, e.g., asthma, especially in children of low-income and minority communities. The State of California recently listed acrolein as one of five air toxics significantly impacting childrens' health. The DEIS/R projects large increases in toxic particulate and acrolein emissions from aircraft, cargo transport, ground service vehicles and construction equipment. The FEIS/R should assess the health impacts of these toxic emissions and the extent to which such impacts will be adequately mitigated.

LAWA's Air Quality and Source Apportionment Study: EPA commends LAWA for undertaking the '*Air Quality and Source Apportionment Study of the Area Surrounding Los Angeles International Airport,*' and we remain committed to our continued role in the completion and implementation of this study. LAWA's air quality and source apportionment study is designed to remedy deficiencies in current information about LAX's current operations on air quality and surrounding communities. Given the existing and projected air quality impacts associated with LAX, this study is extremely important. The data and analysis that becomes available through this study will facilitate full disclosure of impacts, identify appropriate mitigation measures, and inform the NEPA decision-making process. As it becomes available, FAA should fully integrate the information and analysis of the air quality and source apportionment study in this project's NEPA document and decision-making process.

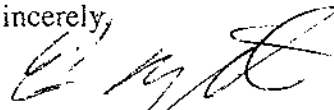
Alternatives: NEPA requires disclosure of adverse impacts and how such impacts may be avoided or minimized. Since the project's stated purpose is to "respond to local and regional demand for air transportation during...2000-2015" (p. ES-6), we believe the range of fully evaluated alternatives is too narrow. This is critical in light of FAA's recognition of disproportionately high, adverse impacts on minority and low-income communities from aircraft noise, and potentially air quality and health. While the DEIS/R mentions an alternative for other regional airports, FAA determined it is not reasonable. EPA believes there is not sufficient information in the DEIS/R to support this conclusion and strongly recommends that the FEIS/R include an analysis of the extent to which greater use of existing commercial airports in the five-county region may help to meet the project's stated purpose and need while potentially reducing adverse impacts. While new and/or additional information could be presented in the FEIS/R, a supplemental EIS may be more useful and appropriate to present a broader range of fully evaluated alternatives. Given the scope and complexity of managing projected increases in air traffic over the next 15 years in the five-county region, FAA should consider a comprehensive, long-term effort beyond this particular NEPA document to examine strategies to fairly and effectively distribute air traffic at the commercial airports of the five-county region. We believe such an approach is consistent with the recent commitment by the Secretary of Transportation to establish a task force to assess aviation demand and airport capacity in southern California.

Conclusion: As noted, EPA is particularly concerned with the projected NAAQS violations attributable to this project, lack of a detailed plan to avoid and/or mitigate disproportionately high, adverse impacts to minority and low-income populations, potential health effects, and the narrow range of alternatives that were fully evaluated. EPA believes there are serious deficiencies in the information presented in the DEIS/R, which leads to a high level of uncertainty about the magnitude of potential impacts associated with this project. The findings

and recommendations of LAWA's air quality and source apportionment study are especially relevant to FAA's decision-making, and merit careful consideration in this NEPA process. The FEIS/R should include FAA's general conformity determination and related mitigation commitments. No matter what alternative under NEPA is finally selected, including No Action, there are major regional air quality, environmental justice, and other issues needing resolution. Because of the complexity of issues involved in avoiding and/or mitigating the projected NAAQS violations attributable to this project, it is important that such issues be addressed with the involvement and cooperation of all parties (e.g., the public, industry, and Federal, State, regional and local governments), utilizing existing regulatory processes to protect air quality in the South Coast Air Basin. EPA looks forward to working with FAA, LAWA, and Secretary Mineta's Task Force to find an effective, comprehensive approach to air transportation in the region and to address the issues raised by the DEIS/R and the public comment process.

Please refer to our attached comments for a detailed explanation of EPA's objections and other issues raised by our review. We look forward to working with FAA to resolve the objections raised by our review. If you have any questions, please call me at 415-744-1585. David Tomsovic is the staff contact for this project, and can be reached at 415-744-1575.

Sincerely,



Enrique Manzanilla, Director
Cross Media Division

Attachments: 3

- (a) Summary of EPA Rating Definitions
- (b) Detailed EPA comments on DEIS/R
- (c) Honeywell letter to EPA

cc:

David B. Kessler, FAA, Los Angeles
Michael Ritchie, Division Administrator, FHWA, Sacramento
Horst Greczmiel, Associate Director of NEPA Oversight, CEQ, Washington, D.C.
Anne Miller, Director, Federal Activities, EPA, Washington, D.C.
The Honorable James Hahn, Mayor of Los Angeles
Lydia Kennard, Executive Director, Los Angeles World Airports
Dr. Alan C. Lloyd, Ph.D., Chairman, California ARB, Sacramento
Barry Wallerstein, Executive Officer, SCAQMD, Diamond Bar, CA
The Honorable Roosevelt F. Dorn, Mayor of Inglewood
[All cc's with attachments (a) and (b)]

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SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

U.S. EPA's Detailed Comments on Draft Environmental Impact Statement/Report (DEIS/R) for Los Angeles International Airport (LAX) Master Plan Improvements - September 24, 2001

INTRODUCTION

EPA's Comments on the Draft Environmental Impact Statement/Report (DEIS/R)

EPA's comments on the DEIS/R are based upon our review of the document by staff, attendance at the June 9, 2001 public workshop in Inglewood, viewing a video prepared by Los Angeles World Airports (LAWA) and shown at this workshop, and discussions with staff of the Federal Aviation Administration (FAA). We have reviewed information posted by LAWA on its Palmdale and Ontario facilities, and are in discussions with LAWA as it has been developing an air quality and source apportionment study for the airport. EPA raises the following issues in connection with this project and DEIS/R.

Public Concerns on the Impacts of LAX and this Project

We recognize that commercial air traffic in the five-county Los Angeles region will continue to grow over the next 15 years, as it will across the nation, and that the purpose of the Master Plan Project is to accommodate a portion of this projected demand. However, it is critical that FAA and other responsible parties acknowledge that daily flight operations at LAX have significant, adverse impacts on adjacent communities, and that the National Environmental Policy Act (NEPA) provides a valuable mechanism to address the serious concerns raised by residents affected by LAX. The DEIS/R recognizes disproportionately high, adverse impacts on minority and low-income communities due to aircraft noise, and potentially air quality and health (e.g., p. ES-46). Many comments raised by residents at the June 9, 2001 Inglewood workshop concerned the environmental impacts of commercial air traffic at LAX and associated questions of equity. Specifically, the contention was raised at the Inglewood workshop that residents in communities adjacent to LAX are more adversely affected by daily aircraft operations than others living in the five-county region served by LAX. The residents' concerns appear validated by wording on page ES-46 about disproportionate effects on low-income and minority communities.

- *Recommendation:* Although we recognize that residents closer to airports are generally affected in an adverse manner more so than others more distant (especially aircraft noise and emissions from aircraft, airport service equipment, and airport-related vehicular traffic), it is incumbent upon FAA to determine if there are practicable or reasonable means to avoid or minimize adverse impacts to residents. The Final EIS/R (FEIS/R) should address this issue.

AIR QUALITY

Projected Violations of National Ambient Air Quality Standards

EPA objects to the projected violations of the National Ambient Air Quality Standards (NAAQS) for nitrogen dioxide (NO₂), carbon monoxide (CO), and particulate matter (PM₁₀) identified in

the DEIS/R. The South Coast Air Basin has one of the most severe air quality problems in the nation. The air basin is a 'nonattainment' area for the NAAQS for ozone, PM10, and CO (p. 4-511). We have objections because the DEIS/R forecasts that each alternative scenario (including No Action) will cause NAAQS violations in one or more years, i.e., 2004, 2005, and/or 2015. We object to these projected NAAQS violations due to their projected local violations and a potential to contribute to long-term, net increases in emissions that incrementally contribute to NAAQS violations, and which may be inconsistent with planning efforts to achieve the NAAQS on a regional basis. The Council on Environmental Quality's NEPA regulations provide that, "Environmental impact statements shall state how alternatives considered in it and decisions based on it will or will not achieve the requirements of sections 101 and 102(1) of the Act [NEPA] and other environmental laws and policies" such as the Clean Air Act (underline added).

With the No Action Alternative, concentrations from on-airport operational sources for CO, NO2, and PM10, when added to future background levels, are predicted to violate the NAAQS (p. 4-503). Construction-related concentrations of PM10 under No Action, when added to future background levels, are predicted to exceed the NAAQS due to the development of approved projects such as LAX North and Continental City (p. 4-503). Under Alternative A, maximum NO2 and PM10 concentrations from construction sources, when added to future background levels, are projected to violate the annual NO2 NAAQS and the 24-hour and annual PM10 NAAQS in 2004 and 2005 (p. 4-505). Under Alternative B, maximum NO2 and PM10 emissions from construction, when added to future background levels, are predicted to violate the annual NO2 NAAQS and the 24-hour and annual PM10 NAAQS in 2004 and 2005, with violations of the PM10 NAAQS projected in 2015 (p. 4-507). Under Alternative C (Proposed Action), maximum NO2 and PM10 concentrations, again added to future background levels, are projected to violate the annual NO2 NAAQS and the 24-hour and annual PM10 NAAQS in 2004 and 2005, and violations of the PM10 NAAQS are projected in 2015 (p. 4-509).

We are committed to working with FAA and LAWA to ensure that this project's contribution to the NAAQS violations projected in the DEIS/R are successfully avoided and/or mitigated.

- *Recommendation:* The FEIS/R should document that any projected NAAQS violations from this project will be successfully avoided and/or mitigated. For each alternative (including No Action), the FEIS/R should clarify if the NAAQS for any pollutant would be exceeded only in 2004, 2005 and/or 2015 or if violations would be expected in one or more of the intervening years as well (i.e., 2006 to 2014). All affected agencies should participate in developing adequate, enforceable air quality mitigation that can be shown to have quantifiable emissions reductions such that projected NAAQS violations are successfully avoided and/or mitigated. Absent such a finding in the FEIS/R, agencies and the public have no assurance that the project meets the requirements of the Clean Air Act (CAA).

Mitigation for Projected NAAQS Violations

Table 4.6-20 presents a summary of the benefits from the quantifiable air mitigation measures.

The benefits of air mitigation are significant and may help to reduce or avoid the NAAQS violations projected to occur, including under Alternative C (Proposed Action). Since NAAQS violations are projected, the viability of this project depends upon adequate, enforceable mitigation commitments and their successful implementation.

Technical Report 4 (Air Quality) lists 150 air quality mitigation measures. Some measures are proposed for further evaluation while others are removed from detailed consideration. A number of the measures are beneficial and should be carried forward as the project proceeds, but others appear potentially harmful to air quality (e.g., the proposal for free parking, which contributes to additional use of private vehicles to and from LAX, and thus increased emissions). Others are promising proposals that could be improved or were eliminated from further consideration. We note a mitigation proposal (p. 4-461) that, "A Master Plan Commitment requiring contractors to use low-NOx equipment is proposed to help reduce such emissions, although it would not reduce emissions enough to take them below the threshold of significance."

EPA Region IX received a copy of an 'Air Quality Initiative' for Logan International Airport, prepared by the Massachusetts Port Authority (March 2001), which discusses mitigation that FAA may find useful in preparing the LAX FEIS/R (and general conformity determination). An inter-agency review of air mitigation proposed by FAA for projects under NEPA elsewhere in the nation, especially in nonattainment or maintenance areas, may offer opportunities as this project's NEPA process proceeds. We are committed to working with FAA and LAWA to further evaluate the potential benefits and viability of air mitigation in the DEIS/R, and would participate in any inter-agency review for air mitigation that FAA may undertake.

- *Recommendation:* The FEIS/R should present FAA's strategy to ensure that NAAQS violations due to this project are fully avoided, including inter-agency coordination efforts and the involvement of local communities in developing mitigation. Because the project results in NAAQS violations, it is essential for the FEIS/R to have adequate, enforceable mitigation ensuring that NAAQS violations are fully avoided.
- The statement that, "A Master Plan Commitment requiring contractors to use low-NOx equipment *is proposed*" (p. 4-461) should be modified in the FEIS/R to "*would be required,*" with appropriate commitments for implementation in FAA's ROD. The FEIS/R should discuss if using low-NOx equipment is, by itself, sufficient to avoid the projected NAAQS violations or if additional mitigation is needed to fully avoid any violations of the NAAQS due to this project.

General Conformity

A general conformity determination is needed for ozone, PM10, CO, and NO2 (p. 4-460). This determination would be undertaken by FAA. While we have not seen a draft general conformity determination or a plan as to how FAA intends to make a positive conformity determination, we are very concerned about potential violations of the NAAQS for NO2 and PM10 due to this project, for the three action alternatives. Table 4.6-13 [*Unmitigated Peak Construction Air Pollutant Concentrations - Including Background*] indicates that there would be violations of the NO2 NAAQS for all alternatives for the Horizon Year 2005, and for the peak construction year

(2004). Table 4.6-20 [*Mitigated Peak Operational Concentrations from On-Airport Sources - Including Background*] indicates that high levels of NO₂ (0.043 ppm) exist after mitigation. Although no table presents the mitigated, combined (on-airport, off-airport, and construction) concentrations, NO₂ levels will be high, and perhaps violate the Federal standard. It thus appears that further mitigation may be needed to ensure the project's compliance with the NO₂ NAAQS.

Due to the projected NAAQS violations, EPA is very concerned that FAA may be unable to make a positive conformity determination for this project. Based on discussions between FAA (David Kessler) and EPA (David Tomsovic) on June 26, 2001, we understand that FAA intends to provide a conformity determination in the FEIS/R, including any mitigation measures necessary to demonstrate general conformity. We understand that LAWA is working with the South Coast Air Quality Management District (SCAQMD) to ensure that anticipated emissions from LAX's Master Plan improvements are taken into consideration in the next Air Quality Management Plan (AQMP), and note that if EPA approves that plan such action would ensure conformity.

- *Recommendation:* The FEIS/R should include the general conformity determination and related mitigation commitments, with appropriate commitments in FAA's Record of Decision (ROD). We encourage FAA and LAWA to work with the SCAQMD on air quality issues related to this project, as well as with the California Air Resources Board (CARB) and EPA.

Transportation Conformity

Page 4-511 indicates that LAWA is working with the SCAQMD and the Southern California Association of Governments (SCAG) to ensure that information developed for the Master Plan is taken into consideration in future proposals of the Regional Transportation Plan (RTP), which will be subject to a transportation conformity determination.

- *Recommendation:* The FEIS/R should document that elements of this project proposed for funding or approval by the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA) are consistent with EPA's transportation conformity rule. The FEIS/R should demonstrate that FHWA/FTA-funded or -approved project elements come from a conforming long-range transportation plan and transportation improvement program (TIP). Furthermore, FHWA/FTA projects in CO and PM₁₀ nonattainment areas need to demonstrate project-level conformity.

Air Quality and Source Apportionment Study

LAWA is finalizing an air quality and source apportionment study for LAX, which should be completed in 2002 (p. 4-1008). This study is being developed separately from the Master Plan and is not considered part of the DEIS/R. However, this study's findings and recommendations may have a critical bearing on the current NEPA process, since LAWA's air quality and source apportionment study is designed to provide detailed information on "the role of... LAX in

emitting air pollutants and the impact these emissions have on the total concentration of air pollutants in the neighborhoods around LAX.” (*Air Quality and Source Apportionment Study of the Area Surrounding Los Angeles International Airport*, November 2000. Prepared for LAWA by Camp Dresser & McKee, Inc). Given the existing and projected air quality impacts associated with this project, the air quality and source apportionment study is extremely important. The findings and recommendations of LAWA’s air quality and source apportionment study would serve to facilitate an informed understanding of LAX’s contribution to air pollution, and in shaping informed comments from the public on the Master Plan project, its environmental impacts, and appropriate mitigation for criteria and toxic air pollutants. The findings and recommendations of LAWA’s air quality and source apportionment study would be a valuable complement to the Human Health Risk Assessment section of the EIS/R. The Council on Environmental Quality emphasizes the value of integrating relevant information into NEPA documents as it becomes available at the various stages of the NEPA process. The Council on Environmental Quality urges Federal agencies’ NEPA documents and decisions to reflect the most current data. CEQ informs Federal agencies that, “Decisions [under NEPA] must be supported by the best analysis based on the best data we have or are able to collect.” (*Considering Cumulative Effects Under the National Environmental Policy Act*, CEQ, 1997, at p. 3). The data and analysis that becomes available through LAWA’s air quality and source apportionment this study will facilitate full disclosure of impacts, identify appropriate mitigation measures, and inform the NEPA decision-making process.

- *Recommendation:* As it becomes available, FAA should integrate the information and analysis of the air quality and source apportionment study in this project’s NEPA document and decision-making process. To the extent it is available, this project’s NEPA process should incorporate the findings and recommendations of LAWA’s air quality and source apportionment study, which can include appropriate mitigation measures and other commitments in FAA’s Record of Decision.

Toxic Particulate Emissions

Page 4-999 states, “with implementation of potential mitigation options, human health risk and hazards estimated for each build alternative would be less than CEQA thresholds of significance.” However, the DEIS/R informs the reader that data is insufficient to determine the direct contribution of LAX operations to the most significant human health risks and hazards from air pollution. Information on carcinogenic risk from toxic particulate emissions to areas around LAX is not expected until 2002 (p. 4-1008), as part of LAWA’s pending *Air Quality and Source Apportionment Study of the Area Surrounding Los Angeles International Airport*. Page 4-999 indicates that the Human Health Risk Assessment “did not evaluate impacts of toxic air pollutants associated with current airport operations.”

We thus question FAA’s assertion that health risks and hazards under the build alternatives are less than CEQA’s thresholds of significance. Because the analysis of toxic air pollutants and health, including carcinogenic risk, is incomplete, it is premature to assert that health risk and hazards are less than CEQA’s thresholds of significance. The absence of such data prevents the reader from determining if there is a link between LAX-related emissions and potential health

risks.

- *Recommendation:* The FEIS/R should address the effects of toxic particulate emissions on the health of residents in communities affected by this project, including low-income and/or minority communities.

Mitigation for Toxic Particulate Emissions

We commend FAA on proposed mitigation to reroute cargo trips (p. 4-515) to the extent it reduces emissions and adverse effects upon adjacent communities, and support mitigation to promote cleaner motor vehicle fleets at LAX. Mitigation to reduce emissions could employ cleaner engine technology, engine/unit retirement, particulate trap retrofits and catalytic converter retrofits. We understand that LAX's liquified natural gas/compressed natural gas infrastructure can support alternative fuel applications. LAX's progress in using cleaner-burning fuels, equipment and technologies may result in a major reduction of toxic particulate emissions, thus having a potential to reduce environmental or health risks. This would be consistent with the Council on Environmental Quality's guidance to integrate a broad range of pollution prevention features in NEPA documents and NEPA decisions, and the U.S. Transportation Department's final order implementing the Executive Order on Environmental Justice (mitigation to avoid or reduce disproportionately high, adverse impacts on low-income and/or minority communities).

- *Recommendation:* If FAA concludes that toxic particulate emissions from this project have a potential adverse effect (including cumulative effect) on environmental quality or health, the FEIS/R should evaluate mitigation not currently in the Proposed Action or alternatives (40 CFR 1502.14(f)). (The methodology by which the conclusions were drawn should be carefully documented). In particular, the FEIS/R should identify feasible mitigation to minimize or offset emissions of toxic particulates from increased cargo transport, ground service vehicles, construction equipment, aircraft, and other sources, including stationary sources. FAA's Record of Decision should "state whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not." (40 CFR 1505.2(c)).

Emissions Inventory - Methods and Assumptions

As described below, EPA believes that emissions may have been underestimated in the DEIS/R. Underestimating emissions may have implications for the NAAQS violations already projected to occur with this project, the level of mitigation needed to avoid NAAQS violations, and for FAA's conformity determination.

- *Recommendation:* The FEIS/R should address if project-related emissions may have been underestimated and, as appropriate, identify appropriate corrective measures, including additional mitigation measures.

Auxiliary Power Unit (APU) Emissions: The DEIS/R may substantially underestimate emissions from APUs. Apparently all emissions scenarios assume APU use for 7 minutes per landing/

takeoff cycle (LTO). This assumption may be inconsistent with the latest information on APU use. Even with gate-based electrical power and pre-conditioned air, minimum APU use (per LTO) includes approximately 2 minutes as the aircraft approaches a gate, 10 minutes prior to push-back from the gate, and 5 minutes after the pushback but prior to takeoff (a total time of 17 minutes/LTO). In addition, we understand that, in some circumstances, the APU is not turned off even when gate-based electrical power and pre-conditioned air is available, and the corresponding usage period (per LTO) is 40 minutes for narrow-body aircraft and 60-90 minutes for wide-body aircraft. We attach a copy of a September 29, 2000 letter on APU emissions from Honeywell Engines and Systems to EPA. Honeywell's letter presents recent data on APU operating times and emissions factors.

- *Recommendation:* FAA should review the information in Honeywell's letter and determine if it is appropriate to revise APU emissions in the FEIS/R. The FEIS/R should present mitigation to minimize APU-related emissions to the fullest extent feasible, e.g., through mechanisms such as conditions in future gate lease agreements and/or incentives to reduce APU emissions.

Aircraft Emissions and Reverse Thrust: Based on information in Technical Appendix G, Page 8, Table 4, it appears that the "reverse thrust" mode of aircraft operation was not included in the emissions estimates for aircraft.

- *Recommendation:* If "reverse thrust" is commonly used at LAX, any emissions associated with it should be reflected in the aircraft emissions presented in the FEIS/R.

Taxi/Idle Times: Average taxi/idle times at selected California airports are presented on page 13 of a California Air Resources Board (CARB) reference document, 'Air Pollution Mitigation Measures for Airport and Associated Activity' (May 1994). The estimate for LAX is 23.8 minutes per landing-takeoff cycle. The documentation in table 4, Technical Appendix G does not identify the corresponding taxi/idle time-in-mode assumption used for the aircraft emissions estimates in the DEIS/R.

- *Recommendation:* The FEIS/R should show how the range of values presented for aircraft emissions are consistent with the CARB's reference or indicate the range of values used as well as the source of data from which that range was developed.

Entrained Road Dust: Based on information provided in Technical Appendix G, Page 16, it appears that entrained (paved) road dust was not taken into account in the PM10 emissions estimates prepared for off-airport motor vehicle trips. The emissions factors used to estimate LAX-related road dust PM10 emissions should reflect the latest available data, and be consistent with those used for the AQMP and RTP conformity determination. The most current EPA-approved model should be used to estimate mobile source emissions.

- *Recommendation:* These estimates should be revised for the FEIS/R to include PM10 emissions from motor vehicle activity using approved model and current assumptions.

Emissions Impact Evaluation

It is difficult for the reader to draw conclusions about the data presented on various emissions sources in the DEIS/R, in terms of understanding the “entire picture” of emissions at LAX for baseline (1996), as compared to No Action and the three action alternatives in 2005 and 2015. The air quality emissions impact evaluation is divided into three parts: on-airport, off-airport, and construction. While quantification of airport-related emissions necessitates splitting the airport into various source categories, the evaluation of emission impacts under NEPA should consider them in the aggregate when they occur contemporaneously. Off-airport emissions (LAX-related regional traffic) are, or may be, included in a regional transportation conformity determination, and, given that possibility, tracking these emissions separately is warranted. However, the issue of presenting emissions in connection with CAA conformity is different than NEPA’s requirement to disclose impacts. While construction-related emissions are generally evaluated separately from operational emissions since they typically occur over a period distinct from operations, construction under Alternatives A, B and C occurs over the entire time covered by the Master Plan, and coincide with changes in emissions from operational sources (e.g., aircraft, vehicular traffic). As such, construction and operational emissions changes contribute to the same environmental effects (incremental contribution to regional ozone and PM10 concentrations), and thus should be analyzed together.

- *Recommendation:* In order to disclose the full emissions impacts to the public, the FEIS/R should provide a table showing total emissions increases and decreases from all sources under all alternatives (including No Action) in 2005 and 2015. This would provide a basis for the public to understand the net change as a percentage of the “carrying capacity” of the South Coast Air Basin.

Although not compiled to show the overall emissions impact, the emissions estimates in the DEIS/R allow us to develop independent estimates of the overall emissions impact of the build scenarios. Based on these emissions estimates, the emissions impact (i.e., net change in emissions under Alternative C compared to No Action) would constitute approximately 0.3% and 1.0% of the “carrying capacity” of volatile organic compounds (VOC) and oxides of nitrogen (NOx), respectively, in the South Coast Air Basin, taking into account emissions changes associated with LAX’s on-airport, off-airport, and construction sources in 2015. The emissions impact under Alternatives A and B would be greater. Taking into account the mitigation in the air quality section, the emissions impact under Alternative C appears minimal for VOC but represents approximately 0.4% of the carrying capacity of the region for NOx, and 0.6% for Alternatives A and B.

- *Recommendation:* We recommend that FAA condition Federal approval of any of the build alternatives on implementation of all feasible air quality mitigation and with a clear commitment that the proposed action is consistent with regional air quality planning efforts.

Dispersion Modeling - Methods and Assumptions

Technical Appendix G, Air Quality Impact Analysis, page 25, 2.2.1 Meteorological Data, indicates that only one year of meteorological data was used for dispersion modeling purposes. Where such data is available, five years of representative meteorological data should be used when estimating concentrations with an air quality model (40 CFR Part 51, Appendix W, 9.3.1.2 Length of Meteorological Data).

- *Recommendation:* The FEIS/R should revise its meteorological input to include five years of data or justify why one year of data was used.

Technical Appendix G, Air Quality Impact Analysis, page 26, 2.2.2 Receptors, indicates that all receptor terrain elevations were set to zero meters. Elevated receptors should be included for nearby elevated terrain. Flagpole receptors were not included and may be appropriate for toxic modeling.

- *Recommendation:* The FEIS/R should address if the receptor spacing of 1,000 meters for ISCST3 for toxic air pollutants is too large, and whether elevated receptors would lead to more accurate estimates.

Technical Appendix G, Air Quality Impact Analysis, 2.4 Future Background Concentrations, indicates that the background concentrations are based on values projected in the SCAQMD 1997 AQMP.

- *Recommendation:* The FEIS should address if the interpolated values may be optimistic because they seem to assume a linear rate of reduction from base year to attainment year.

HUMAN HEALTH RISK ASSESSMENT

Emissions and Public Health

EPA is seriously concerned with two major air pollutants (acrolein and toxic particulates) that were not satisfactorily addressed in the health effects section of the DEIS/R. Page 11 of the Human Health Risk Assessment (HHRA) [Technical Report (14a)] states, "diesel particulates were not included in the TAP (toxic air pollutants) screening analysis...because diesel emission estimates were not available at the time the screening was conducted." An absence of analysis on diesel particulates is a deficiency in terms of NEPA disclosure.

- *Recommendation:* The FEIS/R should quantify aircraft-related toxic particulate emissions. The FEIS/R should address the relationship between air toxics associated with aircraft emissions and potential health effects (e.g., respiratory effects), including effects to children of low-income and minority communities. This analysis should be integrated in the FEIS/R and, as appropriate, mitigation commitments reflected in FAA's ROD.

Methodology in HHRA

The HHRA uses a methodology derived from several different sources developed by EPA, the State of California, or other parties. However, using several different sources complicates an effective interpretation of the analysis in the DEIS/R. We find substantial uncertainty in the validity of FAA's approach and in the results of the risk assessment for the proposed project in reducing cancer or noncancer risks.

- *Recommendation:* The FEIS/R should address the validity of the HHRA methodology and implications for conclusions under NEPA.

MATES-II Study

An ambient monitoring study (MATES-II) conducted by the SCAQMD found that the toxic contaminants most often detected at and around the Los Angeles area's ports, airports, and rail facilities consist of benzene, butadiene and elemental carbon (a surrogate for diesel particulates). These toxic contaminants are frequently associated with mobile sources, with the SCAQMD concluding that 90% of the risk in the vicinity of LAX is related to mobile sources (with 80% of risk attributable to diesel emissions). The SCAQMD expressed concern about the concentration and growth of gasoline- and diesel-powered vehicular traffic in and around LAX. It is important to identify LAX-related diesel sources and their environmental impacts (including health effects). The emissions inventory is not explicit about how 'diesel particulate' estimates were made and how such estimates relate to toxics monitoring. The air monitoring study for this NEPA process should, as appropriate, take this data into account. The DEIS/R does not provide a mechanism or timeline to incorporate the results of the air toxics monitoring study, nor do the mitigation measures explicitly address toxics.

- *Recommendation:* The FEIS/R should, as appropriate, integrate the results of the MATES-II air toxics monitoring study and discuss how FAA would mitigate impacts due to air toxics from this project.

Disclosure of Health Effects under NEPA

The HHRA (4.24.1) is framed as a 'CEQA-only' requirement. However, many compounds are Federally-listed "hazardous air pollutants" as well. NEPA and CEQA require lead agencies to address environmental impacts, including health effects, in environmental impact analyses. Under CEQ's NEPA Implementing Regulations, "effects" include those on human health, whether direct, indirect or cumulative (40 CFR 1508.8). We recognize that "health risk assessments" per se are not specifically required by NEPA, but rather that a project's potential effects on health are relevant under NEPA, for example, in facilitating effective public disclosure of a project's reasonably foreseeable impacts and identifying mitigation for adverse effects.

- *Recommendation:* The FEIS/R and ROD should reflect the analysis and conclusions in Chapter 4.24.1, including an appropriate level of mitigation for projected or potential health effects.

Impact of Air Toxic Emissions on Children

Executive Order 13045 (“*Protection of Children from Environmental Health Risks and Safety Risks*”) provides that Federal agencies shall ensure that their activities address disproportionate risks to children due to environmental health risks. The DEIS/R uses a one-mile radius for identifying community impacts, which may be arbitrary should it not accurately reflect potential risks or impacts to affected populations. However, even in a one-mile zone, the DEIS/R and HHRA do not address potential impacts associated with current operations at LAX and the project on 20 schools and 41 day-care centers within this area. At the June 9, 2001 workshop (Inglewood session), an official of the Lennox elementary school district referenced a study by the UCLA School of Public Health which assessed rates of asthma and other illnesses among children in the Lennox school district, finding higher levels than state-wide averages for Lennox children in this age group. The school district contends that emissions from LAX are a causal link or contributing factor.

- *Recommendation:* The FEIS/R should justify the one-mile zone for identifying impacts to communities or expand the one-mile boundary, as appropriate. The extent to which these impacts are borne primarily by low-income and minority populations should be addressed in the FEIS/R. The FEIS/R should identify the number of children in this one-mile zone who may be adversely affected, and discuss pertinent studies or data regarding health effects on children at these schools and day-care facilities from current LAX operations or this project.

Potential Effects of Criteria and Toxic Air Pollutants

The DEIS/R addresses criteria pollutants (Chapter 4.6) separately from toxic air pollutants (Chapter 4.24). Of major concern to EPA is a lack of discussion in the DEIS/R on the (potential) interaction between toxic air contaminants (hazardous air pollutants) and criteria air pollutants (e.g., ozone, CO, PM10, NO2) on human health, especially children. This is an important consideration to portray for existing conditions, No Action, and the build alternatives.

- *Recommendation:* The FEIS/R should address whether these two separate analyses may not accurately depict potential cumulative health risks to affected populations, with particular focus on children’s health and health issues for the low-income and minority communities that page ES-46 admits are disproportionately affected by aircraft noise, and potentially for air quality and health effects.

Mitigation for Air Toxic Impacts

Page 4-1000 states, “Under all build alternatives, with implementation of potential mitigation options, some areas immediately east of LAX would experience a slight increase in potential cancer risk and non-cancer hazard; however, anticipated increases would be less than established thresholds of significance.”

- *Recommendation:* The FEIS/R should quantify the extent to which these areas are subject

to anticipated increases under the action alternatives, and address feasible mitigation to address such increases. The approach to identify mitigation measures should be consistent with U.S. DOT's environmental justice strategy, since many or most individuals potentially affected would be low-income and/or minority.

Hazard Ranking Index

The DEIS/R uses a hazard ranking index (HRI) of five or greater as the threshold for significance for health impacts due to toxic air pollutants.

- *Recommendation:* The FEIS/R should clarify why an HRI of five was used to determine levels of significance for toxic air pollutants.

ENVIRONMENTAL JUSTICE

Department of Transportation's Final Order on Environmental Justice

The U.S. Department of Transportation's (U.S. DOT) final order on environmental justice (see *Federal Register*, April 15, 1997, at pp. 18377-18381) identifies the steps that should be taken by U.S. DOT and its modal administrations if a disproportionately high, adverse human health or environmental effect on minority or low-income populations is identified, as in this DEIS/R (p. ES-46). U.S. DOT's final order requires that responsible DOT officials

"will ensure that any of their respective...activities that will have a disproportionately high and adverse effect on minority populations or low-income populations will only be carried out if further mitigation measures or alternatives that would avoid or reduce the disproportionately high and adverse effects are not practicable. In determining whether a mitigation measure or an alternative is 'practicable,' the social, economic (including costs) and environmental effects of avoiding or mitigating the adverse effects will be taken into account." (see paragraph 8c of U.S. DOT's final order).

- *Recommendation:* The FEIS/R should address the recognized disproportionate effects within the framework of U.S. DOT's final order. The FEIS/R should address if, absent a rigorous analysis of non-LAX action alternatives (outlined below), FAA can determine that disproportionate effects are avoided or minimized to the fullest extent practicable.

Council on Environmental Quality's Guidance on Environmental Justice and NEPA

The DEIS/R does not reflect consistency with guidance issued by the Council on Environmental Quality ("*Environmental Justice Under the National Environmental Policy Act*," CEQ, 1997). CEQ instructs Federal agencies that "mitigation measures identified in an EIS...should reflect the needs and preferences of affected low-income populations (and) minority populations...to the extent practicable." The DEIS/R indicates that mitigation for environmental justice-related impacts (e.g., Environmental Justice Action Plan) has not been determined "pending mitigation program development." Thus, the DEIS/R does not necessarily reflect the "needs and

preferences” of low-income and minority communities disproportionately and adversely affected by LAX and/or those who may be so affected under the proposed alternatives or even under No Action. We note a serious level of public concern about daily operations at LAX, and this project, that was expressed by affected residents at the June 9, 2001 Inglewood workshop. We are willing to assist FAA in identifying and developing mitigation such as the Environmental Justice Action Plan, which should be developed in close coordination with affected local communities, in keeping with the Council on Environmental Quality’s guidance on environmental justice under NEPA.

- *Recommendation:* The FEIS/R should address the project’s consistency with CEQ’s guidance on environmental justice under NEPA, including appropriate commitments in the ROD.

Assessment of Air Quality-Related Environmental Justice Impacts

Page ES-46 recognizes “disproportionately high and significant adverse human health and environmental impacts on minority and low-income communities due to aircraft noise,” and “potential disproportionate impacts associated with air quality and health effects.” Although we commend FAA’s candor in acknowledging this, we are very concerned about the project in terms of environmental justice. The DEIS/R recognizes “potential disproportionate impacts associated with air quality and health effects.” (underline added). However, our review leads to a concern that the project’s air quality effects may pose a likelihood of disproportionately high, adverse effects on low-income and minority populations. We believe this is supported by the following: (1) projected NAAQS violations under No Action and the three action alternatives; (2) a possibility that emissions may be underestimated; (3) the HHRA did not evaluate impacts of toxic air pollutants (p. 4-999); (4) the results on carcinogenic risk from toxic particulate emissions are unavailable until 2002 (p. 4-1008); and (5) major uncertainty that mitigation can reduce projected air quality effects to less than significance.

- *Recommendation:* Based upon an evaluation of factors (1) to (5) immediately above, the FEIS/R should re-examine if existing operations at LAX or this project pose potential or actual disproportionately high, adverse effects on low-income and minority communities due to air quality and health effects, and, as needed, include appropriate commitments in the ROD.

NOISE

Disclosure of Impacts from Aircraft Noise

It is critical that basic data in an EIS be internally consistent and, when data is inconsistent, that there be a brief discussion explaining any inconsistencies. The operational forecasts presented in the DEIS/R are significantly below FAA’s current Terminal Area Forecasts. The DEIS/R contains no supporting documentation for the lower numbers presented in the DEIS/R, although FAA’s guidance recommends this type of documentation when differences exceed 10%. We find significant differences between FAA’s current Terminal Area Forecast and the EIS’s forecasts for

2005 and 2015. Page 2-4 presents a discussion of FAA's Terminal Area Forecast, but references operational numbers from FAA's 1998 Terminal Area Forecast. The rationale seems to be that since preparation of the DEIS/R began in 1998, it is appropriate to use 1998 forecasts. While this appears to be a consistent process, the outcome is a DEIS/R that assesses potential impacts (and develops mitigation) based on data that is not the latest and best available. A review of FAA's previous forecasts indicates that aircraft operations continue to increase with each revised forecast.

A complicating factor is the use of "constrained" and "unconstrained" forecasts (p. ES-9). Page 2-6 discusses constraints that limit existing capacity and the specific use of unconstrained forecasts in Tables 3-1 and 3-2. The DEIS/R's unconstrained forecasts are significantly higher than forecasts used for assessing environmental impacts. The question of what operational forecast is valid (1997 LAX Master Plan, unconstrained forecast, 1998 FAA Terminal Area Forecast, or 2001 FAA Terminal Area Forecast) consequently affects the reliability of the environmental effects analysis. For example, FAA's current Terminal Area Forecast shows 889,665 aircraft operations in 2005 and 1,111,086 aircraft operations in 2015. The DEIS/R uses 784,604 total aircraft operations for 2005 (Alternative C) and 797,249 total aircraft operations for 2015.

There are numerous data inconsistencies in the DEIS/R. For example, Table 3-2 shows that 2015 Alternative C total aircraft operations as 797,249. Average annual daily aircraft operations would be 2,184 (797,249 divided by 365 days). Table 29, Appendix D, shows 2015 average annual day operations as 2,145. On page 55 of Appendix D, a bracketed sentence shows the 2015 average annual day operations at 2,141, with 814 attributed to average day heavy jet operations. Tabulating the heavy jet operations listed in Table 29, it shows 816 operations, rather than the 814 figure given on page 55 of Appendix D. While it is understandable that, in the process of analysis, there will be a refinement of data, it is important that, when this refinement occurs, the data throughout the DEIS/R should be updated and internally consistent.

- *Recommendation:* The difference between operational forecasts used in the DEIS/R and Terminal Area Forecasts should be addressed in the FEIS/R since other impacts (e.g., aircraft noise exposure, aircraft/ground traffic emissions, health effects due to air pollutants) are linked to operational forecasts. The FEIS/R should address the consistency of the forecasts with FAA's guidance. The FEIS/R should discuss FAA's recent *Airport Capacity Benchmark Report 2001* and its relationship to forecasts used in this DEIS/R.

Disproportionately High, Adverse Effects from Aircraft Noise

The DEIS/R documents how noise impacts due to existing aircraft operations at LAX have a disproportionately high, significant and adverse effect on low-income and minority populations (e.g., pp. ES-46, 4-411 and 4-412). Although a significant amount of public funds have been expended to mitigate adverse noise effects through soundproofing, a large number of affected residents continue to be adversely affected by jet noise. Page 4-412 estimates that more than 80% of residents adversely affected by aircraft noise at LAX are low-income or minority. Many

residents of Inglewood who spoke at the June 9, 2001 workshop expressed their concerns about adverse noise effects, and most of these individuals were from minority populations, principally African-American.

The noise analysis forecasts the No Action noise contours in 2005 and 2015, and compares the exposures within those contours with exposures projected to occur under Alternative C in 2005 and 2015. It is forecast that 980 additional residents in 2005 (49,980 Alternative C - 49,000 No Action) will be exposed to noise to levels of 65 decibels or greater. In 2015, the difference between No Build and Alternative C is projected to be 230 residents (44,580 Alternative C - 44,330 No Action). In both cases (No Action and Alternative C), there is a significant population already living in areas not compatible with residential use, and that the affected population increases with the Proposed Action.

EPA is concerned that the DEIS/R lacks a clear commitment to implement measures to adequately mitigate noise impacts associated with this project. The "*Federal Agency Review of Selected Airport Noise Analysis Issues*," Federal Interagency Committee on Noise (FICON - 1992), indicates that "Levels between DNL 65 and 75 dB are considered incompatible with residential or school land uses unless measures are taken to achieve additional noise reduction levels," see page 3-20 of the FICON report). Given the adverse effects due to aircraft noise projected to occur under this project, we recommend that the FEIS/R evaluate the feasibility of a residential acquisition program for residents in the 70 and 75 Day-Night Average Sound Level (DNL) noise contours. A residential acquisition program for residents in the 70 and 75 DNL noise contours should involve affected community members, as well as local officials, in a process that is well-publicized and accessible for the greatest number of residents adversely affected by aircraft noise. A residential acquisition program for residents in the 70 and 75 DNL noise contours should be voluntary (i.e., no involuntary relocations). While it is preferable that non-compatible uses not be within the 65 DNL noise contour, a clear commitment by FAA for acoustical treatment of residences in the 65 DNL contour provides a level of mitigation for indoor noise levels. A valuable reference for facilitating effective public participation is found in CEQ's guidance on environmental justice and NEPA (at III(C)(2), Public Participation, p. 13 of CEQ's guidance).

Additionally, due to major uncertainties in forecasting aircraft operations, we recommend that this project's noise mitigation include certain adaptive features. For example, FAA could commit to conduct noise modeling based on actual operational data one year after the runway elements of this project are completed. This would provide a more accurate measure of aircraft-related noise impacts and identification of noise mitigation for implementation. Future noise modeling could be undertaken when actual operational data indicates that noise contours may have changed to the extent that additional noise mitigation is needed or appropriate.

- *Recommendation:* An evaluation of the feasibility of specific residential acquisition (for residents in the 70 and 75 DNL contours) and acoustical treatment programs (for residents in the 65 DNL contour) should be analyzed in the FEIS/R and, as appropriate, appropriate commitments included in FAA's ROD. Any program for residential acquisition should be based on an open, participatory process involving affected

residents. The noise mitigation program should include certain adaptive features.

CUMULATIVE IMPACTS

We find several sections where the EIS's analysis of cumulative impacts should be modified in the FEIS/R. The first area is the cumulative contribution of emissions from LAX (criteria pollutants and air toxics) to the South Coast Air Basin's air quality and the health of residents, both those residing near the airport and those within the larger air basin. As noted in our comment on Potential Effects of Criteria and Toxic Air Pollutants, the DEIS/R analyzes criteria air pollutants separately from air toxics.

The DEIS/R indicates that results of LAWA's study on carcinogenic risk from diesel particulate emissions are not expected until 2002 (p. 4-1008). The cumulative analysis on diesel particulate emissions in the FEIS/R should, to the fullest extent possible, reflect the results of this study, in order to provide accurate public disclosure under NEPA and to afford an opportunity for informed public comment. Since diesel particulates (a State-listed carcinogen) account for 70% of the cancer risk due to air pollution in the South Coast Air Basin (see p. 4-1008), it is important that this analysis be presented under NEPA. The Council on Environmental Quality informs Federal agencies that, "Decisions [under NEPA] must be supported by the best analysis based on the best data we have or are able to collect." (underline added). Since LAWA is now collecting such data, it seems reasonable for it to be presented within the framework of the current NEPA process, in order for FAA to achieve the best informed decision.

As noted, the DEIS/R may underestimate emissions from several sources, such as APUs. To the extent that FAA revises the emissions estimates, this has a bearing on the analysis of cumulative impacts presented in the FEIS/R, as well as mitigation measures.

- *Recommendation:* The FEIS/R should address if these separate analyses may potentially underestimate the cumulative health risks to affected populations, with emphasis upon the health of children and potentially affected low-income and minority communities. Of particular concern is a lack of discussion on any potential interaction involving toxic air contaminants (hazardous air pollutants) and criteria air pollutants on health, including children. The FEIS/R should provide the most current analysis of the cumulative risks to health associated with diesel particulate emissions. Lastly, as FAA revises its estimates of emissions of various pollutants, the cumulative effects analysis in the FEIS/R should reflect this information.

OTHER ISSUES

Purpose and Need and Relationship to a Range of Reasonable Alternatives

Pages ES-6 and 2-1 identify three project objectives. The objectives form the basis of the project's statement of purpose and need, specifically, to (1) respond to local and regional demand for air transportation during 2000-2015; (2) ensure that new investments in airport capacity are efficient and cost-effective, maximizing the return on existing infrastructure capital; and (3)

sustain and advance the international trade component of the regional economy and the international commercial gateway role of the City of Los Angeles. The manner in which an EIS presents a project's purpose and need under NEPA defines which alternatives are considered as reasonable, and thus fully evaluated in the DEIS/R. CEQ's Regulations state that an EIS shall "rigorously explore and objectively evaluate all reasonable alternatives...." CEQ requires that EISs should "include reasonable alternatives not within the jurisdiction of the lead [Federal] agency."

All three action alternatives fully evaluated are within LAX's physical boundaries. Page ES-7 states that "alternative airports and alternative modes of transportation were evaluated," as were "various aviation activity management or demand management scenarios." The DEIS/R contends, "in all cases, the analyses revealed that the alternatives in these two categories could not reasonably be expected to meet the purpose and needs of the Master Plan and would not eliminate the need for improvements at LAX." However, we are concerned with statements in the DEIS/R that non-LAX action alternatives must assume a "significant amount" of projected operations in order to be fully evaluated. Specifically addressing Ontario and Palmdale, page 3-2 states, "these [two] airports have neither the facilities nor market advantages that would enable them to attract significant amounts of demand away from LAX."

LAWA issued a statement (March 12, 2001) highlighting Ontario's capacity to handle increased air cargo. According to LAWA, "Ontario International is in a strong position to handle more air cargo....The airport [Ontario] is capable of handling much more domestic and international cargo." Information released by LAWA on its Palmdale facility states that "plans for additional facilities have been completed," and that Palmdale has received renewed attention in recent years as a "reliever airport" for LAX. According to LAWA, Palmdale has "ample ramp space for additional planes," and remains "an investment in the future." According to LAWA, plans are underway to build a new cargo ramp and bypass taxiways to improve Palmdale's cargo facilities, and to develop new passenger facilities. These improvements (and future potential) at Ontario and Palmdale are not reflected in the DEIS/R, although they appear capable of helping to respond to the project's purpose and need.

The DEIS/R does not address if an alternative routing a portion of future operations to Ontario, Palmdale and/or other commercial airports in the five-county region was considered by FAA, or if such a scenario could potentially avoid or minimize some of the adverse effects projected to occur. In addition to helping meet the three objectives, such a scenario may reduce adverse effects, e.g., the disproportionately high, adverse environmental justice-related impacts due to aircraft noise. A scenario in which operations are more geographically dispersed may reduce adverse air quality and health effects in the areas around LAX.

A recent Federal court case addressed reasonable alternatives that must be fully evaluated under NEPA, and the extent to which alternatives achieving some (but not all) of a project's purpose and need are viewed as "reasonable." Concerning an EIS prepared by the Federal Highway Administration in California, the 9th Circuit U.S. Court of Appeals ruled,

"Each of the alternatives considered in the FEIS/R achieved the project goals, from traffic

delay to safety to environmental impact, in varying degrees. No one alternative fulfilled all the goals completely....These proposals [alternatives analyzed in the EIS] span the spectrum of "reasonable" alternatives and satisfied the requirements of the National Environmental Policy Act." (*Carmel-by-the-Sea v. U.S. Department of Transportation*, 123 F.3d 1142 (9th Cir., 1997) at p. 1159).

- *Recommendation:* FAA's environmental document should address whether an alternative involving Ontario, Palmdale and/or other commercial airports in the five-county region is capable of meeting one or more objectives for this project. The FEIS/R should take a "hard look" at whether an action alternative diverting a portion of operations to other commercial facilities can meet some of the purpose and need, consistent with *Carmel-by-the-Sea*. The FEIS/R should address the applicability of *Carmel-by-the-Sea* in presenting the action alternatives for this project. The FEIS/R should reconcile statements in the DEIS/R that other airports in the five-county region can not meet this project's objectives, even though information made available to the public by LAWA indicates that Ontario and Palmdale present opportunities to meet elements of the purpose and need.

Use of 1996 Data as 'Baseline' for Purposes of NEPA Analysis and Disclosure of Impacts

Data for calendar year 1996 is the "baseline" of existing conditions at LAX. The discussion in any EIS of the existing baseline is designed to help the reader understand existing environmental conditions in order to evaluate, and compare, the relative impacts of the various alternatives. The discussion of the "existing situation" at LAX is what existed five years ago, when aircraft operations were smaller and the fleet had yet to fully convert to quieter aircraft. EPA is concerned because of uncertainties about the continuing validity of basic data (1996) on aircraft operations, and consequent air quality and noise impacts. The use of 1996 as the baseline presents a dated reference that may lack continuing validity. While 1996 data is important as background, it may not provide a clear picture of current conditions at LAX (including cumulative impacts), information that is critical to facilitate informed public disclosure under NEPA.

Likewise, 1996 surface traffic data may not reflect *current* traffic-related impacts associated with LAX (e.g., air emissions). The Council on Environmental Quality's handbook on assessing cumulative impacts under NEPA urges Federal agencies to have NEPA documents and NEPA decisions that reflect the most current data. CEQ indicates, "Decisions must be supported by the best analysis based on the best data we have or are able to collect" (*Considering Cumulative Effects Under the National Environmental Policy Act*, p. 3, CEQ, 1997). Data that is five years old may not be the "best data" when disclosing impacts under NEPA, especially if more current data is available to FAA.

- *Recommendation:* At a minimum, the FEIS/R should discuss which conclusions would likely change if 2000-2001 noise impact data were presented and analyzed. Whenever feasible, and consistent with CEQ's cumulative assessment handbook, the most current data for flight operations, aircraft mixes, aircraft noise impacts, air quality impacts, and traffic impacts be presented in the FEIS/R so the public can compare 1996 data to more

recent data, and, from this, make an informed judgment on this project.

Depicting the Consequences of the No Action Alternative

Page 3-25 indicates that a demand of 97.9 million annual passengers (MAP) in 2015 cannot be met by LAX's existing facilities because its airfield, roadways and terminal buildings "would experience complete breakdown." The assertion about a "complete breakdown" is inconsistent with wording (p. 3-60) that 97.9 MAP would result in a "degraded level of service," i.e., increased congestion, crowding and aircraft delays.

- *Recommendation:* The FEIS/R should clarify if 97.9 MAP in 2015 using existing facilities would result in a "complete breakdown" or a "degraded level of service." If "complete breakdown" is inaccurate, this phrase should be removed from the FEIS/R since it may prevent an objective evaluation of the No Action alternative.

Cargo Projections at LAX

There are discrepancies in the data on cargo projections at LAX under the various alternatives and the unconstrained forecast. In terms of cargo activity, page ES-9 indicates an "unconstrained forecast" of 4,172,000 annual tons of cargo in 2015 (compared to 1996 baseline of 1,896,764 million tons of cargo). Alternatives A, B, and C are projected to accommodate *identical* cargo in 2015, i.e., 4,172,000 tons (compared to 3,120,000 annual tons of cargo under No Action in 2015). The unconstrained forecast projects 1,004,591 annual operations in 2015; Alternatives A and B project 935,140 annual operations in 2015; and Alternative C projects 797,249 annual operations in 2015. It is unclear why the unconstrained forecast and Alternatives A, B, and C all project identical volumes of cargo, since annual operations are not identical "across the board." Even different fleet mixes under the three alternatives and the unconstrained forecast would not likely result an identical volume of cargo (4,172,000 tons) for each. A LAWA video shown at the June 9, 2001 public workshop (Inglewood) informed the public that a significant amount of cargo is carried on passenger aircraft, a statement confirmed in a June 18, 2001 discussion between David Kessler (FAA) and David Tomsovic (EPA). It seems reasonable for those viewing LAWA's video to assume that different aircraft operations would yield different volumes for cargo, i.e., the largest cargo tonnage should be under the "unconstrained forecast," Alternatives A and B would display identical cargo volumes, and Alternative C would show the least cargo. This is not the case, however.

- *Recommendation:* The FEIS/R should explain the apparent discrepancy about the amount of cargo that can be handled at LAX under the three alternatives and the unconstrained forecast. Any implications this may have on aircraft noise impacts should be presented as well.

COMPREHENSIVE REGIONAL APPROACH

FAA addresses increasing aircraft operations across the nation on an airport-by-airport basis as local airport entities propose specific projects. As aircraft operations and their impacts increase

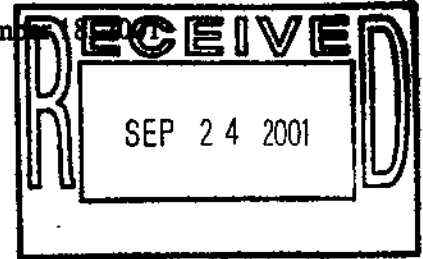
in the Los Angeles metropolitan area, EPA believes the time may be ripe for a comprehensive analysis of how various scenarios can respond to the five-county region's projected aviation needs, by means of a study covering all commercial airports in this five-county region. A viable solution is more likely to be accepted by all affected parties based upon a comprehensive study assessing the air transportation needs of the entire five-county region. This comprehensive study would address the interests and requirements of all parties: the public, the airlines, Federal/State/local/regional agencies, and airport authorities. While there are no 'easy answers,' and impacts from the region's airports would continue, examining commercial aviation needs on an area-wide scale would inform all parties how the five-county region can accommodate increasing aircraft operations on a comprehensive basis as well as at individual airports. A major inquiry is how public concerns about the 'proportionality of impacts,' (including FAA's recognition of disproportionately high, adverse impacts to low-income and minority communities), and associated questions of equity, can be satisfactorily addressed. A focus of particular concern to EPA is whether total emissions of criteria air pollutants and toxic air pollutants can be reduced via a comprehensive regional analysis.

- *Recommendation:* We recommend that FAA begin a comprehensive analysis of how various scenarios can respond to the five-county region's projected aviation needs, by means of a study covering all commercial airports in this five-county region. Such an approach is consistent with the Secretary of Transportation's recent commitment to establish a task force to assess aviation demand and airport capacity in southern California.



11013

September



Mr. David Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P. O. Box 92007, Worldway Postal Center
Los Angeles, California 90009-2007

Subj: COAST GUARD COMMENTS RE LOS ANGELES INTERNATIONAL AIRPORT (LAX) DRAFT
MASTER PLAN (MP), JANUARY 2001, AND LAX DRAFT ENVIRONMENTAL IMPACT
STATEMENT/ENVIRONMENTAL IMPACT REPORT (EIS/EIR), JANUARY 2001

Dear Mr. Kessler:

Thank you for the opportunity to review the subject LAX Draft MP and Draft EIS/EIR. We noted that the Draft EIS/EIR did not address the future relocation sites for Coast Guard Air Station (CGAS) Los Angeles and, consequently, did not address possible potential environmental impacts on CGAS. Coast Guard expects that potential environmental impacts at alternative relocation sites will be fully identified and assessed in the Final EIS/EIR.

On May 1, 2001, Coast Guard representatives met with LAX and FAA MP and EIS/EIR coordinators to discuss the proposed Draft MP and EIR/EIS relocation sites for CGAS. Since the proposed CGAS relocation sites are only summarily identified in the Draft MP Appendix O, and since possible impacts associated with this relocation action are not identified in the associated Draft EIS/EIR, specific Coast Guard comments relate only to the Draft MP. The comments below summarize Coast Guard concerns regarding the proposed relocation alternatives as they were discussed in the meeting and in our subsequent contacts with FAA and LAX representatives.

1. The proposed Draft MP relocation sites of the CGAS Los Angeles should be based on the following primary Coast Guard requirements:
 - Although the CGAS currently operates three HH-65 helicopters, all the future CGAS locations identified in the MP and EIS/EIR must be planned for a new CG aircraft maintenance facility with the future capacity of four HH-60 helicopters.
 - The CGAS requires immediate access to an airport taxiway area (1000' x 150') to accommodate helicopter rolling take-offs and landings going in both east and west directions.
 - The CGAS requires approximately a 63,000 GSF hangar-facility capable of housing four helicopters. It also requires an aircraft ramp capable to park and refuel all assigned helicopters as well as an additional parking area for transient aircraft (several helicopters and one C-130 aircraft).
 - The regular CGAS daily operations will consist of up to five flights per day plus multi-mission flights for operational support.
2. After reviewing the Draft MP alternative relocation sites for the CGAS, the Coast Guard has concluded:
 - Appendix O of the LAX MP, Alternative A for 2005, erroneously identified the existing CGAS building/hangar size at 39,000 GSF. The correct size is 51,700 GSF.
 - The proposed location in the LAX MP Alternative B for 2015 (along Sepulveda Blvd.) is non-operable for CGAS due to the incompatible air-traffic patterns and restricted site arrangement at the proposed location.
 - A general location within the LAX southern border adjacent to Imperial Avenue may be suitable for CGAS Los Angeles (similar to the proposed LAX MP Alternative A for 2015 and Alternative C for 2015). If selected, this location must conform to the primary CGAS requirements outlined above while more detailed


Subj: COAST GUARD COMMENTS RE LOS ANGELES INTERNATIONAL AIRPORT (LAX) DRAFT MASTER PLAN (MP), JANUARY 2001, AND LAX DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT (EIS/EIR), JANUARY 2001

requirements would be developed later during the master planning and EIS/EIR processes. Furthermore, CGAS approach and departure flight corridors must be established to conform to the LAX flight control system and noise abatement policy.

3. As discussed at the meeting, all LAX, FAA and Coast Guard representatives are aware that the subject Draft MP and Draft EIS/EIR documentation, due to their complexity, are still far from completion. I request that, the FAA and LAX representatives will need to keep the CG informed and engaged as the master planning and NEPA/CEQA processes unfold. In order to facilitate the CGAS relocation during these processes, the Coast Guard will provide more detailed comments/data to the FAA and LAX representatives on all relevant items regarding CGAS site and facility planning requirements, project phasing/timing impacts, and property ownership and lease requirements.
4. Since the CGAS relocation to one of the proposed, new, alternative sites might also produce different environmental impacts on the future CGAS, the Coast Guard expects the Final EIS/EIR to comparatively address impacts at the several sites, e.g., future LAX airport noise impacts. Future LAX airport noise could have a negative environmental impact on the CGAS duty crew contingent that must be berthed at CGAS facility at all times.

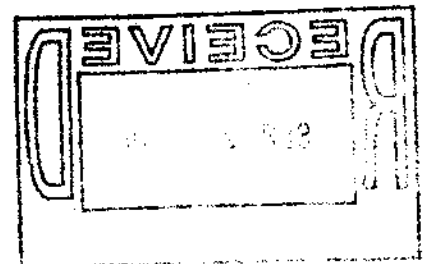
We are looking forward in working with you on the Draft LAX MP and Draft EIS/EIR. My points of contact regarding this matter are Mr. Andrej Skarica, Facility Planner, at (510) 437-5619, and Ms. Carol Meyer, Environmental Engineer, at (510) 437-3511, both from Coast Guard Maintenance and Logistics Command Pacific.

Sincerely,



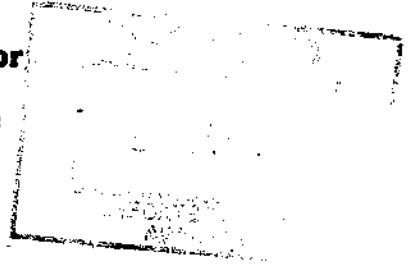
J. P. MILKEY
Lieutenant Commander, U. S. Coast Guard
Chief, Planning Branch
Maintenance and Logistics Command Pacific

Copy: Mr. Jim Ritchie, City of Los Angeles, Los Angeles World Airports, LAX Master Plan Office, Room 218, P.O. Box 92216, Los Angeles, CA 90009-2216
Commanding Officer, USCG Air Station Los Angeles, 7159 World Way West, Los Angeles, CA 90045-5000
Commander, Eleventh Coast Guard District, Coast Guard Island, Alameda, CA 94502-5100
Commanding Officer, USCG Civil Engineering Unit Oakland, 2000 Embarcadero Suite 200, Oakland, CA 94606-5337





United States Department of the Interior
OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
1111 Jackson St., Suite 520
Oakland, CA 94607



September 24, 2001

Mr. David B. Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007, Worldway Postal Center
Los Angeles, California 90009-2007

Re: Draft Environmental Impact Statement / Environmental Impact Report for the Los Angeles International Airport Proposed Master Plan Improvements, Los Angeles, Los Angeles County, California (ER 01/0038)

Dear Mr. Kessler:

We have reviewed the Draft Environmental Impact Statement/ Environmental Impact Report (DEIS/EIR) dated January 2001, for the Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Los Angeles, Los Angeles County, California. Our comments are based on review of the biological resources information presented in the DEIS/EIR and supporting technical appendices and our knowledge of biological resources in western Los Angeles.

GENERAL COMMENTS

According to the DEIS/EIR, the proposed project will impact non-native grasslands, disturbed areas, valley needlegrass grasslands, southern foredune, southern dune scrub, and vernal ponds. Federally threatened and endangered species that will or have potential to be impacted by the project include the endangered El Segundo blue butterfly (*Euphilotes battoides allyni*) and Riverside fairy shrimp (*Streptocephalus woottoni*). The DEIS/EIR relies on a modified Habitat Evaluation Procedures (HEP) methodology to define biological impacts and develop biological mitigation measures. The modified HEP method used for this analysis is flawed and inappropriate for use in defining biological impacts and developing acceptable mitigation measures.

The DEIS/EIR contains language in virtually all of the biological mitigation measures that limits monitoring and maintenance to "not more than five years." The DEIS/EIR implies that if performance criteria are not met within five years, no further maintenance or monitoring need be performed. If a mitigation site fails to meet acceptable performance standards, the significant

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impacts of the project would not be reduced below a level of significance. For these reasons, we recommend that all mitigation areas meet acceptable performance criteria before the project proponent is relieved of mitigation responsibility.

Because of the regional significance of declining species and habitats found within the Master Plan boundaries, we recommend that all biological mitigation areas associated with the project, both within and outside of the current preserve area, are protected and managed in perpetuity. The Department would like to work with the project proponents in the design and implementation of a regional preserve system meeting long-term biological goals.

SPECIFIC COMMENTS

Volume II, pp. 4-615 - 4-646

The HEP analysis presented in the DEIS/EIR does not follow the accepted HEP methodology and is flawed in the following fundamental ways:

- a. The DEIS/EIR's HEP is developed based on idealized vernal pool/native grassland landscape characteristics that are not demonstrated as important features for any particular species of interest. The two reference sites chosen as idealized habitats for the analysis of the LAX project are the Santa Rosa Plateau and the Carrizo Plain Natural Area. Both of these sites are inland areas that support some similar types of habitat (grassland, forb, and vernal pool), but their similarity to the historical coastal habitats of the study area is questionable. In fact, they are very dissimilar to the existing condition of the study area and are not at all analogous to southern foredune and southern dune scrub. Rather than focus on how high quality habitats associated with the reference sites might help define the specific habitat requirements of the target species found at LAX, the DEIS/EIR develops a generalized HEP that largely ignores the requirements of the target species. For instance, the analysis quantifies such factors as vernal pool flora, native grasses over 10 percent, and contiguous native habitat over 40 acres, which have very different relevance to species as diverse as the loggerhead shrike (*Lanius ludovicianus*), Riverside fairy shrimp, San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), or Lewis' evening primrose (*Camissonia lewisii*).
- b. The HEP analysis arbitrarily assigns values to habitat components without any justification. For example, the category "under regulatory conservation" which measures the strength of environmental land-use laws for a given habitat type and fails to evaluate the quality of the habitat itself, is given twice the importance (0.10) as real habitat components such as "summer dessication" which is critical to the survival of Riverside fairy shrimp. On the other hand, "summer dessication" would not necessarily be an equally important element in consideration of the habitat requirements for the loggerhead shrike, burrowing owl (*Athene cunicularia*), silvery legless lizard (*Anniella pulchra*), etc.

- c. The DEIS/EIR inappropriately assigns Habitat Values to all of the study area's different vegetation communities based on one vegetation community/landscape (the idealized reference sites). The artificially constructed habitat value measurements for vernal pools/native grasslands are applied to completely unrelated habitats using the same inappropriate categories. Southern foredune, for example, is downgraded because it does not contain "areas with periods of inundation of equal to or greater than 30 days," a habitat value that does not apply to the sandy substrates of southern foredune habitats. The southern foredune habitat on the El Segundo dunes, widely acknowledged as some of the highest quality and most diverse examples of its type in southern California, only rates a 0.45 value in the analysis because of this misapplication of specific habitat components to unrelated and structurally very different habitats. As a result, the entire project site is given artificially low Habitat Values because many areas do not exhibit "mound-depression microrelief," "native soils with slope less than 10%," "sensitive/listed vernal pool-associated species (reproducing)," etc., that are comparable to a vernal pool landscape. Many of the habitat components listed in Table 4.10-1 are insignificant in the context of assessing the importance of the site's vegetation resources.
- d. The HEP used in the DEIS/EIR inappropriately "banks" habitat units of urbanized landscape areas that are subsequently used to downgrade the impacts of the proposed project on unrelated habitats. For example, the DEIS/EIR (Page 4-646) considers future ornamental landscaping within the facility (arbitrarily assigned a value of 2.68 habitat units for 53.6 acres of landscaping) to offset the loss of non-native grasslands and disturbed areas supporting sensitive species.
- e. The DEIS/EIR proposes that the restoration of disturbed dune scrub/foredune (Habitat Value of 0.35 according to DEIS/EIR) to southern foredune (Habitat Value of 0.45 according to DEIS/EIR) would result in a mitigation credit value of 0.8 per acre, a higher value than southern foredune or *any other existing habitat* within the study area. Using the DEIS/EIR's methodology, a change in Habitat Value from 0.35 to 0.45 is a difference of 0.1, not 0.8. Using the DEIS/EIR's methodology and Table 4.10-1, the restored southern foredune community would "ideally" resemble grassland/vernal pool habitats of Santa Rosa Plateau and Carrizo Plain, an inappropriate and undesirable result.
- f. The mitigation ratio of 1:1 (as measured in "Habitat Units" in the DEIS/EIR) results in inadequate compensation for the loss of habitats occupied by sensitive species including the loggerhead shrike, San Diego black-tailed jackrabbit, and western spadefoot toad (*Scaphiopus hammondi*). In the following discussion we will examine the example of the non-native grassland and disturbed/bare ground communities under 2015 Alternative "A". The entire study area contains approximately 704.9 acres of non-native grassland (designated as non-native grassland/ruderal in the DEIS/EIR). Approximately 363.4 acres would be impacted under Alternative A. Using the DEIS/EIR's HEP analysis, this 363.4 acres is equivalent to 54.47 Habitat Units. The DEIS/EIR then combines the impacts for disturbed/bare ground (94.8 acres or 9.48 Habitat Units) with the grassland

habitat units ($54.47+9.48=63.95$ Habitat Units). An arbitrarily assigned credit for future landscaped areas is then subtracted from the total impacts to yield the total Habitat Units of impact (63.95 Habitat Units -2.68 Habitat Units (or 53.6 acres of landscaping) = 61.27 Habitat Units). The proposed mitigation plan consists of three components: (1) enhancement of 16.9 acres of non-native grassland to needlegrass grassland; (2) restoration of 18.06 acres of existing roadways within the El Segundo blue butterfly preserve to southern foredune; and (3) enhancement of 74.6 acres of disturbed dune scrub/foredune to southern foredune. Of this total, only 16.9 acres would provide comparable mitigation (enhancement of non-native grassland to native grassland) for losses of 363.4 acres of grassland and 94.8 acres of disturbed habitat supporting sensitive species.

- g. Most of the habitats present on LAX are artificially assigned low values, which then are used as the basis for developing mitigation measures. After creating these artificial habitat units, the DEIS/EIR then proposes that units are fully exchangeable, such that impacts to one habitat type, for instance grasslands, could be mitigated through enhancement of different habitat types supporting different species, such as southern foredune. By implying this arbitrary "exchange system" of mitigation, the DEIS/EIR has failed to establish a credible basis for the nexus and proportionality of the mitigation process.

Volume II pp. 4-671 - 4-713

The DEIS/EIR states that occupied habitat for the Riverside fairy shrimp will be replaced at a suitable, alternate location at a ratio of not more than 1:1. Restoration of vernal pools sufficient to support Riverside fairy shrimp is experimental and often unsuccessful. Therefore, mitigation ratios typically vary from 3:1 to 5:1 for impacts to vernal pools depending on the quality of the pools to be disturbed. The "ephemerally wetted areas" on LAX are not high quality vernal pools; however, they do support two species of fairy shrimp and the western spadefoot toad, which require vernal pools for reproduction. Therefore, we recommend that the mitigation for impacts to the pools at LAX be 3:1, at the low end of the typical mitigation range. The surface area of the ponds to be impacted on LAX is 1.3 acres; therefore, the surface area of the mitigation ponds should be 3.9 acres.

In addition, successful creation of functional vernal pool habitat must include provisions for the creation and management of surrounding upland habitats. These upland habitats serve both as buffers and watersheds for created vernal pools. The ratio of upland watershed to pool surface area on natural and successfully created pools is at least 10:1 and often 15:1. Therefore, the amount of land minimally required to support the created pools will be 39 acres. We have recommended splitting this acreage between two or more sites, to increase the chances of successfully restoring the specific conditions which the fairy shrimp and western spadefoot toad require to breed. We recommend that the spadefoot toad mitigation (MM-BC-4, in part) be coordinated with the relocation of vernal pool resources and Riverside fairy shrimp. Buffer areas

and the watersheds of vernal pools should be managed in perpetuity for both Riverside fairy shrimp and spadefoot toad.

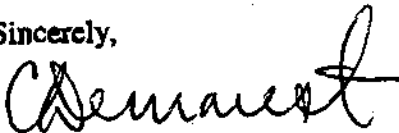
We are also concerned about potential impacts to the federally endangered El Segundo Blue butterfly. Alternative A would impact 320 square feet of occupied butterfly habitat. Considering the rarity of the species and its habitat, direct, permanent impacts to southern foredune and dunescrub communities containing the butterfly should be mitigated at a 5:1 ratio. This would result in the creation of 0.05 acres of suitable habitat. We recommend that this restoration occur in currently unoccupied portions of the dune preserve, such as subsites 45 or 50, or in the 104 acres north of the existing preserve. Impacts to the high density butterfly population in subsite 9 from the proposed ring road and World Way West realignment have not been sufficiently investigated. We recommend further disclosure of the engineering plans being considered for the World Way West interchange area, in order to fully analyze the potential impacts associated with this portion of the proposed project.

Volume II. pp. 4-817-4-838

Light emissions are known to disrupt the circadian rhythms of birds, butterflies, small mammals, and other species. This is especially true of nocturnal species, such as the numerous rare, endemic moth species restricted to the dunes. Light emissions along Pershing Drive are currently very low, with only a few street lights present adjacent to the preserve. However, as noted in the DEIS/EIR, several streetlights at the westerly end of World Way West light a wide area of the dunes preserve. The foot-candles emitted by these lights were not measured or analyzed in the DEIS/EIR. The number of additional streetlights proposed for the ring road and the additional infrastructure on the airport are also not disclosed, but the DEIS/EIR estimates that the light reaching the dunes preserve will increase to 0.60 foot-candles. How this figure was reached is not described. In addition, the effects of increased noise levels on sensitive species and habitats are not adequately analyzed in the DEIS/EIR. In addition, research has shown that chronic noise levels can be disruptive to avian species, amphibians, and rodents. We recommend that the Final DEIS/EIR include a more detailed analysis of the biological effects of night lighting and increased noise levels. Mitigation measures to offset potentially significant impacts should also be proposed.

The Department appreciates the opportunity to comment on this DEIS/EIR.

Sincerely,



for Patricia Sanderson Port
Regional Environmental Officer

cc: California/Nevada Operations Office, Sacramento
Carlsbad Fish and Wildlife Office, Carlsbad
OEPC, Washington

DEPARTMENT OF TRANSPORTATION

District 7
120 South Spring Street, Los Angeles, California 90012
(213) 897-4429



July 20, 2001

IGR/CEQA cs/010134
Draft EIR/EIS
City of Los Angeles
LAX 2015 Master Plan
Vic. LA-105-0.0
LA-1-(25.92-29.08)
LA-405-(21.25-25.94)
SCH # 1997061047

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports (LAWA)
LAX Master Plan Office
P.O. Box 92216
Los Angeles, CA 90009-2216

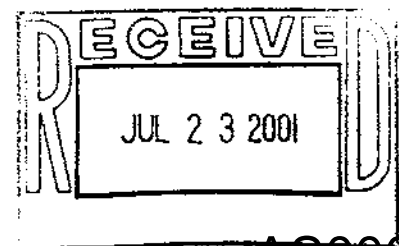
Dear Mr. Ritchie:

Thank you for including the California Department of Transportation in the environmental review process for the above-mentioned document.

In summary, the January 2001 Draft EIR/EIS for the proposed LAX 2015 Master Plan does not adequately address traffic impacts and deficiencies. The document does not provide sufficient project detail for transportation improvements within the State right-of-way and does not adequately identify the funding sources associated with implementing these projects. Additional environmental documents will be required for individual transportation projects that are proposed within the State right-of-way.

Any work within or adjacent to the state highway right-of-way, either existing or proposed, will require an encroachment permit from Caltrans. The permit application will need to include all pertinent analysis, reports, and plans to allow for a comprehensive review of the work proposed and its impact to the State highway right-of-way. In addition, for projects with an anticipated cost of over \$1 million within the State highway right-of-way, a PSR will also be necessary.

Following are the comments for the LAX 2015 Master Plan transportation and circulation mitigation projects:



I. General EIR/EIS Comments

- A. Due to the complexity of the proposed State Route 1 improvements, the proposed estimated construction time at 2-3 years does not appear to be feasible.
- B. Right of Way (R/W) lines should be considered for display in the final EIR/EIS.
- C. The ground transportation projects need to be included in the Regional Transportation Plan (RTP), Regional Transportation Improvement Program (RTIP) and State Implementation Plan (SIP) so as to ensure FHWA air quality standards are met.
- D. In reference to the air space underneath the Route 105 Freeway, Caltrans expects to continue utilizing this space.
- E. The following transportation projects should be identified as LAX 2015 Master Plan mitigation projects:
 - 1. State Route 1 Projects (Appendix K)
 - a. Diamond Interchange, Segment A, B, C
 - b. Urban Interchange, Segment A, B, C
 - c. North Tunnel (Century Blvd/Westchester Pkwy)
 - d. Century Blvd. Interchange
 - 2. State Route 1 projects listed in the EIR/EIS, Table 4.3.2-28
 - 3. LAX Expressway
 - 4. The ring road and connections with State highway facilities
 - 5. Metro Green Line LRT to LAX
 - 6. Route 405/105 direct freeway HOV connectors
 - 7. Extension of Route 105 to Pershing Drive
- F. Caltrans is concerned about the increase in air cargo truck trips and impacts on the regional freeway system during peak commute periods. Please indicate the impacted I-405 and I-105 Freeway ramps along with the projected air cargo truck volumes. Intersection analysis for these freeway ramps will be needed.
- G. Please provide justifications for the number of lanes proposed on the LAX Expressway.

- H. The EIR/EIS should include a discussion on the following issues: flood control channel, Caltrans I-405 Transportation Concept Report (TCR), Railroad Overhead, utilities, access point issues of the proposed LAX Expressway, right-of-way impacts, etc.
- I. The EIR/EIS has not provided sufficient geometric detail for the proposed improvements. Therefore, it should be noted that the document does not constitute geometric approval or environmental approval for any specific work to be done on the State Highway System.
- J. Please explore options with the LADOT on diverting traffic/motorists in order to relieve congestion along Routes 10 and 405, emphasizing on La Cienega Blvd., which is an existing alternate route between Route 10 and Route 405.
- K. For the LAX Expressway alternative, the precise viable roadway alignments and associated right-of-way requirements should be incorporated in the final EIS/EIR.

II. EIR/EIS Section Comments

A. *Section 4.2.3*

Hazardous Materials. Based on the project description contained in the status report dated March 23, 2001, two alternatives are proposed for the LAX Expressway: (1) connect the expressway at the Hughes Parkway Interchange, and (2) connect to the Route 90/I-405 Interchange. The Expressway will be located to the east of Route 405 and eventually cross over to west of Route 405, connect with the Ring Road parallel and south of Arbor Vitae Street. It is also our understanding that Caltrans' role for this project is to provide oversight. As an oversight agency, Caltrans involvement was discussed in Section 4.23.5. In the Master Plan Commitments there is discussion of LAWA's commitments to implement remediation, existing remediation efforts (HM- 1), and the addressing of hazardous materials during construction (HM- 2). The report indicated that property would be acquired during the process. Some of the properties were known or suspected to be contaminated. During the December 14, 2000 meeting, it was mentioned that the acquisition of properties would be the responsibility of LAWA. Unless otherwise advised, it is our understanding there will be no transfer of properties, having the presence of hazardous waste, to Caltrans Right of Way.

B. *Section 4.3.2*

1. From the three Master Plan build alternatives, the No Additional Runway Alternative (C) would have the best off-airport traffic performance.
2. If Alternative (C) is adopted, a traffic study summary will need to be prepared for Alternative (C) showing but not limited to the following:
 - a. Updated traffic volumes for year 2001
(i.e., intersection, street link, freeway segment, and freeway ramp).
 - b. Adjusted Environmental Baseline traffic volumes for year 2005
(i.e., intersection, street link, freeway segment, and freeway ramp).
 - c. Adjusted Environmental Baseline traffic volumes for year 2015
(i.e., intersection, street link, freeway segment, and freeway ramp).
 - d. Traffic distribution for Adjusted Environmental Baseline for year 2005/2015 with a legend indicating the change in trends of Social Demands and Economic Development.
 - e. Proposed LAX expansion project traffic volumes
(i.e., intersection, street link, freeway segment and freeway ramp).
 - f. Existing 2001 geometric configurations as follows:
 - i. Intersection- Lane movements
 - ii. Street Link- Number of lanes
 - iii. Freeway segment- Number of lanes + HOV lanes
 - iv. Freeway ramp- Number of lanes
 - g. Regional Roadway Improvements for Adjusted Environmental Baseline for year 2005/2015 (i.e., intersection, street link, freeway segment, and freeway ramp).
 - h. Mitigation measures/roadway improvements
(i.e., intersection, street link, freeway segment, and freeway ramp).
 - i. Existing 2001 Level of Service
(i.e., intersection, street link, freeway segment, and freeway ramp).
 - j. Adjusted Environmental Baseline Level of Service for year 2005/2015
(i.e., intersection, street link, freeway segment, and freeway ramp).
 - k. Level of Service after proposed LAX expansion project completion
(i.e., intersection, street link, freeway segment, and freeway ramp).
 - l. Level of Service after mitigation measures implementation
(i.e., intersection, street link, freeway segment, and freeway ramp).
 - m. Future projected traffic volumes for Adjusted Environmental Baseline for year 2005/2015 (i.e., intersection, street link, freeway segment and freeway ramp).
 - n. Location of future projects.
3. Note that tables need to be prepared as necessary for comparative analysis.

C. Section 4.6

The LAX Master Plan's air quality analyses recognizes compliance with both SIP requirements as well as Clean Air Act general conformity requirements. Presumably, such recognition ensures a measure of consistency in the data rendering.

D. Section 4.6.3.3

This paragraph should probably be revised or updated. The reference to the 1994 SIP is not clear, particularly since the applicable SIP for the SCAG region is the 1997 SIP. In addition, the best estimate of this paragraph should be revised.

E. Section 4.6.7.2

Construction: Relative to air quality, in addition to the Playa Vista Project, the realignment of SR-1 should also be noted since there would be construction-related emissions.

III. Technical Report 2b

A. Add and analyze the following State roadway segments:

1. Manchester Avenue between Sepulveda Boulevard and I-405. It will be re-stripped by the City of Los Angeles.
2. Lincoln Boulevard (SR-1) North of Manchester Avenue. The impact at this location will be mitigated by the Arbor Vitae project.
3. Sepulveda Boulevard (SR-1) between Rosecrans Avenue and Century Boulevard will be widened by the Playa Vista Project.

B. Add the following state highway segments for accident analysis (It is not possible to analyze the projected accident rate, however, it is expected that safety will be further enhanced and the accident rate will be reduced as a result of funding improvements proposed):

1. Sepulveda Blvd./I-105 off-ramp, n/o Imperial Hwy.
2. Nash St./I-105 WB off-ramp - Imperial Hwy.
3. La Cienega Blvd./I-405 SB ramps, n/o Century Blvd.
4. SR-1/between Century Blvd. and Imperial Hwy.

- C. Below are existing airport activities that do not coincide with the 11:00 – 12:00 Noon peak hour:
1. Section 7.3.1.3 LAX Cargo and Ancillary trips: Figure II-7.8 shows the peak hour from 12:00 – 2:00 PM.
 2. Section 7.3.1.4 Passenger and Visitor Parking Facilities: Figure II-7. shows the peak hour from 5:00 – 6:00 PM.
 3. Section 7.3.1.5 Employee Parking Facilities: Figure II-7.10 shows the peak hour from 2:00 – 3:00 PM.
- D. We are aware that the noon peak period is for arrivals and departures, however, traffic peak period on mainline highway as well as around the airport may not be the same as the peak for the airport. We would like to have further justification for use of the Noon Peak period.
- E. Note that Section 7.3.2.3 Result of Survey shows 30% or more of motorist responding, they used “Nash Street at the westbound I-105 off-ramp”. However, Sepulveda Boulevard at the westbound I-105 off-ramp is the primary off-ramp being used by motorists for LAX.
- F. The peak period at Nash Street westbound off-ramp is about 7:30 to 8:30 AM. Most of the traffic using Nash Street is not airport traffic (they are employees who work in Kilroy Airport Center and at aerospace companies). The survey should be conducted at location(s) where traffic is heading to the airport.
- G. Table II-7.6 , 1996 Weekday LOS
1. The table shows the following six freeway ramps operating at LOS=E or worse. Please note the following proposed improvements (to be implemented in the near future):
 - a. No. 12, I-405 NB off-ramp at Manchester Blvd.
(will be widened under State contract).
 - b. No.13, I-405 SB on-ramp at Manchester Blvd.
(will be re-stripped for ultimate improvement by State contract).
 - c. No. 26, City of Hawthorne
(will widen I-405 SB on-ramp at El Segundo Blvd).
 - d. No. 31, I-105 EB on-ramp at Imperial Highway.
 - e. No. 32, I-105 WB off-ramp at Sepulveda Blvd.
(it will be widened to three lanes by State contract).
 - f. No. 35, I-105 WB off-ramp at Nash St.
(will be widened by State contract).

2. The table also shows the following three freeway mainline segments operating at LOS=F (0) or worse. Please note the following proposed improvements (to be implemented in the near future):

- a. I-405 N/O Venice Blvd.
(will be widened by State contract).
- b. I-405 N/O La Tijera Blvd.
(will be widened by Arbor Vitae project).
- c. I-405 S/O Rosecrans Ave.
(will be widened by City of Hawthorne).

3. The table indicates that the freeway segment of "Interstate 405 south of Rosecrans Avenue" is currently operating at LOS=F(0) during AM, PM and Airport peak hours. Caltrans is planning to construct HOV lanes at this segment of the freeway in the near future.

H. Note that Section 4.3.2 (EIR/EIS) "Off-Airport Surface Transportation" does not show the impact of the proposed project (LAX expansion) at the above critical ramps or the 38 ramps that were analyzed in Table II-7.6.

I. Section 4.3.2 also does not show the impact of the proposed project (LAX Expansion) at the freeway mainline segments. The freeway widening will take place by State contract within the next two years.

J. Please identify the Thresholds of Significance for ramps and mainline segments. Also identify mitigation measures if the proposed project will impact any of the analyzed ramps and freeway segments.

K. Also analyze freeway segment I-105 west of the I-405 and identify mitigation measures if the proposed project impacts any of the analyzed freeway mainline segments (the Sepulveda Blvd. off-ramp will be widened to make three lanes and an auxiliary lane will be added in two phases from I-405 to Sepulveda Blvd. by State contract).

L. Due to ambient increase of traffic volumes and traffic demand generated by the proposed LAX expansion, the need for an HOV connector from I-405 northbound to I-105 westbound should continue to be investigated.

M. The freeway mainline segment of "Interstate 105 west of Interstate 405" is currently experiencing heavy congestion during peak hours and the need for mitigation is deemed necessary. Please investigate the following mitigation measures:

- 1. Widening or restriping the I-105 connectors at Imperial Hwy from two to three lanes.

2. Widening or restriping Imperial Hwy at I-105 from three to four lanes, thus, eliminating merged lanes. The I-105 Freeway terminus at Imperial Highway should be widened to Pershing Drive, possibly becoming part of the State Highway System.
- N. Please provide traffic model result information. Also compare the results of your model with no change in existing traffic patterns.

IV Appendix G

A. Section 3.2.1 and 3.2.2

SCAG's proposed 2001 RTP uses EMFAC7G as does the 1997 AQMP, and the 2000/01 RTIP, the LAX Master Plan incorporates emissions data that is derived from the use of EMFAC 2000 model. The regional plans and programs have not yet used this particular model to determine emissions inventories. The modeling scenarios become somewhat blurred when trying to determine projected model outputs when different models have been used. The Plan acknowledges that the estimates of future emissions are conservative estimates, however, given that different assumptions of variables tend to yield different emissions estimates for the various pollutants, how significant would the differences in the outcomes be?

V Appendix K

A. General Comments

1. Are there any paleontology issues involved in the excavation of this project?
2. The golf course and Youth Park were not mentioned. Please explain their involvement with the project.

B. Section 3.1

As the S/B Route 405 experiences heavy traffic volumes from the I-10 interchange (4 miles north of the proposed expressway), further analysis will be needed to determine the optimal I-405 access point at the northern terminus for the LAX Expressway. The additional analysis will need to evaluate the LAX Expressway and I-405 connections in the vicinity of Venice Blvd. for both the southbound and northbound directions. In addition, traffic mitigation measures will need to be implemented to fully benefit from the proposed expressway.

C. *Section 3.2*

1. LAWA needs to arrange for the City of Los Angeles to construct as a city street any new alignments of Lincoln Blvd. Additionally, LAWA needs to request the City of Los Angeles to accept State relinquishment Sepulveda Blvd. from the Route 105 Freeway to Lincoln Blvd and of Lincoln Blvd. to the Santa Monica city limits.
2. LAWA needs to have the State Legislature remove the specified segment of Lincoln Blvd. from the State Highway system.
3. The alignment of new roadway or the realignment of existing roadway needs to be precisely delineated to enable the parties involved to determine the extent of clean up needed in order to proceed.

D. *Section 3.2.2*

Alternative 2 – Diamond Interchange: Need to have more discussion on the right of way impacts and effects to business, residential, utility, etc.

E. *Section 4.3*

1. Please clarify the health risks involved under the social and economic section.
2. Table 4.3-3, please specify the impacts to Century Blvd. and to the church.

F. *Section 4.4*

The section on Pedestrian and Bicycle Facilities makes reference to several documents or "Plans" but does not cite the author or dates associated with these documents. The last paragraph in this section is also unclear.

G. *Section 4.5*

1. Table 4.5-1 and 4.5-2, please show the NAAQS for CO 8-hour average as 9 ppm instead of 9.0 ppm.
2. The PM₁₀ Hotspot analysis is missing. FHWA currently requires projects in PM₁₀ non-attainment areas to have localized impact analysis. This project is a non-exempt project and is located in PM₁₀ non-attainment area. Hence, a PM₁₀ analysis is required.

H. *Section 4.6*

The noise levels approach or exceed the respective FHWA Noise Abatement Criteria (NAC) for some areas adjacent to the proposed LAX Expressway. The locations of sound walls for these areas should be identified.

I. *Section 4.9*

1. Under the Wetlands and Waters of the United States heading, it may not be necessary to describe a wetland area that ultimately would not be subjected to adverse effects as a result of the project.
2. There is mention of 51 sites that are considered wetlands located in the LAX airfield operations, but no impacts to the wetlands are mentioned. Please explain.

J. *Section 4.13*

Based upon further conversations with the California Coastal Commission (CCC), this project is located outside of the Coastal Zone. However, due to potential impacts to public access to the Coastal Zone, the CCC has indicated that a Federal Consistency review by the CCC may be required for this project.

K. *Section 4.15.2*

1. In what project area is the Merle Norman Headquarters complex?
2. Please clarify the impacts to the four pre-historic sites (archeological). Are they within the APE? Photographs of the buildings or sites, which are eligible for or listed with, the National Registry of Historic Places should be included.

L. *Section 4.16.1*

Please specify the volumes of contaminated soils.

M. *Section 4.16.2.2*

How will the soil and ground water contamination site along the underground storage tanks be mitigated, and explain the no adverse impacts caused by hazardous waste?

N. *Section 4.17.1*

What action needs to be taken regarding the "views of / from the road"?

O. *Section 4.17.2.2*

In the visual section, the photos are not clearly defined. Please clarify.

P. *Section 5.3.1.5*

Need to expand the discussion to summarize the findings of a Relocation Impact Report on residential units and businesses. This report should also be one of the APPENDIXES of the EIS/EIR. In addition, our Right of Way Division would like to review a copy of this report for compliance.

Q. *Section 5.3.2.3*

Please clarify the health risks involved under the social and economic section.

R. *Section 5.3.2.5*

Please explain in more detail the relocation of businesses and residences and the overall impact this project will have on the relocation.

S. *Section 5.3.3*

The Environmental Justice Program and the data involved should be included in this document. Executive Order 12898 "Environmental Justice" should also be addressed in detail.

T. *Section 5.6.2*

Best Management Practices should be used in mitigation for construction noise abatement.

U. *Section 5.8.2.1*

Please clarify how alternative 2 or 3 will decrease average annual pollution loading to the water quality.

V. *Section 5.10.22*

1. Will there be any impacts to native plants and trees?
2. Please explain the "may effect" on the burrowing owls, red-tailed hawks, and migratory raptors nesting and foraging sites located in the vacant lots to the north of the airport.
3. What was the duration of the survey conducted at these vacant lots since it was mentioned that there was no observation of nesting and foraging? Migration may be necessary.
4. How was it determined that these lots are inadequate for nesting and foraging?

W. *Section 5.10.4*

Please provide a conclusion as to the impacts that may or may not occur.

X. *Section 5.15.2.1*

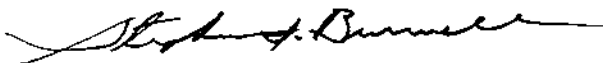
For the implementation of the LAX Master Plan alternatives, discussion of mitigation is needed for the tunneling of Sepulveda on Archeological sites.

Y. *Attachment 2*

It is recommended that commercial zoned areas adjacent to the freeway and of frequent outdoor human use, be identified and investigated for roadway traffic noise impacts.

If you have any questions regarding our comments, refer to our internal IGR/CEQA Record # 010134 and please do not hesitate to contact me at (213) 897-4429.

Sincerely,



STEPHEN BUSWELL
IGR/CEQA Program Manager

cc: Scott Morgan, State Clearinghouse



Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Department of Toxic Substances Control

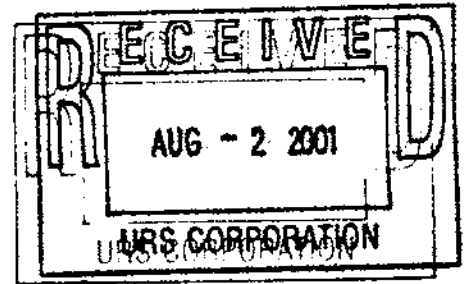
Edwin F. Lowry, Director
1011 N. Grandview Avenue
Glendale, California 91201



Gray Davis
Governor

July 16, 2001

Ms. Jane L. Benefield
City of Los Angeles
1 World Way
Los Angeles, California 90009



DRAFT ENVIRONMENTAL IMPACT REPORT FOR LOS ANGELES INTERNATIONAL AIRPORT PROPOSED MASTER PLAN IMPROVEMENTS, LOS ANGELES, LOS ANGELES COUNTY, CALIFORNIA – SCH # 1997061047

Dear Ms. Benefield:

The Department of Toxic Substances Control (DTSC) has received your draft Environmental Impact Statement / Environmental Impact Report (DEIS/EIR) for the above mentioned Project. Based on the review of the document, DTSC comments are as follows:

- 1) The draft EIR needs to briefly identify and determine whether historic uses at the project site had resulted in any release of hazardous wastes/substances, such as aviation lubes, oils, or chemicals e.g. BTEX, TCE, PCE, and others related to the operations and maintenance at the project area for the proposed alternatives.
- 2) The draft EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight.
- 3) According to the draft EIR (page 4-18), there is a possibility for a potential release due to the use or destruction of the non-renewable resources, such as asbestos, lead, PCB's, and lead-based paint. In considering this, there should be a plan included in the draft EIR clarifying the sampling and/or analysis of these hazardous materials prior to the demolition and construction.

Ms. Jane L. Benefield
July 26, 2001
Page 2

- 4) If during construction of the project, soil and/or groundwater contamination is suspected, construction in the area should stop and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exists, the draft EIR should include a plan identifying how any required investigation and/or remediation will be conducted, and which government agency will provide appropriate regulatory oversight.

If you have any questions, please contact Ms. Jessy Philip at (818) 551-2174 or me at (818) 551-2877.

Sincerely,



Harlan R. Jeche
Unit Chief
Southern California Cleanup Operations - Glendale Office

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Mr. Guenther W. Moskat, Chief
Planning and Environmental Analysis Section
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

AS00002



Winston H. Hickox
Agency Secretary

Air Resources Board

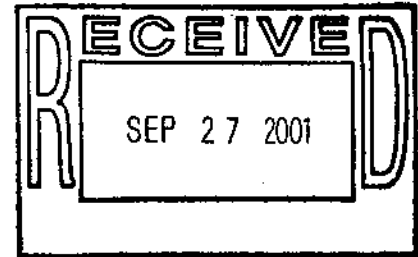
Alan C. Lloyd, Ph.D.
Chairman



Gray Davis
Governor

September 24, 2001

Mr. Roger A. Johnson
Deputy Executive Director
City Of Los Angeles
Los Angeles World Airports
P.O. Box 92216
Los Angeles, California 90009-2216



Dear Mr. Johnson:

Thank you for providing the Air Resources Board (ARB) the opportunity to review and comment on the Draft Environmental Impact Statement/Draft Environmental Impact Report for the Los Angeles International Airport Proposed Master Plan Improvements (DEIS/DEIR). We acknowledge the considerable effort that you have made to evaluate the air quality impacts associated with the project and to identify mitigation measures. We appreciate the opportunities to meet and confer with Los Angeles World Airports (LAWA) staff and consultants.

Mitigation Measures

The proposed Master Plan provides an important opportunity to make LAX a model airport from the standpoint of clean air technologies. In terms of the Master Plan, now is the time to design for zero- and near-zero emission technologies wherever possible. LAWA should use the cleanest possible technologies and designs for all emission sources and then mitigate, to the maximum extent possible, any remaining emissions. While we recognize that LAWA is not building an entirely new airport from the ground up, the scale of the project gives LAWA the opportunity to incorporate effective new strategies to minimize air pollution impacts.

The Master Plan includes an extensive list of air quality mitigation measures. These include measures already in place, measures included in the master plan, measures under evaluation, and measures not selected. This approach enhances the ability to review the considerable number of options. We support the measures that LAWA intends to implement and believe LAWA's commitment to evaluate additional measures is appropriate and necessary. In considering additional measures, we believe all measures labeled for evaluation should be pursued, unless LAWA demonstrates that the measure is not feasible or has a negative impact. ARB staff is available to work with LAWA staff on these assessments.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

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Mr. Roger A. Johnson

September 24, 2001

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We strongly support LAWA's steps to reduce the impacts of diesel particulate emissions during the construction process and in daily operations. Ultimately, all diesel vehicles and equipment on the airport should use either: (1) alternative fuels or (2) the combination of low-sulfur diesel fuel and particulate filters approved by ARB. We commend LAWA on the recent decision to move to low sulfur diesel fuel for ground support operations.

We also encourage you to reconsider the discarded measure to provide free travel on the Green Line to and from LAX, or an alternative that could similarly increase the use of mass transit for passenger access. Another measure not selected, providing incentives for the use of low-emission vehicles to transport cargo to and from the airport, may also offer emission reduction benefits.

Community Impacts

Given the scale of the project, it is important that the DEIS/DEIR assess and characterize the potential community health impacts as clearly as possible. The health risk assessment should be based on methodology and assumptions used by California's Office of Environmental Health Hazard Assessment. The results should show the magnitude and location of health risks from the proposed plan on people in the surrounding area – including residences and schools. There is a lot of information included in the document. It would be helpful from a community information standpoint to summarize the results in a single place in a simplified format.

Emissions Analyses

During our review, we have also noted a number of areas where the emissions assessment in the DEIS/DEIR should be improved or clarified. The proposed air quality mitigation program relies on four measures to provide 98 percent of the anticipated ozone precursor emission reductions in 2015—reduced aircraft engine taxi, clean aircraft incentives and landing fees, conversion to 100 percent electric ground support equipment, and remote airport terminals. Because the assumptions that drive the

Mr. Roger A. Johnson

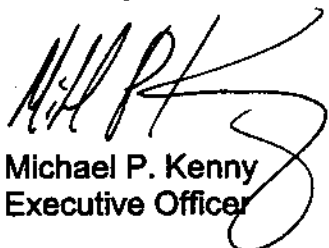
September 24, 2001

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benefit calculations are critical, it is essential that they be clearly defined. ARB staff would like to work with LAWA staff to strengthen, where necessary, the technical air quality analysis of the DEIS/DEIR.

If you have questions, please call me at (916) 445-4383 or have your staff contact Ms. Cynthia Marvin, Chief, Air Quality and Transportation Branch at (916) 322-7236.

Sincerely,

A handwritten signature in black ink, appearing to read 'M.P. Kenny', written over the typed name and title.

Michael P. Kenny
Executive Officer

cc: See next page.

AS00003

Mr. Roger A. Johnson

September 24, 2001

Page 4

cc: Dr. Alan C. Lloyd
Chairman
Air Resources Board
P.O. Box 2815
Sacramento, California 95812

Dr. William Burke
Chairman
South Coast Air Quality
Management District Board
21865 East Copley Drive
Diamond Bar, California 91765-4182

Mr. Jim Ritchie
Los Angeles World Airports
Master Plan Office
P.O. Box 92216
Los Angeles, California 90009-2216

Mr. David Kessler, AICP
Federal Aviation Administration
P.O. Box 92007
Los Angeles, California 90009-2007

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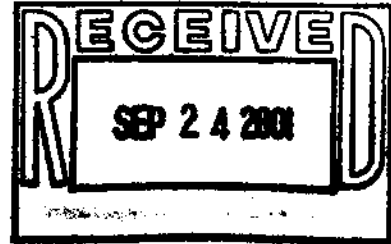
STATE OF CALIFORNIA - THE RESOURCES AGENCY
DEPARTMENT OF FISH AND GAME

GRAY DAVIS, Governor



FACSIMILE TRANSMITTAL

TO: Master Plan LAX
310-646-1891



FROM: _____
SOUTH COAST REGION
4949 VIEWRIDGE AVENUE
SAN DIEGO, CALIFORNIA 92123
TELEPHONE (858) 467-4201
FAX: (858) 467-4299

DATE: 9/24/01 TIME: 5:00PM

OF PAGES SENT INCLUDING TRANSMITTAL SHEET 14

COMMENTS:

Comments on the Los Angeles International
Master Plan of Improvements DEIR

IF YOU DO NOT RECEIVE ALL OF THE PAGES INDICATED
PLEASE CALL THE SENDER AS SOON AS POSSIBLE.

STATE OF CALIFORNIA-THE RESOURCES AGENCY

GRAY DAVIS, Governor

DEPARTMENT OF FISH AND GAME

South Coast Region
9 Viewridge Avenue
San Diego, California 92123
(858) 487-4201
FAX (858) 487-4235



September 21, 2001



Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
Master Plan Office
P.O. Box 92216
Los Angeles, California 90009-2216

**Draft Environmental Impact Statement / Environmental Impact Report for the Los Angeles International Airport Proposed Master Plan Improvements, Los Angeles, Los Angeles County, California
(SCH 1997061047)**

Dear Mr. Ritchie:

The Department of Fish and Game (Department) has reviewed the Draft Environmental Impact Statement/ Environmental Impact Report (DEIS/EIR) dated January 2001, for the Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Los Angeles, Los Angeles County, California. The Department is identified as a Trustee Agency pursuant to California Environmental Quality Act (CEQA) Section 15386 and is responsible for the conservation, protection and management of the state's biological resources.

The proposed project consists of three alternative expansion scenarios for LAX as well as a "no project" alternative. Under Alternative A, a new runway would be added to the north airfield complex, and two existing runways would be lengthened; all runways would be further separated from one another. This alternative differs from the other build options because it would not develop the Manchester Square property acquired as part of the LAX noise mitigation program. This alternative would fully meet the projected demand for aviation services at LAX by accommodating 97.9 million passengers and 4.2 million tons of cargo in 2015. As with each of the three build alternatives (A, B and C), a new passenger terminal complex would be constructed at the west end of the airport on Pershing Drive connected to the I-105 and I-405 freeways by a ring road encircling the airport. An LAX Expressway would be built along side the I-405 and would provide direct freeway access to the airport via a connection to the ring road. New midfield concourses would be connected to the west terminal and the existing central terminal by an Automated People Mover. New air cargo facilities would be built on newly acquired land east of the airport. The LAX Northside project would be reconfigured into a

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Jim Ritchie
September 21, 2001
Page 2

smaller, 2.65 million square-foot mixed use development and would be renamed the Westchester Southside project. The Continental City site would be used for air cargo facilities.

Under Alternative B, a new runway would be added to the south airfield complex, and two existing runways would be lengthened; all runways would be further separated from one another. This alternative would fully meet the projected demand for aviation services at LAX by accommodating 97.9 million passengers and 4.2 million tons of cargo in 2015.

As with each of the three build alternatives (A, B and C), a new passenger terminal complex would be constructed at the west end of the airport on Pershing Drive connected to the I-105 and I-405 freeways by a ring road encircling the airport. An LAX Expressway would be built along side the I-405 and would provide direct freeway access to the airport via the MTA railroad right-of-way adjacent to Florence Avenue, and a connection to the ring road. New midfield concourses would be connected to the west terminal and the existing central terminal by an Automated People Mover. New air cargo facilities would be built on newly acquired land east of the airport. Again, the LAX Northside project would be reconfigured into a smaller, 2.65 million square-foot mixed use development and would be renamed the Westchester Southside project. The Continental City site would be used for air cargo facilities.

Under Alternative C, the number of runways would stay the same at four. Two existing runways would be moved, one runway widened, three runways lengthened and all runways further separated from one another to improve operational efficiency. This alternative would not fully meet the projected demand for aviation services at LAX. It would fully accommodate the cargo demand of 4.2 million tons in 2015. However, it would accommodate only 89.6 million passengers (a shortfall of 8.3 million passengers) in 2015. As with the other build alternatives, a new passenger terminal complex would be constructed at the west end of the airport on Pershing Drive connected to the I-105 and I-405 freeways by a ring road encircling the airport. An LAX Expressway would be built along side the I-405 and would provide direct freeway access to the airport via a connection to the ring road. New midfield concourses would be connected to the west terminal and the existing central terminal by an Automated People Mover. New air cargo facilities would be built on newly acquired land east of the airport. The LAX Northside project would be reconfigured into a smaller, 2.65-million-square-foot mixed use development and would be renamed the Westchester Southside project. The Continental City site would be used for air cargo facilities. LAWA staff has chosen this option as its preferred alternative. (The FAA has not yet identified its preferred alternative and, in accordance with its regulations, the FAA will identify a preferred alternative in the Final EIS/EIR.)

According to the DEIS/EIR, the proposed project will impact non-native grasslands, disturbed areas, valley needlegrass grasslands, southern foredune, southern dune scrub, and vernal ponds. Federally threatened and endangered species that will or have potential to be impacted by the project include the endangered El Segundo blue butterfly (*Euphilotes battoides*

Jim Ritchie

September 21, 2001

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allyni) and Riverside fairy shrimp (*Streptocephalus woottoni*). Sensitive species, including several California Species of Special Concern (CSC) that would potentially be impacted by the proposed project include the loggerhead shrike (*Lanius ludovicianus* - CSC), burrowing owl (*Athene cunicularia* - CSC), western spadefoot toad (*Scaphiopus hammondi* - CSC), silvery legless lizard (*Anniella pulchra* - CSC), San Diego horned lizard (*Prhinosoma coronatum blairvillei* - CSC), San Diego black tailed jackrabbit (*Lepus californicus bennettii* - CSC), Trask's snail (*Helminthoglypta traskii*), Henne's eucosman moth (*Eucosa hennei*), Ford's sand dune moth (*Psammobotys fordii*), and Globose dune beetle (*Coelus globosus*). Sensitive plant species include Lewis' evening primrose (*Camissonia lewisii*), duneflower or sand food (*Pholisma arenarium*), and California spineflower (*Mucronea californica*).

The Department offers the following comments concerning this project:

Habitat Evaluation Procedures Methodology

The DEIS/EIR relies on the Habitat Evaluation Procedures (HEP) methodology to define biological impacts and develop biological mitigation measures. For the reasons described below, the Department does not concur with the manner by which the HEP was applied; and, therefore we do not believe that the mitigation measures are acceptable.

The HEP methodology was first developed in the 1970's by the USFWS for the evaluation of impacts to individual species and their habitats. The HEP methodology is designed to quantify the habitat quality of given areas for a *particular* species. The HEP technique can be a useful tool for impact analysis for a target species by providing a consistent method of assessing the adverse or beneficial effects of a project and its alternatives. Using the *habitat requirements of the target species* as a basis for analysis, the importance of the study area's environmental variables to the target species are analyzed and used to generate a habitat suitability index (HSI), referred to as Habitat Value in the DEIS/EIR. A Habitat Value may range from 0.0-1.0, depending on the value to the target species. Multiplying the HSI or Habitat Value by the acreage of a study area yields habitat units (HU), a measure of a site's acreage and value for a particular species. For example, if a HEP analysis is conducted for two separate target species (Species "A" and Species "B") within an area supporting optimal habitat for Species A but only marginal habitat for Species B, the HSI values and HU values would be much higher for Species A than Species B. The HEP analysis presented in the DEIS/EIR does not follow this accepted methodology, and is flawed in the following fundamental ways:

1. The DEIS/EIR's HEP is developed based on idealized vernal pool/native grassland landscape characteristics that are not demonstrated as important features for any particular species of interest. The two reference sites chosen as idealized habitats for the analysis of the LAX project are the Santa Rosa Plateau and the Carrizo Plain Natural

Jim Ritchie
September 21, 2001
Page 4

Area, both inland areas that support some similar types of habitat (grassland, forb, and vernal pool) but their similarity to the historical coastal habitats of the study area is questionable. In fact, they are very dissimilar to the existing condition of the study area, and are not at all analogous to southern foredune and southern dune scrub. Rather than focusing on how high quality habitats associated with the reference sites might help define the specific habitat requirements of the target species found at LAX, the DEIS/EIR develops a generalized HEP that largely ignores the requirements of the target species. For instance, the analysis quantifies such factors as vernal pool flora, native grasses over 10%, and contiguous native habitat over 40 acres, which have very different relevance to species as diverse as the loggerhead shrike, Riverside fairy shrimp, black-tailed jackrabbit, or Lewis' evening primrose.

2. The HEP analysis arbitrarily assigns values to habitat components without any justification. For example, the category "under regulatory conservation" which measures the strength of environmental land-use laws for a given habitat type and fails to evaluate the quality of the habitat itself, is given twice the importance (0.10) as real habitat components such as "summer dessication" which is critical to the survival of Riverside fairy shrimp. On the other hand, "summer dessication" would not necessarily be an equally important element in consideration of the habitat requirements for the loggerhead shrike, burrowing owl, silvery legless lizard, etc.
3. The DEIS/EIR inappropriately assigns Habitat Values to all of the study area's different vegetation communities based on one vegetation community/landscape (the idealized reference sites). The artificially constructed habitat value measurements for vernal pools/native grasslands are applied to completely unrelated habitats using the same inappropriate categories. Southern foredune, for example, is downgraded because it does not contain "areas with periods of inundation of equal to or greater than 30 days", a habitat value that does not apply to the sandy substrates of southern foredune habitats. The southern foredune habitat on the El Segundo dunes, widely acknowledged as some of the highest quality and most diverse examples of its type in southern California, only rates a 0.45 value in the analysis because of this misapplication of specific habitat components to unrelated and structurally very different habitats. As a result, the entire project site is given artificially low Habitat Values because many areas do not exhibit "mound-depression microrelief," "native soils with slope less than 10%", "sensitive/listed vernal pool-associated species (reproducing)," etc. that are comparable to a vernal pool landscape. Many of the habitat components listed in Table 4.10-1 are insignificant in the context of assessing the importance of the site's vegetation resources.
4. The HEP used in the DEIS/EIR inappropriately "banks" habitat units of urbanized landscape areas that are subsequently used to downgrade the impacts of the proposed

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project on unrelated habitats. For example, the EIS/EIR (Page 4-646) considers future ornamental landscaping within the facility (arbitrarily assigned a value of 2.68 habitat units for 53.6 acres of landscaping) to offset the loss of non-native grasslands and disturbed areas supporting sensitive species.

5. The DEIS/EIR proposes that the restoration of disturbed dune scrub/foredune (Habitat Value of 0.35 according to DEIS/EIR) to southern foredune (Habitat Value of 0.45 according to DEIS/EIR) would result in a mitigation credit value of 0.8 per acre, a higher value than southern foredune or *any other existing habitat* within the study area. Using the DEIS/EIR's methodology, a change in Habitat Value from 0.35 to 0.45 is a difference of 0.1, not 0.8. Using the DEIS/EIR's methodology and Table 4.10-1, the restored southern foredune community would "ideally" resemble grassland/vernal pool habitats of Santa Rosa Plateau and Carrizo Plain, an undesirable result.
6. The mitigation ratio of 1:1 (as measured in "Habitat Units" in the DEIS/EIR) results in inadequate compensation for the loss of habitats occupied by sensitive species including the loggerhead shrike, San Diego black-tailed jackrabbit, and western spadefoot toad. In the following discussion we will examine the example of the non-native grassland and disturbed/bare ground communities under 2015 Alternative "A". The entire study area contains approximately 704.9 acres of non-native grassland (designated as non-native grassland/ruderal in the DEIS/EIR). Approximately 363.4 acres would be impacted under Alternative A. Using the DEIS/EIR's HEP analysis, this 363.4 acres is equivalent to 54.47 Habitat Units. The DEIS/EIR then combines the impacts for disturbed/bare ground (94.8 acres or 9.48 Habitat Units) with the grassland habitat units (54.47+9.48=63.95 Habitat Units). An arbitrarily assigned credit for future landscaped areas is then subtracted from the total impacts to yield the total Habitat Units of impact (63.95 Habitat Units-2.68 Habitat Units (or 53.6 acres of landscaping) = 61.27 Habitat Units. The proposed mitigation plan consists of three components: (1) enhancement of 16.9 acres of non-native grassland to needlegrass grassland; (2) restoration of 18.06 acres of existing roadways within the El Segundo blue butterfly preserve to southern foredune; and (3) enhancement of 74.6 acres of disturbed dune scrub/foredune to southern foredune. Of this total, only 16.9 acres would provide comparable mitigation (enhancement of non-native grassland to native grassland) for losses of 363.4 acres of grassland and 94.8 acres of disturbed habitat supporting sensitive species.
7. Most of the habitats present on LAX are artificially assigned low values, which then are used as the basis for developing mitigation measures. After creating these artificial habitat units, the DEIS/EIR then proposes that units are fully exchangeable, such that impacts to one habitat type, for instance grasslands, could be mitigated through enhancement of different habitat types supporting different species, such as southern

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foredone. By implying this arbitrary "exchange system" of mitigation, the DEIS/EIR has failed to establish a credible basis for the nexus and proportionality of the mitigation process.

8. In summary, we believe that the modified HEP method used for this analysis is flawed and misapplied, and is inappropriate for use in defining biological impacts and developing acceptable mitigation measures. The following discussion of impacts to habitats and sensitive species omits any references to habitat values as defined or used in the DEIS/EIR.

Federally-Listed Species

9. We understand that the USFWS currently in formal consultation with the Federal Aviation Administration regarding proposed impacts to occupied habitat of the Riverside fairy shrimp.

Restoration of vernal pools sufficient to support Riverside fairy shrimp is experimental and often unsuccessful. Therefore, mitigation ratios typically vary from 3:1 to 5:1 for impacts to vernal pools depending on the quality of the pools to be disturbed. The "ephemerally wetted areas" on LAX are not high quality vernal pools, however, they do support two species of fairy shrimp and the western spadefoot toad, which require vernal pools for reproduction. Therefore, we recommend that the mitigation for impacts to the pools at LAX be 3:1, at the low end of the typical mitigation range. The surface area of the pools to be impacted on LAX is 1.3 acres, therefore the surface area of the mitigation ponds should be 3.9 acres.

Successful creation of functional vernal pool habitat must include provisions for the creation and management of surrounding upland habitats. These upland habitats serve both as buffers and watersheds for created vernal pools. The ratio of upland watershed to pool surface area on natural and successfully created pools is at least 10:1 and often 15:1. Therefore the amount of land minimally required to support the created pools will be 39 acres. We have recommended splitting this acreage between two or more sites, to increase the chances of successfully restoring the specific conditions which the fairy shrimp and western spadefoot toad require to breed.

Please review the Vernal Pool Construction Monitoring Protocol and Habitat Replacement Evaluation produced by the USFWS located at:

<http://pacific.fws.gov/es/vpfinal.html>

10. Potential impacts to the El Segundo Blue butterfly include 320 square feet of occupied

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habitat under Alternative A. Considering the rarity of the species and its habitat, direct, permanent impacts to southern foredune and dune scrub communities containing the butterfly should be mitigated at a 5:1 ratio. This would result in the creation of 0.05 acres of suitable habitat. We recommend that this restoration occur in currently unoccupied portions of the dune preserve, such as subsites 45 or 50, or in the 104 acres north of the existing preserve. Impacts to the high density butterfly population in subsite 9 from the proposed ring road and World Way West realignment have not been sufficiently investigated, as described below in the light emissions discussion. We recommend further disclosure of the engineering plans being considered for the World Way West interchange area, in order to fully analyze the potential impacts associated with this portion of the proposed project.

Other Impacts

11. The ring road which is proposed to replace Pershing Drive and circle the expanded airport presents a number of potential impacts to wildlife and habitats that have not been analyzed or mitigated. The DEIS/EIR states that a number of rare vertebrate species, such as the black-tailed jackrabbit, San Diego horned lizard, and silvery legless lizard occur, or are proposed to be reintroduced to the dunes. However, no analysis is presented as to the effects of increased speeds and traffic volume on rates of road kill for these species. These populations of sensitive species are already reduced due to the limited extent of habitat available, and therefore significant rises in mortality rates due to increased road kill may render these populations unsustainable. New technologies for deterring road crossings by small vertebrates are currently available (<http://www.fhwa.dot.gov/environment/wildlifecrossings/index.htm>). These technologies should be incorporated into the designs of the ring road, so as to prevent increases in road kill of sensitive species.
12. Light emissions are known to disrupt the circadian rhythms of birds, butterflies, small mammals, and other species. This is especially true of nocturnal species, such as the numerous rare, endemic moth species restricted to the dunes. Light emissions along Pershing Drive are currently very low, with only a few street lights present adjacent to the preserve. However, as noted in the DEIS/EIR, several streetlights at the westerly end of World Way West light a wide area of the dunes preserve. The foot-candles emitted by these lights were not measured or analyzed in the DEIS/EIR. The number of additional streetlights proposed for the ring road and the additional infrastructure on the airport are also not disclosed, but the DEIS/EIR estimates that the light reaching the dunes preserve will increase to 0.60 foot-candles. How this figure was reached is not described. We recommend that the Final DEIS/EIR include a more detailed analysis of the biological effects of night lighting. Mitigation measures to offset potentially significant impacts

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should also be proposed.

13. The effects of increased noise levels on sensitive species and habitats are not adequately analyzed in the DEIS/EIR. Research has shown that chronic noise levels can be disruptive to avian species, amphibians, and rodents.
14. The DEIS/EIR may fail to disclose and analyze proposed impacts to the northern 104 acres of the dunes. An approved EIR, circa 1983, was certified by the City of Los Angeles for the LAX Northside Project. The development of this area is considered part of the "no project alternative", but project changes since 1983 are not discussed in detail. The LAX Northside project has been re-named and reconfigured as the Westchester South project. However, the DEIS/EIR appears to present potential new impacts for project components not previously analyzed. Several figures in the DEIS/EIR Biological Assessment Technical Report depict a golf course, resort hotel, light industrial, and commercial/mixed use in the northern area of the dunes. We recommend that any reasonably foreseeable direct and/or indirect physical changes associated with the project should be included as part of the project and analyzed for potentially significant environmental effects and appropriate mitigation measures.

Mitigation

15. Because of the regional significance of declining species and habitats found within the Master Plan boundaries, we recommend that all biological mitigation areas associated with the project, both within and outside of the current preserve area, are protected and managed in perpetuity. Department staff are available to work with LAWA in the design and implementation of maintenance and monitoring plans to meet long-term biological goals.
16. Long-term management of the dunes is essential if the area is to provide mitigation opportunities for project impacts. Currently, portions of the dune preserve are in a state of degradation due to a general lack of management. In the last several years the dunes have been allowed to deteriorate through invasion by exotic plant species, and contain a highly altered vertebrate community through the abundance of red fox. We recommend the creation of a non-wasting endowment to support implementation of an approved management plan. Management of the dunes should be accomplished through an independent management organization with extensive expertise in managing sensitive habitats and endangered species.
17. The DEIS/EIR contains language in virtually all of the biological mitigation measures limiting monitoring and maintenance to "not more than five years." The accepted

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mitigation monitoring and maintenance period pursuant to CEQA is typically a period of not less than five years. In some cases five years or less is sufficient to meet performance standards; in other cases it is not. By limiting the maintenance and monitoring period to less than five years regardless of the success of the mitigation site, the DEIS/EIR implies that if performance criteria are not met within five years, no further maintenance or monitoring need be performed. If a mitigation site fails to meet acceptable performance standards, the significant impacts of the project would not be reduced below a level of significance. For these reasons, we recommend that all mitigation areas meet acceptable performance criteria, before LAWA is relieved of mitigation responsibility. On the other hand, it is often appropriate to cease maintenance and monitoring responsibilities if a mitigation site has clearly met acceptable performance standards prior to the end of five years.

18. The Department is concerned with the loss of grasslands in southern California, including both native and non-native grasslands. Grasslands and other open areas on the site provide foraging habitat for raptors, and support sensitive species including burrowing owl, loggerhead shrike, western spadefoot toad, and San Diego black-tailed jackrabbit. The mitigation proposed in the DEIS/EIR is unacceptable. The Department recommends that proposed impacts to annual grassland be mitigated in-kind at a ratio of 0.5:1 to compensate for the loss of raptor foraging habitat and sensitive species habitat. Because LAX is one of the last expanses of grassland in the area, nearby mitigation sites with sufficient acreage may not exist. If sufficient acreage is not available on the site or nearby, an off-site grassland preserve should be considered. Primary consideration should be given to areas supporting or capable of supporting sensitive species impacted by the project. The establishment of an off-site grassland preserve would not necessarily mitigate for losses of habitat on a local level, but would at least provide compensatory habitat within the region.

19. The success criteria outlined in the mitigation measure for impacts to Lewis' evening primrose (MM-BC-2) are not acceptable. The acreage currently occupied by the species is 2.5 acres according to the DEIS/EIR. The estimate of 300 individuals present likely only represents an estimate of flowering individuals present at a given time. This species, like most other annual plants, is likely very dynamic in both the spatial distribution and numbers of observable (flowering) individuals present from year to year. Due to various dormancy mechanisms, annuals of xeric habitats rarely exhaust the entire seedbank in any given year. Observations of flowering individuals of annual plant species do not necessarily provide a census of the entire population (i.e., the seedbank). To better quantify the loss and appropriate mitigation measures, the acreage of occupied habitat must be taken into account along with the estimated number of flowering plants observed. We recommend that MM-BC-2 is revised to establish an area of no less than 2.5 acres of

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currently unoccupied but otherwise suitable habitat to disperse seed. The success criteria should not only include the "establishment" (germination?) of 300 seeds in the first year after dispersal, but should also include true success criteria, including measures of seed set, recruitment, and spatial distribution over the mitigation area for the entire five-year monitoring/maintenance period.

20. We recommend that the planting of mature trees associated with MM-BC-3, as well as all landscaping associated with future improvements, avoid establishing non-native trees in areas where the presence of the trees could impact native dune or grassland communities. Impacts associated with non-native trees include the invasive tendencies of some plant materials, alterations of native arthropod communities due to irrigation and other changes, and creation of habitat for aggressive or non-native bird species. The Department recommends the use of locally native plants to the greatest extent feasible in the landscape areas. The applicant should not plant, seed or otherwise introduce invasive exotic plant species to the landscaped areas adjacent to or near mitigation or open space areas. Exotic plant species not to be used include those species listed on Lists A & B of the California Exotic Pest Plant Council's list of "Exotic Pest Plants of Greatest Ecological Concern in California as of October 1999." This list includes such species as: pepper trees, pampas grass, fountain grass, ice plant, myoporum, black locust, capeweed, tree of heaven, periwinkle, sweet alyssum, English ivy, and Spanish broom. A copy of the complete list can be obtained by contacting the California Exotic Pest Plant Council at 32912 Calle del Tesoro, San Juan Capistrano, CA 92675-4427, or by accessing their web site at <http://www.caexppc.org>
21. We recommend that the spadefoot toad mitigation (MM-BC-4, in part) be coordinated with the relocation of vernal pool resources and Riverside fairy shrimp previously mentioned. All buffer areas and the watersheds of vernal pools (i.e., mitigation areas) should be managed in perpetuity for both Riverside fairy shrimp and spadefoot toad.
22. The DEIS/EIR proposes to transport black-tailed jackrabbits to the dune preserve area (MM-BC-4, in part), and monitor their status for three years. Currently, jackrabbits inhabit a significant portion of the airfield west of the southern runway. Though the acreage occupied is not disclosed in the DEIS/EIR, it is likely greater than 100 acres. Within the habitat restoration area only 41 acres of grassland and dune scrub habitats are present. These two habitats are the primary habitats suitable for jackrabbits on the dunes. No analysis is presented to suggest that 41 acres of habitat is sufficient to establish a self sustaining population of jackrabbits. A much larger extent of these two habitats (92 acres) is present on the dunes to the north of the habitat restoration area. We recommend incorporating the northern dunes into the dune preserve and establishing a jackrabbit population on the combined acreage. As transplantation efforts are experimental and

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prone to failure, we also recommend the selection of a second site to establish a new population. Potential sites may include those finally selected as suitable for Riverside fairy shrimp habitat creation. A red fox control program will be essential to maintaining jackrabbits on the dunes or potentially in off-site mitigation areas.

23. The DEIS/EIR states that currently three pairs of loggerhead shrikes inhabit the dunes west of Pershing Drive. From the distribution of observation points mapped on figure 4.10-5, it appears one to two other pairs use the western airfield east of Pershing Drive for nesting. Therefore the proposed project will result in a loss of habitat, and potentially the loss of two out of five pairs of shrikes on the property. Shrikes maintain large territories, and though the enhancement of the dunes preserve may increase the foraging value for the resident pairs, there is no evidence to show that an enhanced dune area will support two more pairs over what it supports currently. It is doubtful that the mitigation as proposed would reduce the impact below a level of significance. We recommend that the acquisition or restoration of occupied grassland habitat as previously mentioned as an effective mitigation measure.
24. As previously mentioned, the proposed mitigation measures for loss of habitat for the three build alternatives (MM-BC-5, MM-BC-6, and MM-BC-7) should be revised. The Department recommends that grassland mitigation should be provided at a ratio of at least 0.5 to 1 for losses of grassland habitats. The DEIS/EIR's mitigation measures propose container stock planting densities for dominant species comprising valley needlegrass grassland, provided in plants/habitat unit. Converting these densities to plants per acre, and on-center spacing (assuming an even distribution of the container stock), the proposed spacings include: nodding needlegrass (5.18 feet on-center), white everlasting (31.7 feet on-center), doveweed (31.7 feet on-center), California croton (29.9 feet on-center), and dune primrose (23.97 feet on-center). These proposed spacings would result in an extremely low amount of cover, not at all resembling a natural grassland or grassland/forb community. Furthermore, the species diversity as suggested in the DEIS/EIR would result in a target community lacking the diversity of a natural community. We recommend an increased container stock density as well as the inclusion of many more species. Both container stock and seed should be considered for this effort.

Most importantly, the proposed success criteria of "attainment of at least a 10 percent cover of native cover" is not acceptable. The Department and many local agencies have adopted a threshold of ten percent cover by *native grass species* as a determining factor in the classification and mapping of a given area as a native grassland type. An upland site dominated by herbaceous species with only ten percent cover of grasses may represent a native grassland/forb community, or more commonly may represent an extremely degraded native grassland community with a high percentage of non-native, disturbance-

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adapted species. The Department does not accept ten percent total native cover as an acceptable performance criteria for natural communities that achieve up to 75%-100% cover during the spring season. Therefore, the Department recommends: (1) examination of high quality needlegrass/forb habitat within the Master Plan boundaries for use as a reference site; and (2) consideration of published data documenting historical plant species and communities of the area.¹ The success criteria for this mitigation measure should be the attainment of replacement habitat comparable to the existing and pre-disturbance condition of the reference site, rather than a goal of ten percent native cover.

25. The revegetation of needlegrass grassland is extremely difficult and has been subject to a high failure rate due primarily to competition by non-native plant species. Revegetation of native grassland is largely in the experimental phase, with many land managers and others currently exploring ways to increase the success of native grassland restoration. Site selection, cryptobiotic crusts, soil types, fire, soil and vegetation salvage, associated species, weed competition, and other factors interact to influence the success or failure of native grassland restoration. While the site may have historically supported more forbs than grasses, similar revegetation methods and constraints would apply. Based on past experience, the Department recommends an extended site preparation and installation period for revegetation of this plant community. In areas supporting non-native species, we recommend at least two to three years of weed control prior to the installation of native grass species, in addition to the five-year maintenance/monitoring period. In fact, some research has shown that five years may be only marginally sufficient for grassland revegetation sites to achieve significant native growth (see <http://www.hastingsreserve.org/GrassRestore/GrasRest2.html>) We recommend that the project use salvaged materials from the project site, including soils, cryptobiotic crusts, native grasses, and geophytes, if these are available.
26. Needlegrass grassland is designated as a Rare Natural Community (S.1.1) that has suffered a decline of well over 99 percent in southern California. Because of the rarity of this community, the Department recommends a higher mitigation ratio (2:1 to 3:1) for impacts to needlegrass grassland (discussed in MM-BC-8, MM-BC-9, and MM-BC-10). Likewise, previous comments regarding specific revegetation methodology also apply to MM-BC-8.
27. The DEIS/EIR suggests that "Any combination of habitat replacement completed by LAWA or its designee drawn from the above-listed opportunities that equals at least

¹Mattoni, R., and T. Longcore. 1997. The Los Angeles Coastal Prairie, a Vanished Community. *Crossosoma* 26(2): 71-102

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61.27 habitat units shall be considered sufficient replacement for the loss of habitat resulting from implementation of Alternative A." As previously mentioned, the Department do not support this concept for this or any of the "build" alternatives.

We appreciate the opportunity to comment the on the DEIS/EIR for the Los Angeles International Airport Proposed Master Plan Improvements project. The Department has determined that the project as currently proposed would have significant, unmitigated impacts on sensitive biological resources. Specifically, the actions will substantially reduce the habitat of sensitive wildlife species, reduce the numbers of endangered, threatened or rare species, and result in impacts that are cumulatively significant in light of past habitat losses and the small amount of remaining habitat to support sensitive species in western Los Angeles County. We request that the FAA and the City of Los Angeles not take final certification action until the Department has had the opportunity to meet with the applicant to address the concerns identified in this letter. If you have any questions or comments please call Brad Henderson at (310) 214-9950.

Sincerely,



William E. Tippetts
Environmental Program Manager

cc: Department of Fish and Game
File

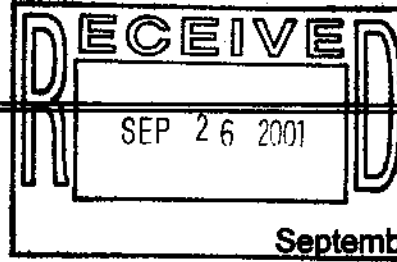
California Coastal Commission
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TO: Mr. Jim Ritchie, City of Los Angeles, Los Angeles World Airports
 Mr. David Kessler, AICP, U.S. Department of Transportation, Federal Aviation Administration

FROM: Teresa Henry, District Manager, California Coastal Commission *TH (cc:RK)*
 Derek Lee, Water Quality Specialist, California Coastal Commission *DL*

SUBJECT: Draft EIS/EIR, Los Angeles International Airport Proposed Master Plan Improvements. SCH# 1997061047.

Thank you for including the California Coastal Commission in the environmental review process for the above-mentioned document. The following comments represent the opinions of the staff only and do not represent the comments of the Commission itself.

The California Coastal Commission has direct permitting responsibility and regulatory authority over all federally permitted or funded projects occurring within or affecting the California coastal zone. The Commission's authority, called "federal consistency review," comes from the coastal zone Management Act enacted by Congress in 1972 and periodically re-authorized since then. All federal activities affecting coastal zone resources have been subject to the Commission's regulatory jurisdiction since the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce approved California's Coastal Management Program (CCMP). Activities authorized, funded, or carried out by federal agencies that affect coastal zone resources must be reviewed by the Commission for consistency with the federally approved California Coastal Management Program (CCMP), including the California Coastal Act.

Any development within the coastal zone requires a Coastal Development Permit (CDP) unless the developer of the project is a federal agency, in which case a federal consistency review, as described above, may be required. In reference to LAX, the inland boundary of the coastal zone is the inland extent of the dedicated right-of-way of Pershing Drive. Coastal Commission approval would be required for the proposed relocation of FAA's navigational aids within the Los Angeles/El Segundo Dunes located in the coastal zone. Any potential impacts to sensitive biotic communities, sensitive flora and fauna species, and wetlands within the coastal zone would be analyzed and mitigation would be required for those impacts within the coastal zone. It is possible that certain improvements proposed in sensitive areas that could be constructed elsewhere would be required to be relocated to less sensitive areas. Any development within the coastal zone including some not anticipated in this letter would require a CDP. Street Improvements located within the coastal zone, including many of the proposed improvements to Main Street, California Street, Pershing Drive, Imperial Highway and other streets, would require a CDP. Any changes to bike paths or footpaths within the coastal zone would require a CDP. Any changes of land use,

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drainage systems, or fuel pumps, as well as relocation of residences or businesses, within the coastal zone would require a CDP. Construction setup, staging or storage areas within the coastal zone would require a CDP. These items are examples and not a comprehensive list of all possible impacts that may require a CDP. Any additional development or change in intensity of use within the coastal zone will require a CDP.

Project Description. In our early meetings with the airport staff, the Coastal Commission staff understood that the development envisioned in the master plan was entirely located outside of the coastal zone—that no development was proposed seaward of Pershing drive. Some language in the EIR indicates that the Airport may be considering development of a golf course or vernal pools on the dunes, which are located in the Coastal Zone. Specifically, in the appendix that addresses natural resources, tables 8, 11 and 14, the map code for open space is also used for golf course. The map seems to show a 100-acre golf course on the dunes in the coastal zone. On another illustration there seems to be a hotel resort. There are three depictions of a golf course on the dunes. For this reason the staff has also commented on issues involving the dunes. In analyzing this MASTER PLAN EIS/EIR and the measures used to mitigate the various alternative's impacts, Coastal Commission staff will be concerned with:

1. Sensitive biological resources found in the Los Angeles/El Segundo Dunes area, which are located within the coastal zone;
2. Effects on federally and state listed threatened and endangered species including those requiring an incidental take permit from the U.S. Fish and Wildlife Service;
3. Effects of water quality runoff on coastal waters or watercourses;
4. Effects to coastal access and recreation and traffic impacts;

This list is not comprehensive and in no way limits the Commission's jurisdiction over matters not listed.

Sensitive Biological Resources.

There are vernal pools and some coastal prairie and some degraded Coastal Sage Scrub on the West End of the airport outside the coastal zone. We are concerned that when the Airport considers mitigation measures for impacts on these resources that there is an understanding that an improvement or mitigation located west of Pershing Drive will be located inside the coastal zone. The Commission will review any development inside the coastal zone for consistency with the view, habitat and public access and recreation policies of the Coastal Act.

The Coastal Act policies addressing environmentally sensitive habitat areas, such as are found on the dunes are very strict. The policies would not allow relocation of habitat

from the dunes to another part of the dunes or consolidation of habitat areas. Similarly the policies would not allow development of a different kind of habitat on the dunes, such as vernal pools if that habitat was not now found there. Such development would require a coastal development permit to be issued by both the City of Los Angeles, and by the Commission. The policies that the Commission staff would use in preparing its analysis includes the following:

Section 30240

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The Commission's review of any development proposed in the dunes would require protecting the long-term viability of the dune habitat and the endangered species that depend on the dunes before approving any proposal. A hotel or golf course on the dunes would not be a use that is dependent on the resource. Therefore construction of a hotel or a golf course on the dunes would raise serious issues of conformity with Section 30240 of the Coastal Act.

Water Quality. The Los Angeles World Airport now drains its storm water directly into the ocean, seaward of Dockweiler State Beach, a heavily used public beach. Los Angeles World Airports (LAWA) is committed to developing a detailed drainage plan (HWQ-1) upon the selection of a final build alternative. Most of the initial treatment of drainage proposed however, will occur outside the coastal zone. The Draft EIS/EIR states that with the implementation of HWQ-1, any hydrology and water quality associated impacts would be less than significant. It is, however, very difficult to assess the future success of such a plan without having the opportunity to examine it first. The Commission staff believes that the drainage plan should be incorporated into the Final EIS/EIR to allow for public review.

LAWA fails to propose specific potential management measures and practices to be implemented for each of the build alternatives. At a minimum, a conceptual design with minimum mitigation measures should be developed for each build alternative at this time. This is made feasible by the fact that the three build alternatives are really very similar in nature. Commission staff believes that the potential hydrology and water quality impacts associated with the build alternatives and the proposed mitigation measures should be an integral part of the build alternative selection process.

Besides the narrative stormwater BMP design standards customary in NPDES permits, the Commission staff believes that here exists a perfect opportunity for LAWA to take more meaningful and quantifiable measures to address the runoff issues and their associated impacts. The LA Regional Water Quality Control Board has recently taken steps to require numerical BMP design standards in its Standard Urban Storm Water Mitigation Plan (SUSMP). However, these standards only apply to a few categories of new and re-developments, of which airport is not one. Nevertheless, due to the scale of the proposed development and the significant impacts associated with the runoff as a result of the intensified uses, establishing specific design criteria such as the 85th percentile, 24-hour design storm standard is reasonable. Specifically, for design purposes, post-construction structural BMPs (or suites of BMPs) should be designed to treat, infiltrate or filter stormwater runoff from each storm event, up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1-hour storm event, with an appropriate safety factor, for flow-based BMPs. For LAX, this means treating runoff associated with up to and including 0.75 inch of rainfall in 24 hours or 0.2 inch per hour.

While it is commendable that LAWA has aimed for "reducing impacts to water quality to the maximum extent practicable and achieving no net gain in pollutant loads discharged to receiving water bodies," there exist no practical and feasible guiding principles for designing management practices. Furthermore, the goal of "no net gain" is merely to hold steady the current level of pollutant contributions by LAX to the Santa Monica Bay and Dominguez Channel. It then begs the question of whether or not the current level is good enough for safeguarding the quality of the receiving waters. Judging from the information provided, LAX's current stormwater measures seem inadequate to satisfactorily treat the runoff generated onsite.

Since both of the receiving water bodies are on the CWA Section 303(d) list for impairment by several pollutants of concern of which LAX is a contributor (e.g., Cu, Pb, and Zn), it is conceivable that the future Total Maximum Daily Loads (TMDLs) developed for these pollutants would require LAX to share in the necessary load reductions. It simply is sensible to anticipate those future needs by incorporating the necessary stormwater designs during the current phase of development when opportunities abound. It may be worth pointing out that LAWA already acknowledges "[d]ue to the relatively large area that would be redeveloped, substantial opportunities would exist to replace existing facilities with ones that incorporate water quality control BMPs into their design, construction and operations thereby reducing total LAX-related pollutant loads."

It is not clear whether or not baseline information for the various pollutant loadings has been established. Pollutant loads used in the analysis were calculated by multiplying the pollutants' Event Mean Concentrations (EMCs) and average annual runoff. And, these EMCs were obtained from various sources not necessarily specific to the region (e.g., Federal Highway Administration) or most up-to-date. Pollutant loads could have

been underestimated as a result. In addition, without locally relevant data for determining baseline levels, it will be impossible in the future to determine whether the goal of "no net gain" is being attained.

Lastly, using LAWA's method where EMCs remain constant, the only variable in the formula for calculating pollutant loads before and after development would be land use (i.e., the change in impervious area coverage). This will most likely result in underestimates of pollutant loads because it ignores the potential increase in pollutant contributions due to the intensification of various activities at LAX. Stormwater BMPs designed using these projections may then fall short of intended treatment efficacy.

Only nine pollutants are considered in the DEIR. Several pollutants, including cadmium, mercury, nickel, silver, chromium, PAHs, and PCBs, scheduled for TMDL development for the Santa Monica Bay and Dominguez Channel have been prematurely eliminated from the study. The DEIR provides no valid reasons for their exclusion. The Commission staff strongly urges baseline information on the omitted pollutants be established and a rigorous monitoring program be implemented to determine the exact LAX contribution of these pollutants to the downstream water bodies.

The planned parking capacity for each of the build alternatives would exceed demand for both 2005 and 2015 by about 6,800 stalls and 3,800 stalls, respectively. This is meant to reduce the number of double trips by people recirculating on the terminal service loop due to Central Terminal Area congestion or by not being able to find parking spaces. While this sounds like a good idea, the concern with these additional spaces are the potential increase in impervious areas. Are these additional stalls located in (existing) vertical structures or are they horizontal ground spaces built on formerly pervious areas? One of the most effective practices to reducing runoff and its associated pollutants is minimizing the creation of impervious areas in the first place. There needs to be a balanced analysis between traffic relief and water quality impacts. If these extra stalls are critical to ensuring traffic relief, active measures should be undertaken to minimize any negative runoff impacts associated with the increase in impervious areas. Examples of these measures include, but are not limited to, retention and/or detention basins, catch basin filters and underground sand filters.

Commission staff strongly encourages LAWA to, wherever appropriate, design water quality components into LAX's flood control measures. While it is important to ensure that drainage facilities can adequately convey stormwater runoff and prevent flooding, increasing the structure's capacity is often less effective than reducing peak flow rates. As mentioned in the DEIR, reducing peak flow rates could be achieved, for example, by reducing the directly connected impervious areas. Taking this one step further, peak flow rates could be reduced by minimizing overall impervious areas, period, or by creating pervious areas such as filtering strips and/or grassy swales to intercept flows.

While the pollutant loads associated with wet weather flows were estimated quantitatively, those associated with the dry weather flows were only addressed qualitatively. The reason given was that "[s]ince, the types of pollutants in dry weather flows are governed by the source of the flow and, therefore, are extremely variable and cannot be quantified, the analysis of dry weather flows is limited to the identification of factors that are likely to increase or decrease their occurrence." Were there no past sampling results or chemical use records to assist in the quantification? There needs to be a better effort in quantifying pollutant loading as a result of dry weather flows.

LAWA acknowledges that there will be an overall intensification of use at LAX under all three build alternatives. In addition, the DEIR states, "the Imperial retention basin would be removed and dry weather flows entering the storm drain system would have the potential to discharge untreated to the Santa Monica Bay or Dominguez Channel water bodies." The only mitigation measures proposed are compliance with existing regulations and airport procedures, particularly the LAX SWPPP, and incorporation of some unspecified source control, structural and treatment BMPs under HWQ-1. Unfortunately, these may not be adequate. The SWPPP developed pursuant to the Industrial Activities Storm Water General Permit (Industrial NPDES Permit) is often only required to be available onsite and ready for inspection by the appropriate authorities when requested, but not required as a part of the permit application process. In other words, the SWPPP is often not evaluated for adequacy. LAWA is strongly urged to propose clear measures to prevent and control dry weather runoff. This could be accomplished by incorporating the SWPPP into the final EIS/EIR to allow for public review. In light of their smaller quantities, diversion of dry weather runoffs for treatment (or treatment onsite) should be considered.

The DEIR fails to analyze a more comprehensive list of BMPs that could be implemented during the construction phase. It simply states that by following the procedures outlined in the SWPPP, prepared pursuant to the construction NPDES permit, and employing the eight BMPs listed in the DEIR, impacts to water quality associated with construction activities would be less than significant. For the same reason stated above for industrial NPDES permit, SWPPP developed according to the requirements of a construction permit is often not subject to agency/public review and cannot guarantee water quality protection. In addition, the eight BMPs listed in the DEIR fail to address, among others, the staging and times of year planned for land disturbance and the methods proposed for chemical use and storage. Such details should be incorporated into the final EIS/EIR.

There is very little mention of BMP inspection, monitoring, and maintenance. Besides inappropriate and inadequate designs, BMPs often fail because they are not being properly maintained. A rigorous program needs to be in place to ensure that the BMPs continue to operate at their design capacities in preventing and controlling polluted runoff. It is also imperative to identify BMP inadequacies in terms of type, size, location, and number. Structural BMPs should be inspected prior to the start of the rainy season

(no later than October 15th), after the first storm of the rainy season, and monthly thereafter until April 30th. Major observations to be made during inspections include:

- Locations of discharges of pollutants from the site;
- BMPs that are in need of maintenance;
- BMPs that are not performing, failing to operate, or inadequate; and
- Locations where additional BMPs are needed.

While it is important to have structural and/or treatment stormwater BMPs, the Coastal Commission staff strongly encourages the implementation of nonstructural BMPs for source control as well. These include, among others, personnel training for good housekeeping measures.

Impacts on Beach Access. The proposed master plan improvement may impact major beach access routes—Highways 1, 42, 105, and 405, as well as Pershing Drive, West Imperial Highway, Westchester Parkway, Vista Del Mar, Main Street, and Culver Boulevard. As we have discussed, directly blocking access along Imperial Highway to the beach would raise major issues of consistency with Sections 30210 and 30211 of the Coastal Act. Increased congestion on any of these east-west corridors could impact beach access particularly in the summer months. The information that you provided does not show the extent of traffic impacts on these routes during peak beach use times. In analyzing projects for the Commission, the staff will need to know the project's impacts on beach access routes. We note that certain key intersections will function at level F after mitigation. Staff will need to know whether these routes will flow at high levels of congestion—at or above level F—on peak beach use times, including holidays and summer weekends.

Traffic Impacts. One of the mitigation measures proposes funding for a Los Angeles County plan to "extend the Marina Freeway (Route 90)". There is no indication or proof that Caltrans or the County would be willing or able to use these funds. There is also no indication of alternate mitigation if these funds are not allocated to that proposed project. The portion of the Marina Freeway that would be extended is located within the coastal zone. There is an unnamed drainage in the median strip of the existing Marina Freeway (Route 90) that supports freshwater wetland plants. The standard of review of any development within the coastal zone is whether or not it is consistent with the Coastal Act. The status of a project as a required mitigation measure for development outside the coastal zone does not change this standard of review or assure approval. Therefore, before any of the mitigation measures in the coastal zone such as this road are constructed Caltrans, the City of Los Angeles, or the County of Los Angeles must obtain a coastal development permit. It may not be possible to obtain a coastal development permit if the road or other improvement requires wetland fill or has other impacts on coastal resources. Provisions for alternative mitigation consistent with the Coastal Act should be provided.

Transit Alternatives. The 1984 Marina del Rey Ballona LUP provides for light rail along Lincoln Boulevard connecting to the airport, and/or a 'people mover' along Lincoln Boulevard connecting to Santa Monica. Two 1987 revisions to that plan by both Los Angeles County (the Marina del Rey LUP) and the City of Los Angeles (the Playa Vista LUP) provide for light rail along Lincoln Boulevard connecting to the airport, and or a "people mover" along Lincoln Boulevard connecting to Santa Monica "if found feasible by local, regional, or state agencies responsible for their development." The 1987 Playa Vista LCP in addition requires that the part of any system operating in the City shall be linked to those portions located in County areas to assure an integrated system.

It may be more likely now than it was in 1987 that a transit alternative is feasible and might significantly reduce trips. Since 1987, there have been two successful light rail lines constructed in Los Angeles County. The Airport is now proposing to extend one of these lines, the "Green Line", across Lincoln Boulevard into the Airport. Although it is possible that an improvement that has high initial costs may still not be feasible, the Commission staff will most likely want a careful analysis of transit alternatives. We note that one of the difficulties of extending a light rail line or "people mover" along Lincoln has been lack of sufficient right-of-way. The mitigation measures for this project already include proposals to acquire right-of-way in several areas, including along some of the Lincoln Corridor. The presently proposed traffic mitigation measures would use former rail right-of-way located within Culver Boulevard for road improvements.

Wetland Issues that may be raised by some road improvements. Section 30233 allows fill of wetlands for incidental public service purposes. In the Bolsa Chica decision, the courts found that it was not allowable to fill wetlands except as provided for in section 30233. In fact, the court said that "incidental public services are limited to temporary disruptions and do not usually include permanent roadway expansions" at all. Bolsa Chica Land Trust v. Superior Ct. (1999) 71 Cal. App. 4th 493,517. However, it did allow for roadway expansions when "no other alternative exists and the expansion is necessary to maintain existing traffic capacity." Id. This decision will put severe limitations of on roadway expansions that require wetland fill. If any of the road expansions proposed as mitigation for traffic generated by airport expansion are located in the coastal zone and require wetland fill, it may not be possible for the Commission to approve the widened roadway because of the limitations of Section 30233.

Many parts of the road improvement involve no wetland fill. In other areas, such as along Lincoln Boulevard in Area B and the extension of Admiralty to Culver Boulevard in Area A, there may be wetland fill issues. The Commission will need to know precisely what the impacts of the proposed widening will be on wetland areas. Additional surveys concerning the extent of the wetlands will need to be completed in advance of the Commission's consideration of the proposed road improvements.

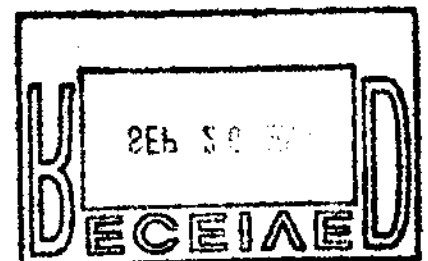
Mitigation Measures.

The proposed traffic mitigation measures concentrate on adding lanes to major streets, and some intersections such as Lincoln at Washington. According to the report, these measures will alleviate, but not entirely mitigate increased traffic. Mass transit mitigation includes "smart" signals along north/south bus routes, but does not include enhancements to east/west bus routes, which are the public transportation routes for beach visitors who now arrive on mass transit. Proposed mitigation measures that involve development within the coastal zone would be reviewed for consistency with the coastal act policies. Concerns would include impacts on beach visitor access, on wetland or habitat areas, or on community character.

Under the Coastal Act mitigation measures must be considered to reduce or avoid impacts. The Commission staff will rely on Coastal Act Sections 30253 and 30254 to analyze alternatives, and to consider the effects of the intensity of development. Under the Coastal Act, where traffic corridors are constrained by natural habitats or wetlands, or when public access would be adversely impacted the Commission staff will consider recommending that the size of the road be reduced.

Consistency with Certified LUP's/LCP's. The standard of review of all development within the coastal zone is the policies of the Coastal Act. However, in communities where there is a certified local coastal program, that LCP will be the standard of review for development. The City of Manhattan Beach and Marina del Rey all have certified Local Coastal Programs. Any road improvements within these areas would require a coastal development permit issued by the local government having jurisdiction over the area. In areas such as Venice, Redondo Beach, Hermosa Beach, Playa Vista the standard of review would be consistency with the Land Use Plan. Where there is a certified Land Use Plan, the Commission staff will look consider the policies of the Land Use Plan, but the standard of review will remain the Coastal Act policies. This is relevant in the case of the Airport because it applies to mitigation measure such as road widening projects that may be located in those communities.

The Commission staff looks forward to receiving the final EIS/EIR and to working with the LAWA staff in processing the coastal development permits and Federal consistency reports that may be necessary. For more information on our comments on water quality, please contact Derek Lee at (415) 904-5200; for Federal Consistency issues, please contact James Raives at (415) 904-5200. For other matters please contact Pam Emerson, Los Angeles Area Supervisor at (562) 590-5071. Thank you again for your attention.



CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

GRAY DAVIS, Governor



Call [unclear]

May 11, 2001

MEMORANDUM

TO: Los Angeles Area Planners, Teresa Henry, Deborah Lee, Mark Delaplaine, James Raives, Chuck Damm, Sandy Goldberg, Jack Gregg

FROM: Pam Emerson

SUBJECT: LAX EXPANSION

On Thursday, April 25 I went to a show and tell and airport tour at LAX regarding their planned expansion, a controversial project directly adjacent to the coastal zone. They are keeping development outside the coastal zone and they have made changes in their circulation plan so that impacts direct coastal access routes (Imperial etc) will be avoided. Their EIR comment period is still running. We may want to comment on the following issues:

1) **Traffic.** They claim no impacts south of Rosecrans (at the north end of Manhattan Beach), but admit to impacts on route 1 - i.e. Lincoln Boulevard, the major coastal access route north of the airport. They are contributing to a number of intersection improvements. On the 16th I will be seeing LA DOT for other reasons and they have offered to go over the Airport's mitigation measures with me. Combined with Playa Vista it is a big impact. We have agreed not to raise a consistency issue on traffic but we may want to consider a comment once Karen and I have analyzed the traffic issues and mitigation measures.

2) **Water quality.** Four people from the RWQCB and one from City of LA environmental department were in attendance. It was pretty obvious from the tour that there are all kinds of opportunities for fuel spills and ground water and ocean runoff problems. There are two major floodwater collection basins that will need to be retrofitted with filters.

3) **Habitat.** There are vernal pools and some coastal prairie and some degraded CSS on the West End of the airport outside the coastal zone. The biologist say that FAA rules will make it very hard to restore the pools, because FAA forbids standing water for more than three hours to avoid attracting birds. Apparently the butterflies on the dunes are doing fine. I left to talk to LA City about another matter while the project biologists were beginning to explain their problems to Chuck Raysbrook, regional director at Fish and Game.

4) **Degree of control:** the Airport staff argues that they have no control over landings, which is what is driving the growth. They claim landings will occur

MEMORANDUM
Airport Expansion EIR/EIS
Page 2 05/11/01

whenever the airlines and or the FAA wish. They expect 89 million passengers by 2015.

5) The big controversial issue is sound impacts, which is not our issue. Additional houses will be acquired in Westchester, and additional sound impacts will occur in Inglewood. The FAA rules say that if your house or apartment building is substandard structurally, they will not pay for soundproofing. I am sure we will hear additional controversy concerning the environmental justice of that rule. There is already controversy regarding noise impacts on Inglewood, El Segundo and Westchester. In response to the noise issue the preferred alternative is lengthening a runway on the north side and extending the Sepulveda tunnel but the preferred alternative does not include a new runaway.



Gray Davis
GOVERNOR

STATE OF CALIFORNIA

GOVERNOR'S OFFICE of PLANNING AND RESEARCH
State Clearinghouse

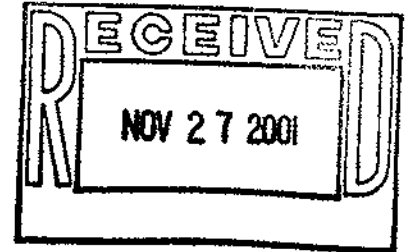


Steven A. Nissen
DIRECTOR

November 13, 2001

Jane L. Benefield
City of Los Angeles
1 World Way
Los Angeles, CA 90009

Subject: LAX Master Plan and Draft EIS/EIR
SCH#: 1997061047



Dear Jane L. Benefield:

The State Clearinghouse submitted the above named Joint Document to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on November 9, 2001, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts
Senior Planner, State Clearinghouse

Enclosures
cc: Resources Agency



State Clearinghouse Data Base

SCH# 1997061047
Project Title LAX Master Plan and Draft EIS/EIR
Lead Agency Los Angeles, City of

Type JD Joint Document
Description The Joint Draft EIS/EIR provides complete descriptions of the environmental conditions, in and around LAX, the potential environmental impacts of the improvements associated with each alternative, mitigation measures to address potential impacts, and other information required by NEPA and CEQA.

Lead Agency Contact

Name Jane L. Benefield
Agency City of Los Angeles
Phone 310 646-7690 **Fax**
email
Address 1 World Way
City Los Angeles **State** CA **Zip** 90009

Project Location

County Los Angeles
City Los Angeles, City of
Region
Cross Streets Imperial and Sepulveda

Parcel No.	Township	Range	Section	Base
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Proximity to:

Highways I-405/I-105
Airports LAX & Hawthorne Municipal
Railways MTA Green Line and BNSF
Waterways Pacific Ocean
Schools
Land Use M2 (Q) and M3

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Coastal Zone; Economics/Jobs; Forest Land/Fire Hazard; Flood Plain/Flooding; Drainage/Absorption; Geologic/Seismic; Job Generation; Housing; Noise; Public Services; Schools/Universities; Sewer Capacity; Social; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

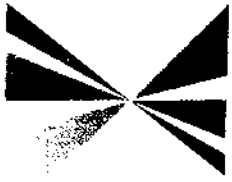
Reviewing Agencies Resources Agency; California Coastal Commission; Department of Conservation; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Office of Emergency Services; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 7; Caltrans, Division of Transportation Planning; Air Resources Board, Airport Projects; Integrated Waste Management Board; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; California Energy Commission; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

Date Received 01/18/2001 **Start of Review** 01/18/2001 **End of Review** 11/09/2001

Note: Blanks in data fields result from insufficient information provided by lead agency.

AS00008

SOUTHERN CALIFORNIA



**ASSOCIATION OF
GOVERNMENTS**

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Riverside County: Bob Boster, Riverside County • Ron Coveridge, Riverside • Greg Potts, Cathedral City • Ron Roberts, Temecula • Jan Rodman, Corona • Charles White, Moreno Valley

San Bernardino County: Tom Mikels, San Bernardino County • Bill Alexander, Rancho Cucamonga • David Edelman, Fontana • Tom Ann Garcia, Grand Terrace • Bob Hunter, Azusa • Gwynn Norton Perry, Chino Hills • Judith Vales, San Bernardino

Ventura County: Judy Mikels, Ventura County • Glen Becerra, Santa Valley • Donna D. Davis, San Ramon • Tony Young, Port Hueneme

Riverside County Transportation Commission: Robin Lowe, Hemet

Ventura County Transportation Commission: Bill Davis, Santa Valley

July 23, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan / Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216

RE: **Comments on the Draft Environmental Impact Statement / Environmental Impact Report for the Los Angeles International Airport Proposed Master Plan Improvements - SCAG No. I 20010048**

Dear Mr. Ritchie:

Thank you for submitting the **Draft Environmental Impact Statement / Environmental Impact Report for the Los Angeles International Airport Proposed Master Plan Improvements** to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG reviews the consistency of local plans, projects and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

SCAG is a Joint Powers Agency established under California Government Code Section 6502. SCAG is designated as the Metropolitan Planning Organization (MPO) for the greater Los Angeles region including the Los Angeles International Airport service area. SCAG is also the designated Regional Transportation Planning Agency, and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Plan (RTIP) under California Government Code Sections 65080 and 65082 respectively.

1. SCAG is the authorized regional agency for Inter-Governmental Review of programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).
2. Pursuant to Public Resources Code Section 21083, SCAG reviews Environmental Impact Reports of projects of regional significance for consistency with regional plans {California Environmental Quality Act Guidelines Sections 15206 and 15125(b)}.

The Los Angeles International Airport Proposed Master Plan Improvements meets SCAG's criteria for classification of a plan that is regionally significant. SCAG staff's comments are on the Draft EIS/EIR in terms of SCAG's aviation and transportation related policies from the 2001 Regional Transportation Plan.

July 23, 2001
Mr. Jim Ritchie
Page 2

A brief summary of SCAG staff comments includes the following: the Project exceeds the adopted 2001 Regional Transportation Plan (RTP) aviation strategy of 78 MAP; the Draft EIS/EIR does not suggest consideration or the potential incorporation of high-speed rail for the proposed Project; and there is no indication on funding to implement the proposed improvements.

In addition, SCAG staff outlines a number of recommendations, which would bring the proposed project into compliance with the RTP. These recommendations are listed on the following pages and should be strongly considered.

The project title and SCAG Clearinghouse number should be used in all correspondence with SCAG concerning this project. If you should have any questions, please contact me at (213) 236-1867. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey M. Smith", is written over the typed name.

JEFFREY M. SMITH, AICP
Senior Planner
Intergovernmental Review

AR00001

**COMMENTS ON THE
DRAFT
ENVIRONMENTAL IMPACT STATEMENT /
ENVIRONMENTAL IMPACT REPORT
FOR THE
LOS ANGELES INTERNATIONAL AIRPORT
PROPOSED MASTER PLAN IMPROVEMENTS
SCAG NO. I 20010048**

SUMMARY OF SCAG STAFF COMMENTS

- The proposed Project considers the expansion of the Los Angeles International Airport. The proposed Project is designed to accommodate a range of 79 MAP to 98 MAP. The preferred alternative (Alternative C) would accommodate 89 MAP. **The Project exceeds the adopted 2001 Regional Transportation Plan (RTP) aviation strategy of 78 MAP.**
- The Draft EIS/EIR, on page 2-1, states that regional demand is expected to increase over the next fifteen years, with considerable demand expected at LAX. The project sponsor has reviewed the potential contributions of the existing and planned commercial service airports in the region to meet the increased demand and has concluded that the capacity of LAX needs to be increased to an appropriate level to meet this demand. The Draft EIS/EIR also recommends a number of mitigation measures that address environmental and ground access impacts. Despite the mitigation measures, most impacts would remain significant and unavoidable. **In addition, the proposed expansion of the airport is not consistent with the adopted RTP aviation strategy.**
- The proposed expansion of LAX is anticipated to handle potential passenger and cargo increases. **The projected increases exceed the adopted RTP aviation strategy.**
- Through the RTP, SCAG is proposing an Intra-Regional High Speed Maglev System, which will connect major regional activity centers and transportation facilities. The System, as envisioned, would provide a connection to the proposed Project. The Draft EIS/EIR includes a section on rail technology, however, **the discussion does not suggest consideration or the potential incorporation of high-speed rail for the proposed Project.**
- The Draft EIS/EIR includes a section on funding. The total program cost of the proposed Project is \$12 billion dollars. The Draft EIS/EIR on page 2-19, suggests that funding for the proposed Project could come from a combination of private,

state, local and federal funding. The Draft EIS/EIR describes a few funding programs, but **there is no indication on funding to implement the proposed improvements.**

CONCLUSION AND RECOMMENDATION:

1. Based on the review of the LAX Master Plan Draft EIS/EIR, **the proposed Project is not consistent with the 2001 Regional Transportation Plan.** The proposed Project should be consistent with the 2001 RTP and aviation strategy that was adopted by the Regional Council to replace the 1998 RTP. Project consistency is essential for implementation of transportation, projects, programs and policies.
2. In order for the LAX Master Plan to be consistent with the 2001 RTP, staff strongly recommends the following:
 - Rescope the LAX Master Plan alternatives to conform to the RTP aviation strategy of 78 MAP or less.
 - Consider a decentralized/regional approach to comply with RTP aviation strategy.
 - Use an Intra-Regional High Speed Maglev System as a way to redistribute regional demand.
 - Redistribute cargo and passengers to regional airports such as March Global Port, San Bernardino, Southern California Logistics, Palmdale, Ontario, El Toro and John Wayne.
 - Use mitigation measures stressed in the RTP EIR, and other options such as remote terminals.
 - Participate in the Southern California Regional Airport Authority (SCRAA). Los Angeles World Airports must work with SCRAA to review projects, which are consistent with the RTP and support safety.
 - Coordinate the Master Plan transportation strategies and funding with surrounding communities, LACMTA and the Regional Transportation Plan and Regional Transportation Improvement Program Process.
 - Please note SCAG's continued objection to the Arbor Vitae Interchange.

July 23, 2001
Mr. Jim Ritchie
Page 5

3. All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Roles and Authorities

THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG) is a *Joint Powers Agency* established under California Government Code Section 6502 et seq. Under federal and state law, SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). SCAG's mandated roles and responsibilities include the following:

SCAG is designated by the federal government as the Region's *Metropolitan Planning Organization* and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program pursuant to 23 U.S.C. '134, 49 U.S.C. '5301 et seq., 23 C.F.R. '450, and 49 C.F.R. '613. SCAG is also the designated *Regional Transportation Planning Agency*, and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080 and 65082 respectively.

SCAG is responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the *South Coast Air Quality Management Plan*, pursuant to California Health and Safety Code Section 40460(b)-(c). SCAG is also designated under 42 U.S.C. '7504(a) as a *Co-Lead Agency* for air quality planning for the Central Coast and Southeast Desert Air Basin District.

SCAG is responsible under the Federal Clean Air Act for determining *Conformity* of Projects, Plans and Programs to the State Implementation Plan, pursuant to 42 U.S.C. '7506.

Pursuant to California Government Code Section 65089.2, SCAG is responsible for *reviewing all Congestion Management Plans (CMPs) for consistency with regional transportation plans* required by Section 65080 of the Government Code. SCAG must also evaluate the consistency and compatibility of such programs within the region.

SCAG is the authorized regional agency for *Inter-Governmental Review* of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).

SCAG reviews, pursuant to Public Resources Code Sections 21083 and 21087, Environmental Impacts Reports of projects of regional significance for consistency with regional plans [California Environmental Quality Act Guidelines Sections 15206 and 15125(b)].

Pursuant to 33 U.S.C. '1288(a)(2) (Section 208 of the Federal Water Pollution Control Act), SCAG is the authorized *Areawide Waste Treatment Management Planning Agency*.

SCAG is responsible for preparation of the *Regional Housing Needs Assessment*, pursuant to California Government Code Section 65584(a).

SCAG is responsible (with the Association of Bay Area Governments, the Sacramento Area Council of Governments, and the Association of Monterey Bay Area Governments) for preparing the *Southern California Hazardous Waste Management Plan* pursuant to California Health and Safety Code Section 25135.3.



California Regional Water Quality Control Board

Los Angeles Region



Winston H. Hickox
Secretary for
Environmental
Protection

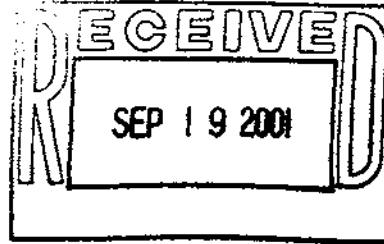
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September 17, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan/ Rm 218
P. O. Box 92216
Los Angeles CA 90009-2216



LOS ANGELES INTERNATIONAL AIRPORT PROPOSED MASTER PLAN IMPROVEMENTS: DRAFT ENVIRONMENTAL IMPACT STATEMENT – ENVIRONMENTAL IMPACT REPORT, SCH# 1997061047

The Los Angeles Regional Water Quality Control Board (Regional Board) is charged with protecting surface and groundwater quality in the coastal watersheds of Los Angeles and Ventura Counties, including the Santa Monica Bay Watershed where the proposed LAX expansion project is located. The Regional Board has reviewed the above-referenced Environmental Impact Statement/Environmental Impact Report (EIS/EIR) and is pleased to provide the following comments.

Section 4.7 Hydrology and Water Quality

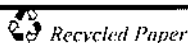
The proposed project entails the expansion of the existing LAX airport to include 275 additional acres of land mainly for road construction and the extension of the Green Line. The project alternatives involve some construction within the existing area to lengthen existing runways and/or create new ones, and/or construct an additional terminal. Surface water from the existing site and the proposed expansion will be discharged directly to the Santa Monica Bay or the Dominguez Channel – both of which have been listed on U.S. EPA's 1998 303(d) list as being impaired. Some of the pollutants identified as being associated with the run-off -copper, lead, zinc, and ammonia (which is a component of Total Kjeldahl Nitrogen) - are impairing pollutants in these waterbodies. In addition phosphorus and oil and grease, while not listed, are pollutants of concern in the Santa Monica Bay Watershed. Discharge of pollutants already known as stressors from urban areas should, at a minimum, be minimized to the Maximum Extent Practical.

Treatment of Dry weather flows

According to the EIS/EIR the current practice is for run-off from the Imperial Sub-Basin, which drains the maintenance, fuelling, and washing areas, to be collected in a water quality detention basin and conveyed to Hyperion Treatment plant (HTP). In Alternatives A, B and C, as described in the draft EIS/EIR, this retention basin will be removed and is not expected to be replaced. This creates the potential for the direct discharge of polluted run-off from this area to the storm drains.

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As per NPDES Permit CAS614001, NPDES Permit CAS000001 [State of California, General Industrial Activities Storm Water Discharge Permit (State Industrial Permit)] of which the City of Los Angeles is a Permittee (WDID No. 419S004995), non-storm water discharges including the washing of outdoor maintenance; aircraft and vehicle washing and servicing; and washing of paved areas is prohibited. These activities may occur only if the discharge is to the sanitary sewer and not the storm drain system. Therefore, dry weather run-off from these activities should be collected and treated. An Industrial Wastewater Pre-treatment permit for discharge to HTP, or an NPDES permit for industrial wastewater discharge may be required.

The EIS/EIR does not address the potential increases in zinc and copper deposits, associated with automotive tires and brakes, as a result of increased traffic. These deposits will increase the pollutant loading of dry weather and storm water runoff. It is not clear whether these factors were included when estimating the projected increases of pollutants in the run-off from the site.

Stormwater Run-off

The proposed project will result in increased impervious area; leading to higher peak rates of run-off from the site to the stormdrains. The increased flow rate may cause scouring downstream in unimproved channels, if such channels are present. The SUSMP program requires the use of storm water best management practices (BMPs) for new development and re-development, to minimize, eliminate, or otherwise prevent storm water pollution. To comply with SUSMP, post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for down stream erosion. The EIR should include details of hydrology and pollutant loadings, and identify measures to control the effects of increased peak rate of run-off.

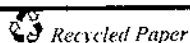
The EIS/EIR states the project proponents intent to develop an adequate Storm Water Pollution Prevention Plan (SWPPP) for construction once an alternative has been selected. In addition to the erosion and sediment controls that need to be on site, the new monitoring requirements recently included in the State Construction Permit will need to be implemented. The Regional Board intends to review this SWPPP for adequacy.

Atmospheric Deposition

The Regional Board is concerned about the potential impact of the projected increases in air pollution on the water quality in the area. Air pollutants can be deposited into water bodies either directly from the air onto the surface of the water, or through indirect deposition, where the pollutants settle on the land and are then carried into a water body by runoff or through natural processes such as the movement of groundwater through the soil. Studies have shown that aerial deposition may be a significant contributor of pollution to Santa Monica Bay; however this issue is not discussed in the reports. While the effects of indirect deposition may be mitigated by the

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collection and treatment of run-off, the impacts of direct deposition should be taken into account. The Regional Board requests an estimate of the projected loading of these air pollutants, on the affected waterbodies via direct aerial deposition.

Impact on Groundwater

The assumption is made that the impact of the project on the groundwater recharge rate is insignificant since "the Groundwater beneath LAX is not used for municipal or agricultural purposes". The groundwater in the area is designated as a potential municipal source (MUN) and as such is expected to be maintained in sufficient quantity and of sufficient quality to be able to achieve this beneficial use. In the event where neither quality nor quantity will allow for this beneficial use of the water, it is the Regional Board's responsibility to take steps to ensure that no further degradation or losses occur while trying to restore it. The Regional Board requests that the threat of groundwater contamination be reviewed in the context of MUN considerations and the presence or absence of saltwater intrusion.

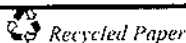
Section 4.11.8.1 MM-ET-1 Riverside Fairy Shrimp Habitat Restoration

The Regional Board understands that the proposed impacts to 1.3 acres of vernal pool habitat containing the embedded cysts of the Riverside Fairy shrimp are recommended to be mitigated at a "ratio of not more than 1:1." Please note, the Board generally requires a minimum 3:1 mitigation-to-impact area replacement ratio for wetland impacts that cannot reasonably be avoided. A lower ratio may be considered appropriate if a mitigation site is offered as fully functional, in-kind, and having equal to or greater value prior to commencement of project impacts. The Board will consider any temporal impacts to aquatic resources and any "estimated" data used to calculate habitat values of uninstalled and incomplete mitigation areas prior to issuance of a Water Quality Certification, pursuant to Section 401 of the Clean Water Act.

The document proposes that replacement habitat "shall have a habitat value of not less than 0.75"(essentially five times that of the existing habitat value estimated at 0.15) and states that a "program to monitor the progress of habitat creation" shall be developed "prior to relocation of the embedded cysts." Although both of these proposals are encouraged, the document fails to identify the exact location of the proposed mitigation site and omits detailed discussion regarding how the mitigation site would be created, monitored, and maintained in perpetuity. These items must be addressed and should include specific success criteria and remedial action upon failure to meet success criteria. Furthermore, of the eight potential mitigation sites identified in the document, the Board does not concur with utilizing any of the six Orange County sites because each of these sites are located outside of the Los Angeles Regional Board's jurisdiction.

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Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan/ Rm 218

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September 17, 2001

Section 4.12 Wetlands

The proposed project will require a Clean Water Act Section 401 Water Quality Certification from the Regional Board prior to obtaining permit approval from the U.S. Army Corps of Engineers (please contact Anthony Klecha at 213/576-6785 for additional information). In addition, the project may be subject to the Board's authority under the Porter-Cologne Water Quality Control Act if it will result in any discharges of waste that could affect the quality of the waters of the state, defined as any surface water or groundwater, including saline waters, within the boundaries of the state (Section 13050(e)). For example, Argo Ditch, as referenced in Section 4.12.2 of the document, is a water of the state and as such, is subject to the Board's authority and therefore should be subject to evaluation or consideration under the Master Plan.

Section 4.23 Hazardous Materials

The Regional Board would like to ensure that this project does not interfere with the on-going groundwater remediation efforts at LAX; and has the following recommendations:

- (i) In the event that an existing soil and/or groundwater remediation system must be removed in part, or completely, the appropriate regulatory agency should be notified and prior written approval must be obtained.
- (ii) Previously unidentified soil and/or groundwater contamination discovered during construction activities must be reported to the appropriate regulatory agency.

The Regional Board expects to be given an opportunity to comment on the program or document developed to coordinate efforts associated with the handling of contaminated materials encountered during construction as reference in the Master Plan hazardous materials commitment, HM-2.

Thank you for the opportunity of reviewing the subject document. Should you have any questions regarding our comments, please contact Jonathan Bishop at (213) 576-6622.

Sincerely,

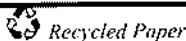


Dennis Dickerson
Executive Officer

cc: State Clearinghouse

California Environmental Protection Agency

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 **South Bay Cities**
COUNCIL OF GOVERNMENTS

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September 20, 2001

Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan/Room 218
P.O. Box 92216
Los Angeles, California 90009-2216

Dear Mr. Ritchie:

The South Bay Cities Council of Governments has reviewed the LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) with the assistance of a consultant team of technical experts. Our analysis has led us to recommend that Los Angeles World Airports deem the document inadequate for certification because it fails to comply with the requirements of both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

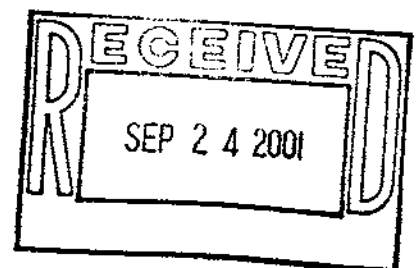
The technical comments attached identify extensive omissions and deficiencies with the Draft EIS/EIR. In addition, we are concerned that the document omits an alternative of a fully regional solution which more effectively utilizes other commercially viable airports in Southern California to address the anticipated growth in regional air passenger and air cargo demand.

We look forward to your response to our comments.

Sincerely,



Sandra Jacobs
Chair, SBCCOG
Mayor Pro Tem, El Segundo



Attachment

LOCAL GOVERNMENTS IN ACTION

Carson El Segundo Gardena Hawthorne Hermosa Beach Inglewood Lawndale Lomita Los Angeles Manhattan Beach
Palos Verdes Estates Rancho Palos Verdes Redondo Beach Rolling Hills Rolling Hills Estates Torrance

AR00003



CHEVALIER, ALLEN & LICHMAN LLP

Attorneys at Law

Commercial Litigation • Aviation Law & Litigation • Environmental Law & Litigation

September 20, 2001

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Mr. David B. Kessler, AICP
Federal Aviation Administration
P.O. Box 92007
World Way Postal Center
Los Angeles, CA 90009-2007

Re: Draft Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements - Comments of the South Bay Cities Council of Governments

Dear Mr. Ritchie and Mr. Kessler:

The following constitutes the comments of the South Bay Cities Council of Governments ("SBCCOG"), pursuant to the requirements of the California Environmental Quality Act, Public Resources Code § 21000, et seq., ("CEQA") and the National Environmental Policy Act, 42 U.S.C. § 4321, et seq., ("NEPA"), concerning the Draft Environmental Impact Statement/Environmental Impact Report ("Draft EIS/EIR") for the Los Angeles International Airport ("Airport") Proposed Master Plan Improvements ("Project"), prepared jointly by the Federal Aviation Administration ("FAA") and the City of Los Angeles ("Los Angeles").¹

The issues raised by these comments fall into seven general categories, although they are not limited only to those categories:

(I) the baseline used in the Draft EIS/EIR, against which the various environmental impacts of the Project are compared, is not properly designated;

¹ The FAA and Los Angeles shall, for the remainder of this letter, be referred to collectively as "Project Proponents".

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John Chevalier, Jr.*
Berne C. Harr
Barbara E. Lichman, Ph.D.
Jacqueline E. Serrao, LL.M.
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Mr. Jim Ritchie
Mr. David B. Kessler, AICP
September 20, 2001
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(II) the discussion of the Project's surface traffic impacts is misleading;

(III) the noise impacts of the Project are inadequately addressed;

(IV) the potential air quality impacts of the Project are not fully disclosed;

(V) the Draft EIS/EIR does not explore all reasonable alternatives, and, thus, paves the way for its ultimate conclusion that expansion of the Airport's airside and groundside facilities are the sole way to meet future demand;

(VI) the Draft EIS/EIR fails to adequately specify mitigation measures or methods to enforce them; and

(VII) the recently articulated project goal of increasing safety obscures the Project's clear capacity-enhancing purpose. As a result of these defects, the Draft EIS/EIR cannot meet the high standards of disclosure that are the gravamen of both CEQA and NEPA.

I. THE DRAFT EIS/EIR DOES NOT PROPERLY DESIGNATE THE BASELINE FOR ANALYSIS.²

The specification of a baseline for comparison with Project impacts is a critical component of analysis under CEQA, because without an accurate specification of the baseline, "analysis of impacts, mitigation measures and project alternatives becomes impossible." County of Amador v. El Dorado County Water Agency, 76 Cal.App.4th 931, 953 (1999). A central concept of CEQA is that "a baseline figure must represent an environmental condition existing on the property prior to the project." Save Our Peninsula Committee, et al. v. Monterey County Board of Supervisors, et al., 87 Cal.App.4th 99, 124 (2001). The regulations implementing CEQA, 14 Cal. Code Regs. § 15000, et seq., ("CEQA Guidelines") are specific as to the definition of "prior to the project":

"An environmental impact report must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or, if

² Later sections II, III and IV more fully discuss the pitfalls arising from the use of the three separate and distinct baseline assumptions used in that analysis; Environmental Baseline, Adjusted Environmental Baseline, No-Project/No-Action.



Mr. Jim Ritchie
Mr. David B. Kessler, AICP
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no Notice of Preparation is published, at the time the environmental analysis is commenced . . . This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.” CEQA Guidelines § 15125(a).

While the courts have taken the position that the “date for establishing a baseline cannot be a rigid one”, Save Our Peninsula Committee, supra, 87 Cal.App.4th at 125, they have also held unequivocally that “an EIR must focus on impacts to the existing environment, not hypothetical situations”, County of Amador, supra, 76 Cal.App.4th at 955. The baseline for analysis in the Draft EIS/EIR does not meet these tests.

A. The Draft EIS/EIR’s Base Year Does Not Reflect the Physical Conditions on the Project at the Time of the Publication of its Notice of Preparation.

The Airport Master Plan, November, 2000, Technical Analysis (“Master Plan”) is the basis of the analysis contained in the Draft EIS/EIR (Master Plan, Preface, page i). The analyses contained in Master Plan, Chapter II, Existing Conditions Working Paper, 4/19/96, use data from the base year 1994 (see, e.g., § 2.3.1, page II-2.1, re: Annual Weather Conditions; Figure II-2.17, page II-2.53, re: Design Day Hourly Distribution of Operations and Tables following). The Notice of Preparation, however, was published in July, 1997 (Draft EIS/EIR, page ES-2), almost three years after the conditions reflected in the original Master Plan data and analysis. Courts have consistently taken the position that a baseline should not “be set a number of years earlier than the commencement of the current project”. Save Our Peninsula Committee, supra, 87 Cal.App.4th at 127.

Moreover, the Master Plan and Draft EIS/EIR contain multiple inconsistent base years such that it is impossible for the public to ascertain which base year is used for a given purpose. On the one hand, the Draft EIS/EIR (page ES-2) states that the environmental analysis normally describes existing conditions as of the July, 1997 date on which the Notice of Preparation was published (even though none of the data in the Master Plan upon which the Draft EIS/EIR is based reflects a 1997 origin). On the other hand, the Draft EIS/EIR states that, where a full year’s worth of data is needed, data from 1996 is used (see, e.g., Draft EIS/EIR Technical Report on Surface Traffic), and sometimes earlier years [unspecified], and sometimes even data from the later years 1999 and 2000 (even though these latter are more than two years after the publication of the Notice of Preparation). Additionally, the Master Plan is unclear as to whether 1994 or 1995 data is used. Finally, different base years are used for different components of the analysis. e.g., 1996 for surface traffic and noise, 2000 for water resources.



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Mr. David B. Kessler, AICP
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Such selective shifting of baselines has substantive consequences. For example, the use of a 1994 (or even 1996) baseline in analysis of aircraft noise impacts artificially elevates the baseline for analysis by incorporating noise from the larger numbers of Stage 2 aircraft in the fleet in 1994/96. These aircraft were totally phased out of the United States fleet by the year 2000. Further, the use of a 1994 (or 1996) baseline year in the air quality analysis potentially overstates the baseline level of criteria pollutants in the L.A. region which has since come into attainment for all criteria pollutants except Ozone and Particulate Matter.³ In short, the nonspecificity of both the Master Plan and Draft EIS/EIR with respect to the base year for analysis renders the results of their analyses questionable.

B. The Master Plan and Draft EIS/EIR Baseline Analyses Are Based On Incomplete and/or Inaccurate Data.

The Master Plan defines the capacity of the Airport's existing airside facilities as "the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay." (Master Plan, § 2, page II-2.1) The correct determination of existing airside capacity is critical to identification of the Airport's potential to accommodate future air traffic demand and plan future airport's development. (Master Plan, Chapter 2, page II-2.1) Various independent variables are used in the modeling of existing airport capacity, including, but not limited to: (1) runway operating configurations; (2) noise abatement procedures; (3) airspace operating assumptions; and (4) airfield operating assumptions. (Master Plan, § 2.3, page II-2.21) Delay is also apparently a contributing variable. The relationships within the model are such that, if the definition of a given variable, or the value assigned to it, are questionable, the capacity determination resulting from the model is prejudiced.

Here, even if, for argument's sake, the Draft EIS/EIR had specifically and accurately designated a base year, critical data used in the Master Plan baseline demand/capacity/delay analysis is incomplete or in some cases inaccurate.

³ The Draft EIS/EIR also states that its use of earlier years results in a more "conservative" analysis, because there were fewer passengers and operations in earlier years, and, thus, less noise and fewer emissions to compare against those generated by the Project. This claim is inaccurate at least with respect to noise and air quality analyses as set forth below. In any event, it does not account for the opposite effect of using later years 1999/2000 as the baseline, which would, by the logic used in the Draft EIS/EIR, artificially elevate the baseline and, consequently minimize the environmental impacts of the Project. As neither the Master Plan nor Draft EIS/EIR are specific as to the distribution of various baseline years throughout the analysis, it is impossible to ascertain the degree of distortion that may have occurred through the use of these alternate baselines.



Mr. Jim Ritchie
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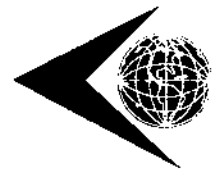
As a threshold matter, the Master Plan demand/capacity/delay analysis is predicated on Aircraft Communications, Addressing and Reporting System ("ACARS"), and Official Airline Guide ("OAG") data sources. These two data sources exaggerate, or, inaccurately characterize, true (airport capacity related) delay. The Master Plan defines delay as "the difference between the actual time it takes an aircraft to perform an arrival or departure and the normal time it would take to perform the same operation with no interference from other aircraft." (Master Plan, § 2.1, page II-2.2) ACARS data is generated by the airlines, and is based on activities such as push back, parking at the gate, or opening or closing cabin doors. ACARS data includes information about on-time performance, based on the arrival and departure times developed by each airline for each segment of flight. Since the data is airline-generated, airline definitions of delay are automatically built into the report.⁴

Further, the OAG is published for the express purpose of identifying the arrival and departure times of various airlines. When the airlines set up their schedules, they factor in the average delay for each leg of flight between city pairs. Thus, the OAG also builds delay into the departure and arrival times based on each airline's historical data and operating experience for each flight segment.

In summary, ACARS data is not original source data but is the product of third party intervention. It is manipulated by various airline functionaries before a final report is released. Similarly, OAG data is manipulated to include delay not after, but before the fact. Therefore, because both sources of data already include a delay factor, their use in the Master Plan's modeling, as set forth below, is likely to cause a double counting of delay.⁵

⁴ When an aircraft pushes back from the gate or closes the cabin door, the aircraft could be late for a variety of reasons. Many delays are due to factors that are airline-controllable such as late boarding of passengers, customer service delays, maintenance delays, late arriving equipment, catering, fueling, baggage and the unavailability of crew members, to name but a few. Other types of delay would be attributable to airport, runway or taxiway design, airport acceptance rates, airport construction, noise abatement regulations, air traffic control restrictions and weather. These items are also introduced and incorporated into the ACARS report as a delay factor.

⁵ In addition, the Master Plan analysis relies on numerous sources other than ACARS or OAG data including personal observations, a small sampling of users and an unique determination of aircraft speeds and routes, none of which is suitable, let alone optimal, for developing baseline analyses or formulating assumptions. (See, e.g., Master Plan, § 2.1.3, pages II-2.5 - II-2.6)



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Instead of ACARS or OAG data, the Master Plan should have relied on radar data. Radar data is a memorialization of the movement of arriving aircraft from a specified distance outside the terminal control area until touchdown and, conversely, for departing aircraft, from the aircraft's lift-off from the runway to the same distance outside the airport's control area. Every operation is tracked in real time without the intervention of third party interpretation, manipulation, or extraneous factors, unrelated to the operational capacity of airport infrastructure.

The effects of this confounding of substantive with non-substantive delay factors are reflected in the Master Plan's modeling of demand/capacity/delay. The FAA's Simulation Model ("SIMMOD"), Version 2.1, was apparently used in the Master Plan's demand/capacity/delay analysis. SIMMOD simulates the movement of arriving and departing aircraft from their entry/exit into the Los Angeles Terminal Air Traffic Airspace through approach and landing phase, or taxi and takeoff, to their exit from the terminal air traffic airspace. Proper calibration of SIMMOD is essential since the resulting statistics depend upon the data used to develop the baseline assumptions and operating instructions for the model. In this case, ACARS and OAG data were used to calibrate SIMMOD. Because of the potential double counting inherent in these data sources, and the consequent exaggeration of delay in the model, the principal conclusion that is drawn from SIMMOD is that the only way to remedy delay is to build additional airport infrastructure. The most obvious flaw of such an analysis is that it eliminates, at the outset, opportunities to gain efficiency through improvements in operating practices and minor modifications to the air traffic system. Thus, what seems like a relatively minor data collection/designation problem pervades the demand/capacity/delay modeling upon which the Draft EIS/EIR's environmental analysis is based, and subtly biases the results.

C. The Draft EIS/EIR is Based on Implausible Modeling Assumptions.

The accuracy of SIMMOD's results depends on an accurate "description" of the "airport's operating environment". (Master Plan, § 2.1, page II-2.2) Both the Master Plan and Draft EIS/EIR acknowledge that the "description" is made up not merely of data purporting to represent actual current conditions, but also assumptions arising from that data (see, e.g., Master Plan, § 2, page II-2.1). Therefore, to the extent data and assumptions are incorrect or incomplete, so too will be the results of the model. In addition to the data problems specified above, SIMMOD, as used in the Master Plan, incorporates implausible, or biased, assumptions which, in turn, call into question the integrity of its output.



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Mr. David B. Kessler, AICP
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1. Assumptions Concerning Aircraft Delay Are Unexplained and Unsupported.

The Master Plan's (and Draft EIS/EIR's) definition and description of the delays at the existing (pre-Project) Airport are based on consultants' opinions and not on factual information. First, while the Master Plan acknowledges that "a standard definition of acceptable delay is not used in the industry" (Master Plan, § 2.1.3, page II-2.5), it then concludes that "delay levels of six to ten minutes indicate the need for additional facilities"; that "as average aircraft delay increases above six minutes, passengers tend to perceive service reliability problems"; "as delay approaches ten minutes per operation, further increases in demand are limited", and, "flight cancellations were assumed when delays exceed 20 minutes per average annual aircraft operation." (Master Plan, § 2.1.3, pages II-2.5 - II-2.6) These assumptions are apparently based on information derived from prior studies by the Master Plan consultants at airports other than Los Angeles, in years as early as 1988. In other words, the delay standards relied upon in the Master Plan are based on outdated data concerning potentially irrelevant subject airports. All of these have unique characteristics that may have influenced creation or perception of delay, and none of them are discussed in the Master Plan or Draft EIS/EIR.

Further, these unsupported assumptions do not reflect an understanding of the diverse ways in which delay is determined by the airlines, Air Traffic Control and the Department of Transportation. First, a typical airline will develop performance criteria for each phase of flight based on company goals and performance percentages, including arrival and departure delay. Airlines use "zero variance" as a standard for "on time" performance (i.e., zero difference between arrival and/or departure times and published schedules). The percentage goal for each activity will be based on the level of performance the airline hopes to, or, in some cases, must attain in order to remain competitive. Some airlines track on time performance plus five minutes and most will track on time performance plus 14 minutes.

FAA Air Traffic Control, on the other hand, computes delay based on actual delay time en route. An arriving aircraft is considered delayed only if the aircraft is held en route to the destination for 15 minutes or more at any given moment during the flight. It is possible that these aircraft could be held at more than one interval during a flight. However, if each holding period does not exceed the 15 minute threshold, no delay is recorded, even though the total delay might well be in excess of 15 minutes. Further, inbound delay is kept separate from outbound delay. A departing aircraft is not counted as delayed until: (1) the average taxi time for the airport; (2) the time from the gate to the runway; and (3) 15 minutes have cumulatively elapsed. Air Traffic Control delays do not consider airline schedules or internally generated delays in their reporting system. The majority of Air Traffic Control delays are as a result of weather and not system capacity. Finally, the Department of Transportation grades airline performance on the



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time of arrival at the destination airport within 14 minutes of the scheduled arrival time. The Master Plan utilizes none of those benchmarks. Thus, the Master Plan fails to adequately explain the basis for its demand/capacity/delay analysis.

2. The Master Plan's Assumptions Concerning Turboprop Operations are Manifestly Inaccurate.

Referring to its analysis of existing noise abatement procedures as they pertain to the creation or maintenance of demand/capacity/delay, the Master Plan states that "based on actual information obtained by the Los Angeles Noise Management Bureau, turboprop departures were permitted to turn slightly earlier than jet departures at the Airport VOR, which is located between runways 7L and 7R, west of Pershing Drive" (Master Plan, § 2.3.3, page II-2.31). In addition, Figures II-2.11 and II-2.12 indicate that, when the Airport is operating on a west flow, turboprop aircraft turn at the VOR.

These representations are inaccurate and lead to incorrect assumptions about flight paths. In fact, if such a turn were permitted, it would occur prior to the shoreline, contrary to current noise abatement procedures. Turning the turboprops early allows faster aircraft to depart behind the turboprops at a more accelerated rate than is currently allowed, thus allowing more aircraft to depart in a given interval. The results of this inaccurate assumption are that: (1) the baseline departure capacity is artificially elevated to a level higher than would be realized had actual air traffic data been used and the noise abatement procedures modeled as they are actually used; and (2) turboprops, as depicted in the Master Plan and Draft EIS/EIR, are directed over noise sensitive areas not previously overflown, and, as a result, elevate the baseline noise levels, thereby concomitantly reducing the apparent noise impacts of the Project.

3. The Master Plan's Flight Schedule Assumptions Are Outdated.

The Master Plan reports the results of a SIMMOD analysis conducted in 1994, using 1994 data and 1994 assumptions. In addition to this obsolete data, the ACARS data upon which the SIMMOD analysis is based includes less than 51% of commercial operations and more than 46% of the total operations in the design day flight schedule. As: (1) operational configurations long pre-date the commencement of the environmental process; (2) current schedules were not used (although available), the assumptions concerning a typical day's traffic are substantially unsupported; and (3) not all of the aircraft operators were considered, the assumptions concerning a typical day's traffic are substantially unsupported.



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4. The Master Plan's Fleet Mix Assumptions are Inaccurate.

The Master Plan relies on a fleet mix distribution derived from "August 11, 1994 OAG, NMB Do Daily Operations Records and LADOA 1994 Monthly Air Traffic Volumes" (Master Plan, Table II-2.16, page II-2.58). This 1994 fleet mix distribution is outdated and, thus, inadequate for use in SIMMOD. Specifically, it includes a large number of Stage 2 aircraft which are no longer in operation at the Airport. Not only are Stage 2 aircraft noisier, but they have different emissions characteristics from the newer high bypass ratio, Stage 3 aircraft. If a more recent base year had been selected, the proportion of Stage 2 aircraft would have been smaller, and the noise baseline lower, and, thus, more accurate.

5. The Master Plan's Assumptions Concerning Aircraft Speed Are Inaccurate.

The Master Plan's assumptions concerning aircraft speeds were apparently inflated to fit the underlying assumption of unconstrained aircraft flows. The Master Plan model calls for all aircraft to operate at the same constant air speed before proceeding to the Airport and landing. The model further assumes that all aircraft exit the runway at the same point and within the same amount of time in order to reach the modeled flow rate. In actual conditions, the speeds of the aircraft vary, with high airspeed greatly reduced as the aircraft approaches the airport. Nor would all aircraft exit the runway at the same location. In short, this assumption of high constant speed will have an as yet unascertained impact on the model's results but would tend to overstate capacity of the existing facility, and, thus, the baseline for comparison with the Project's improvements.

D. The Master Plan's Model Omits Critical Variables.

Another crucial issue revolves around variables the Master Plan fails to include in its model. Specifically these include: (1) the capacity of the airspace beyond the Airport Terminal Control Area ("TRACON"); and (2) gate capacity for future scenarios.

1. The Master Plan Should Have Considered Airspace Capacity Beyond The Airport's Terminal Area Airspace.

According to the Master Plan, airspace considerations were limited to entry (and exit) from the Airport's TRACON airspace. (Master Plan, § 2.1.1, page II-2.3) The failure to consider airspace capacity beyond that point is a material omission from the analysis. This is because the majority of aircraft delays are absorbed in the en route environment before an aircraft arrives in TRACON airspace. By modeling only the terminal area, the results of the model are



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skewed for both arriving and departing aircraft. For departing aircraft, if the model does not consider the inherent constraints of the en route air traffic system, including differences in aircraft performance and the impacts of other air traffic transiting the area for other airports, the departure flow pictured in the model will remain unconstrained and aircraft can take off at a constant, predetermined rate. When reaching the boundary, the aircraft are dropped from the scenario, and the model does not further consider constraints of the en route system which naturally impact the TRACON airspace. Unfortunately, this unconstrained flow scenario is not normally possible in today's complex air traffic control system.

Similar problems exist in modeling arrivals without consideration of airspace outside the TRACON. Inbound aircraft are assumed, in the Master Plan model, to be at the entry point of terminal airspace when required by the model. Aircraft proceed inbound at a set speed, reduce speed at a predetermined point, land and proceed unimpeded to their gate. This is not a reasonable representation of a typical aircraft arrival. In fact, there is almost no likelihood that aircraft can be delivered to the terminal inbound fix at a rate consistent with the model's assumptions.

Instead, the Master Plan's arrival model appears to have been developed to insure that an arriving aircraft would be at the inbound fix at the specific time required in order to maximize the arrival rate for the airport. Although Air Traffic Control consistently tries to keep the aircraft sequenced as closely as possible "in-trail", it is not possible to consistently space aircraft a set distance apart for extended periods of time. The availability of aircraft to fit into the sequence, aircraft speeds, the mix of large and small aircraft, a lack of demand, aircraft deviations due to weather, in-trail restrictions though an en route sector or in-trail restrictions required for an airport approach control facility and other variables cause the in-trail spacing of arrival aircraft to be inconsistent. As a result of these and many other factors, there is unused capacity in each of these arrival sequences. In summary, the Master Plan's failure to adequately consider constraining factors outside the TRACON airspace calls into question the validity of the model's result.

2. The Master Plan Should Have Modeled Gate Capacity.

The Master Plan did not include in its modeling aircraft gate operations for future activity levels, allegedly because of the inability of the existing gate facilities to accommodate the higher activity levels.⁶ (Master Plan, § 2.5.3, page II-2.104) The Master Plan disclaims the importance

⁶ Performance measures contained in the Master Plan, § 2.5.1, include "outbound ground delay" which, in turn, appear to include gate related variables such as "gate push-back delay". This performance measure was apparently used in the modeling of existing gate



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of this omission [“The inability to model gate operations in detail does not impact the results of the airside capacity analysis since at higher activity levels the runway system tends to be the primary constraint . . .” Master Plan, § 2.5.3, page II-2.110]. The Master Plan is in error.

If an aircraft cannot get to the gate unimpeded, the resulting delay must be factored into the analysis. In the Master Plan, taxi patterns are consistent and aircraft are dropped from the model when they reach the gate area. The model does not capture any delays in the gate area or any delays that might occur in reaching the gate due to congestion on the ramp. The same is true for departing aircraft. If a departing aircraft cannot leave the gate due to inbound traffic or other traffic in the gate area, the departure demand at the airport may not be as regular as is assumed in the Master Plan’s model.

The importance of this omission is that it precludes development of a clear picture of the delay reduction, and consequent capacity enhancing, attributes of the Project. Without estimation of the potential groundside/terminal structure constraints on operations (capacity), the actual delay reducing, and capacity enhancing, benefits of the Project as a whole cannot be accurately ascertained.

3. The Master Plan Should Have Considered Currently Implemented Air Traffic Procedures.

While the Master Plan acknowledges the existence of the current Dual Civet Arrival procedure, it fails to analyze its delay reducing, or consequent capacity enhancing efficiencies. The procedure is mentioned, then drops off the “radar” screen. The Dual Civet Arrivals, however, have so greatly reduced arrival delay at the Airport that no national delay program for the airport has been established since the procedure’s implementation. Ignoring the impacts of Dual Civet Arrivals results in an exaggeration of existing delay and a consequent exaggeration of the Project’s delay reducing, and capacity enhancing benefits.

E. Demand, as Defined in the Master Plan, is an Identity with Capacity.

Inaccurate data and assumptions are not alone in influencing the outcome of a modeling effort. Inadequate specification of a variable may also lead to an unrepresentative result. In this case, the independent variable, demand, as defined, is not independent but is virtually synonymous with, or surrogate for, the dependent variable, capacity. Thus, the demand variable has an interactive relationship with the dependent variable which influences the model’s outcome in significant ways.

operations but not future ones. (Master Plan, § 2.5.1, page II-2.97)

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For example, the Master Plan defines aircraft demand as “a 24-hour flight schedule representative of design day activity.” (Master Plan, § 2.1.2, page II-2.3) The “24-hour flight schedule” definition is almost identical to the definition of “capacity”, “the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay.” (Master Plan, § 2, page II-2.1) The two variables, therefore, vary together, i.e., as “capacity” increases, “demand” will also increase, rendering demand useless as a predictor of capacity. The precise degree in which the interaction of the independent and dependent variables in the model affect the analysis cannot be ascertained at this point without re-running SIMMOD. Suffice it to say that a new surrogate for demand, derived, for example, from airline market surveys, or annual enplanements, is necessary to insure the integrity of the model’s results.

II. THE DRAFT EIS/EIR DOES NOT FULLY ANALYZE THE PROJECT’S OFF-AIRPORT SURFACE TRAFFIC IMPACTS.

While the Draft EIS/EIR’s off airport surface traffic analysis adequately depicts some aspects of the Project’s surface traffic generation potential, it is notably deficient in the following ways: (1) the analysis gives little consideration to surface traffic impacts on South Bay Communities other than those directly proximate to the airport; (2) the use of the Adjusted Environmental Baseline for comparison with the Project’s surface traffic impacts creates a misleading picture of the magnitude of those impacts; (3) the Draft EIS/EIR improperly equates the direct and cumulative impacts of surface traffic; (4) the Draft EIS/EIR provides inadequate information regarding the Northside/Westchester Southside Project; (5) the Draft EIS/EIR transportation planning horizon is improperly attenuated; and (6) the Draft EIS/EIR lacks a mitigation monitoring program detailing implementation of mitigation measures for the impacts of surface traffic.

A. The Draft EIS/EIR Lacks Adequate Consideration of Surface Traffic Impacts on South Bay Communities.

The Draft EIS/EIR analyzed 61 intersections, with an additional 15 intersections selected for focused analysis. Only nine of the 76 intersections were south of the I-105 (Century) freeway. The apparent explanation for the focus on the north side of the airport is presented in the Draft EIS/EIR, pages 4-284 - 4-289:

“South of LAX, there is a higher percentage of LAX traffic on I-405 and a lower percentage on the arterials, indicating that airport



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traffic is in fact staying on the freeway system as desired. However, this is not the result of I-405 operating well, but is more a result of the layout of the roadway network south of LAX. There are no alternative arterial routes that closely parallel I-405 south. In fact, south of LAX, all major arterial routes change to a north/south orientation, while I-405 south of Rosecrans Avenue continues in a northwest/southeast direction.”

This explanation does not account, however, for at least three conditions acknowledged in the Draft EIS/EIR which exist south of the Airport: (1) airport traffic south of the airport represents a significant component of traffic on local streets; (2) interviews at freeway intersections south of the airport indicate a large percentage of airport trips; and (3) the Draft EIS/EIR claims a benefit from redistribution of traffic south of the airport off the freeway and onto local streets.

1. Airport Traffic Represents a Significant Component of Traffic on Local Streets South of the Airport.

The Draft EIS/EIR notes that 8% of the afternoon peak on Sepulveda Boulevard south of El Segundo Boulevard is airport related, but concludes “. . . even if all the Airport bound traffic were removed, there would be little noticeable difference on most roads outside of the immediate vicinity of the airport, particularly during the morning and evening rush hours.” (Draft EIS/EIR, page 4-289) The 8% reported in the Draft EIS/EIR is, however, more important to traffic flow than it appears. For example, the intersection of Sepulveda and El Segundo Boulevards has a reported 1996 Volume to Capacity (V/C) of .869 and a projected 2005 V/C ratio of 1.062 (Draft EIS/EIR, Table 4.3.2-23, page 4-334). Eight percent of the 1996 traffic represents an airport contribution at this intersection of .069. The benchmark of “significant impact” is defined in the Draft EIS/EIR as a change in V/C ratio of .01 for an intersection operating at Level of Service (“LOS”) F (Draft EIS/EIR, page 4-291). Therefore, at the intersection of Sepulveda and El Segundo Boulevards, a contribution of .069 to the V/C ratio can hardly be considered as representing “. . . little noticeable difference . . .”

2. Freeway Ramp Data Shows Traffic Exiting the I-405 South of the Airport.

Master Plan, Chapter II, Section 7.3, reports the results of a survey conducted at area intersections during the A.M. and P.M. peak hours. The results of that survey call into question the assumption that traffic is not diverted off the I-405 onto local streets south of the Airport, where it demonstrates that more than 30% of the trips at northbound I-405 ramps at El Segundo were Airport related.



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3. The Draft EIS/EIR Is Internally Contradictory with Respect to Use of Off-Freeway Traffic Routes South of the Airport.

The Draft EIS/EIR states, in pertinent part: "Further, although it would be ideal for airport access to be provided directly via freeways, the dispersion of Airport traffic onto many arterial and freeway routes does have a side benefit in that its impact is minimized on any given route" (Draft EIS/EIR, page 4-289). This statement directly contradicts the Draft EIS/EIR's initial assumption that the roadway system is designed such that freeway traffic is not diverted to the local street system south of the airport. If, in fact, airport traffic is diverted from the freeway, as claimed for traffic to and from the north, would not a similar set of traffic solutions be applicable to the south as well?

In addition, Master Plan, Table II-7.12 also sets forth data that calls into question the assumption of the limited diversion of freeway traffic onto local streets south of the airport. Table II-7.12 illustrates that, by absolute volume, only 3 of 30 "key roadway segments" carry more Airport related morning peak hour traffic than does Sepulveda Boulevard north of Rosecrans Avenue, and in the afternoon only four key segments carry more peak hour traffic than that intersection.

In short, the failure to consider traffic impacts south of Rosecrans Avenue appears arbitrary. At a minimum, the Draft EIS/EIR and its technical appendices need to provide a much clearer statement of why the intersections evaluated were selected, and why no consideration was given to areas south of Rosecrans Avenue.

B. The Use of the Adjusted Environmental Baseline for Comparison With the Project's Surface Traffic Impacts is Misleading.

Three scenarios were used as baselines against which to evaluate the surface traffic effects of the proposed Master Plan improvements: (1) Environmental Baseline; (2) Adjusted Environmental Baseline; and (3) the No-Project/No-Action alternative. The Environmental Baseline is the existing condition pre-project. It includes existing roadways and land uses, and the current airport configuration. The year used in this baseline changed during the development of the Master Plan. At the initiation of the Master Plan process, the baseline year used was 1994. Information is reported in different Master Plan sections for 1994 and 1995. For the third iteration of the Master Plan, the baseline became 1996. The technical reports for the Draft EIS/EIR used 1996.

The Adjusted Environmental Baseline uses the current airport configuration but assumes that future off airport roadways and land uses already in the pipeline will be completed (see



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Section B.1 below). As with the Environmental Baseline, the definition of Adjusted Environmental Baseline changed with the development of the Master Plan. The existing condition section of the Master Plan (Chapter IV, Section 7) used horizon years of 2000 to 2015. The "constrained" alternatives section (Chapter V, Section 3) used the years 2005 and 2015. Finally, the No-Action/No-Project Alternative is the converse of the Adjusted Environmental Baseline and assumes that off-airport development will remain constant, but currently approved airport projects will be completed.

There are at least two issues of importance raised by reliance on the Adjusted Environmental Baseline: (1) accuracy of the Adjusted Environmental Baseline and its resulting projections; and (2) applicability of the Adjusted Environmental Baseline to the environmental impact analysis.

1. The Uncertain Definition of the Adjusted Environmental Baseline Makes the Results of its Comparison With Project Impacts Questionable.

The initial question about the Adjusted Environmental Baseline is the accuracy of the definition of "Existing Condition/Environmental Baseline" on which it is purportedly based. There are significant differences between the 1995 data concerning the "Existing Condition/Environmental Baseline" contained in the proposed Master Plan and the 1996 data contained in the Draft EIS/EIR. A comparison of Master Plan, Table II-7.2 and Draft EIS/EIR, Table 4.3.2-24, for the a.m. peak hour, shows changes in the "Existing Conditions/Environmental Baseline" between 1995 and 1996. As illustrated in the following Table, some intersections got significantly better and some significantly worse. In all but one case, the difference in V/C ratios between 1995 and 1996 exceeds thresholds used for determining significance in the Draft EIS/EIR.



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Intersection	Master Plan Table II 7.2 1995 V/C*	EIS/EIR Table 4.3.2-24 1996 V/C	V/C Difference
Aviation/El Segundo	0.981(E)	0.835(D)	-.146
Aviation/Rosecrans	0.915(E)	1.121(F)	.206
Highland/Rosecrans	0.714(C)	1.069(F)	.335
Sepulveda/El Segundo	0.840(D)	0.869(D)	.029
Sepulveda/Mariposa	0.776(C)	0.730(C)	-.046
Sepulveda/Rosecrans	1.238(F)	1.220(F)	-.018
Vista Del Mar/Grand	0.755(C)	0.749(C)	-.006
Vista Del Mar/Imperial	0.821(D)	0.465(A)	-.356

* In Master Plan Table II 7.2 the first column heading is apparently mislabeled

Moreover, the “adjustments” to the “Existing Conditions/Environmental Baseline” involved adding additional roadways and additional traffic to the system based on anticipated projects. The definitions of these “adjustments” is not consistent within the Draft EIS/EIR, or between it and the Master Plan. For example, the Draft EIS/EIR states that: “A list of approved development projects were developed . . . (Draft EIS/EIR, page 4-279)” [Emphasis added.] The traffic technical report on which the Draft EIS/EIR is based states: “A list of planned development projects was developed . . .” (Technical Report, § 3b, page 2-3)” [Emphasis added.] Master Plan, Table IV-8.3; Master Plan, Chapter V, Appendix I; and Technical Report, 3b, Table 2-3, present projected regional roadway improvements. Master Plan, Chapter V, Section 2.6 indicates that the future roadway network used in the analysis includes those projects “. . . currently funded and approved or which have a high probability for completion by 2015 . . .” Clearly, the distinction between “approved” and “planned” projects is critical to a functional definition of Adjusted Environmental Baseline. The baseline will be set much higher (and the consequent relationship of the Adjusted Environmental Baseline with the Project’s impacts much lower) if all planned projects are included in addition to all approved projects.

Finally, Chapter IV of the Master Plan (Table VI-8.1, page IV-8.5) provides a “preliminary list of related projects” that differs from the list presented in Table 2.2 of the Draft EIS/EIR Traffic Technical Report, 3b. While differences are to be expected between the 1996 version of the Master Plan and the Updated 2000 version of the Traffic Technical Report, one difference may be more crucial than others - the projected size and resulting traffic impact of the Playa Vista Project. For example, according to the Master Plan, Table IV-8.1, the Playa Vista Project will contain 13,156 single-family units and 8,262 multi-family units. Master Plan,



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Chapter V, Appendix L, and the Draft EIS/EIR Traffic Technical Report specifies 13,085 multi-family units and no single-family units for the same Project. There is no explanation for the change, nor any reference to the source of either number. The difference is crucial because the traffic analysis assumed three people for each single-family home, and only two for each multi-family residence. The change therefore results in a significant diminution in traffic if the latter multi-family numbers are correct. Considering the potential of over 13,000 housing units for traffic generation, a complete explanation is needed to render the Draft EIS/EIR surface traffic analysis.

2. The Applicability of the Adjusted Environmental Baseline to the Draft EIS/EIR Traffic Analysis is Questionable.

As set forth above, the off airport surface traffic analysis in the Draft EIS/EIR uses the Adjusted Environmental Baseline as “the basis of comparison under CEQA for future mitigation for the three build alternatives” (Draft EIS/EIR, page 4-276). The Adjusted Environmental Baseline reflects projected conditions in the years 2005 and 2015 with off airport land use activities completed and regional circulation improvements in place, but without any increased use of the airport. This approach minimizes the potential direct impact from the adoption of the proposed Master Plan because: (1) the future traffic volumes without the Project increase thereby reducing the proportional effect of the added airport traffic from the Project and (2) additional circulation system improvements provide additional capacity. While it is reasonable to assess particular impacts at the time at which they might occur, relying on this approach requires assurances that the projected circulation improvements will actually be in place. No such assurances are provided in the Draft EIS/EIR.

The Off Airport Technical Report lists circulation system improvements that were included in the modeling process. This listing provides an indication of when certain improvements are anticipated. Without these improvements, the circulation system for the Adjusted Environmental Baseline would, apparently, be the same as for the 1996 condition, and many more intersections and roadway segments would be subject to significant adverse impacts as a result of the proposed Master Plan. It is important, therefore, that the Draft EIS/EIR traffic analysis include projected phasing of the anticipated improvements relative to the additional traffic resulting from airport use. This should include a discussion of the phasing of airport improvements as they pertain to traffic generation with respect to the circulation improvements used in the Adjusted Environmental Baseline. Limitations should be placed on airport traffic generation if anticipated circulation improvements off-airport do not occur. Once the Adjusted Environmental Baseline is accepted as accurate and the conditions to achieve it are assured, the next issue concerns the significance of surface traffic impacts and the mitigation measures needed to reduce those impacts.



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C. The Direct and Cumulative Impacts of Surface Traffic Are Improperly Equated.

The surface traffic analysis uses traffic volumes from airport and non-airport projects. (See, e.g., Master Plan § 2.6.2, page V-2.279). Therefore, it is at least partially a cumulative impact analysis.⁷ Because the surface traffic analysis is based on cumulative traffic volumes, the significance of the direct impacts and the cumulative impacts are equated. However, the use of the Adjusted Environmental Baseline makes this equation between direct and indirect effects inappropriate. While comparing the Project to the adjusted future conditions may be appropriate for assessing direct impacts, the cumulative impact is the impact of all traffic relative to the existing condition, not expected future conditions as contained in the Adjusted Environmental Baseline.

The result of this improper equation of direct and indirect effects is material. The following Table (derived from Draft EIS/EIR, Table 4.3.2-24) for the a.m. peak hour illustrates the problem. The reported change in congestion between the existing conditions and Alternative C, the preferred project alternative, is often significant, while the comparison of Alternative C with the Adjusted Environmental Baseline (which incorporates future conditions) is not.

⁷ “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects.” (CEQA Guidelines, § 15355(b))



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Intersection ⁸	Existing V/C(LOS)	Adjusted Baseline V/C(LOS)	Alternative C (w/mit) V/C(LOS)	Difference (w) Existing	Difference (w) Adjusted
Aviation/El Segundo	0.835(D)	1.097(F)	0.865(F)*		
Aviation/Rosecrans	1.121(F)	1.164(F)	1.171(F)	-.050	-.007
Highland/Rosecrans	1.069(F)	1.211(F)	0.947(E)	-.122	-.264
Sepulveda/El Segundo	0.869(D)	1.190(F)	1.161(F)	+.292	-.029
Sepulveda/Mariposa	0.730(C)	0.772(C)	0.803(D)	+.073	1.031
Sepulveda/Rosecrans	1.220(F)	1.275(F)	1.243(F)	1.023	-.032
Vista Del Mar/Grand	0.749(C)	0.918(E)	0.729(C)	-.02	-.189
Vista Del Mar/Imperial	0.465(A)	1.098(F)	0.903(E)	+.438	-.195

* Apparent error in Table 4.3.2-24 of the EIS/EIR (page 4-340)

Using this concept of the Adjusted Environmental Baseline, the result is that the cumulative impacts of the Project are often significant and not mitigated even when the Project's direct effects have been.⁹

D. The Draft EIS/EIR Inadequately Documents the Northside/Westchester Southside Project.

The Draft EIS/EIR's impact analysis for off airport surface traffic is dependent upon the assumption that there will be a substantial reduction in the number of trips generated from the Northside Project. By "reconstituting" the Northside Project into the Westchester Southside Project, the Draft EIS/EIR projects that there will be a significant decrease in collateral trips with the adoption of the proposed Master Plan.

The source of the collateral trip reduction is the change in the land use for the Northside Project and Continental City Project. Attachment A of Technical Report 3b provides the basis for the reduction in collateral trips.

⁸ Change in V/C Rates of .01 defines significant impact for intersections at LOS F (Draft EIS/EIR, p. 4-291).

⁹ Note that if the comparison had been between Alternative C and the No-Project/No-Action Alternative, the difference would have been even greater, as the No-Project/No-Action Alternative provides for on-airport, potentially capacity-enhancing, improvements, but not off-airport surface traffic impact mitigation.



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	AM PEAK			PM PEAK		
	Adjusted Baseline	No Project	Alternative C	Adjusted Baseline	No Project	Alternative C
Northside	0	7,217	3,922	0	7,131	4,423
Continental City	0	5,323	0	0	5,348	0
Manchester Square	0	0	212	0	0	233
Total	0	12,540	4,134	0	12,479	4,656

The issue here is the same as that concerning the Adjusted Environmental Baseline, i.e., the actions needed to insure that the reduction is achieved. The principal question is what specific discretionary actions are required to modify the allowable land uses in the Northside Project and in Continental City property, and how will compliance be assured?

The land use component of the Draft EIS/EIR and Condition LU-1 in Chapter V, Environmental Action Plan, presents a "Master Plan commitment" that:

"To the maximum extent feasible, all [Q] conditions . . . from the City of Los Angeles Ordinance No. 159,526 that address the Northside project area will be incorporated by LAWA into the Zoning Code Amendment and LAX Master Plan Implementing Ordinance for the Westchester Southside Project. Accepting that certain conditions may be updated, revised, or determined infeasible as a result of changes to the LAX Northside project, the final [Q] conditions for the Westchester Southside Project will ensure that the level of environmental protection afforded by the full set of LAX Northside projects [Q] conditions is maintained."
 (Draft EIS/EIR, Chapter V, page 5-2).

Since this traffic reduction is critical to the projected Master Plan trip generation, the detail associated with this property needs to be firmly established. It is unacceptable to assume that certain conditions may be "updated, revised or determined infeasible" if they are necessary to bring about the decrease in collateral trips upon which the Master Plan projections are based. While there are some discussions of the Northside/Westchester Southside Project in the Draft EIS/EIR's purpose and need chapter and Master Plan, Appendix Q, these are brief, general presentations lacking in specificity as to the actions needed to commit the City to limit these uses.



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The importance of this lack of specificity in the definition of Project actions, as they relate to the Northside/Westchester Southside Project, is that there is no commitment by Los Angeles to insure that the traffic reduction represented by the changes in allowable land use will occur. The surface traffic capacity for the Project claimed through the reduction of traffic generation from the Westchester Southside Project is significant. Without a more adequate demonstration of the Master Plan's ability to achieve that reduction, and a concrete commitment to meeting those goals, the Draft EIS/EIR will remain inadequate.

E. The Transportation Planning Horizon Used in the Draft EIS/EIR is Improperly Shortened So As To Minimize the Full Build Out Surface Traffic Impacts of the Project.

The Draft EIS/EIR modeled future conditions for the years 2005 and 2015. The current regional transportation plan, however, uses 2025 as the horizon year. The use of a later year between 2015 and 2025 for analysis is proper in light of the fact that the Project is anticipated to take 16 years to complete.¹⁰ If the Project commences as early as 2002, it will not be completed until 2018, three years after the 2015 horizon has expired. With the year 2013 being the second greatest peak construction year (Draft EIS/EIR, page 4-270), the proposed Master Plan improvements will not be complete by the time the present horizon year of 2015 is reached. The import of the choice of 2015 as horizon year, before the Project is completed, is that the full build-out ("worst case") impacts of the Project will remain unanalyzed.

Further, while the impacts resulting from the adoption of the proposed Master Plan are generally evaluated against the Adjusted Environmental Baseline, much of the Draft EIS/EIR's discussion of surface traffic is compared to the No-Project/No-Action alternative (i.e., the alternative that assumes growth in operations and passenger demand at the Airport, along with completion of improvements already planned, but no off airport traffic or other development improvements). The comparison of the Project with two separate baselines in the years 2015 presents a misleading picture. While the reconstitution of the Northside Project may provide a reduction in the traffic generated in 2015, the existing airport improvements clearly permit growth beyond that currently possible. Therefore, the further into the future conditions are projected, the greater the effect of the proposed Master Plan improvements on traffic.

¹⁰ The Draft EIS/EIR, Purpose and Need Section (Chapter 2, pages 2-12 through 2-13) indicates that the Project will be implemented in two phases. The first phase will last six years and the following phase 10 more years.



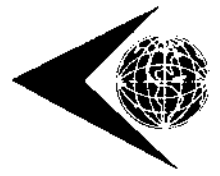
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F. The Impacts of Construction Traffic Are Largely Ignored.

While the Project's construction will stretch over a period of 14 years, the impacts of the numerous construction vehicles that will be in use during that period remain unexplored. First, the Draft EIS/EIR acknowledges a volume of construction vehicles which includes 2.8 trucks per minute, 10 hours per day, 6 days per week, or 1.2 trips per minute, 20 hours per day in a 7 day work schedule (Draft EIS/EIR, page 4-319). While the Draft EIS/EIR purports to address mitigation by recommending that trucks trips be divided among four locations on the construction site, that purported mitigation does not consider the trucks' impacts on surrounding arteries even a short distance from the construction site.

Moreover, the Project will admittedly coincide with the construction of Playa Vista, located approximately 2 miles north of the airport (Draft EIS/EIR, page 4-320). The Draft EIS/EIR contains little or no analysis of the cumulative impacts of the construction of these two projects on surface traffic on surrounding arteries and the San Diego Freeway. Moreover, the mitigation offered is slight. The Draft EIS/EIR offers to expand the "... Traffic Coordination Office ..." to minimize the impacts of construction traffic (Draft EIS/EIR, page 4-320). This purported mitigation measure, even when combined with other assurances including that "construction traffic ... can be managed ..." (Draft EIS/EIR, page 4-320), and "traffic patterns around the airport for the general public would be largely maintained ..." (*Id.*), does little, if anything, to assure that the manifest impacts of construction will be mitigated. The Draft EIS/EIR admits as much where it states "however, even with these commitments in place, the Project would still cause sufficient construction-related traffic to cause notable disruption of normal traffic flows near the airport." (*Id.*) Since construction is planned to last more than 14 years, the Draft EIS/EIR is basically stating that for that entire period, traffic is expected to be disrupted, and the Project's purported mitigation will be insufficient to restore stability.

Finally, the Draft EIS/EIR pays little or no attention to the traffic impact of vehicles used by construction workers. It states that construction employees will work in three shifts, and that the second shift will arrive before the first shift ends (Draft EIS/EIR, page 4-319). Using simple math, it appears that at some points during the day, parking would have to be provided for more than 8,000 workers when these two shifts overlap. While remote parking areas are suggested for construction employees, they are as far away as Palmdale, Van Nuys and Ontario (*Id.*). The likelihood of construction workers using such remote parking is slim to none. Therefore, the mitigation measure is largely useless. However, even if remote parking were utilized to any extent, the Draft EIS/EIR fails to discuss the traffic impacts of the shuttles which would bring the construction workers from these remote locations to the airport. In short, even though construction is expected to last for 14 years, the Draft EIS/EIR contains little, if any, analysis of



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the impacts of construction worker traffic which will take place on the entire street/freeway system 6 or 7 days a week during that period.

In summary, while “the general construction concept is to have many of the transportation improvements completed within the first five years after construction begins . . .” (Draft EIS/EIR, page 4-318), the LAX Expressway and northeastern portion of the ring road from the San Diego Freeway to Sepulveda Boulevard would not be available to traffic until well after the first five years (Draft EIS/EIR, Table 4.3.2-18, page 4-318). Therefore, there would be no new routes available for mitigating the above impacts during the heaviest construction period.¹¹ As a consequence of the above omissions, the Draft EIS/EIR’s analysis of construction traffic impacts is materially deficient.

G. The Draft EIS/EIR Lacks a Mitigation Monitoring Program.

The Draft EIS/EIR, Chapter V is entitled “Environmental Action Plan”. It is not specific as to whether this constitutes a Mitigation Monitoring Program required by CEQA (CEQA Guidelines § 15091(d)). If it does represent a Draft Mitigation Monitoring Program, it is inadequate. The Section lacks a clear statement of the party responsible for implementing the mitigation, the mechanism for enforcement of the mitigation and the timing of implementation. Moreover, it lacks detailed explanation of the way in which the diminution of traffic from the Northside Project, as well as other surface traffic mitigation measures will be achieved.

III. THE DRAFT EIS/EIR NOISE ANALYSIS UNDERSTATES THE PROJECT’S AIRCRAFT NOISE IMPACTS.

The Draft EIS/EIR minimizes the Project’s noise impacts by artificially inflating the Environmental Baseline and by failing to disclose the Project’s overflight noise impacts.¹²

¹¹ The Draft EIS/EIR states that Phase 1 of the Project would be 5-6 years long and end in 2005. As the Draft EIS/EIR cannot be approved before late 2001, at the earliest, and Phase 1 of the construction could not then begin before 2002, Phase 1 could not end until at least 2007 or 2008. Similarly, Phase 2 which is estimated to extend 10 years past the completion of Phase 1, would end in 2017 not 2015, as assumed in the Draft EIS/EIR. This is important because the impacts of construction, and associated traffic, will now be extending well past the period anticipated in the Draft EIS/EIR.

¹² Project proponents apparently did not use the most recent Integrated Noise Model (INM) Version 6.0 to calculate aircraft noise as the Draft EIS/EIR discusses INM, Version 5.1a.



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A. The Draft EIS/EIR Does Not Designate the Proper Baseline for Its Noise Analysis.

As noted earlier, a threshold issue in environmental analysis is the establishment of a "baseline". The function of a "baseline" is to provide a benchmark of existing conditions against which the environmental impacts of a project may be measured. If the baseline is incorrectly designated at too high a level, the impacts of the Project will be improperly minimized. In this case, the Draft EIS/EIR utilizes three separate and distinct baselines for analyzing the impacts of the Project: (1) the Environmental Baseline (1996), i.e., the purported conditions in existence before implementation of the Project; (2) "No-Project" baseline for 2005 (and 2015) which includes "natural" growth on the airport resulting from implementation of already approved airport projects continued in the current Master Plan that purportedly would have occurred even if the Project is not implemented; and (3) Adjusted Environmental Baseline predicated on projected conditions in the years 2005 and 2015 with off-airport land use activities completed and regional circulation improvements in place, but without any improvement to airport facilities.

The Draft EIS/EIR chooses 1996 (i.e., the Environmental Baseline) as the base year for evaluation of aircraft noise impacts, and states that in 2015, the Project's horizon year, Alternative C "would reduce the total number of people exposed to aircraft noise above 65 CNEL compared to current conditions as represented by the Environmental Baseline year." (Draft EIS/EIR, page 4-11) By using 1996 as the benchmark, the Draft EIS/EIR's noise analysis artificially minimizes the apparent growth in noise impacts associated with the Project. This is because, in 1996, many noisy Stage 2 aircraft remained in the fleet (which were then phased out in late 1999). When the Notice of Preparation was published in July 1997, the Project proponents knew with certainty at that time that some of the noisiest aircraft in its fleet would not operate after December 31, 1999, and that the removal of these aircraft from the fleet serving the Airport would reduce the size of the airport's noise exposure contours. The Draft EIS/EIR concedes that the "reduction in noise exposure is the result of a federally mandated phase out of older, noisier Stage 2 jets," and not the implementation of the Project. Despite that fact, the Draft EIS/EIR consciously skews the analysis by using 1996 as the Base Year for its noise analysis.

The Draft EIS/EIR disregards the fleet mix changes brought about by the Stage 2 phase out. The Draft EIS/EIR's "Average Annual Day Operations and Fleet Mix - Environmental Baseline" (Draft EIS/EIR, Appendix D, page 11) includes a total of 139 noisy Stage 2 aircraft in

Draft EIS/EIR, Appendix D, page 6.



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the daily operations mix. In other words, nearly 7% of the aircraft included in the calculation of the baseline noise contour analysis are high noise producing aircraft the inclusion of which will increase the size of the baseline noise contours and, thereby minimize the apparent impacts of the Project.

Courts have displayed flexibility in dealing with cases involving complex long term environmental review. They have agreed that, for lengthy environmental review such as that at issue here, the analysis of such impacts as surface traffic (and aircraft operations) which normally fluctuate over time are properly assessed against a later baseline than the time of the publication of the Notice of Preparation. (Save our Peninsula Committee, supra, 87 Cal.App.4th at 125-126) Therefore, Project proponents are not tied to the 1996 baseline, the last full year of data before the year of Notice of Preparation Publication, but should, more properly, have used a year no earlier than 1999, the last full year of data available before publication of the Draft EIS/EIR. Moreover, that data should have been updated with available data from the year 2000. Absent such an update, the Draft EIS/EIR noise analysis is incomplete and, thus, inadequate.

B. The Draft EIS/EIR Fails to Disclose the Project's Overflight Noise Impacts.

Under FAA Rules, changes in operations above an altitude of 3,000 feet Above Ground Level (AGL) are categorically excluded from environmental review under NEPA. FAA Order 1050.1D, Appendix 3, paragraph 3.a.¹³ However, FAA Order 1050.1D, paragraph 32 also mandates that "extraordinary circumstances" such as actions which are likely to have a significant impact on noise levels over noise sensitive areas, or a significant impact on coastal zones, "shall be the subject of an environmental assessment." (Id., paragraph 32)

Here, the noise analysis in the Draft EIS/EIR narrowly focuses on cumulative aircraft noise impacts created by aircraft approaching the Airport from the east, and from start-of-takeoff roll. However, it completely disregards the impact of single event overflight noise on the South Bay communities: (1) by failing to depict and analyze the noise impacts from additional new routes over areas not previously over-flown; (2) by failing to acknowledge a potential increase in lateral separation of aircraft which could lead to an increase in overflight noise; (3) by failing to report or study the noise impacts of increased operations over coastal zones; and (4) by using an outdated modeling system to justify the decision not to study the noise impacts to South Bay communities.

¹³ The Draft EIS/EIR improperly relies on *draft* FAA Order 1050.1E and the City of Los Angeles' Draft L.A. CEQA Thresholds Guide (May 14, 1998) as authority for several of its assertions.



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1. The Draft EIS/EIR Depicts Additional New Routes Over Noise-Sensitive Areas Within the South Bay Communities but Fails to Analyze the Noise Effects of These New Routes.

CEQ Guidelines § 1502.15¹⁴ state that “[t]he environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration.” [emphasis added] The Draft EIS/EIR’s failure to comply with this mandate is two-fold. First, the Preferred Alternative includes new routes over areas not previously impacted. Second, the Draft EIS/EIR does not analyze the noise impact created by these new routes over noise sensitive areas, thereby failing to describe the environment of the areas to be affected or created.

Master Plan Maps (pages II-2.36 - II-2.37, Figures II-2.11 and II-2.12) illustrate that when the Airport is operating on a west flow, M-class or turbo-prop aircraft turn at the VOR. This is contrary to stated airport policy and noise abatement procedures which require aircraft to proceed past the shoreline before starting a turn. In fact, twelve of the departure tracks for turbo-props used to establish the baseline integrated noise monitor data are routed over residential areas not previously overflowed. (Draft EIS/EIR, Appendix D, page 7, Exhibit 2). The use of these incorrect flight tracks and early turns potentially affects the noise contour on both sides of the airport.

Moreover, if the turbo-prop aircraft turn early, the designated routes will cause them to fly over noise sensitive areas such as parts of El Segundo, thus requiring further review under the “extraordinary circumstances” exception of FAA Order 10501.1D, paragraph 32. In short, the development of these new routes could potentially violate Airport noise abatement policy and could create unacknowledged impacts which must be analyzed.

2. Greater Lateral Dispersion of Aircraft Will Potentially Occur to Accommodate the Increase in Operations at the Airport Which May Lead to Premature Easterly Turns Over the South Bay Communities and Consequent Increases in Overflight Noise.

Even if no new routes were contemplated, the Draft EIS/EIR states that over 90% of the operations at the Airport are in a west flow with climb out over the ocean. The aircraft then turn either south-east or north-east towards their easterly destination. The Draft EIS/EIR anticipates that the Project will lead to an increase in operations. The Draft EIS/EIR does not, however,

¹⁴ The Draft EIS/EIR is also a federal document subject to the requirements of the National Environmental Policy Act, 42 U.S.C. § 4321, et seq., and its implementing regulations, 40 C.F.R. § 1500, et seq. (“CEQ Guidelines”).



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discuss the way in which these increased operations will be integrated into the existing Airport air traffic flows. If it did, it would also have to reveal the potential for increased overflights of South Bay communities.

To accommodate this increase in air traffic, more airspace will probably be required to maintain adequate separation between aircraft during climb out. Air traffic controllers separate aircraft in two ways, laterally and vertically. Generally speaking, since heavy departing aircraft are resistant to an increase in vertical separations for reasons of both cost and performance, aircraft are dispersed laterally. As lateral separation between departing aircraft must be maintained, a greater number of offshore aircraft may come closer and over the shoreline, which may also lead to premature easterly turns from the initial southerly headings of departing flights. These premature turns will potentially lead to an increase in overflight noise over South Bay Communities, noise sensitive areas not previously included in standard departure tracks. At a minimum, the Draft EIS/EIR should contain a supplementary single-event noise analysis for communities south of the airport.

3. The FAA Fails to Study the Project's Noise Impacts over Coastal Zones.

FAA Order 1050.1D, paragraph 32, Extraordinary Circumstances, mandates that a normally categorically excluded proposed Federal action which "is likely to have a significant impact on natural, ecological, cultural, or scenic resources of national, state, or local significance, including... coastal zones," (FAA Order 1050.1D, paragraph 32) shall be the subject of, at a minimum, an environmental assessment. Included in South Bay communities are the coastal zones south of the airport. As California's coastal zones are of national, state, and local significance, they fall within the mandate contained in FAA Order 1050.1D. Nevertheless, the Draft EIS/EIR fails to acknowledge, let alone analyze, impacts on South Bay coastal zones.

4. The Draft EIS/EIR Ignores FAA Order 1050.1D, Paragraph 32 and Uses a Modeling System Which Lacks Any Legal or Scientific Basis in Order to Justify the Draft EIS/EIR's Failure to Examine the Noise Impacts to Communities in the South Bay.

The Draft EIS/EIR noise analysis assumes that noise in the South Bay communities which lies outside the parameters established for the noise analysis, does not exist. The noise analysis is, therefore, incomplete. First, as discussed above, the turbo-prop routes and the potential for increased lateral separation of aircraft will have a material impact on noise levels of noise sensitive areas including coastal zones. Therefore, FAA Order 1050.1D, paragraph 32 calls for at least an assessment of changes in operations above 3,000 feet AGL. Nevertheless, the Draft EIS/EIR, in two paragraphs, completely dismisses this requirement and categorically states that "no further noise review" above 3,000 feet is necessary since the noise associated with jet



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aircraft weighing more than 75,000 pounds will not change more than five decibels CNEL. (Draft EIS/EIR, Appendix D, page 65)

Second, the rationale for this determination is unexplained and unjustified under either legal or scientific standards. The five decibel CNEL standard is not acknowledged in the procedures and policies of NEPA, FAA Order 1050.1D, or FAA Order 5050.4A. The Draft EIS/EIR's methodology is further flawed by the use of a patently erroneous measure. The FAA's benchmark for the measurement of overflight is "Above Ground Level" (AGL).¹⁵ The measure employed in the Draft EIS/EIR is "Above the Airport." (Draft EIS/EIR, Appendix D, page 65). The potential for mischief with the latter measure is clear. If the Project proponents analyze noise at altitudes greater than "3,000 feet above an airport's elevation," then communities in the South Bay and elsewhere which are located well above the airport's elevation would be at a severe disadvantage. For instance, Palos Verdes is at approximately 1,480 feet elevation,¹⁶ while the Airport is located at 126 feet.¹⁷ Due to the difference in elevation between Palos Verdes and the Airport, an aircraft may be 3,001 feet "above the airport", and its noise not subject to environmental review, while it is only 1,521 feet above Palos Verdes. Thus, while the noise impact may not meet the "above the airport" criterion, the noise over Palos Verdes would be significantly greater but remain unaccounted for in the model.

Third, the Draft EIS/EIR claims to have relied upon the Air Traffic Noise Screening Model (ATNS), Version 2.0, to:

"assess the effects of noise level changes associated with air traffic procedure changes at altitudes greater than 3,000 feet above an *airport's elevation*. This methodology requires that changes in aircraft noise be evaluated if the noise associated with jet aircraft weighing more than 75,000 pounds changes by more than five decibels of DNL (CNEL in California) over residential areas and the aircraft is in flight at an altitude between 3,000 and 18,000 feet *above the airport*." (Draft EIS/EIR, Appendix D, page 65)
[Emphasis added.]

¹⁵ See, in general, FAA Order 1050.1D which uses the benchmark "ABOVE GROUND LEVEL" as a starting point for altitude measurements.

¹⁶ <http://pointvicenteinterpretivecenter.com/rpv/recreationparks/content/rpvfactsheet2000.htm> (accessed June 22, 2001).

¹⁷ <http://www.airnav.com/airport/LAX> (accessed June 22, 2001).



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It did not. In fact, it appears that the outdated and obsolete checklist from FAA Notice 7210.360 was utilized instead. ATNS is a computerized version of the former FAA Notice 7210.360, and supercedes the checklist method. It requires actual data input, performs the calculations, and prepares written documentation on the findings. The Draft EIS/EIR contains only a checklist. After checking off five boxes from the "departure" N 7210.360 checklist, (Draft EIS/EIR, Volume D, pages 79-86) the Project proponents determined that:

"since the flight tracks of the new and relocated runways will be located within close proximity to the present flight tracks of the existing runways, and the aircraft activity on these tracks will not result in an increase of 5 decibels of DNL (CNEL) over any residential area when the aircraft are above 3,000 feet, *the checklist indicates that no further noise review under this requirement is necessary.*" Draft EIS/EIR, Volume D, pg. 65. (Italics added for emphasis.)

The checklist itself is proof that the drafters never used the actual ATNS aircraft noise screening modeling system, but, instead, chose to work with its former outdated and obsolete checklist version. The Draft EIS/EIR misleads the public into believing that an actual, scientific analysis was conducted to determine whether noise decibels would increase above 3,000 feet.

In short, the Draft EIS/EIR does a disservice to the South Bay communities by ignoring the potential noise impacts that the new flight tracks and lateral separation of aircraft will cause to the area. Not only should the Project proponents conduct a full environmental review of the noise impacts to the area under FAA 1050.1D, paragraph 32, but a more accurate, and scientifically appropriate methodology should be used to make the determination of the significance of noise impacts over South Bay communities.

IV. THE DRAFT EIS/EIR AIR QUALITY ANALYSIS IS INADEQUATE.

The Draft EIS/EIR's air quality analysis exhibits serious deficiencies, not the least of which is the total absence of a formal air quality conformity analysis required under federal law where, as here, the Project's air quality impacts are not claimed to be insignificant (see 42 U.S.C. § 7506¹⁸). The absence of a conformity analysis necessarily renders the following comments

¹⁸ "No department, agency, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license, permit or approve any



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preliminary, and SBCCOG reserves the right to comment further upon issuance of the conformity analysis.

A. The Baseline for the Draft EIS/EIR Air Quality Analysis is Not Appropriately Estimated.

The Draft EIS/EIR assumes that annual aircraft operations will be essentially identical regardless of whether the Preferred Alternative is implemented (Draft EIS/EIR, page ES-9). Under the No-Action/No-Project Alternative, total operations are expected to be 98 percent of operations under the preferred expanded capacity scenario (Alternative C). Furthermore, air passenger operations activity will actually be *higher* under the No-Action/No-Project Alternative. At the same time, the Preferred Alternative moves about 15 percent more passengers through higher aircraft load factors.

Basic economic theory, however, dictates that under free market conditions, demand will reach equilibrium for a given level of supply at a certain market cost (including time costs associated with delays, congestion, etc.). If the supply curve (for air transportation) is then shifted, as would occur under an increased capacity situation such as that proposed,¹⁹ the supply/demand equilibrium for the same level of market cost will shift to a point of higher demand. This shift is often referred to as induced demand, and analyses which do not consider this effect (or which assume demand levels counter to market behavior as appears to be the case with the Draft EIS/EIR) are not accurate in general, or specifically with respect to future air quality conditions under any of the various alternatives.

Viewed from a practical rather than theoretical perspective, the Draft EIS/EIR presumes that the Airport will support over 391,000 aircraft landing and takeoff (LTO) cycles in 2015 by doing nothing other than carrying through with those projects already adopted. Although operations without the Project would be constrained by greater delays as well as excessive times to reach the airport, the Draft EIS/EIR does not account for the discouraging effects of these delays, and assumes that under the Preferred Alternative, specifically designed to relieve these problems of congestion and delay, the total number of annual LTOs will increase by less than 2 percent (to 398,000) over the No-Action/No-Project Alternative. There are only two possible explanations for this relationship: (1) either usage under the No-Action/No-Project baseline is overstated; or (2) usage under the Preferred Alternative is understated. Correspondingly, either

activity which does not conform to an implementation plan . . .” (42 U.S.C. § 7506(c)(1))

¹⁹ The Preferred Alternative lengthens and reconfigures runways, adds a new West Terminal, and improves traffic flow.



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emissions for the No-Action/No-Project baseline are overstated or emissions for the Preferred Alternative are understated. The result is an artificial (and erroneous) minimization of the difference in emissions between baseline conditions and those of the Project.

This same issue affects stationary source emissions. Increased airport capacity can be expected to attract associated industrial and commercial activity into the area. This attraction would not occur without the increased capacity and, therefore, must be accounted for if a true assessment of airport emission impacts is to be determined. Note that this commercial development is distinct from currently planned commercial development, in that it occurs due to airport capacity expansion, but outside the formal planning process of the airport. One must recognize that the estimates of reduced emissions under the action alternatives (either the preferred or alternative scenarios relative to a No-Action/No-Project scenario) are due almost entirely to "flow" improvements in the form of reduced taxiway congestion and improved traffic movement both on and offsite. If these congestion reductions are eliminated or reduced through increased air travel or associated demand that is not properly accounted for in the Draft EIS/EIR, the predicted emissions impacts will not be accurate.

B. Future Background Pollutant Concentrations Are Not Appropriately Estimated.

Background pollutant concentrations are required to accurately estimate the impact of the proposed Airport expansion on National Ambient Air Quality Standards/California Ambient Air Quality Standards ("NAAQS/CAAQS") compliance. These concentrations must account for the combined impacts of the universe of emission sources not explicitly accounted for in the airport analysis. In effect, the background concentrations determine the emissions baseline upon which Airport emissions are placed. If this base is underestimated, the overall affect of airport expansion on NAAQS/CAAQS compliance could be similarly understated. Alternatively, if the base is too high, the Draft EIS/EIR analysis could be conservative. While the Draft EIS/EIR presumes the latter (Draft EIS/EIR, Technical Appendix G, page 46), it contains no data to support such a conclusion and some reason to believe that the converse may be true.

Current short term (sub-annual) background concentrations for the Draft EIS/EIR are based on measurements taken at an onsite monitoring station located just east of the southern runway configuration. Current annual concentrations are based on data collected at a South Coast Air Quality Management District ("SCAQMD") monitoring facility (Hawthorne) located near, but southeast of the Airport (Draft EIS/EIR, Technical Report 4, Attachment A, page 3). On the premise that measurements from these sites inherently include emissions from the Airport, the Draft EIS/EIR concludes that such emissions represent conservative background concentration baselines for air quality analysis (since Airport emissions will be added on top of a background that already includes Airport emissions).



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However, the prevailing wind direction for the Airport area is southwest to northeast (Draft EIS/EIR, Technical Report 4, Attachment A, page 3). Therefore, there is probably little influence from the Airport on the offsite concentrations used as background, as well as only moderate influence on the onsite-based background concentrations. The bulk of airport activity, including all terminal and motor vehicle operations occur under the influence of a prevailing wind plume that crosses Airport property to the north of the onsite monitoring station. While certain aircraft takeoff and queuing emissions are undoubtedly accounted for in the onsite baseline concentrations, these represent only a small fraction of overall airport emissions. Comparative data for concentrations from both monitoring stations could demonstrate the validity of the claim of conservatism, (i.e., do the observed concentrations for identical monitoring periods show a higher background at the onsite station?), but the Draft EIS/EIR apparently contains no data for the offsite monitoring station (other than the specific background concentrations used in the Draft EIS/EIR and associated documents, which are not comparable to the data for the onsite monitoring station).

More importantly, the emissions inventory rollback techniques used to forecast future background concentrations (Draft EIS/EIR, Technical Appendix G, pages 45-46) are of questionable validity for the Airport area. Background concentrations as well as future emission reduction influences around the Airport are constrained by geography. Since the prevailing wind flows from the southwest to the northeast, the Pacific Ocean represents a physical constraint that may significantly influence emission reduction impacts on background concentrations. In effect, the implemented rollback procedure to estimate future background concentrations reduces current background concentrations in proportion to expected *regional* emission inventory reductions over the same time period. Therefore, this procedure inherently assumes that inventory reductions are homogeneous throughout the region in terms of their influence on background concentrations. This is perhaps a viable assumption in instances where one part of a region has similar source characteristics with another, but the Airport region is clearly constrained to those source characteristics along the Pacific coastline to the immediate south of the Airport. It is the expected reductions from these sources in particular that should be used to adjust Airport background concentrations.

Generally background concentrations for 2005 are reduced 30 to 40 percent while concentrations for 2015 are reduced 50 to 60 percent from the current measured data (Draft EIS/EIR, Technical Report 4, Attachment A, page 4). Clearly this assumes significant emission reductions will affect coastal monitoring sites and provides substantial headroom for emissions increases within the confines of the NAAQS/CAAQS. These reductions probably represent the most significant influence on forecast pollutant concentrations in 2005 and 2015. It is critical that the propriety of the assumed background concentrations at least be supported by comparative analysis of current Airport and offsite monitoring data as well as analysis of emissions source



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classifications for the area immediately to the south of the Airport with the remainder of the air basin. This comparison will either provide the proper support for the currently implemented approach or suggest a more appropriate alternative.

C. Reverse Thrust Emissions from Aircraft Are Not Included in the Draft EIS/EIR Air Quality Analysis.

The Draft EIS/EIR makes an affirmative determination not to address emissions from aircraft reverse thrust operations, ostensibly on the basis of inadequate emission factors and short usage times (Draft EIS/EIR, Technical Appendix G, page 4). Both of these claims are misleading. First, reverse thrust is essentially a high thrust operating mode and emission factors for such modes (i.e., climbout and takeoff) are readily available. Common practice is to use takeoff emission factors. Second, it is true that the time in mode for reverse thrust operations is short, however high thrust modes produce very high unit time NO_x . For example, at a commonly utilized reverse thrust mode time of 15 seconds, increased NO_x emissions would be equivalent to the NO_x produced by increasing overall takeoff time by 35 percent (0.7 minutes plus 0.25 minutes versus 0.7 minutes). Since takeoff accounts for about 35 percent of total aircraft NO_x (Draft EIS/EIR, Technical Report 4, Attachment C), the overall aircraft NO_x inventory could increase by nearly 13 percent simply due to the inclusion of reverse thrust-related emissions alone. Without some affirmative determination that such operations will be prohibited under the action alternatives, reverse thrust emissions should be included in the Draft EIS/EIR air quality analysis.

D. The Applicability of the Construction Equipment NO_x Standard is Overstated.

The Draft EIS/EIR states that only construction vehicles meeting a 2.5 grams per brake horsepower-hour (g/bhp-hr) NO_x standard will be used for airport construction projects by 2005 (Draft EIS/EIR, Technical Appendix G, page 3). Furthermore, this requirement will be phased in between 2001 and 2005, beginning at 20 percent of vehicles and increasing at a rate of 20 percent per year. This "requirement" raises several concerns as it is applied to the construction equipment emissions analysis in the Draft EIS/EIR.

First, the 3.0 g/bhp-hr NMHC+ NO_x standard (that is the basis for the 2.5 g/bhp-hr NO_x assumption) for construction vehicles does not take effect until 2005 for 300-750 horsepower (hp) engines, 2006 and 2007 for 100-300 hp engines, or not at all for engines of other hp. Mandating this equipment for Airport work at an accelerated schedule beginning in 2001 may or may not be successful, but clearly requires some statement of commitment by the regulated parties. Voluntary, so-called "Blue Sky Series," engines can be certified by manufacturers before 2005 but there is no requirement to do so (and little incentive since these engines cannot be used



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in the emissions averaging programs associated with non-Blue Sky engines. averaging programs which are currently relied on by all heavy duty engine manufacturers for emissions standards compliance). In reality, construction firms will only be able to provide equipment that is available on the market and it is dubious that the number of engines meeting the suggested standard in the required years will be significant.

Second, the mandatory "clean engine" standards that do begin in 2001 require NO_x at levels around 4.0 g/bhp-hr (an exact value is not possible since the standard is again expressed as $\text{NMHC} + \text{NO}_x$, in this case 4.8 g/bhp-hr). However, these standards also only apply to 300-750 hp equipment. While a number of construction equipment engines fall into this category, many others range from as low as 25 hp up through 300 hp. For these lower hp categories, standards do not begin until 2003 or 2004 and get progressively less stringent as engine size decreases (to 5.6 g/bhp-hr for engines below 100 hp).

Third, even if this low emissions requirement could be enforced (i.e., allow use of only new Blue Sky Series engines at the Airport), an assumption of 100 percent in-use compliance is overly optimistic. While it is not possible to say with certainty what fraction of equipment may operate at emissions levels above certification standards, experience has demonstrated that engines employing sophisticated engine management strategies and aftertreatment controls (as is expected for engines meeting these stringent standards) are subject to both malperformances and malmaintenance effects. For first generation engines, such problems are usually exacerbated. What can be stated with certainty is that construction emissions impacts will be larger than the level acknowledged in the Draft EIS/EIR.

E. General Emission Factors for Offroad Equipment are Understated.

In general, it appears that the emission factors employed for offroad engines, even in the absence of the 2.5 g/bhp-hr issue noted above, are significantly underestimated. This underestimation affects not just construction equipment, but both baseline and ongoing aircraft Ground Support Equipment ("GSE") operations, and results from the fact that outdated emission factor sources were utilized. The net effect is that airport emission and air quality impacts are underestimated.

Offroad engine emissions knowledge is currently in a state of rapid development and estimation techniques need to maintain currency with the latest methods. In California, this would imply use of the California Air Resources Board's ("CARB") OFFROAD emission factor model, while nationally a similar model termed NONROAD has been developed by the U.S. Environmental Protection Agency ("EPA"). While development continues on both, they clearly represent the most up-to-date compendiums of current offroad engine emissions estimation



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techniques. For example, these models employ the most recent emission factor test data, emissions deterioration test data, and equipment size and activity factors. References cited in the Draft EIS/EIR (Draft EIS/EIR, Technical Report 4, Attachment A), such as the EPA's AP-42 and Procedures for Emissions Inventory Preparation documents as well as the SCAQMD's CEQA Handbook, employ less developed and, in many cases, seriously outdated data.

An example of the magnitude of the emissions underestimation can be derived by comparing emission factors across the alternative methods. The Draft EIS/EIR relies on the use of the FAA's Emissions Dispersion and Modeling System ("EDMS") to generate GSE emission estimates. However, EDMS includes significantly outdated GSE emissions data.²⁰ A quick comparison indicates that CARB OFFROAD model and EPA NONROAD model GSE (average) emission rates (for the same equipment activity distribution assumed in the EIS/EIR) are, for diesel equipment, from 7 to 13 times greater for VOC, 5 to 10 times greater for PM, 5 to 9 times greater for CO, 4 to 5 times greater for NO_x, and 4 to 5 times greater for SO₂. For gasoline GSE, the models produce average emission rates 10 to 20 times greater for VOC, 1 to 6 times greater for PM, 15 to 16 times greater for CO, 6 to 9 times greater for NO_x, and 2 to 4 times greater for SO₂. The impact of using outdated emission rates is clearly significant and should be reevaluated if realistic air quality impacts are to be derived.

F. Ground Support Equipment Populations Are Not Appropriately Specified.

As stated above, the Draft EIS/EIR uses the FAA's EDMS model to estimate GSE emissions (Draft EIS/EIR, Technical Report 4, Attachment A). Inherent within this approach is an assumption that EDMS properly estimates GSE populations. Since the current GSE population at the Airport is known, it would be appropriate to determine whether EDMS assumptions are consistent with the Airport's actual population and use-hour statistics. This would provide support for the validity of EDMS equipment estimation algorithms and allow for a more appropriate assessment of the accuracy of the GSE emissions estimates and air quality impacts of the Draft EIS/EIR.

G. Emissions Benefits of Conversion of GSE to Electric, Hybrid, and Alternative Fuels are Overstated.

The Draft EIS/EIR contemplates a widespread GSE replacement program under all three of the action alternatives, while retaining primarily fossil fuel powered GSE for the No-Action/No-Project Alternative (Draft EIS/EIR, Technical Report 4, Attachment L). While this

²⁰ This situation may be improved in the latest version of EMDS, which was released subsequent to the completion of the Draft EIS/EIR.



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could be construed as a mitigation measure and, in fact, is listed as the single most effective mitigation measure on the list of potential mitigation measures included in the Draft EIS/EIR (pages 4-514 through 4-519), it is arbitrary to apply the measure only to the action alternatives, as there are no specific constraints to such substitution today or under the No-Action/No-Project Alternative. Electric GSE is cost effective from a market standpoint today. Therefore, whatever incentive or mandate will be offered under the action alternatives to move toward electrification could just as readily apply today. Required infrastructure modifications are relatively modest, with no dependency on the expansions associated with any of the action alternatives. But by far the most troubling issue is that the replacement program already appears to be accounted for in the "unmitigated" emission estimates for all three action scenarios. If this is the case, no additional emission reductions will be achieved through GSE electrification as is claimed in the proposed list of mitigation measures.

H. Incorrect Aircraft PM Emission Factors Are Used in the Draft EIS/EIR Air Quality Analysis.

Two issues exist with respect to the aircraft PM analysis that result in an underestimation of the Project's potential air quality impacts. First, it appears that the Draft EIS/EIR is based on the incorrect emission factors from the supporting analysis undertaken to develop those factors (Draft EIS/EIR, Technical Report 4, Attachment H). Second, it appears that the approach used to develop PM emission factors for aircraft²¹ produces estimates that are not consistent with previous PM emission testing results.²²

Analysis of PM emission factor estimation reveals that the basic estimation approach used in the Draft EIS/EIR yields an emission factor that only considers the basic non-volatile portion of particulate. An adjustment factor (that varies with fuel sulfur content) exists and should be used to correct the estimate to total PM (Draft EIS/EIR, Technical Report 4, Attachment H). This factor is calculated to be about 2.6 for low sulfur (about 70 ppmW) jet fuel and 14.7 for high sulfur (about 675 ppmW) jet fuel.²³ Since existing EPA data demonstrates that

²¹ The International Civil Aviation Organization ("ICAO") emissions certification process for aircraft does not include PM, so alternative emission factor estimation approaches are required.

²² Adjustments not employed in the Draft EIS/EIR may compensate for most of this deficiency.

²³ This calculation is based on data presented in the Draft EIS/EIR (Technical Report 4, Attachment H).



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U.S. jet fuel averages about 600 ppmW sulfur, the appropriate adjustment factor for the Draft EIS/EIR would be about 13.2. However, from figures presented in the Draft EIS/EIR, it appears that the unadjusted emission factors were used for all emissions analysis. If so, PM emission impacts are significantly underestimated and should be reassessed after applying an adjustment to increase the PM emission rate by a factor of 13.

In addition there is a potential deficiency in the approach employed to estimate PM emission factor data. The underlying need for a statistical estimation technique such as that employed cannot be disputed as the available aircraft PM emissions testing database is both small and dated. However, the Draft EIS/EIR (Technical Report 4, Attachment H) statement that the age of that data renders it valueless are questionable. Engine technology has advanced relative to the engines represented in the test database, but the fundamental physical and chemical combustion characteristics that give rise to PM formation have not. The additional claim that the existing aircraft emission factors are not of value since they reflect total PM as opposed to PM-10 is also without merit. Virtually 100 percent of combustion-related PM is PM-10, so any error resulting from the substitution of total PM for PM-10 will be insignificant. In fact, the PM emission factor estimation approach employed in the Draft EIS/EIR requires just such an assumption of equivalency between total PM and PM-10 (as stated in Technical Report 4, Attachment H).

If relationships between aircraft PM and another routinely measured pollutant can be developed for one or more of the standard aircraft operating modes, then measured values for this "independent" pollutant can be used to estimate PM emission rates in that mode (or modes). Such a statistical approach can take advantage of the limited existing PM emissions database, while at the same time recognizing the substantial progress that has been made in aircraft engine performance. It is, however, critical that such relationships consider possible operating mode-specific differences in any identified PM relationship, as engine and combustion efficiency vary substantially across modes. For example, one would expect PM emission rates to be inherently low in high efficiency (high NO_x) modes of operation since the same high temperature, high pressure conditions that give rise to high NO_x also favor more complete fuel combustion. Conversely, PM would be expected to be high in low efficiency combustion modes. In short, it should not be expected that the significance of any inter-species relationship(s) is/are invariant across the full range of operating modes.

A very strong statistical relationship between measured PM and the inverse of measured NO_x is observed in three of the four standard aircraft operating modes (approach, takeoff, and climbout), with coefficient t-statistics all significant at 99-plus percent confidence. A strong coefficient can also be observed for the taxi mode, but it explains virtually none of the observed variation in PM and NO_x (whereas variance explanatory significance exceeds 99 percent



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confidence for the other three modes). The magnitude of the relationship coefficients varies from 28.4 in takeoff mode to 45.0 in climbout mode, and is 33.0 in approach mode. While all three modes exhibit significant relationships, takeoff mode serves as the best basis for an overall relationship, as it statistically produces the smallest root mean square error based on regression data (an error 35 to 40 percent lower than those of climbout and approach modes). Using this takeoff mode PM-to-NO_x relation as a means to estimate aircraft takeoff PM emission rates for each of the engines with NO_x measurements in the overall ICAO emissions database, PM emission rates for the other three operating modes (climbout, approach, and taxi) can be developed based on observed statistical relationships between mode-specific PM and takeoff PM (i.e., PM-to-PM regressions across modes). Linear coefficients for all three modes (1.42 for climbout, 1.53 for approach, and 3.10 for taxi, all in pounds per thousand pounds fuel burned space) are significant at 99-plus percent confidence, with adjusted correlation coefficients for climbout and approach at 0.78 and 0.83 respectively. Taxi mode correlation is poor, but the PM-to-PM relation does account for observed variance at greater than 99 percent confidence.

Using existing ICAO emissions measurement statistics, this alternative approach produces PM emission rates that are 4 to 37 times higher than those used in the Draft EIS/EIR. The smallest differentials are observed at the highest thrust modes. The differentials grow with reducing thrust possibly because the Draft EIS/EIR approach does not take operating efficiency differentials between modes into consideration. Nevertheless, for a typical LTO cycle (as per Draft EIS/EIR times-in-mode), the aggregate aircraft PM emission factor will be underpredicted by a factor of 17 using the Draft EIS/EIR approach. The effect on PM air quality analyses is obvious.²⁴

I. Aircraft SO₂ Emissions are Underpredicted.

The Draft EIS/EIR relies on version 3.2 of the EDMS model to predict aircraft SO₂ emissions (Draft EIS/EIR, Technical Appendix G, page 4). This model underestimates aircraft SO₂ emissions by a factor of two due to reliance on an incorrect AP-42 emission factor (the emission factor was developed without accounting for the factor of two ratio between SO₂ mass and fuel sulfur mass). To the extent that the Draft EIS/EIR already demonstrates potential ambient SO₂ concerns, those concerns will be exacerbated by this underprediction.

²⁴ Interestingly, if the appropriate carbon-to-total PM emission factor correction of 13.2 is implemented as suggested in the support material for the Draft EIS/EIR (Technical Report 4, Attachment H), the bulk of the emission factor differentials between the two estimation approaches virtually disappear (i.e., a correction factor of 13 versus an underestimation factor of 17 for an aggregate LTO). Nevertheless, significant differences would still exist on a mode specific basis.



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J. The Assumption of Gate-Based Power and Air for All Aircraft is Questionable.

The Draft EIS/EIR assumes that 100 percent of air carrier gate power and conditioned air needs will be satisfied by gate-based electrically powered systems as opposed to fossil fuel powered auxiliary power units (APU) or GSE (Draft EIS/EIR, Technical Appendix G, page 10). Experience has shown that even under conditions where gate-based equipment is available, not all airlines or aircraft will utilize it consistently. This seems to be especially true for quick-turnaround airlines such as Southwest. Although the assumption of 100 percent availability and usage affects the no action and action scenarios equally, it is important from an ambient air quality perspective to account for the full range of expected emissions. Without some definitive airport policy that gate-based systems (both power and air) be used and that any on-board APU be shut down until needed for main engine startup, the Draft EIS/EIR would present a more realistic assessment of aircraft emissions if it adjusted the percentage of gate-based system usage to match currently observed use rates at the Airport.

K. APU Emission Factors for SO₂ and PM Not Considered.

APU emission factors for both SO₂ and PM are assumed to be zero. This results from deficiencies in the EDMS model and should be corrected to properly estimate aircraft-related air quality impacts. SO₂ emissions are a function of fuel sulfur content, so that emission rates can be readily calculated and applied. APU PM emission rates can be developed using the same methodology applied to main aircraft engines. The potential impacts of this deficiency would be magnified were the Draft EIS/EIR to properly attribute some fraction of gate power and air support to APU.

L. Aircraft Taxi Times are Not Included in the Draft EIS/EIR or Supporting Data.

Aircraft taxi-idle times are not included in the Draft EIS/EIR, its technical appendices or supporting documentation.²⁵ It can be deduced from the included emissions estimates for aircraft taxiing that those emissions decrease substantially under the action scenarios, but the actual times should be included to allow the public an opportunity to better evaluate their propriety. In addition, the ability of SIMMOD to accurately estimate aircraft taxi times must be demonstrated by comparing SIMMOD predictions for current conditions at the Airport to observed taxi times at the Airport. The issue of aircraft taxi times is critical. The bulk of Aircraft VOC and CO emissions are generated during taxiing. In addition, although NO_x emission rates are low during taxiing, the amount of time spent in taxi mode results in a significant taxi contribution to overall

²⁵ The Draft EIS/EIR contains references to the development of the taxi/idle times using SIMMOD, but no actual indications of what those times were.



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NO_x emissions. Most critically, it is expected that virtually all of the aircraft emissions differential between the project baseline and the project alternatives is due to assumed reductions in aircraft idle time. Clearly, it is important that taxi times be accurately modeled. However, sufficient information is not included in the Draft EIS/EIR to determine that accurate modeling was performed.

M. The Project's Conformity Cannot Be Determined from Data and Analysis Contained in the Draft EIS/EIR.

Even without consideration of the various issues noted above, the Draft EIS/EIR presents several air quality concerns relative to the NAAQS/CAAQS under the Preferred Alternative. Although a series of mitigation measures are discussed and preliminary emission reduction estimates presented, these estimates are not documented and therefore, the calculation methodologies cannot be evaluated. The Draft EIS/EIR defers formal review of potential mitigation measures until a Final EIS/EIR is developed (Draft EIS/EIR, page 4-459). Similarly, the Draft EIS/EIR acknowledges the applicability of federal conformity requirements, but defers both the conformity analysis and a proposed conformity determination to the Final EIS/EIR (Draft EIS/EIR, page 4-460). Unfortunately, such an approach makes it impossible to comment constructively on either potential emission mitigation measures or the conformity process, since these processes will be released for comment only after the underlying decision-making has been finalized.

V. THE DRAFT EIS/EIR'S ALTERNATIVES FAIL TO SATISFY THE "PURPOSE AND NEED" FOR THE PROJECT.

The mandate to evaluate and compare alternatives is the "heart" of an EIS (CEQ Guidelines, § 1502.14). FAA Order 1050.1D, paragraph 63, implementing NEPA, mandates that an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." The FAA Order further requires that the EIS Alternatives analysis include a rigorous exploration and objective evaluation of all reasonable alternatives. Courts have concluded that to be reasonable, the suggested alternatives must meet the goals of the proposed action.²⁶

²⁶ See, generally, City of Carmel-By-The-Sea v. United States DOT, 123 F.3d 1142 (1997); National Wildlife Federation v. Federal Energy Regulatory Commission, 912 F.2d 1471 (1990).



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The Draft EIS/EIR's alternatives analysis fails to meet the stated goals of the Project. The Draft EIS/EIR states that the general "[p]urpose and objectives of the Master Plan are to provide... sufficient airport capacity for passengers and freight in the Los Angeles region to sustain and advance the economic growth and vitality of the Los Angeles region." (Draft EIS/EIR, volume 1, pg. 2-1) More specifically, the Draft EIS/EIR outlines three objectives which the Project needs to satisfy: (1) "to respond to the local and regional demand for air transportation during the period 2000 to 2015, taking into consideration the amount, type, location, and timing of such demand"; (2) "to ensure that new investments in airport capacity are efficient and cost-effective, maximizing the return on existing infrastructure capital"; and (3) "to sustain and advance the international trade component of the regional economy and the international commercial gateway role of Los Angeles."²⁷

It is not clear, however, that the proposed runway improvements that form an integral part of Alternative C, the Preferred Alternative, constitute a superior, or even an efficient way to accomplish the Project's stated purposes. For example, all three of the Project's objectives could potentially be, at least partially, achieved through airspace/air traffic modifications, both within the terminal airspace and in the en route system. This alternative is neither acknowledged nor explored in the Draft EIS/EIR. Nevertheless, this conclusion is supported by the fact that the Dual Civet arrival configuration has reduced arrival delay for operations from the east significantly since 1998 and has resulted in an average time-savings of 4.4 minutes per Civet turbojet arrival aircraft. In fact, since the Dual Civet arrival procedures were implemented, there have been no national delay programs set up for the Airport, since delay has not been an issue. However, the Draft EIS/EIR does neither address nor incorporate the capacity or delay reduction efficiencies gained through this procedure in any of its modeling.²⁸

²⁷ Id.

²⁸ Where the Master Plan does address air traffic procedures, it is in error. The Master Plan states that the Departure Sequencing Program (DSP), a program that provides the capability to sequence departures from Los Angeles basin airports, would enhance capacity at the Airport. (Master Plan, § 2.6.1.3, page II-2.137) However, the DSP program has been cancelled by the FAA due to a lack of benefit. Essentially, the Southern California TRACON consolidation effort occurred many years ago and the references to it in the Master Plan and the Draft EIS/EIR are outdated. Many innovations and changes in airspace and procedures at the TRACON over the past few years have occurred, and none are referenced or adequately considered in the Draft EIS/EIR. Basically, the Draft EIS/EIR does not address the changes in airspace design or the new routes that have been developed as a result of airspace enhancements in Southern California.



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Moreover, a closer examination of the Master Plan and the Draft EIS/EIR reveals that the Draft EIS/EIR may have ignored relatively inexpensive improvements in air traffic procedures in favor of very expensive, physical changes to the airfield. This is apparently because the Project's true purpose does not include the first two claimed in the Draft EIS/EIR, i.e., the broad ones of providing "sufficient airport capacity for passengers and freight in the Los Angeles region" (Draft EIS/EIR, Volume 1, page 2-1), in an "efficient and cost effective" way (Draft EIS/EIR, page 2-1). Instead, the Project's principal purpose is the narrow and singular one of accommodating "New Large Aircraft" ("NLA") that, with their long haul capabilities, would potentially serve the Airport in order to "sustain and advance the international trade component of the regional economy." (Draft EIS/EIR, page 2-1)²⁹

This conclusion is substantiated by the fact that the current aircraft fleet does not require 12,000 feet of runway to take off. Even today's heavy aircraft such as the B-747-400 and the B-777-400 only need 8,000 - 10,000 feet of runway for take-off and landing (under the weather conditions prevailing at the Airport). The Airport's existing runways are 8,295-feet, 10,285-feet, 12,091-feet, and 11,096-feet in length. Thus, even the shortest runway at the Airport can accommodate the heaviest and largest aircraft in the fleet under prevailing circumstances today.

The result of the Draft EIS/EIR's failure to acknowledge the Project's primary purpose, i.e., to increase the proportion of super long-haul aircraft in the fleet, is a concomitant failure to analyze the full range and magnitude of environmental impacts that may arise from the desired change in fleet mix. While it is, as yet, early in the NLA development process, some technical facts about the aircraft are already known, sufficient to make at least some educated projections concerning its impact. For instance, ascertaining the projected climb rate will enable an estimate of whether the NLA can meet current airport noise abatement operational requirements; or whether those will have to be altered; or whether the NLA will, ultimately, overfly noise sensitive communities at lower (or higher) altitudes, resulting in higher (or lower) noise levels over those communities. Similarly, preliminary data concerning engine type and emissions characteristics would enable at least a preliminary analysis of the air quality impact of the NLA, as well as the GSE needed to support it, if different from those categories already in use. Finally, the Draft EIS/EIR should have included the capacity/delay impacts from the increased use of NLA. As the Draft EIS/EIR fails to model ground operations in detail, the delay impacts that

²⁹ The Draft EIS/EIR comes close to admitting as much: "Development of NLA aircraft is driven by increasing demand and constrained international gateway airports around the world, including LAX ... Development of the NLA will allow these airports to continue to meet the growing demand for travel between primary trading partners. As one of the three major (and busiest) gateway airports in the nation, LAX would be one of the first airports to be served by NLA." (Draft EIS/EIR, page 2-11)



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may result are not considered in developing an accurate analysis of arrival and departure flows and the congestion which may ensue even after Project implementation.

In summary, because the alternatives analysis is the “heart” of the NEPA process; because the Draft EIS/EIR fails to consider, or analyze, the impacts of eminently reasonable alternatives such as airspace changes to meet the Project’s stated purposes; because Alternative C does not alone meet the Project’s stated purposes; and because the most significant result of implementing Alternative C, the increased capacity to accommodate NLAs, remains unanalyzed from an environmental perspective, the Draft EIS/EIR’s alternatives analysis is seriously flawed.

VI. THE DRAFT EIS/EIR DOES NOT ADEQUATELY SPECIFY MITIGATION MEASURES OR METHODS TO ENFORCE THEM.

CEQA requires that agencies identify the environmental impacts of a project, and implement mitigation measures to lessen the adverse environmental impacts. (CEQA Guidelines §15002 (a)(3)). However, the Draft EIS/EIR fails to comply with CEQA by (1) failing to provide a complete list of mitigation measures, and (2) failing to specify, at a minimum, a Draft Mitigation Monitoring Program to inform the public of how the project proponents intend to ensure the implementation of mitigation measures.

A. The Draft EIS/EIR Delays Disclosure of the Full List of Mitigation Measures Until the Final EIS/EIR.

CEQA Guidelines §15126.4(a)(1)(B) mandates that the “[f]ormulation of mitigation measures should not be deferred until some further time.” While the Draft EIS/EIR acknowledges the existence of significant unmitigable impacts, it also states that, “A final package of design features, Master Plan Commitments, and Mitigation Measures will be developed ... The resulting Environmental Action Plan will be published in the Final EIS/EIR.” (Draft EIS/EIR, Executive Summary, pg. ES-30) By deferring to the Final EIS/EIR to reveal the mitigation measures, the public’s opportunity comment will have been attenuated. The SBCCOG, therefore, reserves the right to comment on items, including the Draft Conformity and Mitigation Monitoring Program that should have been included, but were omitted from the Draft EIS/EIR.



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B. The Draft EIS/EIR Fails to Provide a Draft Mitigation Monitoring Program.

California Public Resources Code §21081.6 requires that a public agency “adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.” (Cal. Pub. Resources Code §21081.6 (a)(1)). If an EIR “identifies one or more significant environmental effects of the project,” CEQA Guidelines §15091(a) requires an agency to “make one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding.” With these findings, the CEQA Guidelines mandate that “the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.” (CEQA §15091(d))

The Draft EIS/EIR violates CEQA Guidelines §1509(d) and California Public Resources Code § 21081.6 in that it fails to set forth a program that monitors or reports on each mitigation measure. Although the Draft EIS/EIR cites some mitigation measures to combat the environmental impacts of the Project, it makes no mention of the “permit conditions, agreements, or other measures” (CEQA Guidelines § 15091(d)) which would ensure compliance with mitigation measures. In other words, it does not specify the steps necessary to ensure compliance, the responsible party to ensure compliance, or the resulting consequences should compliance not occur.

VII. THE UNRELATED ISSUE OF “SAFETY” SHOULD NOT BE USED AS A SMOKE SCREEN TO PUSH THE CAPACITY-DRIVEN DRAFT EIS/EIR FORWARD.

In recent public statements, the FAA and LAWA have introduced the notion that because of its high number of runway incursions, the Airport is unsafe, and that the Project’s “improvements” are critical to remedying the adverse safety conditions.

Contrary to the FAA’s contention, however, runway incursions are largely a function of pilot or air traffic controller error, not airport layout and design.³⁰

³⁰ A pilot might enter a runway without proper authorization or clearance; a pilot is unfamiliar with an airport, does not hear an instruction, or fails to acknowledge an instruction to



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In fact, the Airport can eliminate runway incursions only if it builds runways with no entrances and no exits. However, simple solutions such as enhanced marking and lighting for runways, increased awareness and training for pilots and controllers, improvements in communications and procedures, and resolving management issues at the FAA³¹ are all basic and available measures that should be implemented at the Airport. In addition, affordable incursion-reducing technologies currently available to the Airport such as the Airport Movement Area Safety System (presently in use at the San Francisco International Airport), which uses radar to alert controllers to potential collisions, would minimize the problem as well.³² In fact, even the FAA has even pressed the need for instituting technological improvements at airports to combat the runway incursion issue.³³

While recent incidents have made runway incursions a “hot button” in the eyes of the public, Congress, and aviation organizations, this recently surfaced “safety” issue cannot serve as justification for a project which otherwise fails to meet environmental standards.

hold short of an active runway; a pilot, when approaching an active runway, crosses the hold line for that runway; a controller may clear an aircraft onto an active runway without ensuring that there are no other aircraft operating on that runway; the controller may fail to coordinate an aircraft crossing a runway with the controller who has the responsibility for approving all operations on that runway; a controller may clear an aircraft to cross a runway and the pilot may take an excessive amount of time crossing and may interfere with another aircraft; and the controller may fail to exercise the proper oversight of the operation and allow two aircraft to occupy an active runway resulting in a runway incursion.

³¹ Transportation Department Inspector General Kenneth M. Mead recently told a House subcommittee that the “FAA’s director of runway safety has little authority over FAA employees who work on runway safety projects. Result: Almost every FAA runway safety project runs years late at more than double the anticipated cost, often failing to meet original expectations.” The Washington Post Company, “Runway Alert”, page A22, July 7, 2001.

³² “It’s the first surface detection equipment that really gives an alert to the controller and allows the controller to prevent a collision.” CNN, “Close Calls on Runways Alarm Aviation Experts”, June 27, 2001.

³³ The Director of the FAA’s Runway Safety Office, Mr. Bill Davis, expressed that “he needs additional authority to coordinate and speed up technological improvements.” The Washington Post Company, “Runway Alert”, page A22, July 7, 2001.



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VII. CONCLUSIONS.

Based on the above analyses, the SBCCOG concludes that the Draft EIS/EIR does not serve its most fundamental purpose as an “environmental alarm bell” to “alert the public and responsible officials to environmental changes before they have reached ecological points of no return.” (See, e.g., County of Inyo v. Yorty, 32 Cal.App.3d 795, 810 (1993).) Among other things, the varying baselines, selectively applied to areas of potential impact so as to artificially diminish the apparent impacts of the Project; the virtual absence of any analysis of impacts south of the Airport; and the lack of consideration of imminently reasonable alternatives, including air traffic alternatives, to the expenditure of billions of dollars in what are ultimately only marginally effective airfield improvements, require substantial analytic revisions to the Draft EIS/EIR. The SBCCOG further concludes that, after those revisions are made, “significant new information” will emerge which will require that the Draft EIS/EIR be recirculated (Center Sensible Planning, Inc. v. Board of Supervisors, 122 Cal.App.3d 813, 822 (1981)), so that the public, in general, and the SBCCOG and its members in particular, are not denied their statutorily mandated opportunity to test, assess and evaluate the new data and conclusions contained in the revised Draft EIS/EIR, and to make informed judgments as to their validity.

The SBCCOG thanks LAWA for this opportunity to comment.

Sincerely,

CHEVALIER, ALLEN & LICHMAN, LLP

By: Barbara E. Lichman
Consultant
South Bay Cities Council of Governments

AR00003

PROOF OF SERVICE

I declare that I am over the age of eighteen (18) and not a party to this action. My business address is 2603 Main Street, Suite 1000, Irvine, California 92614.

On September 20, 2001, I served the following **Letter dated September 20, 2001 to Mr. Jim Ritchie and Mr. David Kessler re: Draft Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements - Comments of the South Bay Cities Council of Governments** on the interested parties in this action by placing a true and correct copy of each document thereof, enclosed in a sealed envelope, addressed as follows:

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan/Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216

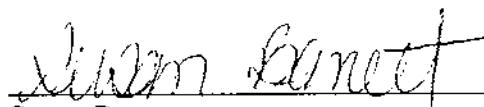
Mr. David B. Kessler, AICP
Federal Aviation Administration
P.O. Box 92007
World Way Postal Center
Los Angeles, CA 90009-2007

(x) (BY MAIL) I am "readily familiar" with the business' practice for collection and processing of correspondence for mailing with the United States Postal Service. I know that the correspondence is deposited with the United States Postal Service on the same day this declaration was executed in the ordinary course of business. I know that the envelope was sealed and, with postage thereon fully prepaid, placed for collection and mailing on this date, following ordinary business practices, in the United States mail at Irvine, California.

Executed on September 20, 2001 at Irvine, California.

(X) (State) I declare under penalty of perjury under the laws of the State of California that the above is true and correct.

() (Federal) I declare that I am employed in the office of a member of the bar of this court at whose direction the service was made.



Susan Barrett

AR00003



South Coast Air Quality Management District



21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • <http://www.aqmd.gov>

FAXED: September 21, 2001

September 21, 2001

Mr. David B. Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P. O. Box 92007
World Way Postal Center
Los Angeles, CA 90009-2007

**Draft Environmental Impact Statement / Report (DEIS/R) for the Los Angeles International
Airport Proposed Master Plan Improvements**

Dear Mr. Kessler:

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated in the Final Environmental Impact Statement / Environmental Impact Report.

Pursuant to Public Resources Code §21092.5, please provide the AQMD with written responses to all comments contained herein before the certification of the Final Environmental Impact Report. The AQMD would be happy to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Charles Blankson, Ph.D., Transportation Specialist – CEQA Section, at (909) 396-3304 if you have any questions regarding these comments.

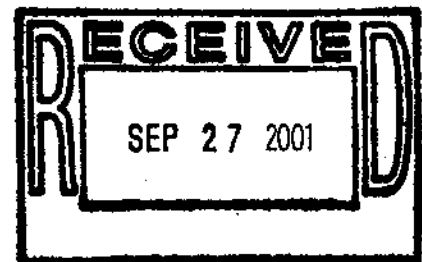
Sincerely

Barry R. Wallerstein, D.Env.
Executive Officer

Attachment

cc Mr. Jim Ritchie, Los Angeles World Airports, LAX Master Plan / Room 218, P. O. Box 92216,
Los Angeles, CA 90009-2216

SS:CB: LAC010118-02, Control Number
(e:/ceqa/laxmaster/laxltr.doc)



AR00004

Draft Environmental Impact Statement / Environmental Impact Report (DEIS/DEIR) for the Los Angeles International Airport Proposed Master Plan Improvements

1. **Construction Off-road Mobile Source Emission factors:** In the Technical Report 4, Appendix G – “Air Quality Impact Analysis,” there is a brief methodology section describing how construction emissions were calculated for the proposed project alternatives. In the third full paragraph on page 3 of Appendix G it is stated, “Hourly emission rates were calculated for all vehicle types using project specific information where available or guidance default values for the variables in the emission factor calculations.” Although construction schedules and activity levels for construction equipment are described in Attachment E to Appendix G, the construction equipment emission factors in Attachment F to Appendix G (Table A9-8-B from the AQMD’s Handbook) are given in pounds per horsepower-hour. The final EIR/S should describe the methodology and show the equation(s) for converting pounds per horsepower-hour to pounds per hour of operation for the equipment listed in Attachment E to Appendix G. Further, a table similar to Table A9-5-A in the AQMD’s Handbook should be created and included in the Final EIR/S, in Attachment E for example.
2. **Construction Worker AVR Assumption:** On page 3 of Technical Report 4, Appendix G – “Air Quality Impact Analysis,” one of the assumptions used to calculate construction worker commute trip emissions is an AVR of 2.0. In the Final EIR/S please provide support for using an AVR of 2.0, otherwise a more conservative AVR of 1.0 should be used.
3. **Breakdown of Construction Emissions by Emissions Source/Activity:** Related to item #1, the CEQA/NEPA lead agencies provide substantial detail for estimating construction emissions. However, it is difficult to recreate construction emission estimates in Technical Report 4, Appendix G, Attachment G because these emission estimate tables simply provide total emissions without a breakdown of emissions by emissions source i.e., piece of equipment or construction task. An intermediate table providing peak daily emissions (year 2004) by emissions source for LAWA’s staff-preferred Alternative C would have been helpful in evaluating the construction air quality impacts analysis. Such an intermediate table should be included in the Final EIR/S.
4. **Table 4.6-10 – Unmitigated Construction Emissions:** A comparison of the daily and quarterly emissions data in Table 4.6-10 shows these data to be consistent with the comparable data in Technical Report 4, Appendix G, Attachment E. Comparable annual emissions data do not appear to be included in Attachment E. A spot check of the annual emissions data performed by multiplying the quarterly emissions by four shows that the annual emissions data appear to underestimate annual construction emissions for each of the alternatives. Please explain this apparent discrepancy or correct the data in this table in the Final EIR/S.
5. **Traffic Analysis:** Please follow up and respond to CARB’s concerns that the traffic analysis was used to calculate off-airport vehicle miles traveled (VMT) and emissions.

6. **Aircraft Particulate Matter:** A further discussion needs to be included as to why the health risk assessment (HRA) excluded aircraft particulate matter emission or include in the HRA.
7. **Breakdown of Operation Emissions by Emissions Source/Activity:** In the Technical Report 4, Appendix G – “Air Quality Impact Analysis,” there is an extensive methodology section describing how operation emissions were calculated for the proposed project alternatives. Apparently, from the discussion, on-airport emissions were calculated primarily from the EDMS model, whereas off-airport emissions (primarily on-road mobile sources) were calculated using CARB methodologies and EMFAC2000 (version 1.99) emission factors. Similar to comment #3 above, a table showing emissions for operation emissions sources/activities identified in the methodology section of Technical Report 4, Appendix G – “Air Quality Impact Analysis,” would be useful, especially to help evaluate the mitigation control efficiencies identified in Table 4.6-16 on pages 4-514 through 4-516 and Table 4.6-17 on pages 4-517 and 4-518 (see also comment #6).
8. **Enforceable Mitigation Measures:** Table 4.6-16 lists a number of mitigation measures with potentially quantifiable effects, including a range of potential emission reductions (in tons per year) for each mitigation measure. However, many of the mitigation measures rely on future approvals (FAA approvals for example) or rely on future cooperative agreements with other agencies (MTA and Caltrans), the airline tenants at LAX or other airports in the region. Since there is currently no guarantee that these approvals or cooperation with these other entities will ultimately occur, the AQMD believes taking credit for emission reductions that are currently unenforceable is inconsistent with CEQA Guidelines §§15126.4 (a)(1)(B) (mitigation measures should not be deferred to some future time) and 15126.4 (a)(2) (mitigation measures should be enforceable through “legally-binding instruments.” Therefore, Table 4.6-17 on pages 4-517 and 4-518 and Tables 4.6-19, 4.6-20 and 4.6-21 on pages 4-520, 4-521 and 4-522, respectively, should be modified to show only emission reductions that are currently enforceable. This comment also applies to the health risk assessment results in Table 4.24.1-4 on page 4-1022 of the Draft EIR/S. Alternatively, the lead agencies could show a range of emission reductions showing currently enforceable mitigation measures as the end of the range up to a high end of the range showing emission reductions if all approvals and cooperation with all other entities occur.
9. **Table 4.6-19 – Emission Inventories:** There appears to be errors in the data in Table 4.6-19. For example, the percent reduction (mitigated emissions) claimed for each of the alternatives appears to be incorrectly calculated based on the tons per year for each alternative relative to the baseline. In the case of SO₂ for the year 2005, there is actually a net increase in emissions for each of the alternatives not a reduction. For the year 2015, the table shows a net increase in emissions for NO_x (for all alternatives), SO₂ (for all alternatives), and PM₁₀ (for Alternatives A and B). Please explain or correct these apparent discrepancies in the Final EIR/S.
10. **Mitigation Measure Control efficiencies:** With regard to the control efficiencies identified for the mitigation measures in Table 4.6-16, the Draft EIR/S does not appear to

provide any supporting documentation regarding the methodology used to calculate the range of potential emission reductions, including assumptions, equations, emission factors, source of emission reduction control efficiencies, etc. The Final EIR/S should provide documentation to support the emission reductions shown in Table 4.6-16. This detailed information need not be included in the main text of the Final EIR/S, but could be incorporated into Technical Report 4, Appendix G – “Air Quality Impact Analysis,” for example, or one of the technical attachments.

11. **Overlapping Phases:** The Draft EIR/S presents construction and operation air quality data for each of the project alternatives as discreet non-overlapping phases. For example, Table 4.6-10 shows only construction emissions for the peak construction year, 2004, and the horizon years 2005 and 2015. Tables 4.6-9 and 4.6-19 show only unmitigated and mitigation on-airport operation emissions respectively, for the horizon years 2005 and 2015. However, once phase 1 becomes operational in 2005, phase 1 operation emissions will overlap with phase 2 construction emissions. It is recommended that the lead agencies provide additional information in the Final EIR/S, in a table for example, that shows phase 1 operation emissions, peak phase 2 construction emissions, and the sum of the two to determine if these overlapping emissions could exceed the emissions estimates in Tables 4.6-10, 4.6-9, or 4.6-19.
12. **Mitigation Measures:** Table 4.6-16 and Technical Report 4, Appendix G, Attachment X identify potential mitigation measures currently under consideration as part of the proposed project. In the case of some mitigation measures, there is insufficient detail associated with the description of the mitigation measures to properly evaluate them or their control efficiency. For example, in Table 4.6-16 the following mitigation measure is listed for construction, “Use soil stabilization and/or watering to reduce fugitive dust emissions during construction.” Associated with this mitigation measure is a fugitive dust control efficiency of 90 to 95 percent. To justify such a high control efficiency, the lead agency needs to specify the number of times per day the site will be watered, for example, and specifically what other types of soil stabilization will be employed to achieve such a high control efficiency. Other examples include mitigation measures in Attachment X such as those for stationary sources, which simply state “efficient buildings” or “energy conservation” without describing what is meant by these terms. A better description of the mitigation measures will assist the public in better evaluating their effectiveness.
13. **Additional Construction Mitigation Measures:** In addition to the construction mitigation measures identified in Table 4.6-16 and Attachment X, the lead agencies should consider incorporating the following mitigation measures:
 - Configure construction parking to minimize traffic interference;
 - Provide temporary traffic control during all phases of construction activities to improve traffic flow (e.g., flag person);
 - Develop a construction traffic management plan that includes, but is not limited to: rerouting construction trucks off congested streets, consolidating truck deliveries, providing dedicated turn lanes for movement of construction trucks and equipment on- and off-site;

- Prohibit truck idling in excess of ten minutes;
- Use electricity from power poles instead of temporary diesel or gasoline generators;
- Suspend all grading when wind speed exceed 25 miles per hour;
- Traffic speeds on all unpaved roads should be reduced to 15 miles per hours or less;
- Cover all haul trucks hauling dirt, sand, soil, or other loose materials;
- Sweep streets with AQMD Rule 1186-certified street sweepers whenever visible dust accumulates on roadways; and
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads or wash off trucks and any equipment leaving the site each trip; etc.

Examples of other construction air quality mitigation measures can be found in Chapter 11 of the AQMD's Handbook.

14. **Additional Operation Mitigation Measures:** In addition to the operation mitigation measures identified in Table 4.6-16 and Attachment X, the lead agencies should consider incorporating the following mitigation measures:

- Use central water heating systems;
- Install solar panels on roofs to supply electricity for air conditioning, etc., to reduce energy consumption;
- Use light-colored roofing materials, which reflect sunlight and, therefore, heat away from buildings;
- Use double glass paned windows;
- Use energy efficient low-sodium parking lot lights; and
- Use fuel cells to produce heat and/or electricity; etc.

Examples of other operation air quality mitigation measures can be found in Chapter 11 of the AQMD's Handbook.

15. **CALMPRO Program:** In Section 4.6.2.3 on pages 4-468 and 4-469 of the Draft EIR/S and on pages 24 and 25 of Technical Report 4, Appendix G – “Air Quality Impact Analysis,” various models used to analyze air quality impacts are discussed, including U.S. EPA's CALMPRO model, ISCST and EDMS models. As stated on page 39 of Appendix G, by using CALMPRO, “The influence of calm periods is eliminated by zeroing hourly concentrations at all receptors if the corresponding hour of meteorological data is calm.” With regard to using the ISCST model, to provide the most conservative analysis, the “NOCALM” model option should be used, which includes the influence of calm wind periods as part of the analysis. With regard to the EDMS model, to provide the most conservative analysis, CALMPRO should not be applied. Instead, the comparable EDMS results should be used, which includes the influence of calm periods.
16. **Post Processing EDMS Model Runs:** On page 39 of Technical Report 4, Appendix G – “Air Quality Impact Analysis,” it is stated that the EDMS model calculates NO_x emissions, which must be converted into NO_2 emissions. Further, it is stated that to convert NO_x into annual NO_2 concentrations, the Tier 2 Ambient Ratio Method (ARM) was used, as recommended by U.S. EPA. It is also stated that the ARM conversion ratio

(approximately 0.42) was also used to convert NO_x to NO₂ for short-term NO₂ concentrations. Although the ARM conversion ratio is appropriate for annual concentrations, it is not appropriate for short-term concentrations. Pursuant to AQMD-recommended modeling protocol and to provide a conservative analysis, 100 percent NO_x to NO₂ conversion should be assumed for short-term NO₂ concentrations.

17. **ISCST Model Application:** In Attachments A and Z to Technical Report 4, Appendix G – “Air Quality Impact Analysis,” the lead agency does not provide information on the model parameter options used in the ISCST model application. As noted previously, the “NOCALM” option should be used pursuant to AQMD’s recommended modeling protocol.
18. **Human Health Risk Assessment – ISCST Model Application:** As noted on page 4 of Attachment F to Technical Report 14a “Human Health Risk Assessment Technical Report,” it is stated that the ISCST is the dispersion model used to estimate toxic air pollutant health risks. As noted previously, to provide a conservative analysis, the “NOCALM” model option should be selected.
19. **Human Health Risk Assessment Assumptions:** On page 4-1004 of the methodology section in Chapter 4.24 – “Human Health and Safety (CEQA)” in the Draft EIR/S, it is stated that estimated cancer risks are based on a 30-year exposure to residents near the airport. Pursuant to AQMD risk assessment procedures guidance and to provide a more conservative analysis, a 70-year exposure assumption should be used to assess cancer risks from a proposed project.



California Regional Water Quality Control Board

Los Angeles Region

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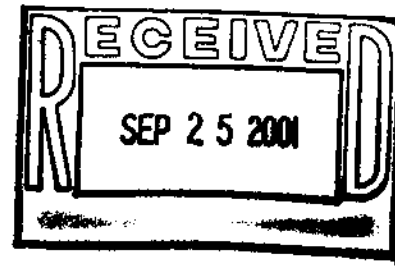


Gray Davis
Governor

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.swrcb.ca.gov/rwqcb4>

September 24, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan Office
P. O. Box 92216
Los Angeles CA 90009-2216



ADDITIONAL COMMENTS ON LOS ANGELES INTERNATIONAL AIRPORT PROPOSED MASTER PLAN IMPROVEMENTS: DRAFT ENVIRONMENTAL IMPACT STATEMENT – ENVIRONMENTAL IMPACT REPORT, SCH# 1997061047

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the proposed master plan improvements at Los Angeles International Airport (LAX). This California Regional Water Quality Control Board, Los Angeles Region (Regional Board) previously sent a comment letter dated September 17, 2001 on the DEIR for LAX. The comments herein are intended to be, and should be considered in addition to the comments already submitted. This letter is specific to issues related to storm water and urban runoff discharges from LAX.

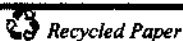
The Regional Board, under State law is charged with protecting surface and ground water quality in the coastal watersheds of Los Angeles and Ventura Counties, including the Santa Monica Bay Watershed where the proposed LAX expansion project is located. LAX is currently regulated by the Regional Board under 2 permits – the State of California, General Industrial Activities Storm Water Discharge Permit (State Industrial Permit, NPDES No. CAS000001, WDID No. 419S004995), and the County of Los Angeles Municipal NPDES Storm Water Discharge Permit (Municipal Storm Water Permit, NPDES Permit No. CAS614001). Under the Municipal Storm Water Permit, the City of Los Angeles must reduce pollutant discharges in storm water discharges from public facilities, including LAX, to the storm drain system to the maximum extent practicable (MEP standard). All non-storm water discharges must be effectively prohibited. However, under the State Industrial Permit, storm water discharges from LAX, as a transportation facility, must comply with all water quality standards. Under this permit, all non-storm water discharges must be eliminated or covered under a separate NPDES permit. The Regional Board has reviewed the above-referenced Environmental Impact Statement/Environmental Impact Report (DEIR) and is pleased to provide the following additional comments.

Section 4.7 Hydrology and Water Quality

For any construction activity 5 acres and above (1 acre beginning in March 2003), LAX shall obtain coverage under the State of California General Construction Activities Storm Water

California Environmental Protection Agency

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption
For a list of simple ways to reduce demand and cut your energy costs, see the tips at: <http://www.swrcb.ca.gov/news/echallenge.html>



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations

AR00005

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports

- 2 -

September 24, 2001

Discharge Permit (State Construction Permit, NPDES No. CAS000002. The requirements for that permit generally are a Storm Water Pollution Prevention Plan (SWPPP) which includes specific pollution prevention practices to be implemented on site during construction; erosion and sediment controls that will be implemented on site; monitoring requirements; and post construction controls. These post-construction controls are intended to reduce pollutants in storm water discharges after all construction phases have been completed. These must be consistent with all local post-construction storm water management requirements, policies, and guidelines. LAX and the Federal Aviation Administration must consider site-specific and seasonal conditions when designing the control practices. Operation and maintenance of control practices after construction is completed shall be addressed, including short-term and long-term funding sources and the responsible party. In the Los Angeles Region, the Regional Board has required numerical BMP design standards in its Standard Urban Storm Water Mitigation Plans (SUSMPs). The SUSMP requirements apply to the LAX development or redevelopment (the addition, creation, or replacement) which involves 100,000 square feet of impervious surface or more. Post-construction treatment controls shall be designed to treat, infiltrate or filter storm water runoff from each storm event, up to and including the 85th percentile, 24-hour storm event for volume-based BMPs (Water Quality Volume - WQV), and/or the 85th percentile hourly rainfall intensity, with a safety factor of times 2, for flow-based BMPs (Water Quality Flow - WQF). For LAX, this means, WQV is 1.2 inches of rainfall over a 24 hr period and the WQF is 0.2 inches per hour.

The proposed project entails the expansion of the existing LAX airport to include 275 additional acres of land mainly for road construction and the extension of the Metropolitan Transit Authority Green Line. The project alternatives involve construction within existing areas to lengthen existing runways and/or create new ones, and/or construct an additional terminal and other auxiliary construction activities. Surface water from the existing site and the proposed expansion will be discharged directly to the Santa Monica Bay and to the Dominguez Channel. Both of these receiving water bodies are impaired by copper, lead, zinc, and ammonia. Phosphorus and oil and grease are pollutants of concern in the Santa Monica Bay Watershed. These are all pollutants that are currently found in surface runoff from LAX and whether or not a proposed alternative is completed at LAX, this Regional Board expects that the discharge of pollutants from LAX will be reduced from current levels to comply with water quality standards and/or the MEP standard, whichever is stricter.

The City of Los Angeles is a permittee under National Pollutant Discharge Elimination System (NPDES) Permit No. CAS000001 [State of California General Industrial Activities Storm Water Discharge Permit (State Industrial Permit) WDID No. 419S004995)]. The goal of this permit is to reduce the discharge of pollutants to receiving waters from industrial activities at the permitted site. This State Industrial Permit allows for storm water discharges from the permitted site on the condition that a site-specific Storm Water Pollution Prevention Plan (SWPPP) and pollution prevention practices are optimally implemented to reduce pollutants. A site-specific storm water

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Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

AR00005

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports

- 3 -

September 24, 2001

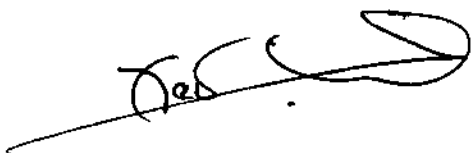
monitoring program is also required and is intended to characterize runoff from the site and help direct efforts to reduce pollutants from runoff in the specific areas where the pollutants originate. The State Industrial Permit also requires that an annual report be submitted by July 1.

The annual reports submitted by LAX include monitoring results from storm water sampling. As part of the monitoring program, a list of constituents likely to be found on site is required to be sampled in storm water runoff. LAX has many activities which have pollutants associated with them. LAX has sampled for some parameters but the list of parameters is incomplete. This Regional Board would like characterization results from storm water discharges from LAX included in the next environmental document relating to master plan improvements including polycyclic aromatic hydrocarbons (PAHs), heavy metals, pesticides, deicing agents, and any other constituents likely to be found in storm water runoff from the numerous activities at LAX. These constituents may be monitored in conjunction with sampling under the State Industrial Permit. LAX shall also initiate storm water toxicity testing for both chronic (for chronic use the Tier I species for toxicity tests as specified in the California Ocean Plan of 1997, or its update) and acute (for acute use the State Water Resources Control Board protocols).

The review of analytical results for specific conductance, total suspended solids, total organic carbon, total recoverable petroleum hydrocarbons have exceeded federal benchmarks for storm water runoff and/or state water quality standards. Additional treatment controls appear necessary. This Regional Board expects that LAX and the FAA will address this Regional Board's water quality concerns in any future environmental documents related to LAX Master Plan Improvements.

Thank you for the opportunity of reviewing and commenting on the subject document. Should you have any questions regarding this letter or the comments provided herein, please contact Carlos Urrunaga at (213) 576-6655.

Sincerely,

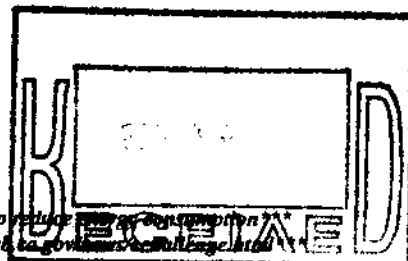


Xavier Swamikannu, D.Env.
Chief, LA/LB Storm Water Program

cc: State Clearinghouse
Ms. Pam Emerson, California Coastal Commission, Long Beach
Mr. Derek Lee, California Coastal Commission, San Francisco

California Environmental Protection Agency

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Coalition for a Truly Regional Airport Plan

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5. Banning
6. Barstow
7. Beaumont
8. Bell
9. Bell Gardens
10. Bellflower
11. Big Bear Lake
12. Blythe
13. Buena Park
14. Calimesa
15. Canyon Lake
16. Carson
17. Cathedral City
18. Chino
19. Chino Hills
20. Coachella
21. Colton
22. Corona
23. Costa Mesa
24. Covina
25. Cudahy
26. Culver City
27. Cypress
28. Desert Hot Springs
29. Diamond Bar
30. Downey
31. El Segundo
32. Fontana
33. Garden Grove
34. Gardena
35. Grand Terrace
36. Hawthorne
37. Hemet
38. Hermosa Beach
39. Hesperia
40. Highland
41. Huntington Park
42. Indian Wells
43. Indio
44. Inglewood
45. Lake Elsinore
46. Lawndale
47. Loma Linda
48. Lomita
49. Los Alamitos
50. Los Angeles County
51. Manhattan Beach
52. Montclair
53. Monterey Park
54. Moreno Valley
55. Murrieta
56. Needles
57. Norco
58. Palm Desert
59. Palm Springs
60. Palos Verdes Estates
61. Perris
62. Rancho Cucamonga
63. Rancho Mirage
64. Rancho Palos Verdes
65. Redlands
66. Redondo Beach
67. Rialto
68. Riverside
69. Riverside County
70. Rosemead
71. San Bernardino
72. San Bernardino County
73. San Jacinto
74. Santa Monica
75. Seal Beach
76. South Gate
77. Stanton
78. Temecula
79. Torrance
80. Twentynine Palms
81. Upland

- 82. Victorville
- 83. Villa Park
- 84. Westminster
- 85. West Hollywood
- 86. Whittier
- 87. Yucaipa
- 88. Yucca Valley
- 89. Alliance for a Regional Solution to Airport Congestion (ARSAC)
- 90. Coachella Valley Assoc. of Governments
- 91. Orange County Regional Airport Authority (OCRAA)
- 92. Communities for a Better Environment (CBE)
- 93. California League of Conservation Voters Education Fund
- 94. El Segundo Unified School District
- 95. Inglewood Unified School District
- 96. Inland Valley Development Authority
- 97. LAX Expansion No! (LAXEN)
- 98. Lennox School District
- 99. Manhattan Beach School District
- 100. March Airport Joint Powers Authority
- 101. P.A.N.I.C.
- 102. Redondo Beach School District
- 103. Riverside County Transportation Commission
- 104. San Bernardino County Association of Governments
- 105. San Bernardino International Airport Joint Powers Authority
- 106. South Bay Cities Council of Governments
- 107. Southern California Cities Joint Powers Consortium
- 108. Southern California Logistics Airport
- 109. Western Riverside Council of Governments
- 110. Westside Civic Federation
- 111. Wiseburn Unified School District

RESOLUTION NO. 99-07

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
ADELANTO, SAN BERNARDINO COUNTY, CALIFORNIA,
CALLING FOR A REGIONAL AIRPORT PLAN FOR
SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, Communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, Airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

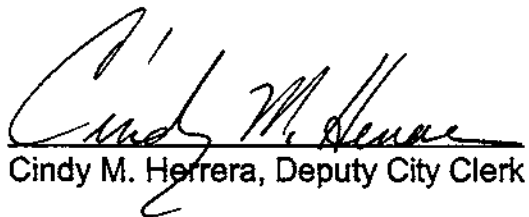
WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

RESOLUTION NO. 99-07
PAGE TWO

NOW, THEREFORE, BE IT RESOLVED, that: The communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Adelanto this 9th day of March, 1999.


William T. Hartz, Mayor


Cindy M. Herrera, Deputy City Clerk

AR00006

RESOLUTION NO. 99-07
PAGE THREE

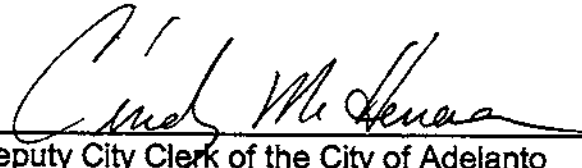
I, CINDY M. HERRERA, Deputy City Clerk of the City of Adelanto, California, do hereby certify the foregoing Resolution No. 99-07 was duly adopted at a regular meeting of the City Council of the City of Adelanto on the 9th day of March 1999, by the following vote to-wit:

AYES: Council Members Snider, Althouse, Mayor Pro Tem Awabdy, Mayor Hartz

NOES: None

ABSENT: Council Member DeGood

IN WITNESS THEREOF, I set my hand and affix the official seal of the City of Adelanto, on the 9th day of March 1999.



Deputy City Clerk of the City of Adelanto
and of the City Council thereof

RESOLUTION NO. R97-55**ORIGINAL****A RESOLUTION OF THE ALHAMBRA CITY COUNCIL
OPPOSING EXPANSION OF THE LOS ANGELES INTER-
NATIONAL AIRPORT (LAX)**

WHEREAS, the City of Los Angeles Department of Airports (DOA) seeks to add additional runways and flights to and from LAX to quadruple its passenger and cargo capacity rather than utilize other DOA properties, or other regional airports in a "fair share" balance within the five county region of Ventura, Los Angeles, San Bernardino, Riverside and Orange Counties; and,

WHEREAS, LAX's expansion plans will result in even higher levels of hazardous air pollution, noise pollution, and air traffic congestion which will have a severe impact on the health, safety, and quality of life of residents in the City of Alhambra; and,

WHEREAS, the City experiences low-flying aircraft an average of 30 percent of the days each year based on poor weather conditions at LAX, and these number of days will likely increase to at least half the days each year due to the higher air traffic volume and consequent more frequent use of the City's airway; and,

WHEREAS, LAX's expansion plans will result in a continuous flow of low flying commercial aircraft over the City of Alhambra, thereby destroying the quiet ambience of the bedroom community and making residential property less desirable; and,

WHEREAS, LAX expansion plans are vehemently opposed by other communities; such as, Inglewood, Hawthorne, El Segundo, Redondo Beach and Monterey Park who will also suffer from the impacts of increase air traffic into LAX; and,

WHEREAS, LAX's expansion plans will do more harm than good for the Los Angeles area commerce by devaluing property located along the flight paths and driving businesses and homeowners to leave; and,

WHEREAS, LAX's expansion plans are an unrealistic attempt to accommodate all of the Los Angeles area's air transportation needs into one of the nation's smallest metropolitan airports; and,

NOW, THEREFORE, BE IT RESOLVED, by the Alhambra City Council as follows:

SECTION ONE: This Council hereby opposes the expansion of LAX and urges our State and Federal Legislators to enact legislation that requires environmental studies on the negative impacts of low flying aircraft on communities that lie within the flight paths of airports;

AR00006

SECTION TWO: The City Clerk shall certify to the adoption of the Resolution and shall send copies of same to Federal and State Representatives, the Federal Aviation Agency, the Los Angeles Department of Airports, Los Angeles County Board of Supervisors, San Gabriel Valley Council of Governments and the Southern California Association of Governments.

Signed and approved this 27th day of October, 1997.


BARBARA A. MESSINA, Mayor

ATTEST:


FRANCES A. MOORE, City Clerk

I HEREBY CERTIFY that the above and forgoing resolution was duly passed and adopted by the Alhambra City Council at its regular meeting held on the 27th day of October, 1997, by the following vote to wit:

AYES: PAULSON, BURKE, CONDIE, TALBOT, MESSINA
NOES: NONE
ABSENT: NONE


FRANCES A. MOORE, City Clerk

Resolution No. 99-09

A Resolution of the Town Council of the Town of Apple Valley encouraging the development of aviation facilities in areas experiencing growth in demand for such facilities.

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation through the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion given LAX's location in the built-out intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for saving future growth in air commerce in Southern California; and

WHEREAS, the development of airport resources in the high-growth areas of the region will lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

Now, therefore, be it resolved that:

It is the policy of the Town Council of the Town of Apple Valley to encourage the development of aviation facilities in areas experiencing growth in demand, and

NOW, THEREFORE, BE IT FURTHER RESOLVED that:


The Town of Apple Valley urges the Southern California Association of Governments and its Aviation Task Force to prepare a long-range Regional Airport Plan for Southern California that includes one or more fully developed alternatives that distribute the growth in airline passenger and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impacts associated with each alternative.

PASSED AND ADOPTED by the Town Council of the Town of Apple Valley on the 23rd day of March, 1999.



Mayor

Attest:



Town Clerk

STATE OF CALIFORNIA

COUNTY OF SAN BERNARDINO

TOWN OF APPLE VALLEY

I, EUNICE S. PUCKETT, TOWN CLERK of the Town of Apple Valley, California, do hereby certify that Resolution No. 99-09 as duly and regularly adopted by the Town Council of the Town of Apple Valley, California, at a meeting thereof held on the 23rd day of March, 1999 by the following vote:


AYES: Councilmembers Jacobo, Sagona, Shoup, Mayor Pro Tem Loux
and Mayor Holman.

NOES: None

ABSTAIN: None.

ABSENT: None.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the Town of Apple Valley, California, this 26th day of March, 1999.


Eunice S. Puckett, CMC, Town Clerk
Town of Apple Valley

SEAL



AR00006

RESOLUTION NO. 01-C11

A RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF AZUSA, CALIFORNIA, CALLING FOR A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding the LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many others commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF AZUSA, CALIFORNIA, DOES RESOLVE, DECLARE, DETERMINE AND ORDER AS FOLLOWS:

That the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

That the Assistant City Clerk shall certify to the passage and adoption of this resolution and enter it into the book of original resolutions.

PASSED, APPROVED AND ADOPTED this 20th of February, 2001.

Joseph Roman Ariza
MAYOR

I HEREBY CERTIFY that the foregoing resolution was duly adopted by the City Council of the City of Azusa, at a regular meeting thereof, held on the 20th day of February, 2001, by the following vote of the Council:

AYES:	COUNCILMEMBERS:	HARDISON, STANFORD, ROCHA, CHAGNON
NOES:	COUNCILMEMBERS:	NONE
ABSENT:	COUNCILMEMBERS:	MADRID

Candace Brown
ASSISTANT CITY CLERK

RESOLUTION NO. 1999-45

A RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF BANNING, CALIFORNIA SUPPORTING SOUTHERN
CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG)
AND ITS AVIATION TASK FORCE IN THEIR PREPARATION
OF A LONG-RANGE REGIONAL AIRPORT PLAN FOR
SOUTHERN CALIFORNIA.

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Long Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year, and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given the location of LAX in the built-out intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest in growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern, California; and

WHEREAS, the development of airports based on research in the high-growth areas of the region will lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.


NOW THEREFORE, BE IT RESOLVED, that SCAG affirms its policy to encourage the development of aviation facilities in areas experiencing growth in demand; and

BE IT FURTHER RESOLVED, that the City Council of the City of Banning supports the Southern California Association of Government and its Aviation Task Force in their preparation of a long-range Regional Airport Plan for Southern California that includes one or more fully-developed alternatives that distribute the growth in airline passengers and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impacts associated with each alternative.

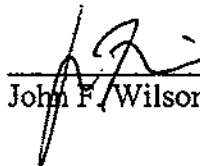
PASSED, APPROVED AND ADOPTED this 22nd day of June, 1999.


John Hunt, Mayor

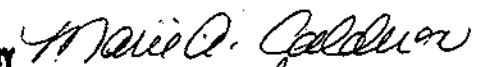
ATTEST:


Marie A. Calderon, City Clerk

APPROVED AS TO FORM AND
LEGAL CONTENT:


John F. Wilson, City Attorney

**CERTIFIED TO BE A TRUE AND CORRECT
COPY OF THE ORIGINAL DOCUMENT ON
FILE IN THE OFFICE OF THE CITY CLERK.**

BY 
TITLE *City Clerk*
DATE *8-9-99*

CERTIFICATION

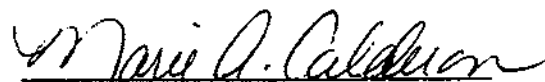
I, Marie A. Calderon, City Clerk of the City of Banning, California, do hereby certify that the foregoing Resolution No. 1999-45 was duly adopted by the City Council of the City of Banning, California, at a regular meeting thereof held on the 22nd day of June, 1999 by the following vote, to wit:

AYES: Councilmembers Bracken, Jenkins, Williams, Mayor Hunt

NOES: None

ABSTAIN: None

ABSENT: Councilmember Palmer


Marie A. Calderon, City Clerk
City of Banning, California

RESOLUTION NO. 3795 -1999

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BARSTOW CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, The Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, Expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, Communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, Airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX, which will be paid for by regional tax payers; and

WHEREAS, There are many other commercial airports in Southern California, some with significant histories as commercial airports and some recently converted to commercial or joint military and commercial airports; and

WHEREAS, Several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and

WHEREAS, Developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in the air commerce in Southern California; and

WHEREAS, The development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED that the City of Barstow calls upon the communities of Southern California (including the City of Los Angeles) and the Counties of Los

RESOLUTION NO. 2000-09

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
BELL, CALIFORNIA CALLING FOR A REGIONAL AIRPORT
PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and,

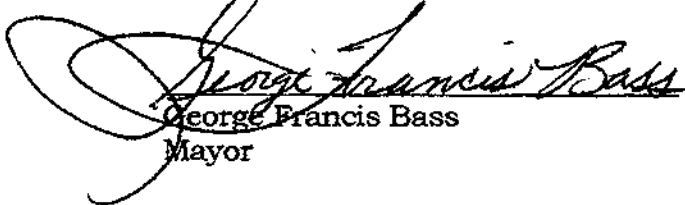
WHEREAS, several of these airports are located in areas of southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

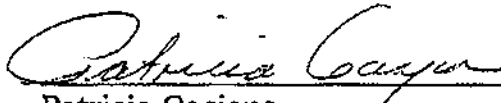
WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED, that the City of Bell calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED AND APPROVED this 6th day of March 2000


George Francis Bass
Mayor

ATTEST:


Patricia Casjens
City Clerk

I certify that the foregoing Resolution No. 2000-09 was adopted by the City Council of the City of Bell at a regular meeting held March 6, 2000, by the following vote.

AYES: Councilmen Bello, Janssen, Johnson, Mayor Pro Tem Cole
and Mayor Bass

NOES: None

ABSTAIN: None

ABSENT: None


Patricia Casjens, City Clerk

Resolution No. 2000-09

March 6, 2000

Page 2

AR00006

RESOLUTION NO. 99-59**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELL GARDENS CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and


WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED, that the City of Bell Gardens calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

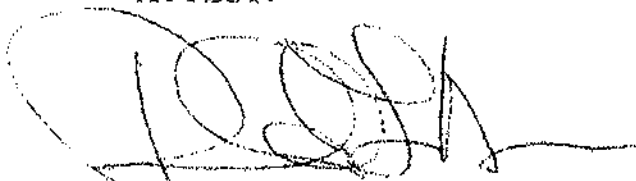
PASSED, APPROVED, AND ADOPTED this 29th day of December 1999.


RAMIRO MORALES, MAYOR

APPROVED AS TO FORM:


Arnoldo Beltrán, City Attorney

ATTEST:


Ronald L. Hart, City Clerk

CERTIFICATION

STATE OF CALIFORNIA)
)
 COUNTY OF LOS ANGELES) SS.
)
 CITY OF BELL GARDENS)

I, RONALD L. HART, City Clerk of the City of Bell Gardens, California, do hereby certify that the foregoing attached Resolution No. 99-59 was duly adopted by the City Council of the City of Bell Gardens, California, at their Special Meeting held on the 29th day of December 1999 and that the same was adopted by the following vote, to Wit:

AYES: Mayor Morales, Mayor Pro Tem Chacón, Councilmembers Aceituno and Rodriguez.

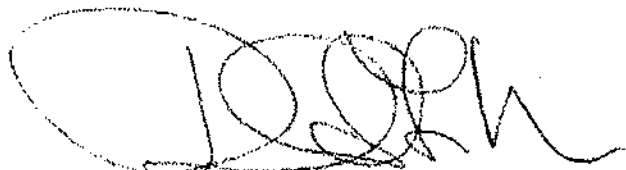
NOES: None

ABSTAIN: None

ABSENT: None

EXCUSED: Councilmember Cabrera.

I hereby affix my hand and Official Seal of the City of Bell Gardens, California.



RONALD L. HART
 City Clerk

CITY OF BELLFLOWER

RESOLUTION NO. 99-71

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
BELLFLOWER CALLING FOR A REGIONAL AIRPORT
PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, such an expansion will greatly increase the number of flights into LAX, double ground traffic going to and from LAX, and create enormous adverse noise and air pollution impacts upon surrounding communities and may cost 12 billion dollars; and

WHEREAS, Southern California has several airports that handle commercial and cargo traffic; and

WHEREAS, these airports are located in areas projected for the greatest growth in population and employment over the next twenty years while communities surrounding LAX are projected to grow the least; and

WHEREAS, developing airport capacity near high growth communities may be an environmentally superior, lower-cost and more equitable strategy than expanding LAX.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BELLFLOWER, AS FOLLOWS:

SECTION 1. The City Council of the City of Bellflower supports the call for a regional airport plan for Southern California.

SECTION 2. The Mayor, or presiding officer, is hereby authorized to affix his signature to the Resolution signifying its adoption by the City Council of the City of Bellflower, and the City Clerk, or her duly appointed deputy, is directed to attest thereto.

SECTION 3. The City Administrator, or duly appointed staff, is hereby directed to draft and send Letters of Support to the proponents of a regional airport plan, the City's State representatives and to any other appropriate and concerned parties, and the Mayor or presiding officer, is hereby authorized to affix his signature to the Letters of Support.

PASSED, APPROVED, AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF BELLFLOWER THIS 26th DAY OF JULY, 1999.



Joe Cvetko, Mayor

Attest:



Janet B. Ashpaugh, Deputy City Clerk

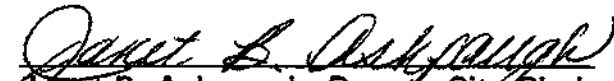
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STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS
CITY OF BELLFLOWER)

I, Janet B. Ashpaugh, Deputy City Clerk of the City of Bellflower, California, do hereby certify under penalty of perjury that the foregoing Resolution No. 99-71 was duly passed, approved, and adopted by the City Council of the City of Bellflower at its Regular Meeting of July 26, 1999, by the following vote to wit:

AYES: Councilmembers - Pratt, Smith, Bomgaars, and Mayor Cvetko
NOES: Councilmember - Gilson

Dated: July 27, 1999


Janet B. Ashpaugh, Deputy City Clerk
City of Bellflower, California

(SEAL)

AR00006

RESOLUTION NO. 98-642

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
BLYTHE CALLING FOR A REGIONAL AIRPORT PLAN FOR
SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for the Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burden on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Blythe calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our Congressional Representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED AND ADOPTED this 14th day of September, 1999, by the following called vote, to wit:

AYES: Kallan, Grimm, Thomas, Soto, Crain

NOES: None

ABSENT: None



Mayor Robert A. Crain

ATTEST:



Virginia Rivera, City Clerk

(SEAL)

RESOLUTION NO. 10951

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
BUENA PARK, CALIFORNIA, CALLING FOR A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic to and from LAX; and

WHEREAS, communities in the vicinity of LAX and John Wayne Airport which already experience adverse environmental impacts from the operations of the airport can expect increased noise and air pollution, increased traffic congestion and air pollution from ground traffic; and

WHEREAS, there are many other existing and proposed commercial airports in Southern California, including the former Marine Corps Air Station, El Toro, expected to experience increased growth in population and employment over the next 20 years; and

WHEREAS, developing airport capacity near high growth communities may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environment burden on communities near LAX;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BUENA PARK calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; the Southern California Association of Governments, and our congressional representatives to join together in developing a truly Regional Airport Plan for Southern California, including the former Marine Corps Air Station, El Toro, in Southern California, to serve the expanding air commerce marketplace in an equitable and fair share allocation of the demand for air travel.

RESOLUTION NO. 10951
Page 2

PASSED AND ADOPTED this 10th day of April 2001, by the following called vote:

AYES:	COUNCILMEMBERS:	Marshall, Berry, Dow, Sigler, Brown
NOES:	COUNCILMEMBERS:	None
ABSENT:	COUNCILMEMBERS:	None
ABSTAIN:	COUNCILMEMBERS:	None



 Mayor

ATTEST:



 City Clerk

I hereby certify that the foregoing Resolution was duly and regularly passed and adopted at a regular meeting of the City Council of the City of Buena Park, held this 10th day of April 2001.



 City Clerk

RESOLUTION NO. 99-5

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CALIMESA, CALIFORNIA, IN SUPPORT OF A REGIONAL AIRPORT IN THE INLAND AREA

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given LAX's location in the built-out intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of airport resources in the high-growth areas of the region will lead to more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

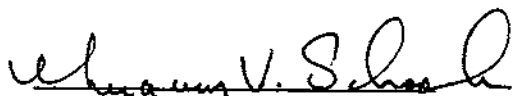
NOW, THEREFORE, BE IT RESOLVED THAT: SCAG affirms its policy to encourage the development of aviation facilities in areas experiencing growth in demand; and

BE IT FURTHER RESOLVED by the City Council of the City of Calimesa that the cities and counties of Southern California, working through the Southern California Association of Governments and its Aviation Task Force, shall prepare a long-range Regional Airport Plan for Southern California that includes

Res. 99-5


one or more fully-developed alternatives that distribute the growth in airline passenger and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impacts associated with each alternative.

PASSED, APPROVED AND ADOPTED, this 19th day of April, 1999.


Gregory V. Schook, Mayor

ATTEST:

APPROVED AS TO FORM:


Wanda Steadman, City Clerk


Marguerite P. Battersby, City Attorney

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) ss
CITY OF CALIMESA)

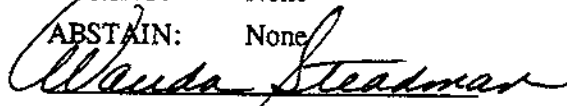
I, Wanda Steadman, City Clerk of the City of Calimesa, do hereby certify that the foregoing Resolution No. 99-5 was duly adopted at a regular meeting of the City Council of the City of Calimesa on the 19th day of April, 1999 by the following roll call vote:

AYES: Council Members Chlebnik, Moqet, Taylor, Winningham and Mayor Schook

NOES: None

ABSENT: None

ABSTAIN: None


Wanda Steadman, City Clerk

RESOLUTION NO. 99-015

**A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF CARSON, CALIFORNIA,
CALLING FOR A REGIONAL AIRPORT PLAN
FOR SOUTHERN CALIFORNIA**

WHEREAS, The Los Angeles Department of Airports has initiated a revision of the Master plan for Los Angeles International Airport (LAX) which anticipates its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, Airport officials estimate LAX improvements will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, There are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, Several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

WHEREAS, Developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, The development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burdens on communities near LAX.

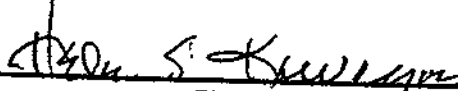
NOW, THEREFORE, BE IT RESOLVED, the City Council of the City of Carson calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED and ADOPTED this 2nd day of February 1999.



MAYOR

ATTEST:



CITY CLERK

APPROVED AS TO FORM:

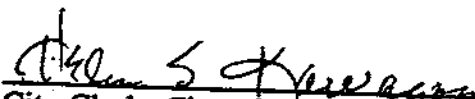


CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss.
CITY OF CARSON)

I, Helen S. Kawagoe, City Clerk of the City of Carson, California, do hereby certify that the whole number of members of the City Council is five; that the foregoing resolution, being Resolution No. 99-015 was duly and regularly adopted by said Council at a regular meeting duly and regularly held on the 2nd day of February, 1999, and that the same was passed and adopted by the following vote:

AYES:	COUNCIL MEMBERS:	Mayor Fajardo, Calas, and Olaes
NOES:	COUNCIL MEMBERS:	None
ABSTAIN:	COUNCIL MEMBERS:	Sweeney
ABSENT:	COUNCIL MEMBERS:	O'Neal



City Clerk, City of Carson, California

RESOLUTION NO. 99-34**A RESOLUTION OF THE CITY COUNCIL FOR THE CITY OF CATHEDRAL CITY, CALIFORNIA, CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for the Los Angeles International Airport (LAX) which anticipated expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and,

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

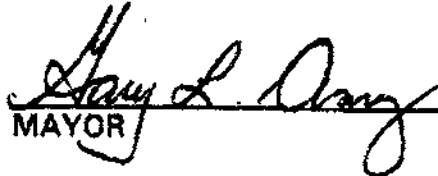
WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burden on communities near LAX.

NOW, THEREFORE, the City Council of the City of Cathedral City, California, does hereby Resolve, Declare, Determine and Order as follows:

SECTION 1. That the City of Cathedral City join with other communities of Southern California in the development of a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

SECTION 2. That the City Clerk shall certify to the passage and adoption of this Resolution; shall enter the same in the book of original Resolutions of said City; and shall make a minute of passage and adoption thereof in the records of the proceedings of the City Council of said City, in the minutes of the meeting at which Resolution is passed and adopted.

APPROVED AND ADOPTED this 13th day of July, 1999.


MAYOR

ATTEST:


CITY CLERK

APPROVED AS TO FORM:


CITY ATTORNEY

REVIEWED:


INTERIM CITY MANAGER

RESOLUTION No. 99R- 20

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHINO
HILLS SUPPORTING A REGIONAL AIRPORT PLAN FOR SOUTHERN
CALIFORNIA;

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double the ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW THEREFORE, the City Council of the City of Chino Hills does resolve that, the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED, AND ADOPTED this 23rd day of March, 1999.


GARY G. LARSON, MAYOR

ATTEST:


LINDA D. RUTH, CITY CLERK

APPROVED AS TO FORM:


MARK HENSLEY, CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF CHINO HILLS)

I, LINDA D. RUTH, City Clerk of the City of Chino Hills, DO HEREBY CERTIFY that the foregoing Resolution No. 99R- 20, was duly passed and adopted at a regular meeting of the Chino Hills City Council held on the 23rd day of March, 1999 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS: LARSON, WICKMAN, GRAHAM, NORTON-PERRY, THALMAN

NOES: COUNCIL MEMBERS: NONE

ABSENT: COUNCIL MEMBERS: NONE


LINDA D. RUTH, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 99R - 20__ duly passed and adopted by the Chino Hills City Council at their regular meeting held March 23, 1999.


LINDA D. RUTH, CITY CLERK

(SEAL)

RESOLUTION NO. R-28-99**RESOLUTION OF THE CITY OF COLTON SUPPORTING CERTAIN ACTIONS TAKEN BY SAN BERNARDINO ASSOCIATED GOVERNMENTS IN THE DEVELOPMENT OF A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given LAX'S location in the built-out, intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower

1 infrastructure costs rather than concentrating airport development at LAX may be at
2 environmentally superior, lower cost, and more equitable strategy for serving future growth
3 in air commerce in Southern California; and

4 **WHEREAS**, the development of airport resources in the high-growth areas of the
5 region will lead to a more equitable distribution of jobs and opportunities for economic
6 growth, while reducing the burden on the regional transportation system.

7
8 **NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF COLTON DOES**
9 **HEREBY RESOLVE, DETERMINE AND ORDER AS FOLLOWS:**

10
11 **Section 1.** The City Council hereby acknowledges receipt of the joint resolution adopted by
12 San Bernardino Associated Governments (SANBAG) on March 3, 1999, entitled:

13 JOINT RESOLUTION FOR GENERAL ASSEMBLY.

14
15 The City hereby acknowledges and concurs with the findings set forth in the joint resolution
16 of SANBAG.

17
18 **Section 2.** The City Council hereby designates the SANBAG to serve as the lead agency for
19 the purpose of preparing a long-range Regional Airport Plan for Southern California as set
20 forth in the joint resolution of SANBAG.

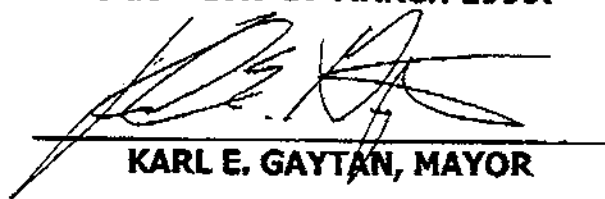
21
22 **Section 3.** The City Council hereby requests SCAG reaffirms its policy to encourage the
23 development of aviation facilities in areas experiencing growth in demand, and

24 **Section 4.** The City Council hereby support the efforts of the cities and counties of
25 Southern California, working through the Southern California Association of Governments
26 and its Aviation Task Force, in the preparation of a long-range Regional Airport Plan for
27 Southern California that includes one or more fully-developed alternatives that distribute the
28

1 growth in airline passenger and cargo operations among the region's commercial aviation
 2 facilities, with full consideration given to both freight and passenger ground access, and the
 3 economic and environmental opportunities and impacts associated with each alternative.

4 **Section 5.** This Resolution shall take effect upon the date of its adoption.

6 **PASSED, APPROVED AND ADOPTED THIS 16TH DAY OF MARCH 1999.**

8 
 9 **KARL E. GAYTAN, MAYOR**

10 **ATTEST:**

11 
 12 **CAROLINA P. BARRERA, CITY CLERK**

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RESOLUTION NO. 99- 19

**RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF CORONA CALLING FOR A REGIONAL AIRPORT
PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

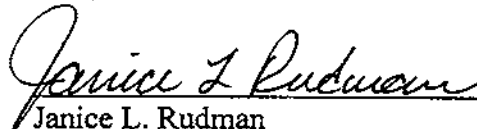
WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burdens on communities near LAX;

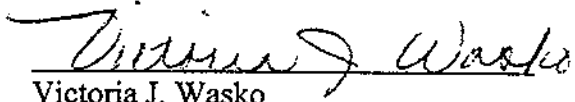
NOW, THEREFORE, BE IT RESOLVED THAT THE CITY COUNCIL OF THE CITY OF CORONA DOES HEREBY call upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

ADOPTED this 17th day of March 1999.



Janice L. Rudman
Mayor of the City of Corona

ATTEST:



Victoria J. Wasko
City Clerk of the City of Corona

AR00006

CERTIFICATION

I, Victoria J. Wasko, City Clerk of the City of Corona, California, do hereby certify that the foregoing resolution was regularly introduced and adopted by the City Council of the City of Corona, California, at an adjourned regular meeting thereof held on the 17th day of March 1999 by the following vote of the Council:

AYES:	BENNETT, RUDMAN, STEIN, TALBERT
NOES:	NONE
ABSENT:	PUGA
ABSTAINED:	NONE

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Corona, California, this 17th day of March 1999.



City Clerk of the City of Corona, California

(SEAL)

RESOLUTION NO. 01-20**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COSTA MESA, CALIFORNIA, SUPPORTING A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA.**

WHEREAS, airport facilities are an important part of the infrastructure of Southern California in terms of supporting continued economic growth, tourism, business, and resident access to State, National, and International destinations; and

WHEREAS, projected demand for airline travel is expected to exceed existing and planned airport facilities; and

WHEREAS, the demand for additional airport facilities is regional in nature involving all of Southern California; and

WHEREAS, there are many commercial airports in Southern California, some with significant histories as commercial airports, recently converted to commercial or joint military and commercial airports, and others available as the result of military base closure; and

WHEREAS, a regional approach to the provision of airport facilities will ensure that no one community is excessively subjected to the adverse environmental and social impacts associated with the operation of airport facilities; and

WHEREAS, the City of Costa Mesa is already adversely impacted by the operation of John Wayne Airport (JWA) at its current level of operation;

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

That the City of Costa Mesa hereby supports a regional approach to addressing projected demand for airline travel, including the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura.

Further, that the City of Costa Mesa hereby supports a careful evaluation of opportunities for the expansion of existing commercial, joint military and commercial use facilities, and military facilities available as the result of base closure, to meet projected demand, excluding JWA which already adversely impacts residents and businesses in the surrounding area, including the City of Costa Mesa.

PASSED AND ADOPTED this 19th day of March, 2001

[Signature]
Mayor of the City of Costa Mesa

ATTEST:

Mary T. Elliott
Deputy City Clerk of the City of Costa Mesa

APPROVED AS TO FORM
[Signature]
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF COSTA MESA)

I, MARY T. ELLIOTT, Deputy City Clerk and ex-officio Clerk of the City Council of the City of Costa Mesa, hereby certify that the above and foregoing Resolution No. 01-20 was duly and regularly passed and adopted by the said City Council at a regular meeting thereof, held on the 19th day of March, 2001.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Seal of the City of Costa Mesa this 20th day of March, 2001.

Mary T. Elliott
Deputy City Clerk and ex-officio Clerk of
the City Council of the City of Costa Mesa

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
COVINA CALLING FOR A REGIONAL AIRPORT PLAN
FOR SOUTHERN CALIFORNIA.

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, be it resolved that the City Council of the City of Covina calls upon the communities of Southern California, including the City of Los Angeles; the counties of Los Angeles, Orange, San Bernardino, Riverside and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

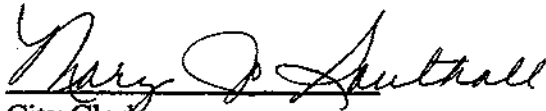
The City Clerk shall certify to the passage and adoption of this resolution, and the same shall take effect and be in force.

APPROVED, PASSED AND ADOPTED this the 4th day of April, 2000.




Mayor

ATTEST:



City Clerk

APPROVED AS TO FORM:



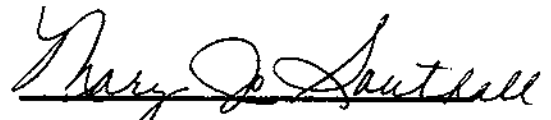
City Attorney

I, MARY JO SOUTHALL, City Clerk, Covina, California, hereby CERTIFY that this Resolution was adopted by the Covina City Council at a regular meeting of the City Council held April 4, 2000, and was approved and passed by the following vote:

AYES: COUNCIL MEMBERS: Allen, Palmeri, Stapleton, M/Christiansen

NOES: COUNCIL MEMBERS: MPT/Truax

ABSENT: COUNCIL MEMBERS: None


Covina City Clerk

RESOLUTION NO. 00-13

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CUDAHY, CALIFORNIA, TO SUPPORT A JOINT PLAN TO DEVELOP A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA THAT CONSTRAINS LAX TO OPERATE WITHIN CURRENT CAPACITIES, AND ENCOURAGES THE DEVELOPMENT OF OTHER COMMERCIAL AIRPORTS IN SOUTHERN CALIFORNIA TO SERVE THE EXPANDING AIR COMMERCE MARKET PLACE.

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, Communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, Airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

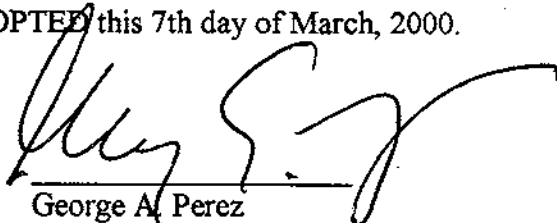
WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

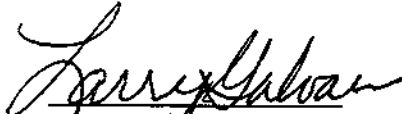
WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environment burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED, that City of Cudahy calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED AND ADOPTED this 7th day of March, 2000.


George A. Perez
Mayor

ATTEST:


Larry Galvan
City Clerk

Resolution No. 00-13
Page 3


(SEAL)

(STATE OF CALIFORNIA)
(COUNTY OF LOS ANGELES)SS
(CITY OF CUDAHY)

I, Larry Galvan, CITY CLERK OF THE CITY OF CUDAHY DO HEREBY CERTIFY THAT the foregoing Resolution No. 00-13 was duly and regularly adopted by the City Council at a regular meeting held thereof on the 7th day of March, 2000, by the following vote:

AYES: Councilmember Conde, Gonzalez and Gurule
Vice Mayor Silva, Mayor Perez

NOES: None


Larry Galvan- City Clerk

AR00006

RESOLUTION NO. 5393

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CYPRESS, CALIFORNIA,
IN SUPPORT OF A TRULY REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA.**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per years; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic to and from LAX; and

WHEREAS, communities in the vicinity of LAX and John Wayne Airport (JWA) already experience adverse environmental impacts from the operations of the airport and can expect increased noise and air pollution, increased traffic congestion and air pollution from ground traffic; and

WHEREAS, there are many other existing and proposed commercial airports in Southern California, including the former Marine Corps Air Station, El Toro, expected to experience increased growth in population and employment over the next twenty years; and

WHEREAS, developing airport capacity near high growth communities may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environment burden on other communities;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Cypress, supports the Orange County Regional Airport Authority's desire to join the communities and representatives of Southern California together, along with the State of California and the Southern California Association of Governments, in developing a truly Regional Airport Plan for Southern California, which includes the former Marine Corps Air Station, El Toro, to serve the expanding air commerce marketplace in an equitable and fair share allocation of the demand for air travel.

PASSED AND ADOPTED by the City Council of the City of Cypress at a regular meeting held on the 23rd day of April 2001.

MAYOR OF THE CITY OF CYPRESS

Attest:

CITY CLERK OF THE CITY OF CYPRESS

STATE OF CALIFORNIA }
COUNTY OF ORANGE }

AR00006

I, JILL R. INGRAM-GUERTIN, City Clerk of the City of Cypress, DO HEREBY CERTIFY that the foregoing Resolution was duly adopted at a regular meeting of the said City Council held on the 23rd day of April 2001; by the following roll call vote:

AYES: 5	COUNCIL MEMBERS: Keenan, McCoy, Piercy, Sondhi, and McGill
NOES: 0	COUNCIL MEMBERS: None
ABSENT: 0	COUNCIL MEMBERS: None

CITY CLERK OF THE CITY OF CYPRESS

TOTAL P.02

AR00006

RESOLUTION NO. 1999-06**A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF DESERT HOT SPRINGS, CALIFORNIA
CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN
CALIFORNIA**

Whereas, the Los Angeles Department of Airports has initiated a revision of the Master Plan for the Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected to 4.2 million tons per year; and

Whereas, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

Whereas, communities in the vicinity of LAX already experiences enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

Whereas, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

Whereas, there are many other commercial airports in Southern California: some with significant histories as commercial airports; and

Whereas, some facilities were recently converted to commercial or joint military and commercial airports; and

Whereas, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least amount of growth in the same period; and

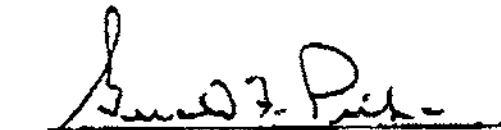
Whereas, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environment superior, lower-cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

Whereas, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environment burden on communities near LAX.


RESOLUTION NO. 1999-06
March 2, 1999

Now, therefore, be it resolved that, the City Council of the City of Desert Hot Springs, California, supports the efforts by Riverside County Transportation Commission in the development of a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

Passed, approved and adopted 2nd day of March, 1999.


GERALD F. PISHA
Mayor

ATTEST:


Kathleen D. Hart
City Clerk

I, Kathleen D. Hart, City Clerk of the City of Desert Hot Springs, hereby certify that the foregoing resolution was duly adopted by the City Council of the City of Desert Hot Springs at a regular meeting thereof, held on the 2nd day of March, 1999, by the following vote of the Council:

AYES: Councilmembers Bosworth, Donnelly, Sherman, and Mayor Pisha
NOES: None
ABSTAIN: None
ABSENT: None


Kathleen D. Hart
City Clerk

kdh 1999-06.rec

RESOLUTION NO. 6366**A RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF DOWNEY, CALIFORNIA, CALLING FOR
A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX), which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year, and, its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX, which will be paid for by regional tax payers; and,

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

Resolution No. 6366
Page 2

NOW, THEREFORE, be it resolved that the City of Downey calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace

The City Clerk shall certify to the adoption of this Resolution.

APPROVED AND ADOPTED this 23rd day of May, 2000

KEITH MC CARTHY
KEITH MC CARTHY, Mayor

ATTEST:

JOYCE E. DOYLE
JOYCE E. DOYLE, Deputy City Clerk

I HEREBY CERTIFY that the foregoing Resolution was adopted by the City Council of the City of Downey at a regular meeting held on the 23rd day May, 2000, by the following vote, to wit:

- AYES: 4 Council Members: Winningham, McCaughan, Perkins, McArthur
- NOES: 0 Council Members: None
- ABSENT: 1 Council Members: Lawrence

JOYCE E. DOYLE
JOYCE E. DOYLE, Deputy City Clerk

RESOLUTION NO. 4091

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL SEGUNDO, CALIFORNIA, CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA.

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposal will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burdens on communities near LAX.

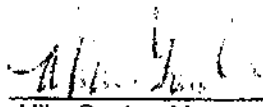
NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL SEGUNDO, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. The City of El Segundo, California, calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, orange, San Bernardino, Riverside and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

RESOLUTION NO. 4091
CALLING FOR REGIONAL AIRPORT
PLAN FOR SOUTHERN CALIFORNIA
PAGE 1

Section 2. The City Clerk shall certify to the passage and adoption of this Resolution; shall enter the same in the book of original Resolutions of said City, and shall make a minute of the passage and adoption thereof in the records of the proceedings of the City Council of said City, in the minutes of the meeting at which the same is passed and adopted.

PASSED, APPROVED AND ADOPTED this 15th day of September, 1998.



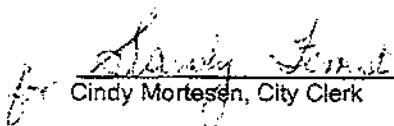
Mike Gordon, Mayor

ATTEST:

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS
CITY OF EL SEGUNDO)

I, Cindy Mortesen, City Clerk of the City of El Segundo, California, do hereby certify that the whole number of members of the City Council of said City is five; that the foregoing Resolution No. 4091 was duly passed and adopted by said City Council, approved and signed by the Mayor, and attested to by the City Clerk, all at a regular meeting of said Council held on the 15th day of September, 1998, and the same was so passed and adopted by the following vote:

AYES: Gordon, Jacobs, McDowell, Gaines, Wernick
NOES: None
ABSENT: None
ABSTAIN: None



Cindy Mortesen, City Clerk

APPROVED AS TO FORM:



Mark D. Hensley, City Attorney

RESOLUTION NO. 4091
CALLING FOR REGIONAL AIRPORT
PLAN FOR SOUTHERN CALIFORNIA
PAGE 2

RESOLUTION NO. 99-86

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
FONTANA ENCOURAGING THE DEVELOPMENT OF A
REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within Southern California is forecasted to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for the Los Angeles International airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

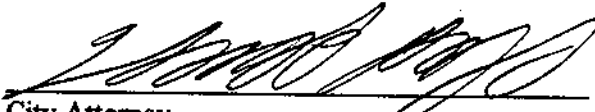
WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of airport resources in high-growth areas will lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

NOW, THEREFORE, BE IT RESOLVED the city Council of the City of Fontana encourages the cities and counties of Southern California to work with the Southern California Association of Governments and its Aviation Task Force in preparing a long-range Regional Airport Plan for Southern California that includes one or more fully-developed alternatives that distribute the growth in airlines passengers and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impact associated with each alternative.

APPROVED AND ADOPTED this 3rd day of August, 1999.

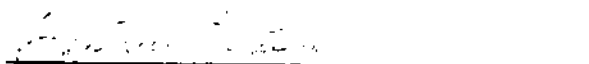
READ AND APPROVED AS TO LEGAL FORM:



City Attorney

I, Beatrice Watson, City Clerk of the City of the Fontana, California, and EX-Officio Clerk of the City Council, do hereby certify that the foregoing resolution is the actual resolution duly and regularly adopted by the City Council at a regular meeting thereof, held on the 3rd day of August, 1999, by the following vote to -wit:

AYES: Mayor Eshleman, Council Members Gonzales, Mancha, Nuaimi, Roberts
NOES: None
ABSENT: None

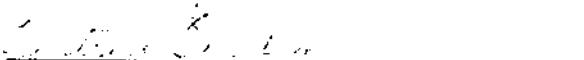


City Clerk of the City of Fontana



Mayor of the City of Fontana

ATTEST



City Clerk

RESOLUTION NO. 8235-99

RESOLUTION OF THE ORANGE COUNTY REGIONAL AIRPORT AUTHORITY
SUPPORTING A REGIONAL APPROACH TO AIR TRANSPORTATION

WHEREAS, Southern California communities are now analyzing the most equitable and efficient means to serve the region's air passenger needs in the 21st century; and

WHEREAS, SCAG and other independent sources indicate that the region's air passenger and cargo demand will double over the next twenty years; and

WHEREAS, the capacity of existing public use airports are inadequate to serve projected demand over the next twenty years; and

WHEREAS, the Los Angeles Department of Airports initiated a revision of the LAX Master Plan to expand its service level from the current 60 million annual passengers to an expected 98 million annual passengers, and its cargo activity from 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, communities surrounding LAX are concerned about the potential increased environmental impacts, such as increases in noise, air pollution, and traffic congestion from the proposed expansion of LAX; and

WHEREAS, the Southern California Association of Governments (SCAG) has taken a policy position that each County within the Southern California region should be responsible for serving its own air passenger and cargo demand; and

WHEREAS, Orange County's population is expected to grow from 2.7 million to 3.5 million within the next decade. John Wayne Airport currently serves only half of its air passenger demand and 4% of its cargo needs, with the remainder served by LAX, Ontario Airport and other airports; and

WHEREAS; it is unreasonable and inequitable to rely on LAX to serve the vast majority of the region's air transportation needs; and

WHEREAS, developing airport capacity near high growth areas is an environmentally superior, low cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, El Toro MCAS has the capability, in conjunction with John Wayne Airport, to serve all of Orange County's air passenger and cargo needs well into the next century, with less noise and traffic impacts than LAX experiences at its current capacity; and

Resolution No. 8235-99

Page 2

NOW, THEREFORE, THE ORANGE COUNTY REGIONAL AIRPORT AUTHORITY RESOLVES that the Southern California community join together to develop a Regional Airport Plan for Southern California that develops the capacity of other airports beside LAX, and specifically focuses on airports like El Toro that are located in and would directly serve high-growth communities, such as Orange County.

Adopted this 26th day of October, 1999.

/s/ BRUCE A. BROADWATER
MAYOR

ATTEST:

/s/ RUTH E. SMITH
CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS:
CITY OF GARDEN GROVE)

I, RUTH E. SMITH, City Clerk of the City of Garden Grove, do hereby certify that the foregoing Resolution was duly adopted by the Council of the City of Garden Grove, California, at a regular meeting held on the 26th day of October, 1999, by the following vote:

AYES: COUNCILMEMBERS: (5) CHUNG, DALTON, LEYES, ROSEN, BROADWATER
NOES: COUNCILMEMBERS: (0) NONE
ABSENT: COUNCILMEMBERS: (0) NONE

/s/ RUTH E. SMITH
CITY CLERK

RESOLUTION NO. 4485

RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF GARDENA, CALIFORNIA, CALLING FOR A
REGIONAL AIRPORT PLAN FOR SOUTHERN
CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double the ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF GARDENA, CALIFORNIA, DOES HEREBY RESOLVE, DECLARE, AND DETERMINE AS FOLLOWS;

SECTION 1. That the City of Gardena, California, does hereby call upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together to develop the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

SECTION 2. That the City Clerk shall certify to the passage and adoption of this resolution; shall cause the same to be entered among the original Resolutions of said City, and shall make a minute of the passage and adoption thereof in the records of the proceedings of the City Council for the meeting at which the same is passed and adopted.

Passed, approved, and adopted this 27th day of October, 1998.



Mayor of the City of Gardena,
California

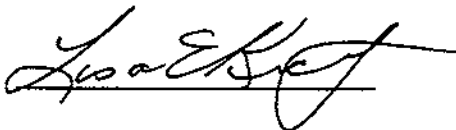
ATTEST:



City Clerk of the City of Gardena,
California

APPROVED AS TO FORM:

Lisa E. Kranitz
City Attorney



CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS:
CITY OF GARDENA)

I, MAY Y. DOI, CMC, CITY CLERK of the CITY OF GARDENA, CALIFORNIA, do hereby certify and attest, under penalty of perjury, the foregoing to be a full, true and correct copy of the original Resolution No. 4485 calling for a regional airport plan for Southern California approved, passed and adopted by the City Council of the City of Gardena in regular session on October 27, 1998 on file in the Office of the City Clerk.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Seal of the City of Gardena, this 2nd day of November 1998.



City Clerk of the City of Gardena, California

(SEAL)

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS:
CITY OF GARDENA)

I, **MAY Y. DOI**, City Clerk of the City of Gardena, do hereby certify that the whole number of members of the City Council of said City is five; that the foregoing Resolution, being Resolution **No. 4485**, was duly passed and adopted by the City Council of said City of Gardena, approved and signed by the Mayor of said City, and attested by the City Clerk, all at a meeting of said City Council held on the **27th** day of **October, 1998** and that the same was so passed and adopted by the following roll call vote:

AYES: COUNCIL MEMBERS CRAGIN, BRADFORD, DEFILIPPO, DUFFY AND
 MAYOR DEAR

NOES: NONE

ABSENT: NONE



City Clerk of the City of Gardena, California

(SEAL)

RESOLUTION NO. 99 -04

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF GRAND TERRACE, CALIFORNIA, CALLING FOR A
REGIONAL AIRPORT PLAN FOR SOUTHERN
CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposal will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burdens on communities near LAX.

RESOLUTION NO. 99 - 04

Page 2

NOW, THEREFORE, BE IT RESOLVED, THAT: the City Council of the City of Grand Terrace calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED, AND ADOPTED this 25th day of March, 1999.

ATTEST:

Brenda Stanfill
City Clerk of the City of Grand Terrace
and of the City Council thereof.

Byron R. Matteson
Mayor of the City of Grand Terrace
and of the City Council thereof.

I, Brenda Stanfill, City Clerk of the City of Grand Terrace, do hereby certify that the foregoing Resolution was introduced and adopted at a regular meeting of the City Council of the City of Grand Terrace held on the 25th day of March, 1999, by the following vote:

AYES: Councilmembers Hilkey, Singley, and Garcia; Mayor Pro Tem Buchanan; Mayor Matteson

NOES: None

ABSENT: None

ABSTAIN: None

Brenda Stanfill
City Clerk

Approved as to form:

John R. Hill
City Attorney

RESOLUTION NO. 6509

A RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF HAWTHORNE, CALIFORNIA, CALLING
FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN
CALIFORNIA.

WHEREAS, the Los Angeles Dept. of Airports has initiated a revision of the Master plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvement will cost as much as

\$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

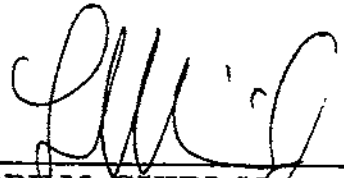
WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Hawthorne calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the

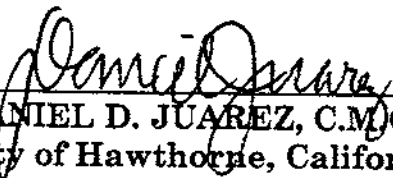
many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED AND ADOPTED THIS 25th DAY OF
JANUARY _____, 1999.




LARRY M. GUIDI, Mayor
City of Hawthorne, California

ATTEST:



DANIEL D. JUAREZ, C.M.C./AAE
City of Hawthorne, California

APPROVED AS TO FORM:



GLEN E. SHISHIDO, City Attorney
City of Hawthorne, California

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STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS
CITY OF HAWTHORNE)


I, MONICA DICRISCI, the duly appointed Deputy City Clerk of the City of Hawthorne, California, DO HEREBY CERTIFY that the foregoing Resolution, being Resolution No.6509, was duly adopted by the City Council of the City of Hawthorne, at the regular meeting of the City Council held January 25, 1999, and that it was adopted by the following vote, to wit:

AYES: Councilmembers Bookhammer, Schoenfeld, Andersen,
McNally, Mayor Guidi.

NOES: None.

ABSTAIN: None.

ABSENT: None.



Deputy City Clerk
City of Hawthorne, California

AR00006

RESOLUTION NO. 3399

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master plan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given LAX's location in the built-out intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of airport resources in the high-growth areas of the region will lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.


NOW, THEREFORE, BE IT RESOLVED THAT:

SCAG affirms its policy to encourage the development of aviation facilities in areas experiencing growth in demand, and

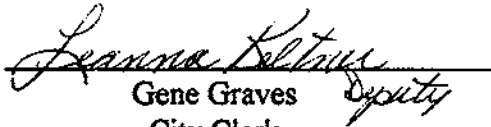
NOW, THEREFORE, BE IT FURTHER RESOLVED THAT:

The Cities and Counties of Southern California, working through the Southern California Association of Governments and its Aviation Task Force, shall prepare a long-range Regional Airport Plan for Southern California that includes one or more fully-developed alternatives that distribute the growth in airline passenger and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impacts associated with each alternative

PASSED, APPROVED AND ADOPTED this 1st Day of April, 1999.


C. Robin Reeser Lowe
Vice Mayor

ATTEST:


Gene Graves Deputy
City Clerk

AR00006

DENNIS ZANE

URBAN DIMENSIONS: *ECONOMIC DEVELOPMENT, TRANSPORTATION & ENVIRONMENTAL PLANNING*
506 SANTA MONICA BLVD. STE. 223, SANTA MONICA, CA 90401
310-899-6767 PHONE 310-899-6765 FAX
URBANDIME@AOL.COM

City Clerk, City of Hemet
450 East Latham Avenue
Hemet, CA 92543

RECEIVED AUGUST 5, 1999
AUG 10 1999
CITY CLERK

Dear City Clerk for the City of Hemet,

We understand that your city passed a resolution in support of a Regional Airport Plan encouraging a regional approach to airport growth. As representatives with the City of El Segundo, a city that has championed this cause for more than a year, we are grateful when other cities add their voice to this very important regional discussion.

We would like to receive a copy of the resolution adopted by your city. Please send this information to the following address:

Denny Zane: Urban Dimensions
506 Santa Monica Blvd. Suite 223
Santa Monica, CA 90401
310-899-6767 • 310-899-6765 (FAX)

Thank You.

Denny Zane
Urban Dimensions

AR00006

RESOLUTION NO. 99-5951**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HERMOSA BEACH, CALIFORNIA, TO ADOPT A RESOLUTION CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA.**

WHEREAS, the Los Angeles Dept. of Airports has initiated a revision of the Master plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year and,

WHEREAS, Expanding its passenger and cargo activity as proposal will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, Communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

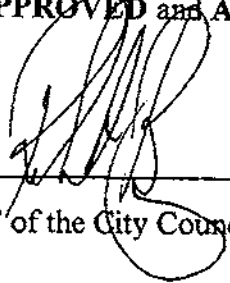
WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

1 **WHEREAS**, the development of these regional airport resources will help spread jobs and
 2 economic development opportunities more equitable throughout the region, and reduce the public
 3 health and environmental burdens on communities near LAX.

4 **BE IT FURTHER RESOLVED** that the City of Hermosa Beach calls upon the
 5 communities of Southern California, including the City of Los Angeles, the Counties of Los
 6 Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our
 7 congressional representatives to join together in developing the Regional Airport Plan for Southern
 8 California that constrains LAX to operate within the capacity of its existing facilities and develops
 9 the capacity of the many other commercial airports in Southern California to serve the expanding
 10 air commerce marketplace.

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 12 **PASSED, APPROVED and ADOPTED** this 12th day of January 1999.



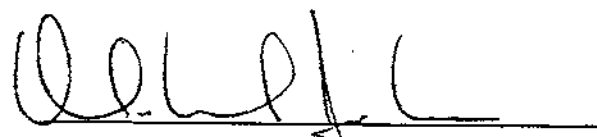
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 16 **PRESIDENT** of the City Council and Mayor of the City of Hermosa Beach, California

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 18 **ATTEST:**

APPROVED AS TO FORM:

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 21 *Chaise Doerflinger*

CITY CLERK

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CITY ATTORNEY

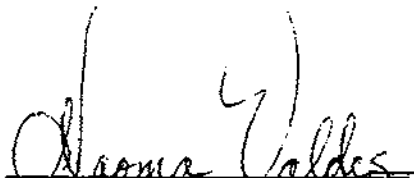
STATE OF CALIFORNIA
COUNTY OF LOS ANGELES
CITY OF HERMOSA BEACH

I, Naoma Valdes, Deputy City Clerk of the City Council of the City of Hermosa Beach, California, do hereby certify that the foregoing Resolution No. 99-5951 was duly and regularly passed, approved and adopted by the City Council of the City of Hermosa Beach at a Regular Meeting of said Council at the regular place thereof on January 12, 1999.

The vote was as follows:

AYES: Bowler, Edgerton, Oakes, Reviczky, Mayor Benz
NOES: None
ABSTAIN: None
ABSENT: None

DATED: January 14, 1999


Deputy City Clerk

RESOLUTION NO. 99-15

WHEREAS, the development of aviation resources in the high-growth area will lead to a more equitable distribution of jobs and economic activity in the region; and
A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HESPERIA, CALIFORNIA, SUPPORTING THE PREPARATION OF A LONG-RANGE REGIONAL AIRPORT PLAN

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 96 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as \$1.2 billion and would necessitate the expenditure of millions of dollars more in assessing its impact on the ground transportation system; and

WHEREAS, the proposed expansion of LAX is a major project that will have a significant impact on the region's economy and transportation system; and

WHEREAS, the City of Hesperia is a major regional hub and its support of the expansion of LAX is in the best interests of the region; and

WHEREAS, the City of Hesperia is committed to supporting the development of aviation resources in the region; and

WHEREAS, the City of Hesperia is committed to supporting the development of aviation resources in the region; and

STATE OF CALIFORNIA)

COUNTY OF SAN BERNARDINO)

CITY OF HESPERIA)

I, Marsha Whalen, City Clerk of the City of Hesperia, California, do hereby certify that Resolution No. 99-15 was duly adopted by the City Council of the City of Hesperia, California at a Regular Meeting thereof held on the 1st day of April, 1999 by the following vote to wit:

AYES: BIGGERS, JENSEN, LINDLEY, NOURSE AND NOWICKI

NOES: NONE

ABSTAIN: NONE

ABSENT: NONE



Marsha Whalen
City Clerk



RESOLUTION NO. 99 - 15

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HIGHLAND,
CALIFORNIA, CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN
CALIFORNIA**

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as \$12 billion, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given LAX's location in the built-out, intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of airport resources in the high-growth areas of the region will lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

NOW, THEREFORE, BE IT RESOLVED THAT SCAG affirms its policy to encourage the development of aviation facilities in areas experiencing growth in demand.

BE IT FURTHER RESOLVED that the cities and counties of Southern California, working through the Southern California Association of Governments and its Aviation Task Force, shall prepare a long-range Regional Airport Plan for Southern California that includes one or more fully developed alternatives that distribute the growth in airline passenger and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access and the economic and environmental opportunities and impacts associated with each alternative.

PASSED, APPROVED AND ADOPTED this 9th day of March, 1999.



Bradley D. Sundquist
Mayor

ATTEST:



Debbie A. Lee, CMC
City Clerk

STATE OF CALIFORNIA)

COUNTY OF SAN BERNARDINO)

CITY OF HIGHLAND)

I, DEBBIE A. LEE, City Clerk of the City of Highland, California, do hereby certify Resolution No. 99 - 15 was duly and regularly adopted by the City Council of the City of Highland, California, at a regular meeting thereof held on the 9th day of March, 1999, by the following vote:

AYES: Brown, Rucker, Starbuck, Timmer, Mayor Sundquist

NOES: None

ABSTAIN: None

ABSENT: None


DEBBIE A. LEE, CITY CLERK

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RESOLUTION NO. 99-74

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUNTINGTON PARK
CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increase congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

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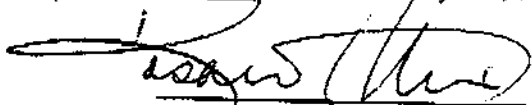
WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF HUNTINGTON PARK DOES RESOLVE AS FOLLOWS:

SECTION 1. The City of Huntington Park calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

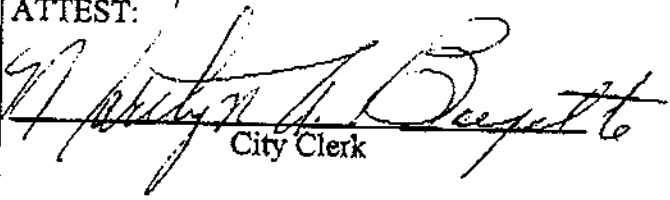
SECTION 2. The City Clerk shall certify to the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED THIS 15th of November, 1999.



Mayor of the City of Huntington Park

ATTEST:

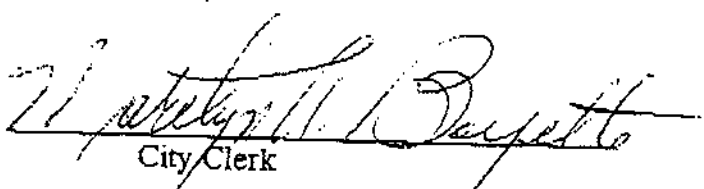

City Clerk

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STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

I, MARILYN A. BOYETTE, CITY CLERK OF THE CITY OF HUNTINGTON PARK,
DO HEREBY CERTIFY that the foregoing Resolution, being Resolution No. 99-74, was passed
and adopted by the City Council of the City of Huntington Park, signed by the Mayor of said
City, and attested by the City Clerk, all at a regular meeting of the City Council held on the 15th
day of November, 1999, and that the same was passed and adopted by the following vote, to wit:

AYES: Councilmembers - Jackson, Maes, Loya, Guevara, Marin
NOES: Councilmembers - None
ABSENT: Councilmembers - None


City Clerk

RESOLUTION NO. 6215

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDIO, CALIFORNIA, SUPPORTING DEVELOPING A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA THAT CONSTRAINS THE LAX TO OPERATE WITHIN THE CAPACITY OF ITS EXISTING FACILITIES AND DEVELOPS THE CAPACITY OF THE MANY OTHER COMMERCIAL AIRPORTS IN SOUTHERN CALIFORNIA TO SERVE THE EXPANDING AIR COMMERCE MARKETPLACE.

WHEREAS, the Los Angeles Dept. of Airports has initiated a revision of the Master plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposal will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Indio, California does hereby resolves as follows:

The communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains the LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED and ADOPTED this 19th day of May, by the following vote:

AYES: Councilmembers Fesmire, Godfrey, Lopez, Wilson, Mayor Silva
NOES: None
ABSENT: None
ABSTAINED: None

Chris B. Silva
Chris B. Silva, Mayor
City of Indio, California

ATTEST:

Evelyn C. Clark
Evelyn C. Clark, Deputy City Clerk
City of Indio, California

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) ss.
CITY OF INDIO)

I, EVELYN C. CLARK, Deputy City Clerk of the City of Indio, do hereby certify the foregoing to be a full, true and correct copy of Resolution No. 6215 of the City Council of the City of Indio, adopted by said Council, at a regular meeting on the 19th day of May, 1999.

Evelyn C. Clark
Evelyn C. Clark, Deputy City Clerk
City of Indio, California

RESOLUTION NO. 99-27

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A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INGLEWOOD, CALIFORNIA, REQUESTING THAT THE CITY COUNCIL OF THE CITY OF LOS ANGELES, CALIFORNIA, OPPOSE EXPANSION OF LOS ANGELES WORLD AIRPORTS UNLESS AND UNTIL THE NEGATIVE IMPACTS OF AIRCRAFT NOISE ON THE CITY OF INGLEWOOD ARE ADDRESSED AND ABATED.

WHEREAS, over ninety percent of aircraft arrivals at the Los Angeles World Airport (LAWA) travel over the City of Inglewood, California; and,

WHEREAS, Inglewood is disproportionately impacted by pollutants generated by air and surface street traffic, in relation to other cities; and,

WHEREAS, fifty percent of surface traffic going to LAWA goes through Inglewood causing traffic congestion, street deterioration and an increase in accidents; and,

WHEREAS, the extraordinary amount of traffic generated by LAWA through the City of Inglewood places an unfair burden on the public safety services of the City of Inglewood, thereby reducing the availability of police, fire and paramedic services for the citizens of Inglewood; and,

WHEREAS, aircraft noise contributes to deterioration of neighborhoods through higher transience rates and increased poverty; and,

WHEREAS, additional impacts to neighborhoods include increased crime associated with activities of poverty-stricken persons who can least afford to move into quieter areas; and,

WHEREAS, the Inglewood City Council is calling upon the Los Angeles City Council to direct the LAWA Board of Airport Commissioners to mitigate the negative impacts on the Inglewood community caused by the increasing number of passengers and flights generated by LAWA.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Inglewood, California, that the City Council requests that the City Council of the City of Los Angeles oppose any expansion of LAWA until and unless the following actions are taken to mitigate the negative impacts on the City of Inglewood generated by LAWA:

SECTION 1) The City Council of the City of Los Angeles shall support legislation that directs the United States Department of Transportation to lower the existing noise mitigation threshold from 65 db CNEL to 55db CNEL; and,

1 **SECTION 3)** The City Council of the City of Los Angeles direct the LAWA Board of Airpor
2 Commissioners to accelerate sound-proof insulation and acquisition of affected properties with a goal o
3 100% mitigation within the next six years; and,

4 **SECTION 4)** The acceleration of sound-proof insulation shall also include the elimination o
5 any stipulation or requirement that property owners in the City of Inglewood give up their rights t
6 airspace by signing an avigation easement in order to obtain funding through LAWA; and,

7 **SECTION 5)** The City Council of the City of Los Angeles shall direct the LAWA Board o
8 Airport Commissioners to provide a minimum of \$25 million annually to mitigate the negative impacts o
9 increased air and surface traffic, aircraft noise, and the resultant increase in crime and strain o
10 Inglewood's public safety services.

11 **BE IT FURTHER RESOLVED** that the City Council of the City of Inglewood, California, wil
12 support the efforts of the City Council of the City of Los Angeles, and the Los Angeles World Airpor
13 Board of Airport Commissioners for regional expansion once the above mitigation efforts are addresser
14 and provided that any expansion or growth will not result in any additional flights over the City o
15 Inglewood and any additional runways at LAWA be located outside of the southern boundaries of th
16 City of Inglewood.

17 **PASSED, APPROVED AND ADOPTED** this 16th day of March, 1999.

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22 By Roosevelt F. Dorn, Mayor
23 Roosevelt F. Dorn, Mayor

24
25 **ATTEST:**

26 Herminia J. Harris
27 City Clerk
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RESOLUTION NO. CC-9810-98

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF LAWNSDALE, CALIFORNIA, CALLING FOR A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvement will cost as much as 12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and


WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burdens on communities near LAX.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAWNSDALE,
CALIFORNIA DOES HEREBY RESOLVE AS FOLLOWS:**

SECTION 1: The City of Lawndale calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED , APPROVED AND ADOPTED this 5th day of October, 1998.

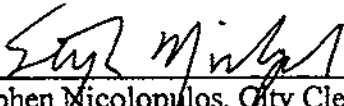

Harold E. Hofmann, Mayor

ATTEST

State of California)
County of Los Angeles) SS
City of Lawndale)

I, Stephen Nicolopoulos, City Clerk of the City of Lawndale, California, do hereby certify that the foregoing Resolution No. CC-9810-98 was duly passed, approved and adopted by the City Council at a regular meeting held on the 5th day of October, 1998, by the following roll call vote:

AYES: Hofmann, Rhodes, Rudolph, Roth, McKee
NOES: None
ABSENT: None
ABSTAIN: None


Stephen Nicolopoulos, City Clerk

APPROVED AS TO FORM:


William W. Wynder, City Attorney

RESOLUTION NO. 2065

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
LOMA LINDA, CALLING FOR A REGIONAL AIRPORT PLAN
FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX), which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, in addition to greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and

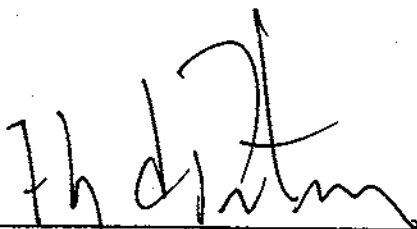
WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX;

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Loma Linda calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

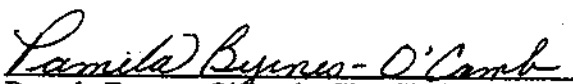
PASSED, APPROVED AND ADOPTED this 13th day of April 1999 by the following vote:

Ayes:	Petersen, Brauer, Christman, Umeda, Ziprick
Noes:	None
Absent:	None
Abstain:	None



Floyd Petersen, Mayor

ATTEST:



Pamela Byrnes-O'Camb, City Clerk

RESOLUTION NO. 98-57

A RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF LOMITA CALLING FOR A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the master plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California, and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED, that:

- 1) The City Council of the City of Lomita calls upon the Los Angeles Department of Airports to encourage efforts in the region to mitigate current traffic impacts from the airport as well as future impacts.

2) The City Council of the City of Lomita calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

Passed, approved and adopted this 21st day of December, 1998.

Ben Rosano
MAYOR

ATTEST:

Alma Arista
CITY CLERK

Post-It Fax Note	7671
Date	12/21/98
From	John J. ...
To	City of Lomita
Phone #	310-325-7110
Fax #	310-314-9196

RESOLUTION NO. 1834**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
LOS ALAMITOS SUPPORTING A REGIONAL AIRPORT
PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience adverse environmental impacts from the operations of the airport can expect increased noise and air pollution, increased traffic congestion and air pollution from ground traffic; and

WHEREAS, there are many other existing and proposed commercial airports in Southern California, including the former Marine Corps Air Station, El Toro, expected to experience increased growth in population and employment over the next twenty years; and

WHEREAS, developing airport capacity near high growth communities may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environment burden on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Los Alamitos, that:

The City of Los Alamitos calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; the Southern California Association of Governments, and our congressional representatives to join together in developing a truly Regional Airport Plan for Southern California that develops the capacity of all other existing and proposed commercial airports, including the former Marine Corps Air Station, El Toro, in Southern California, to serve the expanding air commerce marketplace in an equitable and fair share allocation of the demand for air travel.

PASSED, APPROVED AND ADOPTED this 10th day of September 2001.

Alvin B. Jemsa
Mayor of the City of Los Alamitos

ATTEST:

C. D. Cordova
C. D. Cordova, City Clerk

State of California)
County of Orange) ss.
City of Los Alamitos)

APPROVED AS TO FORM:

Bryan C. LeRoy
Bryan C. LeRoy, Interim City Attorney

I declare under penalty of perjury that this document is a full, true, and correct copy of the original on file in this office.

ATTEST:

DATED: 9/13/01

C. D. Cordova
City Clerk, City of Los Alamitos, California

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LOS ALAMITOS)

I, C. D. Cordova, City Clerk of the City of Los Alamitos, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the City Council held on the 10th day of September 2001, by the following vote:

AYES:	COUNCILMEMBERS:	DeBolt, Parker, Poe, Bates and Jemsa
NOES:	COUNCILMEMBERS:	None
ABSENT:	COUNCILMEMBERS:	None
ABSTAIN:	COUNCILMEMBERS:	None

C. D. Cordova
City Clerk of the City of Los Alamitos

RESOLUTION NO. 5431

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
MANHATTAN BEACH, CALIFORNIA, CALLING FOR A REGIONAL
AIRPORT PLAN FOR THE SOUTHERN CALIFORNIA AREA

WHEREAS, the County of Los Angeles Department of Airports has initiated a revision of the master plan for Los Angeles World Airport (LAX) which anticipates expanding its passenger activity from the current 60 million passengers per year to an expected 98 million passengers per year and an increase in cargo activity from the current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic to and from LAX; and

WHEREAS, communities in the vicinity of LAX, which already experience enormous adverse environmental impacts from the operation of the airport, can expect increased noise and air pollution from overhead aircraft and greatly increased congestion and air pollution from ground traffic; and

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the cost of transportation improvements required to facilitate access to LAX which will have to be borne by the regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant experience as commercial airports, others recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, cost effective and equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will encourage job creation and economic development throughout the region and reduce the public health and environmental burdens on the communities surrounding LAX.

NOW, THEREFORE, BE IT RESOLVED THAT THE CITY COUNCIL OF THE CITY OF MANHATTAN BEACH, CALIFORNIA, DOES HEREBY DECLARE, FIND, DETERMINE AND ORDER AS FOLLOWS:

SECTION 1. The City of Manhattan Beach calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernadino, Riverside and Ventura; the State of California; and the congressional representatives of these areas to join together in developing a Regional Airport Plan for Southern California.

SECTION 2. The Regional Airport Plan for Southern California must develop the capacity of the other commercial airports in Southern California to serve the expanding air commerce marketplace.

SECTION 3. The Regional Airport Plan for Southern California should limit the growth of LAX to a level acceptable to the surrounding communities after significant mitigation measures which address the negative impacts on these communities have been identified and implemented.

SECTION 4. The City Clerk shall make this Resolution reasonably available for public inspection within thirty (30) days of the date this Resolution is adopted.

Reso. 5431

SECTION 5. The City Clerk shall certify to the adoption of this Resolution and thenceforth and hereafter the same shall be in full force and effect.

PASSED, APPROVED and ADOPTED this 3rd day of November 1998.

Ayes:	Cunningham, Wilson, Lillgren, Jones and Mayor Napolitano.
Noes:	None.
Absent:	None.
Abstain:	None.

/s/ Steven A. Napolitano
Mayor, City of Manhattan Beach, California

ATTEST:

/s/ Liza Tamura
City Clerk

RESOLUTION NO. 99-2246

A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF MONTCLAIR CALLING
FOR A REGIONAL AIRPORT PLAN FOR
SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year, and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX, which already experience enormous adverse environmental impacts from the operations of the airport, can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next 20 years, while LAX is nearest to communities expected to experience the least growth in the same period; and

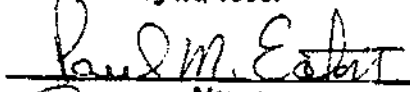
WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.


NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Montclair calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

APPROVED AND ADOPTED this 2nd day of August, 1999.

ATTEST:



Mayor



City Clerk

AR00006

I, Margaret A. Crawford, City Clerk of the City of Montclair, DO HEREBY CERTIFY that Resolution No. 99-2246 was duly adopted by the City Council of said city and was approved by the Mayor of said city at a regular meeting of said City Council, held on the 2nd day of August, 1999, and that it was adopted by the following vote, to-wit:

AYES: Ruh, Dutrey, Raft, Paulitz, Eaton
NOES: None
ABSTAIN: None
ABSENT: None


Margaret A. Crawford
City Clerk

RESOLUTION NO. 10375

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
MONTEREY PARK, CALIFORNIA CALLING FOR A
REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA.

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from the current 60 million passengers per year to an expected 98 million passengers per year and cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding its passenger and cargo activity as proposal will greatly increase the number of flights and potentially double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experienced enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion dollars; not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many other commercial airports located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and;

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

February 17, 1999
Resolution No. 10375
Page Two

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Monterey Park calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED AND ADOPTED this 17th day of February, 1999.

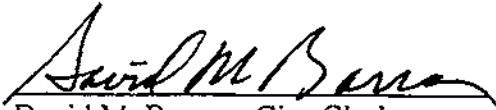


Judy Chu, Mayor
City of Monterey Park
California

AR00006

February 17, 1999
Resolution No. 10375
Page Three

ATTEST:



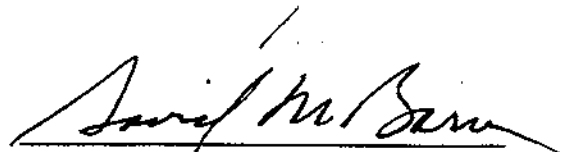
David M. Barron, City Clerk
City of Monterey Park
California

State of California)
County of Los Angeles) ss.
City of Monterey Park)

I, David M. Barron, City Clerk of the City of Monterey Park, California, do hereby certify that the foregoing Resolution No.10375 was duly adopted by the City Council of the City of Monterey Park at a meeting held on the 17th day of February, 1999, by the following vote:

AYES:	COUNCILMEMBERS:	ALONSO, PURVIS, BALDERRAMA, VALENZUELA, CHU
NAES:	COUNCILMEMBERS:	NONE
ABSENT:	COUNCILMEMBERS:	NONE
ABSTAIN:	COUNCILMEMBERS:	NONE

Dated this 17th day of February, 1999.



David M. Barron, City Clerk
City of Monterey Park
California

AR00006

A RESOLUTION OF THE CITY OF MORENO VALLEY
SUPPORTING THE DEVELOPMENT AND IMPLEMENTATION
OF A "REGIONAL AIRPORT PLAN"
FOR SOUTHERN CALIFORNIA

WHEREAS, the City of Moreno Valley has entered into an agreement with the cities of Perris and Riverside and the County of Riverside to create the March Joint Powers Authority (JPA) to develop appropriate uses for March Air Base; and

WHEREAS, the JPA created the "March Inland Port" as a joint use commercial airport in cooperation with the United States Air Force; and

WHEREAS, the development of commercial cargo operations at the March Inland Port is a key strategy in the pursuit of Economic Development and the creation of new jobs by the JPA; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year, and

WHEREAS, expanding passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and


WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development opportunities at LAX may be an environmentally superior, lower cost and more equitable strategy for serving future growth in air commerce in Southern California; and

RESOLUTION JURAT

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) ss.
CITY OF MORENO VALLEY)

I, ALICIA CHAVEZ, City Clerk of the City of Moreno Valley, California, do hereby certify that Resolution No. 99-12 was duly and regularly adopted by the City Council of the City of Moreno Valley at a regular meeting thereof held on the 23rd day of February, 1999, by the following vote:

- AYES: Councilmembers Batey, Flickinger, Sterwart, White, and Mayor West
- NOES: None
- ABSENT: None
- ABSTAIN: None



CITY CLERK

(SEAL)

RESOLUTION NO. 99- 688**RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF MURRIETA CALLING FOR A REGIONAL AIRPORT
PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX;

NOW THEREFORE BE IT RESOLVED THAT THE CITY COUNCIL OF THE CITY OF MURRIETA DOES HEREBY call upon the communities of Southern California including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of the

many other commercial airports in Southern California to serve the expanding air commerce marketplace.

ADOPTED this 21st day of September, 1999.

Chuck Washington, Mayor

A. Kay Vinson, City Clerk

I, A. Kay Vinson, City Clerk of the City of Murrieta California, do hereby certify that the foregoing resolution was regularly introduced and adopted by the City Council of the City of Murrieta, California at a regular meeting thereof held on the 21st day of September, 1999 by the following vote of the Council:

AYES: Enochs, Ostling, Seyarto and van Haaster

NOES: None

ABSENT: van Haaster

ABSTAINED: None

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Murrieta, California on this 21st day of September, 1999.

City Clerk of the City of Murrieta

(SEAL)

RESOLUTION NO. 8-10-99-3

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
NEEDLES, CALIFORNIA, CALLING FOR A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Needles calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Orange, San Bernardino, Riverside and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.


PASSED, APPROVED AND ADOPTED at a regular meeting of the City Council of the City of Needles, California, held on the 10th day of August, 1999, by the following roll call vote:

AYES: Council Members Richards, Hill, Bradshaw, Starr & Gwinnup
NOES: None
ABSENT: Council Member Frazier



Mayor

(Seal)

Attest: 

City Clerk

Approved as to form:

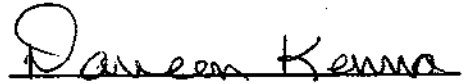


City Attorney

CERTIFICATION

I, Daneen Kenna, City Clerk of the City of Needles, California, hereby certify that the foregoing is a true and correct copy of Resolution No. 8-10-99-3 which was passed, approved and adopted at a special meeting of the Needles City Council of the City of Needles, California, held on the 10th day of August, 1999, by the following roll call vote:

AYES: Council Members Richards, Hill, Bradshaw, Starr & Gwinnup
NOES: None
ABSENT: Council Member Frazier
ABSTAIN: None


Daneen Kenna, City Clerk

(Seal)

Date: August 11, 1999

AR00006

RESOLUTION NO. 99-71

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
PALM DESERT, CALIFORNIA, CALLING FOR A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA.**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX in nearest to communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED as follows:

The City of Palm Desert calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED, AND ADOPTED at a regular meeting of the Palm Desert City Council, held on this 8th day of July, 1999, by the following vote, to wit:

AYES: Benson, Crites, Ferguson, Kelly, Spiegel


NOES: None

ABSENT: None


ABSTAIN: None


ROBERT A. SPIEGEL, MAYOR

ATTEST:


SHEILA R. GILLIGAN, CITY CLERK
CITY OF PALM DESERT, CALIFORNIA

APPROVED AS TO FORM:


DAVID J. ERWIN, CITY ATTORNEY

RESOLUTION NO. 19545

OF THE CITY COUNCIL OF THE CITY OF PALM SPRINGS, CALIFORNIA, AUTHORIZING THE CITY OF PALM SPRINGS TO JOIN THE COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS IN CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA.

WHEREAS the Los Angeles Department of Airports has initiated a revision of the Master Plan for the Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

WHEREAS there are many other commercial airports in Southern California, some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

WHEREAS developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burden on communities near LAX,

NOW THEREFORE BE IT RESOLVED that the City of Palm Springs calls for the Coachella Valley Association of Governments to call upon the communities of Southern California including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our Congressional Representatives to join together in developing the Regional Airport Plan for Southern California that develops the capacity of the commercial airports in Southern California to serve the expanding air commerce marketplace.

ADOPTED this 30th day of June, 1999.

AYES: Members Barnes, Hodges, Oden, Reller-Spurgin and Mayor Kleindienst
NOES: None

ATTEST:

CITY OF PALM SPRINGS, CALIFORNIA

By

City Clerk

City Manager

REVIEWED & APPROVED AS TO FORM

Post-it® Fax Note	7671	Date	9/22/99	# of pages	1
To	MARY BETH	From	DENISE		
Co./Dept.		Co.			
Phone #		Phone #	760-323-8204		
Fax #		Fax #			

RESOLUTION R98-54

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALOS VERDES ESTATES
CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS: The Los Angeles Department of Airports has initiated a revision of the Master plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS: Expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS: Communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS: Airport officials estimate LAX improvement will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and,

WHEREAS: There are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

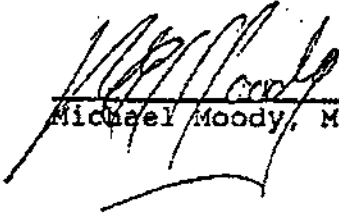
WHEREAS: Several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS: Developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS: The development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX:

NOW, THEREFORE, BE IT RESOLVED, THAT: The City of Palos Verdes Estates calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

Passed, approved and adopted on this 10th day of November, 1998.



Michael Moody, Mayor

Attest:



Gady Smith, City Clerk

Approved as to form:



Stephanie R. Scher, City Attorney

RESOLUTION NUMBER 2697

A RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE
OF CALIFORNIA, CALLING FOR A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, the March Joint powers Authority (JPA) created the "March Inland Port" as a joint use commercial airport in cooperation with the United States Air Force; and

WHEREAS, the development of commercial cargo operations at the March Inland Port is a key strategy in the pursuit of economic development and the creation of new jobs the March JPA; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposal will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Perris as follows:

SECTION 1. The communities of Southern California, including the City of Los Angeles; the counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

ADOPTED, SIGNED and APPROVED this 9th day of February, 1999.

Cecilia Landis
MAYOR OF THE CITY OF PERRIS

Attest:

Margaret Rey
City Clerk

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) ss
CITY OF PERRIS)

I, Margaret Rey, duly elected City Clerk of the City of Perris, California, hereby certify that the foregoing Resolution Number 2697 was duly and regularly adopted by the City Council of the City of Perris at a regular meeting held the 9th day of February, 1999, by the following called vote:

Ayes: LARIOS, YARBROUGH, LARRAGOITTY, TORRES AND LANDERS
Noes:
Absent:

Margaret Rey
CITY CLERK

RESOLUTION NO. 99-35

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO MIRAGE
CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for the Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to a expected 4.2 million tons per year; and,

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and,

WHEREAS, there are many other commercial airports in southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burden on communities near LAX.

CERTIFIED COPY



CITY CLERK
CITY OF RANCHO MIRAGE

AR00006


NOW, THEREFORE, BE IT RESOLVED THAT, the City of Rancho Mirage calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our Congressional Representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

ADOPTED AND APPROVED this 3rd day of June, 1999.

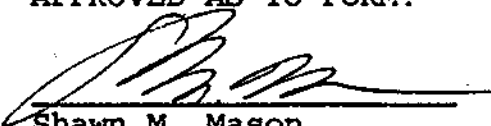
CITY OF RANCHO MIRAGE


Marilyn Glassman
Mayor

ATTEST:


Barbara E. Dohn, CMC
City Clerk

APPROVED AS TO FORM:


Shawn M. Mason
City Attorney

AR00006

RESOLUTION NO. 5664

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REDLANDS
CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN
CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

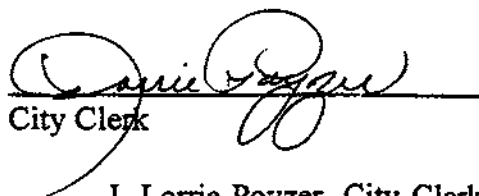
NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF REDLANDS AS FOLLOWS:

Section 1. The City of Redlands calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

ADOPTED, SIGNED AND APPROVED THIS 20th day of July, 1999.


Mayor of the City of Redlands

ATTEST:


City Clerk

I, Lorrie Poyzer, City Clerk of the City of Redlands, hereby certify that the foregoing Resolution was duly adopted by the City Council at a regular meeting thereof, held on the 20th day of July, 1999, by the following vote:

AYES: Councilmembers Banda, Gilbreath, George, Freedman;
Mayor Cunningham
NOES: None
ABSTAIN: None
ABSENT: None


Lorrie Poyzer, City Clerk

RESOLUTION NO. 8043

**A RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF REDONDO BEACH CALLING FOR
A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvement will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

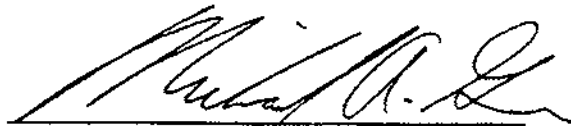
NOW, THEREFORE, be it resolved, that the City of Redondo Beach calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

Be it resolved further, that the City Clerk shall certify the passage and adoption of this resolution, shall enter the same in the Book of Resolutions of said City, and shall cause the action of the City Council in adopting the same to be entered in the official minutes of said City Council.

PASSED AND ADOPTED by the City Council of the City of Redondo Beach, California, this 13th day of October, 1998, by the following vote, to wit:

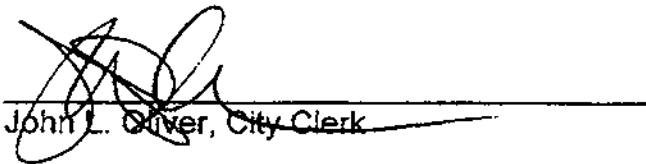
AYES:	Council Members:	Sullivan, Gin, Pinzler, and White
NOES:	Council Members:	Bisignano
ABSENT:	Council Members:	None
ABSTAIN:	Council Members:	None

City of Redondo Beach

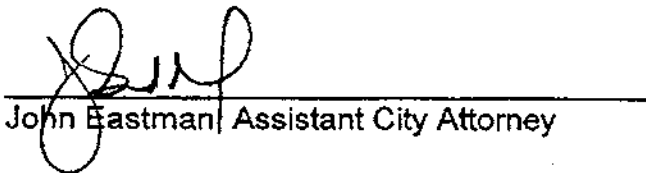


Mike Gin, Mayor Pro Tem

ATTEST:


John L. Driver, City Clerk

APPROVED AS TO FORM:


John Eastman, Assistant City Attorney

1 RESOLUTION NO. 4541

2 A RESOLUTION OF THE CITY OF RIALTO, STATE OF
3 CALIFORNIA, CALLING FOR A REGIONAL AIRPORT
4 PLAN FOR SOUTHERN CALIFORNIA

5 WHEREAS, The Los Angeles Dept. of Airports has initiated a
6 revision of the Master plan for the Los Angeles International
7 Airport (LAX) which anticipates expanding its passenger activity
8 from a current 60 million passengers per year to an expected 98
9 million passengers per year and its cargo activity from its current
10 1.7 million tons per year to an expected 4.2 million tons per year;
11 and,

12 WHEREAS, Expanding its passenger and cargo activity as
13 proposed will greatly increase the number of flights and nearly
14 double ground traffic going to and from LAX; and,

15 WHEREAS, Communities in the vicinity of LAX which already
16 experience enormous adverse environmental impacts from operations
17 of the airport can expect greatly increased noise and air pollution
18 from overhead aircraft, greatly increased congestion and air
19 pollution from ground traffic, especially from dramatic increases
20 in the activity of diesel trucks around the airport; and,

21 WHEREAS, Airport officials estimate LAX improvement will cost
22 as much as \$12 billion dollars, not including the costs of
23 transportation improvements required to facilitate access to LAX
24 which will be paid for by regional tax payers; and,

25 WHEREAS, There are many other commercial airports in Southern
26 California; some with significant histories as commercial airports,
27 some recently converted to commercial or joint military and
28 commercial airports; and,

WHEREAS, Several of these airports are located in areas of
Southern California expected to experience the greatest growth in
population and employment over the next twenty years, while LAX is
near the communities expected to experience the least growth in the
same period; and,

WHEREAS, Developing airport capacity near high growth
communities rather than concentrating airport development at LAX
may be an environmentally superior, lower-cost and more equitable
strategy for serving future growth in air commerce in Southern
California; and,

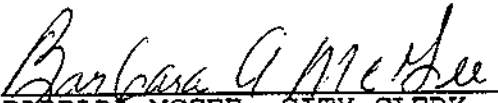
WHEREAS, The development of these regional airport resources
will help spread jobs and economic development opportunities more
equitably throughout the region, and reduce the public health and
environmental burdens on communities near LAX.

1 NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY
2 OF RIALTO, that the City of Rialto calls upon the communities of
3 Southern California, including the City of Los Angeles; the
4 Counties of Los Angeles, Orange, San Bernardino, Riverside, and
5 Ventura; the State of California; and our congressional
6 representatives to join together in developing the Regional Airport
Plan for Southern California that constrains LAX to operate within
the capacity of its existing facilities and develops the capacity
of the many other commercial airports in Southern California to
serve the expanding air commerce marketplace.

7
8 PASSED, APPROVED, AND ADOPTED this 6th day of April, 1999.

9
10
11 
RAY FARMER, MAYOR

12 ATTEST:

13 
14 BARBARA MCGEE, CITY CLERK

15 APPROVED AS TO FORM:

16 
17 ROBERT A. OWEN, CITY ATTORNEY

18
19 STATE OF CALIFORNIA)
20 COUNTY OF SAN BERNARDINO) SS
CITY OF RIALTO)

21 I, BARBARA MCGEE, City Clerk of the City of Rialto, DO HEREBY
22 CERTIFY that the foregoing Resolution No. 4541 was duly passed,
23 approved and adopted at a regular meeting of the City Council of
24 the City of Rialto held on the 6th day of April, 1999.

25 Upon motion of Councilmember Scott, seconded by
26 Councilmember Zupanic-Skaggs, the foregoing Resolution No. 4541

1 was duly passed and adopted.

2 Vote on the motion:

3
4 AYES: Mayor Farmer, Council Members Zupanic-Skaggs, Sampson, Vargas &
5 Scott

6 NOES: None

7 ABSENT: None

8 IN WITNESS WHEREOF, I have hereunto set my hand and the
9 Official Seal of the City of Rialto this 14th day of April,
10 1999.

11 
12 BARBARA MCGEE, CITY CLERK

1 RESOLUTION NO. 19443

2 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIVERSIDE,
3 CALIFORNIA, ENDORSING SOUTHERN CALIFORNIA ASSOCIATION OF
4 GOVERNMENTS JOINT RESOLUTION FOR GENERAL ASSEMBLY DRAFT
5 DATED FEBRUARY 23, 1999, AND FOR GENERAL ASSEMBLY SUPPORTING
6 THE PREPARATION OF A LONG-RANGE REGIONAL AIRPORT PLAN FOR
7 SOUTHERN CALIFORNIA.

8 WHEREAS, access to commercial and cargo aviation opportunities is important to
9 economic vitality and job creation throughout the region; and

10 WHEREAS, aviation demand within the entire region is forecast to exceed 157 million
11 air passengers per year and 8.9 million tons of air cargo per year by 2020; and

12 WHEREAS, the Los Angeles Department of Airports has initiated a revision of the
13 Masterplan for Los Angeles International Airport (LAX) that advocates expansion of its passenger
14 activity from 69 million air passengers per year to an expected 98 million per year and its cargo
15 activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

16 WHEREAS, airport officials estimate that the expansion of LAX to accommodate the
17 proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate
18 the expenditure of billions of dollars more to lessen its impact on the ground transportation system;
19 and

20 WHEREAS, the proposed expansion, given LAX's location in the built-out, intensely
21 congested west side of the South Coast Air Basin where its contribution to air pollution is greatest,
22 appears to be a high-cost, high-impact approach to meeting the region's need for added aviation
23 capacity; and

24 WHEREAS, there are at least nine other developing or existing commercial airports in
25 Southern California, several of which are located in areas expected to experience the greatest growth
26 in population and employment over the next 20 years, while the LAX area is expected to experience
27 the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure
costs rather than concentrating airport development at LAX may be an environmentally superior,

1 lower cost, and more equitable strategy for serving future growth in air commerce in Southern
2 California; and

3 WHEREAS, the development of airport resources in the high-growth areas of the region
4 will lead to a more equitable distribution of jobs and opportunities for economic growth, while
5 reducing the burden on the regional transportation system; and

6 WHEREAS, the Southern California Association of Governments has provided the City
7 of Riverside with a draft Resolution dated February 23, 1999, supporting joint preparation of a long-
8 range Regional Airport Plan by the Cities and Counties of Southern California working through
9 SCAG and its Aviation Task Force, and City of Riverside endorses such draft resolution.

10 NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Riverside,
11 California, that:

12 Section 1: The City of Riverside encourages the development of aviation facilities in
13 areas experiencing growth in demand.

14 Section 2: The City of Riverside endorses the Southern California Association of
15 Governments draft resolution dated February 23, 1999, entitled Joint Resolution for General
16 Assembly.

17 Section 3: The City of Riverside supports the Cities and Counties of Southern California,
18 working through the Southern California Association of Governments and its Aviation Task Force,
19 in preparation of a long-range Regional Airport Plan for Southern California that includes one or
20 more fully-developed alternatives that distribute the growth in airline passenger and cargo
21 operations among the region's commercial aviation facilities, with full consideration given to both
22 freight and passenger ground access, and the economic and environmental opportunities and
23 impacts associated with each alternative.

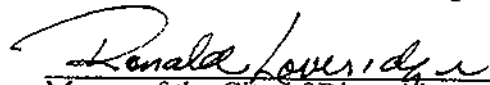
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1 ADOPTED by the City Council and signed by the Mayor and attested by the City Clerk
2 this 2nd day of March, 1999.

3 
4 Mayor of the City of Riverside

5 Attest:

6 
7 City Clerk of the City of Riverside
8


9 I, Colleen J. Nicol, City Clerk of the City of Riverside, California, hereby certify that the
10 foregoing resolution was duly and regularly introduced and adopted at a meeting of the City Council
11 of said City at its meeting held on the 2nd day of March 1999, by the following vote, to wit:

12 Ayes: Councilmembers Beaty, Defenbaugh, Kane, Clifford and
13 Pearson.

14 Noes: None.

15 Absent: Councilmembers Moore and Thompson.

16 IN WITNESS WHEREOF I have hereunto set my hand and affixed the official seal of the
17 City of Riverside, California, this 2nd day of March, 1999.

18 
19 City Clerk of the City of Riverside
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27 [RES/99031802.ET]

1 RESOLUTION NO. 19442

2 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIVERSIDE,
3 CALIFORNIA, ENDORSING THE MARCH JOINT POWERS AUTHORITY
4 RESOLUTION NO. JPA-99-01 AND SUPPORTING THE DEVELOPMENT AND
5 IMPLEMENTATION OF A "REGIONAL AIRPORT PLAN" FOR SOUTHERN
6 CALIFORNIA.

7 WHEREAS, the March Joint Powers Authority (JPA) created the "March Inland Port" as
8 a joint use commercial airport in cooperation with the United States Air Force; and

9 WHEREAS, the development of commercial cargo operations at the March Inland Port is
10 a key strategy in the pursuit of economic development and the creation of new jobs by the March
11 JPA; and

12 WHEREAS, the Los Angeles Department of Airports has initiated a revision of the
13 Master plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger
14 activity from a current 60 million passengers per year to an expected 98 million passengers per year
15 and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per
16 year; and

17 WHEREAS, expanding passenger and cargo activity as proposed will greatly increase the
18 number of flights and nearly double ground traffic going to and from LAX; and

19 WHEREAS, communities in the vicinity of LAX which already experience enormous
20 adverse environmental impacts from operations of the airport can expect increased noise and air
21 pollution from overhead aircraft, and greatly increased congestion and air pollution from ground
22 traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

23 WHEREAS, airport officials estimate LAX improvements will cost as much as \$12
24 billion, not including the costs of transportation improvements required to facilitate access to LAX
25 which will be paid for by taxpayers in the region; and

26 WHEREAS, there are many other commercial airports in Southern California, some with
27 significant histories as commercial airports, some recently converted to commercial or joint use
28 military and commercial airports; and

29 WHEREAS, several of these airports are located in areas of Southern California expected

1 to experience the greatest growth in population and employment over the next twenty years, while
2 LAX is near the communities expected to experience the least growth in the same period; and

3 WHEREAS, developing airport capacity near high growth communities rather than
4 concentrating airport development at LAX may be environmentally superior, demand less public
5 investment, and offer a more equitable strategy for serving future growth in air commerce in
6 Southern California; and

7 WHEREAS, the development of these regional airport resources will help spread jobs
8 and economic development opportunities more equitably throughout the region, and reduce the
9 public health and environmental burdens on communities near LAX.

10 WHEREAS, the Joint Powers Commission of the March JPA adopted Resolution No.
11 JPA-99-01 on January 20, 1999, encouraging the communities of Southern California, including the
12 City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside and Ventura,
13 the State of California and the Southern California Congressional delegation to join together in
14 developing a new "Regional Airport Plan" for Southern California that constrains LAX to operate
15 within the capacity of its existing facilities and develop the capacity of the many other commercial
16 airports in Southern California to serve the expanding air commerce marketplace; and

17 WHEREAS, the City of Riverside City Council endorses Resolution No. JPA-99-01 and
18 supports development of a Regional Airport Plan.

19 NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Riverside,
20 California, that:

21 Section 1: The City of Riverside endorses the March JPA Resolution No. JPA-99-01.

22 Section 2: The communities of Southern California, including the City of Los Angeles,
23 the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura, the State of
24 California, and the Southern California Congressional delegation be encouraged to join together and
25 the City of Riverside supports joining together in developing a new "Regional Airport Plan" for
26 Southern California that constrains LAX to operate within the capacity of its existing facilities and
27 develops the capacity of the many other commercial airports in Southern California to serve the

1 expanding air commerce marketplace.

2 ADOPTED by the City Council and signed by the Mayor and attested by the City Clerk
3 this 2nd day of March, 1999.

4
5 
6 Mayor of the City of Riverside

7 Attest:

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9 
10 City Clerk of the City of Riverside

11 I, Colleen J. Nicol, City Clerk of the City of Riverside, California, hereby certify that the
12 foregoing resolution was duly and regularly introduced and adopted at a meeting of the City Council
13 of said City at its meeting held on the 2nd day of March, 1999, by the following vote, to wit:

14 Ayes: Councilmembers Beaty, Defenbaugh, Kane, Clifford and
15 Pearson.

16 Noes: None.

17 Absent: Councilmembers Moore and Thompson.

18 Abstain: None.

19 IN WITNESS WHEREOF I have hereunto set my hand and affixed the official seal of the
20 City of Riverside, California, this 2nd day of March, 1999.

21
22 
23 City Clerk of the City of Riverside

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27 [RES/99031801.ET]

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
ROSEMEAD SUPPORTING THE DEVELOPMENT OF A REGIONAL
AIRPORT SYSTEM FOR SOUTHERN CALIFORNIA**

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given LAX's location in the built-out, intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of airport resources in the high-growth areas of the region will lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

NOW, THEREFORE, BE IT RESOLVED THAT SCAG affirms its policy to encourage the development of aviation facilities in areas experiencing growth in demand, and

NOW, THEREFORE, BE IT RESOLVED THAT the Cities and Counties of Southern California, working through the Southern California Association of Governments and its Aviation Task Force, shall prepare a long-range Regional Airport Plan for Southern California that includes one or more fully-developed alternatives that distribute the growth in airline passenger and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impacts associated with each alternative.

DONE, THIS 13th DAY OF APRIL, 1999.


MAYOR

ATTEST:

AR00006

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss.
CITY OF ROSEMEAD

I, Nancy Valderrama, City Clerk of the City of Rosemead, do hereby certify that the foregoing Resolution No. 99-13 being:

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ROSEMEAD
SUPPORTING THE DEVELOPMENT OF A REGIONAL AIRPORT SYSTEM FOR
SOUTHERN CALIFORNIA**

was duly adopted at a regular meeting of the Rosemead City Council on the 14th of April, 1999, by the following vote to wit:

AYES:	VASQUEZ, BRUESCH, CLARK, IMPERIAL, TAYLOR
NOES:	NONE
ABSTAIN:	NONE
ABSENT:	NONE



NANCY VALDERRAMA

AGENDA: CERTIFY

AR00006

1
2 **RESOLUTION OF THE MAYOR AND COMMON COUNCIL OF THE CITY**
3 **OF SAN BERNARDINO CALLING FOR A REGIONAL AIRPORT PLAN FOR**
4 **SOUTHERN CALIFORNIA.**

5 **WHEREAS, access to commercial and cargo aviation opportunities is important to**
6 **economic vitality and job creation throughout the region; and**

7 **WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air**
8 **passengers per year and 8.9 million tons of air cargo per year by 2020; and**

9 **WHEREAS, the Los Angeles Department of Airports has initiated a revision of the**
10 **Masterplan for Los Angeles International Airport (LAX) that advocates expansion of its**
11 **passenger activity from 60 million air passengers per year to an expected 98 million per**
12 **year and its cargo activity from its current 1.7 million tons per year to an expected 4.2**
13 **million tons per year; and**

14 **WHEREAS, airport officials estimate that the expansion of LAX to accommodate the**
15 **proposed level of aviation activity would cost as much as 12 billion dollars, and would**
16 **necessitate the expenditure of billions of dollars more to lessen its impact on the ground**
17 **transportation system; and**

18 **WHEREAS, the proposed expansion, given LAX's location in the built-out, intensely**
19 **congested west side of the South Coast Air Basin where its contribution to air pollution**
20 **is greatest appears to be a high-cost, high impact approach to meeting the region's need**
21 **for added aviation capacity; and**

22 **WHEREAS, there at least nine other developing or existing commercial airports in**
23 **Southern California, several of which are located in areas expected to experience the**
24 **greatest growth in population and employment over the next 20 years, while the LAX area**
25 **is expected to experience the region's least growth; and**

26 **WHEREAS, developing airport capacity in areas of high growth and lower infrastructure**
27 **costs rather than concentrating airport development at LAX may be an environmentally**
28 **superior, lower cost, and more equitable strategy for serving future growth in air**
29 **commerce in Southern California; and**

30 **WHEREAS, the development of airport resources in the high-growth areas of the region**
31 **will lead to a more equitable distribution of jobs and opportunities for economic growth,**
32 **while reducing the burden on the regional transportation system.**

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February 25, 1999

A RESOLUTION OF THE MAYOR AND COMMON COUNCIL OF THE CITY OF SAN BERNARDINO CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA.

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I HEREBY CERTIFY that the foregoing resolution was duly adopted by the Mayor and Common Council of the City of San Bernardino at a joint regular meeting thereof, held on the 1st day of March, 1999, by the following vote, to wit:

<u>Council Members</u>	<u>AYES</u>	<u>NAYS</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
ESTRADA	<u>X</u>	—	—	—
LIEN	<u>X</u>	—	—	—
McGINNIS	<u>X</u>	—	—	—
SCHNETZ	<u>X</u>	—	—	—
DEVLIN	<u>X</u>	—	—	—
ANDERSON	<u>X</u>	—	—	—
MILLER	<u>X</u>	—	—	—

Rachel Clark
City Clerk

The foregoing resolution is hereby approved this 2 day of March, 1999.

Jalles
JUDITH VALLES, Mayor
City of San Bernardino

Approved as to form and legal content:

James F. Penman,
City Attorney

By: James F. Penman

February 25, 1999

City of San Jacinto

RESOLUTION NO. 99-. 22

JOINT RESOLUTION FOR GENERAL ASSEMBLY

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given LAX's location in the built-out, intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of airport resources in the high-growth areas of the region will lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

NOW, THEREFORE, BE IT RESOLVED that SCAG affirms its policy to encourage the development of aviation facilities in areas experiencing growth in demand, and

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Cities and Counties of Southern California, working through the Southern California Association of Governments and its

AR00006

Aviation Task Force, shall prepare a long-range Regional Airport Plan for Southern California that includes one or more fully-developed alternatives that distribute the growth in airline passenger and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impacts associated with each alternative.

MOVED, PASSED, AND ADOPTED this 6th day of May, 1999, by the following vote:

AYES: Council Members Conner, Good, Smedley, Williams & Mayor Cornett

NOES: None

ABSTAIN: None

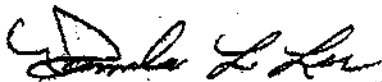
ASSENT: None



Debbie Cornett
Mayor

ATTEST:

Pamela L. Lee



City Clerk

AR00006

RESOLUTION NUMBER 9327 (CCS)

(City Council Series)

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA
MONICA CALLING FOR THE DEVELOPMENT OF A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, the City of Los Angeles Department of Airports has initiated a revision to the Master Plan for Los Angeles International Airport (LAX) in order to expand the passenger and cargo capacity of LAX to accommodate an expected 98 million annual passengers and 4.2 million tons of annual cargo load by the year 2015; and

WHEREAS, communities in the vicinity of LAX already experience enormous adverse environmental impacts from operations of the airport; and

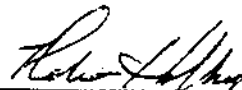
WHEREAS, the proposed expansion is expected to further impact these communities as a result of increased noise, air pollution and road and freeway congestion; and

WHEREAS, improvements to LAX to accommodate the expected growth in passenger and cargo activity, which could cost as much as twelve billion dollars, plus the costs of transportation improvements required to facilitate access to LAX, will be paid for by regional taxpayers; and

WHEREAS, there are many airports in Southern California, some with significant histories as commercial airports, some which have recently been converted to commercial airports and some military airports which are planned to be converted to commercial or joint-use airports; and

WHEREAS, several of these airports are located in areas of Southern California

Adopted and approved this 13th of October, 1998.



Robert Holbrook, Mayor

I, Maria M. Stewart, City Clerk of the City of Santa Monica, do hereby certify that the foregoing Resolution 9327 (CCS) was duly adopted at a meeting of the Santa Monica City Council held on the 13th of October, 1998 by the following vote:

Ayes: Councilmembers: Ebner, Feinstein, Genser, Holbrook, O'Connor

Noes: Councilmembers: None

Abstain: Councilmembers: None

Absent: Councilmembers: Rosenstein

ATTEST:



Maria M. Stewart, City Clerk

AR00006

RESOLUTION NUMBER 4878

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SEAL BEACH CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA

- WHEREAS, The Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and
- WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and
- WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and
- WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and
- WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports and some recently converted to commercial or joint military and commercial airports; and
- WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years while LAX is nearest to communities expected to experience the least growth in the same period; and
- WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and
- WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Seal Beach calls upon the communities of Southern California, including the City of Los Angeles; the counties of Los Angeles, Orange, San Bernardino, Riverside and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Seal Beach on 26th day of February, 2001 by the following vote:

AYES: Councilmembers Byrd, Campbell, Doane, Larson, Jast
NOES: Councilmembers None
ABSENT: Councilmembers None

Patricia E. Campbell
Mayor

ATTEST:
Joanne M. Yeo
Joanne M. Yeo, City Clerk

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF SEAL BEACH)

I, Joanne M. Yeo, City Clerk of Seal Beach, California, do hereby certify that the foregoing resolution is the original copy of Resolution Number 4878 on file in the office of the City Clerk, passed, approved, and adopted by the City Council of the City of Seal Beach, at a regular meeting thereof held on the 26th day of February, 2001.

Joanne M. Yeo
City Clerk

RESOLUTION NO. 6560

CITY OF SOUTH GATE
LOS ANGELES COUNTY, CALIFORNIA

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOUTH GATE,
SUPPORTING THE DEVELOPMENT OF A REGIONAL AIRPORT PLAN FOR
SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 62 million passengers per year to an expected 90 million passengers per year and its cargo activity from its current 2.1 million tons per year to an expected 4.2 million tons per year, and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience adverse environmental impacts from the operations of the airport can expect increased noise and air pollution from overhead aircraft and increased congestion and air pollution from ground traffic around the airport; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years; and

WHEREAS, developing airport capacity near high growth communities may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California, and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SOUTH GATE DOES
FIND, DETERMINE, RESOLVE AS FOLLOWS:

SECTION 1. The communities of Southern California, including the City of South Gate; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives join together in developing a Regional Airport Plan for Southern California that is balanced in developing the capacity of its existing facilities, and to develop the capacity of the many other commercial airports in Southern California so as to serve the expanding air commerce marketplace.

SECTION 2. The City Clerk shall certify to the passage and adoption of this Resolution which shall take effect and be in force immediately.

PASSED, APPROVED and ADOPTED this 25th day of April, 2000.

Hector De la Torre
HECTOR DE LA TORRE, MAYOR

Nina Banuelos

NINA BANUELOS, CITY CLERK
(SEAL)

APPROVED AS TO FORM:

Arnold M. Alvarez-Glasman

ARNOLD M. ALVAREZ-GLASMAN
CITY ATTORNEY

RESOLUTION CERTIFICATION PAGE

STATE OF CALIFORNIA

COUNTY OF LOS ANGELES, SS.

CITY OF SOUTH GATE

I, NINA BAÑUELOS, City Clerk of the City of South Gate, California, do hereby certify that the whole number of Members of the City Council of said City is five; that Resolution No. 6560 was unanimously adopted by the City Council at their Regular Meeting held on April 25, 2000 by the following vote:

Ayes:	Council Members:	De La Torre, De Witt, Gonzalez, Moriel and Ruvalcaba
Noes	Council Members	None
Absent	Council Members	None
Abstain.	Council Members	None

Witness my hand and the seal of said City on May 1, 2000.

NINA BAÑUELOS, City Clerk
City of South Gate, California

RESOLUTION NO. 2001 - 20**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF STANTON, CALIFORNIA, CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, The Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX and John Wayne Airport which already experience enormous adverse environmental impact from the operations of the airport can expect greatly increased noise and ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

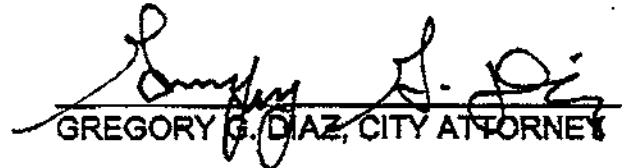
WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX; and

NOW, THEREFORE LET IT BE RESOVLED, that the City Council of Stanton calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

ADOPTED, SIGNED AND APPROVED this 10th day of April, 2001.


WILLIAM C. ESTRADA, MAYOR

APPROVED AS TO FORM:


GREGORY G. DIAZ, CITY ATTORNEY

ATTEST:

I, Brenda Green, City Clerk of the City of Stanton, California DO HEREBY CERTIFY that the foregoing Resolution, being Resolution No. 2000-20 has been duly signed by the Mayor and attested by the City Clerk, all at a regular meeting of the Stanton City Council, held on April 10, 2001, and that the same was adopted, signed and approved by the following vote to wit:

AYES:	Donahue, Dotson, Estrada, Ethans, Shawver
NOES:	None
ABSENT:	None
ABSTAIN:	None


BRENDA GREEN, CITY CLERK

RESOLUTION NO. 99-21

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TEMECULA SUPPORTING THE DEVELOPMENT OF A SUBREGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA

NOW BE IT RESOLVED by the City Council of the City of Temecula as follows:

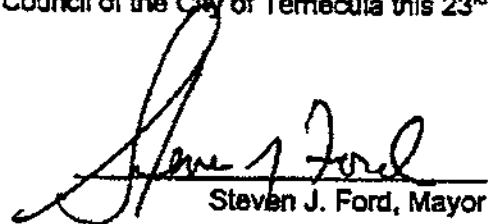
Section 1. The City Council of the City of Temecula does hereby find, determine and declare as follows:

- A. Access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region. Aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 tons of cargo per year by 2020.
- B. The Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million per year.
- C. Airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system.
- D. The proposed expansion, given LAX's location in the built-out, intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's needs for added aviation capacity.
- E. There are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth.
- F. Developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California.
- G. The development of airport resources in the high-growth areas of the region will lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

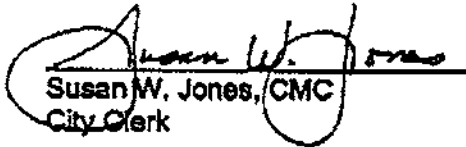
Post-It™ brand fax transmittal memo 7671		# of pages	2
To	Denny Zane	From	Gwyn Flores
Co.	Urban Dimensions	City of Temecula	
Dept.		Phone #	(909) 694-6475
Fax #		Fax #	AR000006

Section 2. The City Council of the City of Temecula does hereby resolve that the City of Temecula supports the Southern California Association of Governments in its efforts to develop a Subregional Airport Plan for Southern California that includes one or more fully-developed alternatives that distribute the growth in airline passenger and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impacts associated with each alternative.

PASSED, APPROVED, AND ADOPTED, by the City Council of the City of Temecula this 23rd day of March, 1999.


 Steven J. Ford, Mayor

ATTEST:

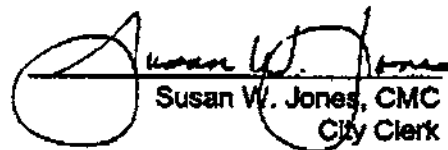

 Susan W. Jones, CMC
 City Clerk

[SEAL]

STATE OF CALIFORNIA)
 COUNTY OF RIVERSIDE) ss
 CITY OF TEMECULA)

I, Susan W. Jones, City Clerk of the City of Temecula, California, do hereby certify that Resolution No. 99-21 was duly and regularly adopted by the City Council of the City of Temecula at a regular meeting thereof held on the 23rd day of March, 1999, by the following vote:

AYES:	5	COUNCILMEMBERS:	Comerchero, Lindemans, Roberts, Stone, Ford
NOES:	0	COUNCILMEMBERS:	None
ABSENT:	0	COUNCILMEMBERS:	None


 Susan W. Jones, CMC
 City Clerk

RESOLUTION 99-129

**RESOLUTION CALLING FOR A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

- WHEREAS: The Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and,
- WHEREAS: Expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,
- WHEREAS: Communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,
- WHEREAS: Airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,
- WHEREAS: There are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and,
- WHEREAS: Several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and
- WHEREAS: Developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and
- WHEREAS: The development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED that the City of Torrance calls upon the communities of Southern California, including the City of Los Angeles; the counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

INTRODUCED, APPROVED AND ADOPTED this 23rd day of November, 1999.

/s/ Dee Hardison
Mayor of the City of Torrance

ATTEST:

/s/ Sue Herbers
City Clerk of the City of Torrance

APPROVED AS TO FORM:
John L. Fellows III, City Attorney

By: /s/ Ronald T. Pohl
Ronald T. Pohl, Assistant City Attorney

AR00006

RESOLUTION NO. 99-02

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TWENTYNINE PALMS,
CALIFORNIA, SUPPORTING SOUTHERN CALIFORNIA ASSOCIATION OF
GOVERNMENTS POLICY TO ENCOURAGE THE DEVELOPMENT OF AVIATION
FACILITIES IN AREAS EXPERIENCING GROWTH IN DEMAND**

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given LAX's location in the built-out, intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

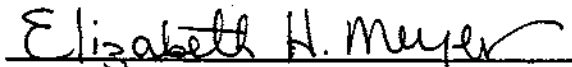
WHEREAS, the development of airport resources in the high-growth areas of the region will lead to more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

THEREFORE, be it resolved that The City of Twentynine Palms supports SCAG's policy to encourage development of aviation facilities in areas experiencing growth in demand.

BE IT FURTHER RESOLVED that the City Council supports the preparation of a long-range Regional Airport Plan for Southern California.

APPROVED AND ADOPTED this 23rd day of March, 1999, by the following vote to wit:

AYES:	COUNCILMEMBERS:	BAGLEY, COLE, DUBE, MASKER, MEYER
NOES:	COUNCILMEMBERS:	
ABSENT:	COUNCILMEMBERS:	


Elizabeth H. Meyer, Mayor

ATTEST:


Charlene L. Sherwood, City Clerk

RESOLUTION NO. 5021

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF UPLAND
CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

- WHEREAS:** The Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and
- WHEREAS:** Expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and
- WHEREAS:** Communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and
- WHEREAS:** Airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and
- WHEREAS:** There are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joining military and commercial airports; and
- WHEREAS:** Several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and
- WHEREAS:** Developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving further growth in air commerce in Southern California; and
- WHEREAS:** The development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED:

SECTION 1: The City of Upland calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

The foregoing Resolution was passed and adopted by the City Council of the City of Upland at a regularly scheduled meeting thereof held on the 8th day of March, 1999, by the following roll call vote:

AYES: Mayor Pro Tem Thomas, Councilmembers Sundell, Libutti

NAYS: None ABSENT: Mayor Nolan, Councilmember Musser ABSTAIN: None



Tom R. Thomas, Mayor Pro Tem

ATTEST:



Sheryll Schroeder, CMC/AAE
Legislative Services Director

RESOLUTION NO. 99-17

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VICTORVILLE URGING THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS AND ITS AVIATION TASK FORCE TO PREPARE A LONG RANGE REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion given LAX's location in the built-out intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of airport resources in the high-growth areas of the region will lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

NOW, THEREFORE, BE IT RESOLVED THAT THE CITY COUNCIL OF THE CITY OF VICTORVILLE encourages the development of aviation facilities in areas experiencing growth in demand; and

NOW THEREFORE, BE IT FURTHER RESOLVED THAT THE CITY COUNCIL OF THE CITY OF VICTORVILLE urges the Southern California Association of Governments and its Aviation Task Force to prepare a long-range Regional Airport Plan for Southern California that includes one or more fully-developed alternatives that distribute the growth in airline passenger and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impacts associated with each alternative.

PASSED, APPROVED AND ADOPTED this 16th day of March, 1999.

Tommy E. Caldwell

MAYOR OF THE CITY OF VICTORVILLE

ATTEST:

Carolee Stotko
CITY CLERK

APPROVED AS TO FORM AND CONTENT:

Henry H. [Signature] 3-17-99
CITY ATTORNEY

I, CAROLEE STOTKO, City Clerk of the City of Victorville and ex-officio Clerk to the City Council of said City, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Resolution No. 99-17 which was adopted at a meeting held on the 16th day of March, 1999, by the following roll call vote, to wit:

AYES: Councilmembers Almond, Cabriales, Caldwell and Rothschild

NOES: None

ABSENT: Mayor Pro Tem Hunter

ABSTAIN: None

Carolee Stotko

CITY CLERK OF THE CITY OF VICTORVILLE

AR00006

FROM : CITY OF VILLA PARK

FAX NO. : 714 998 1508

Sep. 28 2001 12:03PM P2

*YIPD - Villa Park
EC 10/10*

RESOLUTION 2001-2539

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VILLA PARK
CALLING FOR A REGIONAL AIRPORT PLAN
FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.6 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, there are other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial operations; and

WHEREAS, several of these airports are located in areas of Southern California that are expected to experience the greatest growth in population and employment over the next twenty years; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, and lower-cost strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Villa Park hereby calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura, the State of California, and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that develops the capacity of all airports in Southern California to serve the expanding demand for air commerce.

PASSED AND ADOPTED by the City Council of the City of Villa Park at a regular meeting held on the 28th day of August, 2001.


Russell Patterson, Mayor
City of Villa Park

ATTEST:


Kathy Adrian, City Clerk
City of Villa Park

FROM : CITY OF VILLA PARK

FAX NO. : 714 998 1508

Sep. 20 2001 12:03PM P3

Resolution No. 2001-2539
Page 2

STATE OF CALIFORNIA)

COUNTY OF ORANGE)

§

I, **KATHY ADRIAN**, City Clerk of the City of Villa Park **DO HEREBY CERTIFY** that the foregoing Resolution was duly adopted by the City Council of the City of Villa Park on the 28th day of August, 2001, and was carried by the following roll call vote, to wit:

AYES:	COUNCILMEMBERS:
NOES:	COUNCILMEMBERS:
ABSENT:	COUNCILMEMBERS:

McCowan, Freschi, Bell, MacAloney, Patterson
None
None


 Kathy Adrian
 City Clerk

RESOLUTION NO. 98-2026

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WEST HOLLYWOOD OPPOSING THE MASTER PLAN PROPOSED BY THE CITY OF LOS ANGELES DEPARTMENT OF AIRPORTS AND CALLING FOR THE DEVELOPMENT OF A LONG TERM REGIONAL STRATEGIC PLAN FOR OUR AIR TRAFFICE NEEDS.

THE CITY COUNCIL OF THE CITY OF WEST HOLLYWOOD HEREBY RESOLVES AS FOLLOWS:

WHEREAS, The Los Angeles Department of Airports has initiated a revision of the Master plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, Expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, Communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, Airport officials estimate LAX improvement will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and,

WHEREAS, There are many other commercial airports in Southern California, some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, Several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period. For example, the City of Los Angeles owns huge tracks of land in fast-developing Palmdale surrounding the Palmdale Airport—and the local community strongly supports airport development to generate jobs and economic opportunities; and,

Resolution No. 99-2026
Page 2

WHEREAS, Developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, The development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX:

NOW, THEREFORE, BE IT RESOLVED that the City of West Hollywood opposes the current master plan framework, and calls upon the City of Los Angeles Airports Commission and the Department of Airports to reject any master plan revision that does not address long-term, regional air traffic needs.


BE IT FURTHER RESOLVED that the City of West Hollywood joins the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California; and

BE IT FURTHER RESOLVED that the City of Los Angeles restrict LAX to operate within the capacity of its existing facilities and to facilitate the development of capacity of the many other commercial airports in Southern California, including Palmdale, to serve the expanding air commerce marketplace.

PASSED, APPROVED AND ADOPTED THIS 16th day of February, 1999.


MAYOR

ATTEST:

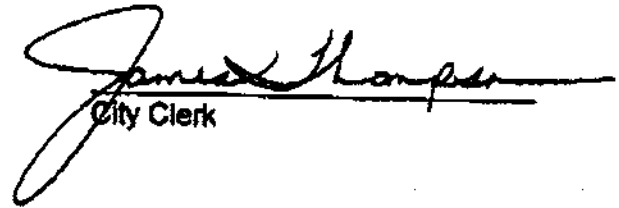

City Clerk

Resolution No. 98-2026
Page 3

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES)
CITY OF WEST HOLLYWOOD)

I, JAMES THOMPSON, City Clerk of the City of West Hollywood, do hereby certify that Resolution No. 98-2026, was duly passed, approved and adopted by the City Council of the City of West Hollywood at a regular meeting held the 18th day of February, 1999, by the following vote:

AYES: Councilmember - Guarriello, Koretz, Prang, Mayor Martin.
NOES: Councilmember - Heilman.
ABSENT: Councilmember - None.


City Clerk

Post-It® Fax Note	7671	Date	2-17	# of pages	4
To	<i>Luis Maguerz</i>		From	<i>Sandy Jackson</i>	
Co./Dept.	<i>City of El Segundo</i>		Co.	<i>City of Whittier</i>	
Phone #			Phone #		
Fax #	<i>310 999 6765</i>		Fax #		

RESLOI

**A RESOLUTION OF
CITY OF WHITTIER,
EXPANSION OF
INTERNATIONAL AIRPORT (LAX)**

WHEREAS, the City of Los Angeles Department of Airports seeks to add additional runways and flights to and from LAX to double its passenger and cargo capacity rather than utilize other Los Angeles Department of Airport properties, or other regional airports in a "fair share" balance within the five (5) county regions of Ventura, Los Angeles, Riverside and Orange Counties; and

WHEREAS, the expansion of LAX will result in even higher levels of hazardous air pollution, noise pollution, and air traffic congestion which will have a severe impact on the health, safety, and quality of life of residents in the City of Whittier; and

WHEREAS, the expansion of LAX will result in the continuous flow of low flying commercial aircraft over the City of Whittier thereby destroying the quiet ambience of the community and making residential property less desirable; and

WHEREAS, the expansion of LAX has been opposed by the cities of Monterey Park, Inglewood, Hawthorne, El Segundo and Redondo Beach who will also be impacted from increased air traffic into LAX associated with its expansion; and

WHEREAS, LAX's expansion plans are an unrealistic attempt to accommodate all of the Los Angeles area's air transportation needs into one of the nation's smallest metropolitan airports.

THE CITY COUNCIL OF THE CITY OF WHITTIER DOES RESOLVE AS FOLLOWS:

SECTION 1. The City of Whittier opposes the expansion of LAX.

SECTION 2. Urge State and Federal legislatures to enact legislation that requires environmental studies on the negative impacts of low flying aircraft on communities that lie within the flight paths of airports.

SECTION 3. Instruct staff to closely follow the efforts of other San Gabriel Valley cities and other affected communities to see what efforts they are pursuing to prevent airport expansion plans from further deteriorating our residents' quality of life.

SECTION 4. The City Clerk shall certify to the passage and adoption hereof.

APPROVED AND ADOPTED this 11th day of November, 1997

Janet R Henke

JANET R. HENKE, Mayor

ATTEST:

Kathryn A Marshall

KATHRYN A. MARSHALL
City Clerk - Treasurer

CITY OF WHITTIER)
) SS
 STATE OF CALIFORNIA)

I, Kathryn A. Marshall, City Clerk in and for the City of Whittier, hereby certify that the above and foregoing is a true and correct copy of Resolution No. 6835, adopted by the City Council in regular session, Tuesday, the 11th day of November, 1997 and same was passed by the following vote:

AYES: D. O Butler A. P. Zolnekoff J. G. Nordbak
 J. R. Henke

NOES: None

ABSTAIN: R. L. Henderson

ABSENT: None

WITNESS my hand and the official seal of the City of Whittier this 11th day of November, 1997.

Kathryn A. Marshall

 KATHRYN A. MARSHALL, City Clerk

RESOLUTION NO. 99-05A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YUCAIPA, CALIFORNIA,
CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX), which anticipates expanding its passenger activity from a current 60-million passengers per year to an expected 98-million passengers per year and, its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year, and

WHEREAS, expanding LAX's passenger and cargo activity, as proposed, will greatly increase the number of flights and nearly double ground traffic going to and from LAX, and

WHEREAS, communities in the vicinity of LAX, which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft and greatly increased congestion and air pollution from ground traffic, especially from dramatic increase in the activity of diesel trucks around the airport, and

WHEREAS, airport officials estimate the LAX improvements will cost as much as 1.2 billion, not including the costs of transportation improvements required to facilitate access to LAX, which will be paid for by regional tax payers, and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports, and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period, and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California, and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

RESOLUTION NO. 99-05
PAGE 2

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF YUCAIPA, CALIFORNIA, DOES HEREBY RESOLVE, DETERMINE AND ORDER AS FOLLOWS:

Section I. That the City of Yucaipa hereby calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED AND ADOPTED this 22nd day of March 1999.



DAN CRAIN, MAYOR

ATTEST:


NITA BROWN, CITY CLERK

STATE OF CALIFORNIA }
COUNTY OF SAN BERNARDINO } ss.
CITY OF YUCAIPA }

I, NITA BROWN, City Clerk of the City of Yucaipa, do hereby certify that the
aforementioned is a true and correct copy of RESOLUTION 99-05 known as:

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YUCAIPA,
CALIFORNIA, CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN
CALIFORNIA**

and which is on file in the Office of the City Clerk, City of Yucaipa,
California.

Said Resolution was adopted by the said City Council at a Regular meeting
thereof held on the 22nd day of March 1999, by the following vote:

- AYES: Council Member s Button, Drusys and Masner. Mayor Pro Tem
 Riddell. Mayor Crain.
- NOES: None.
- ABSTAIN: None.
- ABSENT: None.



NITA BROWN, CITY CLERK

This 23rd day of March 1999.

RESOLUTION NO. 99-4

RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF
YUCCA VALLEY, CALIFORNIA, SUPPORTING SOUTHERN
CALIFORNIA ASSOCIATION OF GOVERNMENTS POLICY
TO ENCOURAGE THE DEVELOPMENT OF AVIATION
FACILITIES IN AREAS EXPERIENCING GROWTH IN
DEMAND

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given LAX's location in the built-out, intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

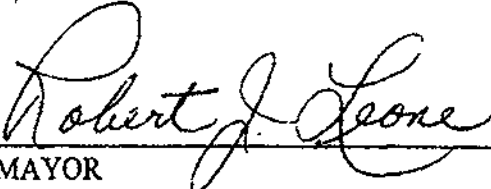
WHEREAS, the development of airport resources in the high-growth areas of the region will lead to more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Yucca Valley


supports SCAG's policy to encourage development of aviation facilities in areas experiencing growth in demand

BE IT FURTHER RESOLVED that the Town Council supports the preparation of a long-range Regional Airport Plan for Southern California.

APPROVED AND ADOPTED this 18th day of March, 1999


MAYOR

ATTEST:


TOWN CLERK

STATE OF CALIFORNIA

COUNTY OF SAN BERNARDINO

TOWN OF YUCCA VALLEY

I, Janet M. Anderson, Town Clerk of the Town of Yucca Valley, California do hereby certify that Resolution No. 99-4 was duly and regularly adopted by the Town Council of the Town of Yucca Valley, California, at a meeting thereof held on the 18th day of March, 1999, by the following vote:

AYES: Council Members Cook, Hunt, Neeb, Scott and Mayor Leone

NOES: None

ABSENT: None

ABSTAIN: None


TOWN CLERK

AR00006

Approved 11/2/91

B Denny Zane
Fin Her Golden
16 Sept 98
5 p. fcs

**A RESOLUTION OF THE
SOUTH BAY CITIES COUNCIL OF GOVERNMENTS**

SOURCE: LAX Standing Committee

WHEREAS, the regional need for commercial airport services is far greater than can be satisfied by a single location; and

WHEREAS, the City of Los Angeles Department of Airports is developing a Master Plan for LAX to guide the development and operation of the airport through the year 2015; and

WHEREAS, the proposed expansion includes nearly doubling the number of passengers serviced annually by the airport and increasing cargo operations by nearly 150 percent; and

WHEREAS, the impacts of LAX on the SCAG region are already substantial and multifaceted, including economic, safety, noise, crime, vehicular traffic, and air quality, to mention a few; and

WHEREAS, the impacts of noise, crime, vehicular traffic and air quality of the South Bay Region of SCAG are disproportionate to the benefits provided to those cities by LAX;

WHEREAS, there has been no study of the environmental impacts LAX has on the SCAG region since 1978; and

WHEREAS, the development scenarios presented by LAX offer no alternatives other than expanding the operations at LAX within its existing boundaries; and

WHEREAS, air services should be dispersed throughout the region to maximize benefits to all communities within the region and minimize impacts to any one or small group of communities; and

WHEREAS, there are several other airports in the SCAG region, including John Wayne, Long Beach, Burbank, Ontario, March Air Force Base, El Toro MCAS, as well as property owned by Los Angeles in Palmdale purchased for siting a new airport; and

WHEREAS, several of these commercial airports in the SCAG region are also seeking to expand their operations.

NOW, THEREFORE, BE IT RESOLVED, that the South Bay Cities Council of Governments demands that SCAG consider the determination of consistency of the LAX Environment Impact Report with the Regional Transportation Plan only after the City of Los Angeles has demonstrated that it has made every effort to coordinate the proposed expansion of LAX with all other commercial airport facilities or possible future commercial airport facilities in the region.

The Clerk shall certify to the passage and adoption of this Resolution; and shall make a minute of the passage and adoption thereof in the records of the proceedings of the South Bay Cities Council of Governments in the minutes of the meeting at which the same is passed and adopted.

PASSED, APPROVED AND ADOPTED this 20th day of November, 1997.

Dee Hardison, Chair
South Bay Cities
Council of Governments

Fax For ^{Denny Zane}
~~Mike Wiant~~
FM Harv Holden

3 Feb 98
2 pages

Sorry I don't have a copy signed by
Dee, but this is the Reso the SBCCOG
adopted in Nov 97

*EL Segundo USD***RESOLUTION**

No. 15/1998-99

**RESOLUTION CALLING FOR A REGIONAL AIRPORT PLAN
FOR SOUTHERN CALIFORNIA**

WHEREAS, The Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, Expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, School Districts and communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, There are many other commercial airports in Southern California, some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, Several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, Developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, The development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

AR00006

NOW, THEREFORE, BE IT RESOLVED, THAT the Board of Education of the El Segundo Unified School District calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

**BOARD OF EDUCATION
EL SEGUNDO UNIFIED SCHOOL DISTRICT**

Kathleen A. Wiley
President

Michael D. Biny
Member

[Signature]
Vice-President

[Signature]
Member

Christine Merrell
Clerk

Inglewood Unified School District
Board of Education LAX Resolution, Approved March 24, 1999

WHEREAS, the Los Angeles World Airports of the City of Los Angeles (LAWA) is developing a Master Plan for Los Angeles International Airport (LAX) to guide the development and operation of the airport through the year 2015; and

WHEREAS, the current operations of LAX far exceed projections that are contained within its only comprehensive environmental assessment that was published in 1975; and

WHEREAS, the other cities and localities have estimated that the current operations at LAX may produce as much as 524 tons of air pollution each day from air and surface vehicles, which equals a pound of pollution per person per day for approximately 1 million people within a five-mile radius of LAX; and

WHEREAS, the Master Plan as presently proposed by LAWA does not presently address adequately the interest and concerns of citizens of Inglewood and Ladera Heights, which concerns and interests must be adequately addressed; and

WHEREAS, the airport expansion as proposed will place unsafe, unfair, and unacceptable burdens on the students, parents, faculty, community and staff of the Inglewood Unified School District, as well as other school districts and communities in the region; and

WHEREAS, the students, parents, faculty, staff and community of the Inglewood Unified School District have had to endure, for many years, increased air and noise pollution that is disproportionate to other communities in the region, with disruptions to classrooms and other student activities; and

WHEREAS, the Lennox Unified School District, the City Councils of Inglewood, Hawthorne, and El Segundo have drafted public statements and resolutions opposing the proposed expansion of LAX;

NOW THEREFORE, BE IT RESOLVED, that the Board of Education of the Inglewood Unified School District declares that it is opposed to the proposed expansion of LAX which will not be in the best interest of students and the Inglewood Unified School District community;

BE IT FURTHER RESOLVED, that the Board of Education calls on its Congressional Representatives to publicly oppose expansion of LAX and to make a statement thereto in the Congressional Record; and calls on its State Representatives to sponsor and pass resolutions opposing this expansion; and that the City Council make written statements of opposition to LAX expansion as part of the EIR/EIS process.

Approved by the Board of Education on Wednesday, February 24, 1999.

Ms. Thomasina Reed, Esq., President

Mrs. Eveline Ross, Vice President

Mrs. Alice Grigsby, Board Member

Ms. Gloria Gray, Board Member

Dr. Loystene-Irvin, Board Member

AR00006

Post-It* Fax Note	7671	Date	# of pages ▶
To	Mary Beth Vergara	From	Olga Hawkins
Co./Dept.		Co.	City of El Segundo
Phone #	310 899-6765	Phone #	
Fax #		Fax #	

RICT

WHEREAS, the Los Angeles World Airports of the City of Los Angeles (LAWA) is developing a Master Plan for Los Angeles International Airport (LAX) to guide the development and operation of the airport through the year 2015; and

WHEREAS, the proposed expansion of LAX includes nearly doubling the number of passengers serviced annually by the airport and increasing cargo operations by nearly 150%; and

WHEREAS, the current operations of LAX far exceed projections that are contained within its only comprehensive environmental assessment that was published in 1975; and

WHEREAS, the other cities and localities have estimated that the current operations at LAX may produce as much as 524 tons of air pollution each day from air and surface vehicles, which equals a pound of pollution per person per day for approximately 1 million people within a five-mile radius of LAX; and

WHEREAS, the Master Plan as presently proposed by LAWA does not presently address adequately the interest and concerns of citizens of Inglewood and Ladera Heights, which concerns and interests must be adequately addressed; and

WHEREAS, the airport expansion as proposed will place unsafe, unfair, and unacceptable burdens on the students, parents, faculty, community and staff of the Inglewood Unified School District, as well as other school districts and communities in the region; and

WHEREAS, the students, parents, faculty, staff and community of the Inglewood Unified School District have had to endure, for many years, increased air and noise pollution that is disproportionate to other communities in the region, with disruptions to classrooms other student activities; and

WHEREAS, the voters of the Inglewood Unified School District community have taken on additional responsibilities imposed by Measure K, our much-needed bond issue, which will have to, in part, deal with the negative effects of the current and proposed operations of LAX, as they impact our facilities; and

WHEREAS, the Lennox Unified School District, the City Councils of Inglewood, Hawthorne and El Segundo have drafted public statements and resolutions opposing the proposed expansion of LAX;

(Board of Education - LAX Resolution, Approved March 24, 1999)

page 2

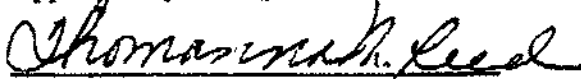
NOW THEREFORE, BE IT RESOLVED, that the Board of Education of the Inglewood Unified School District declares that it is opposed to the proposed expansion of LAX which will not be in the best interest of students and the Inglewood Unified School District community;

BE IT FURTHER RESOLVED, that the Board of Education calls on the Mayor and Inglewood City Council to develop a comprehensive strategy in opposition to the proposed expansion in concert with the Board of Education, and to send letters of opposition to the National and Western Regional Directors of the Federal Aviation Administration, the Chair of the LAWA Commission, Congressional Representatives for Inglewood and California, the President and Members of Los Angeles City Council, the Board of Supervisors, Speaker of the Assembly, President Pro Tempore of the Senate, and members of the Legislature who represent the residents of the Inglewood Unified School District;

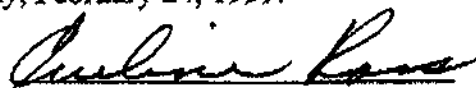
BE IT FURTHER RESOLVED, that the Board of Education urges the Inglewood City Council to oppose efforts to facilitate LAX expansion through zoning changes, traffic planning, relaxation or modification of building and safety ordinances or regulations, or any other action that may be taken by the City that would support LAX expansion; and further, the Board of Education requests that the City Council develop an ordinance that would provide a 30 day notice to the public for LAX-related actions, facilitate and widely publicize public hearings on any measures considered by the City Council that would aid expansion of LAX, using school facilities when desirable;

BE IT FURTHER RESOLVED, that the Board of Education calls on its Congressional Representatives to publicly oppose expansion of LAX and to make a statement thereto in the Congressional Record; and calls on its State Representatives to sponsor and pass resolutions opposing this expansion; and that the City Council make written statements of opposition to LAX expansion as part of the EIR/EIS process.

Approved by the Board of Education on Wednesday, February 24, 1999.



Ms. Thomasina Reed, Esq., President



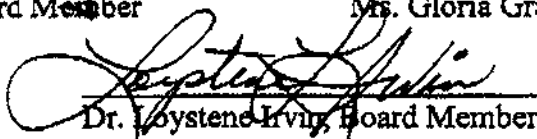
Mrs. Evelyne Ross, Vice President



Mrs. Alice Grigsby, Board Member



Ms. Gloria Gray, Board Member



Dr. Loystene Irvin, Board Member

AR00006

MANHATTAN BEACH UNIFIED SCHOOL DISTRICT

Resolution 1998-16, To Urge the Federal Aviation Administration
to

Discontinue the Practice of Routing Aircraft Over the City of Manhattan Beach

WHEREAS, the Manhattan Beach Unified School District is required to provide a safe and positive learning environment for all of its students, and

WHEREAS, the Federal Aviation Administration has recently redirected the flight paths of departing aircraft by redirecting their take off pattern to loop back eastbound over the city of Manhattan Beach, and

WHEREAS, the loop flight path has become an increased annoyance to students, staff and community members due to the significantly lowered aircraft traveling altitude as a result of the Federal Aviation Administration's new direction, and

WHEREAS, the proposed expansion of Los Angeles International Airport will increase the number of low altitude departure flights directly over the Manhattan Beach Unified School District, thus adding to the disruption of the learning environment for students, and

WHEREAS, the continued and proposed increase in low-level aircraft traffic over the Manhattan Beach Unified School District will negatively impact the current positive learning environment for students and will result in a lesser degree of student learning.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Trustees of the Manhattan Beach Unified School District concludes that:

1. The Federal Aviation Administration should take whatever steps necessary to rescind or redirect the present loop flight path over the Manhattan Beach Unified School District, Manhattan Beach City Proper, and any and all other South Bay school districts, and
2. A copy of this resolution should be sent to the cities and school districts in the South Bay areas affected by the new departure patterns from the Los Angeles International Airport, and
3. The various school districts within the South Bay communities take similar action.

Adopted this 9th day of September 1998, by:

Board of Trustees

LeRoy E. Nelson, President

Mary A. Rogers, Vice President

Lynette Campbell, Clerk

Peter Alfvin, Member

Michele M. Memmott, Member

AR00006

RESOLUTION 1998-17

**A RESOLUTION OF THE MANHATTAN BEACH UNIFIED SCHOOL DISTRICT,
MANHATTAN BEACH, CALIFORNIA, IDENTIFYING AREAS OF CONCERN WHICH
NEED TO BE ADDRESSED IN THE ENVIRONMENTAL REVIEW PROCESS FOR THE
LAX MASTER PLAN**

WHEREAS, the City of Los Angeles Department of airports is developing a Master Plan for LAX to guide the development and operation of the airport to meet the demands for aviation services through the year 2015; and

WHEREAS, the anticipated demand for aviation services in the southern California region is expected to significantly increase through the year 2015 including a 69% increase in the number of air passengers and a 121% increase in the amount of air cargo; and

WHEREAS, the City of Los Angeles Department of airports expects the annual number of aircraft operations at Los Angeles World Airport to increase 30% or from 763,000, to one million aircraft operations annually to accommodate this demand for aviation services; and

WHEREAS, the Los Angeles World Airport is currently considering four (4) concepts which would significantly expand the operations of the airport to accommodate the increase in aircraft operations; and

WHEREAS, the expansion of the Los Angeles World Airport and the associated impacts of the proposed expansion will have a significant affect on the Manhattan Beach Unified School District in the city of Manhattan Beach; and

WHEREAS, the Los Angeles World Airport and the Federal Aviation Administration will be conducting an environmental review process and drafting an Environmental Impact Report concerning the LAX Master Plan; and

WHEREAS, the airport is in close proximity to the Manhattan Beach Unified School District in the city of Manhattan Beach and the impacts of its operation are of critical interest to the entire community.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Trustees of the Manhattan Beach Unified School District in the city of Manhattan Beach, expects the Environmental Impact Report regarding the LAX Master Plan to address the environmental and economic impacts of each of the four proposed concepts with regards to several issues including, but not limited to noise, air quality, safety, utilization of existing flight patterns, changes in flight patterns and/or development of new flight patterns and the impacts of such changes, watershed changes and associated impacts, groundwater quality, light and glare, crime, and increased vehicular traffic.

ADOPTED, this 23rd day of September 1998, by:

LeRoy E. Nelson, President

Mary A. Rogers, Vice President

Lynette Campbell, Clerk

Peter Alfvin, Member

Michele M. Memmott, Member

AR00006

WISEBURN SCHOOL DISTRICT

RESOLUTION #00.1


CALLING FOR A REGIONAL AIRPORT PLAN
FOR SOUTHERN CALIFORNIA


- WHEREAS,** The Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and
- WHEREAS,** Expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and
- WHEREAS,** Communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and
- WHEREAS,** Airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and
- WHEREAS,** There are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and
- WHEREAS,** Several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and
- WHEREAS,** Developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and
- WHEREAS,** The development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.


NOW, THEREFORE, BE IT RESOLVED,

that the Wiseburn School District calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

Adopted this 25th day of July, 2000, in Hawthorne, California.



Walter Guerrero, President


Don Brann, Superintendent


Brian Meath, Clerk


Dennis Curtis, Member


Aaron Nathanson, Member


Walker Williams, Member

RESOLUTION NO. 99-01

RESOLUTION OF THE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
CALLING FOR A REGIONAL AIRPORT PLAN
FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for the Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding its passenger and cargo activity as proposal will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and,

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

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WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burden on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED THAT, the Riverside County Transportation Commission calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our Congressional Representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

ADOPTED AND APPROVED this 10th day of February, 1999.

Councilman Jack F. van Haaster, Chairman
Riverside County Transportation Commission

ATTEST:

Naty Kopenhaver, Clerk of the
Riverside County Transportation Commission

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In response to the proposed unconstrained expansion of LAX, a coalition of South Bay cities was formed to broaden understanding of the wide-ranging impacts associated with the proposed LAX Master Plan and build a regional coalition of interests to ensure that the RTP action steps are fully met. The coalition is seeking region wide support of its goals through adoption of a resolution calling for the development of a Regional Airport Plan for Southern California. The coalition is represented by Denny Zane of Gladstein and Associates who will be present at the Commission meeting to discuss the issues related to airport expansion and the coalition's resolution.

PLANS AND PROGRAMS COMMITTEE AND STAFF RECOMMENDATION:

That the Commission consider adoption of a Resolution No. 99-01, *Resolution of the Riverside County Transportation Commission Calling For a Regional Airport Plan For Southern California.*

RESOLUTION NO. 99-01

RESOLUTION OF THE

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

CALLING FOR A REGIONAL AIRPORT PLAN

FOR SOUTHERN CALIFORNIA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for the Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding its passenger and cargo activity as proposal will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and,

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WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burden on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED THAT, the Riverside County Transportation Commission calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our Congressional Representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

ADOPTED AND APPROVED this 10th day of February, 1999.

Councilman Jack F. van Haaster, Chairman
Riverside County Transportation Commission

ATTEST:

Naty Kopenhaver, Clerk of the

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RESOLUTION NO. 99-004**A RESOLUTION OF THE COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS
CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for the Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 95 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and,

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitable throughout the region, and reduce the public health and environmental burden on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED THAT, the Coachella Valley Association of Governments calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our Congressional Representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

ADOPTED this 7th day of June, 1999.

**COACHELLA VALLEY ASSOCIATION
OF GOVERNMENTS**

Mayor Marilyn Glassman, Chair

ATTEST:

Patricia A. Larson, Executive Director

Denny Zane
(310) 314-9196

March Joint Powers Commission

March Joint Powers Authority

RESOLUTION NO. JPA-98-13

DRAFT

**SUPPORTING THE
DEVELOPMENT AND IMPLEMENTATION OF A
"REGIONAL AIRPORT PLAN"
FOR SOUTHERN CALIFORNIA**

WHEREAS, the March Joint Powers Authority (JPA) created the "March Inland Port" as a joint use commercial airport in cooperation with the United States Air Force; and

WHEREAS, the development of commercial cargo operations at the March Inland Port is a key strategy in the pursuit of economic development and the creation of new jobs by the March JPA; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by taxpayers in the region; and

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DRAFT

March Joint Powers Commission

March Joint Powers Authority

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, some recently converted to commercial or joint use military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be environmentally superior, demand less public investment, and offer a more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED by the Joint Powers Commission of the March Joint Powers Authority at its regular meeting held on December 16, 1998, that the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura, the State of California, and the Southern California Congressional delegation join together in developing a new "Regional Airport Plan" for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

State of California)

County of Riverside)

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March Joint Powers Commission

March Joint Powers Authority

I, Gayle Signorino, Secretary of the March Joint Powers Authority, do hereby certify that the foregoing resolution was duly and regularly adopted by the Joint Powers Commission.

Ayes:

Noes:

Absent:

Date: December 16, 1998

GAYLE SIGNORINO
Secretary

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2 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
3 INGLEWOOD, CALIFORNIA, WITH RESPECT TO THE
4 PROPOSED EXPANSION OF LAX

5 WHEREAS, the proposed expansion of LAX would place unsafe, unfair, and unacceptable
6 burdens on the community of Inglewood and many other communities in the region; and

7 WHEREAS, expanding air traffic at LAX is not necessary for the region's prosperity, since
8 future air traffic demand can be met at other airports in communities throughout Southern California,
9 especially at airports in communities that will experience the highest rates of population growth in the
10 region over the next two decades; and

11 WHEREAS, serving the regional air transportation needs of Southern California by way of
12 airports dispersed throughout the region will reduce environmental impacts, particularly air quality and
13 traffic impacts, in comparison to a massive expansion of LAX; and

14 WHEREAS, the interests and concerns of Inglewood citizens are of paramount importance in
15 all discussions related to the LAX Master Plan and the Inglewood City Council demands that the
16 interests of its residents are adequately and effectively addressed by Los Angeles World Airports
17 (LAWA); and

18 WHEREAS, LAWA must assist the City of Inglewood in mitigating the current damage that
19 has been caused by aircraft noise and airport traffic before any regional expansion should be considered,
20 including all eligible homes in Inglewood must be sound insulated and grant funding must be made
21 available for public safety services directly related to airport traffic and aircraft disaster preparedness;
22 and

23 WHEREAS, other cities surrounding LAWA must begin to share some of the air flight traffic
24 that disproportionately burdens the City of Inglewood before any expansion should be considered.

25 NOW, THEREFORE, the City Council of the City of Inglewood, California, does hereby
26 resolve as follows:

27 SECTION 1. That the City Council strongly opposes the proposed expansion of Los Angeles
28 International Airport.

29 SECTION 2. That this Resolution shall take effect immediately.

30 SECTION 3. That the City Clerk shall certify to the passage and adoption of this Resolution,
31 shall enter the same in the book of original resolutions of said City, and shall make a minute of the
32 passage and adoption thereof in the records of the proceedings of the City Council of said City, in the

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minutes of the meeting at which the same is passed and adopted.

PASSED, APPROVED AND ADOPTED THIS 6th DAY OF October, 1998.

ROOSEVELT F. DORN
ROOSEVELT F. DORN
MAYOR

ATTEST:

HERMANITA V. HARRIS
HERMANITA V. HARRIS
CITY CLERK

RESOLUTION NO. 99- 10

A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF LAKE ELSINORE, CALIFORNIA,
SUPPORTING THE "JOINT RESOLUTION FOR
GENERAL ASSEMBLY"

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, aviation demand within the entire region is forecast to exceed 157 million air passengers per year and 8.9 million tons of air cargo per year by 2020; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passengers per year to an expected 98 million per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given LAX's location in the built-out, intensely congested west side of the South Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of airport resources in the high-growth areas of the region will

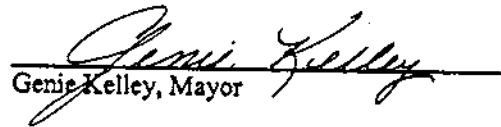
lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Lake Elsinore does hereby support SCAG's policy to encourage the development of aviation facilities in areas experiencing growth in demand; and

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council of the City of Lake Elsinore, working through the Southern California Association of Governments and its Aviation Task Force, shall participate with cities and counties of Southern California to prepare a long-range Regional Airport Plan for Southern California that includes one or more fully-developed alternatives that distribute the growth in airline passenger and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impacts associated with each alternative.

PASSED, APPROVED AND ADOPTED this 9th day of March, 1999, by the following vote:

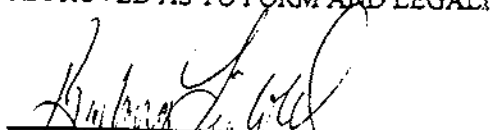
AYES:	COUNCILMEMBERS:	BRINLEY, METZE, PAPE, SCHIFFNER, KELLEY
NOES:	COUNCILMEMBERS:	NONE
ABSENT:	COUNCILMEMBERS:	NONE
ABSTAIN:	COUNCILMEMBERS:	NONE


Genie Kelley, Mayor

ATTEST:


Vicki L. Kasad, City Clerk

APPROVED AS TO FORM AND LEGALITY:


Barbara Leibold, City Attorney

AR00006

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) SS:
CITY OF LAKE ELSINORE)

I, VICKI KASAD, CITY CLERK OF THE CITY OF LAKE ELSINORE,

CALIFORNIA, DO HEREBY CERTIFY that the foregoing Resolution duly adopted by
the City Council of the City of Lake Elsinore at a Regular Meeting of said

Council on the 9th day of March, 1999, and that it was so adopted by the following

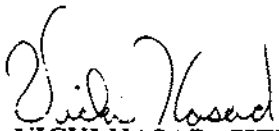
vote:

AYES: COUNCILMEMBERS: BRINLEY, METZE, PAPE,
SCHIFFNER, KELLEY

NOES: COUNCILMEMBERS: NONE

ABSENT: COUNCILMEMBERS: NONE

ABSTAIN: COUNCILMEMBERS: NONE


VICKI KASAD, CITY CLERK
CITY OF LAKE ELSINORE
(SEAL)

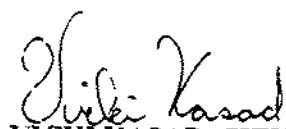
STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) SS:
CITY OF LAKE ELSINORE)

I, VICKI KASAD, CITY CLERK OF THE CITY OF LAKE ELSINORE,

DO HEREBY CERTIFY that the above and foregoing is a full, true and correct copy of

Resolution No. 99-10 of said Council, and that the same has not been amended or repealed.

DATE: March 12, 1999


VICKI KASAD, CITY CLERK
CITY OF LAKE ELSINORE
(SEAL)

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RESOLUTION NO. 3642

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
WESTMINSTER CALLING FOR A REGIONAL AIRPORT
PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, The Los Angeles Dept of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and

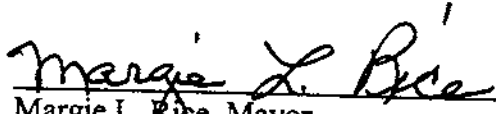
WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

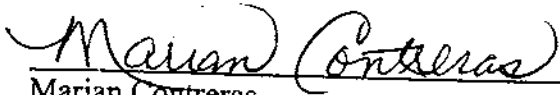
NOW, THEREFORE, BE IT RESOLVED that the City Council of Westminster calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that promotes LAX and its outlying Regional Commercial Airports in Southern California to work together to serve the expanding air commerce marketplace in a spirit of cooperation.

PASSED, APPROVED, AND ADOPTED this 13th day of June 2001.

AYES: COUNCIL MEMBERS: RICE, FRY, LAM, MARSH, PARIS
NOES: COUNCIL MEMBERS: NONE
ABSENT: COUNCIL MEMBERS: NONE


Margie L. Rice, Mayor

ATTEST:


Marian Contreras
City Clerk

STATE OF CALIFORNIA)
) SS.
COUNTY OF ORANGE)

I, MARIAN CONTRERAS, hereby certify that I am the duly appointed City Clerk of the City of Westminster; and that the foregoing resolution was adopted by the City Council of Westminster at an adjourned regular meeting thereof held on June 13th, 2001.


CITY CLERK

RESOLUTION NO. 99-071

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
RANCHO CUCAMONGA, CALIFORNIA, CALLING FOR A
REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is nearest to communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

NOW, THEREFORE BE IT RESOLVED THAT, THE CITY COUNCIL OF THE CITY OF RANCHO CUCAMONGA calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing a regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.


PASSED, APPROVED, AND ADOPTED this 17th day of March, 1999.

AYES: Alexander, Biane, Curatalo, Dutton, Williams

NOES: None

ABSENT: None

ABSTAINED: None



William J. Alexander, Mayor

ATTEST:



Debra J. Adams, CMC, City Clerk

I, DEBRA J. ADAMS, CITY CLERK of the City of Rancho Cucamonga, California, do hereby certify that the foregoing Resolution was duly passed, approved and adopted by the City Council of the City of Rancho Cucamonga, California, at a regular meeting of said City Council held on the 17th day of March, 1999.

Executed this 18th day of March, 1999, at Rancho Cucamonga, California.



Debra J. Adams, CMC, City Clerk

CC RESOLUTION NO. 99-22

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NORCO, CALIFORNIA SUPPORTING SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG) AND ITS AVIATION TASK FORCE IN THEIR PREPARATION OF A LONG-RANGE REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA.

WHEREAS, access to commercial and cargo aviation opportunities is important to economic vitality and job creation throughout the region; and

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Masterplan for Los Angeles International Airport (LAX) that advocates expansion of its passenger activity from 60 million air passenger per year to an expected 98 million per year, and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, airport officials estimate that the expansion of LAX to accommodate the proposed level of aviation activity would cost as much as 12 billion dollars, and would necessitate the expenditure of billions of dollars more to lessen its impact on the ground transportation system; and

WHEREAS, the proposed expansion, given the location of LAX in the built-out, intensely congested west side of the south Coast Air Basin where its contribution to air pollution is greatest, appears to be a high-cost, high-impact approach to meeting the region's need for added aviation capacity; and

WHEREAS, there are at least nine other developing or existing commercial airports in Southern California, several of which are located in areas expected to experience the greatest growth in population and employment over the next 20 years, while the LAX area is expected to experience the region's least growth; and

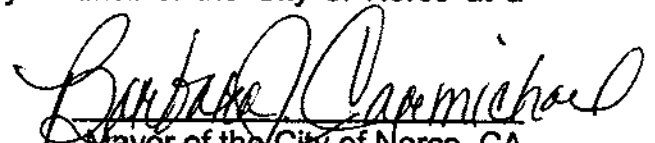
WHEREAS, developing airport capacity in areas of high growth and lower infrastructure costs rather than concentrating airport development at LAX may be an environmentally superior, lower cost, and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of airport researched in the high-growth areas of the region will lead to a more equitable distribution of jobs and opportunities for economic growth, while reducing the burden on the regional transportation system.

NOW THEREFORE, BE IT RESOLVED THAT SCAG affirms its policy to encourage the development of aviation facilities in areas experiencing growth in demand; and

The City Council of the City of Norco supports the Southern California Association of Government and its Aviation Task Force in their preparation of a long-range Regional Airport Plan for Southern California that includes one or more fully-developed alternatives that distribute the growth in airline passengers and cargo operations among the region's commercial aviation facilities, with full consideration given to both freight and passenger ground access, and the economic and environmental opportunities and impacts associated with each alternatives.

PASSED AND ADOPTED by the City Council of the City of Norco at a regular meeting held on April 7, 1999.


Mayor of the City of Norco, CA

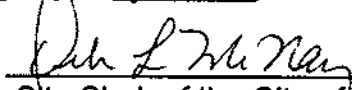
ATTEST:


City Clerk of the City of Norco, CA

I, DEBRA L. MCNAY, City Clerk of the City of Norco, California, do hereby certify that the foregoing Resolution was regularly introduced and adopted by the City Council of the City of Norco, California, at a regular meeting thereof held on the 7th day of April, 1999 by the following vote of the City Council to-wit:

- AYES: Clark, Hall, Koziel, Sorensen, Carmichael
- NOES: None
- ABSENT: None
- ABSTAIN: None

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Norco, California this 7th day of April, 1999.


City Clerk of the City of Norco

/dmg

RESOLUTION NO. 99-46

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDIAN WELLS,
CALIFORNIA, CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN
CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for the Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and,

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

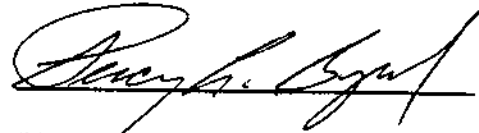
WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burden on communities near LAX.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Indian Wells, California, calls upon the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our Congressional Representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, APPROVED, AND ADOPTED by the City Council of the City of Indian Wells, California, at a regular meeting held on this 15th day of July 1999.



**PERCY L. BYRD
MAYOR PRO-TEM**

CERTIFICATION FOR RESOLUTION NO. 99-46

George J. Watts, City Clerk of the City Council of the City of Indian Wells, California, **DOES HEREBY CERTIFY** that the whole number of the members of the City Council is five (5); that the above and foregoing Resolution was duly and regularly passed and adopted at a regular meeting of the City Council of the City of Indian Wells on the 15th day of July 1999, by the following vote:

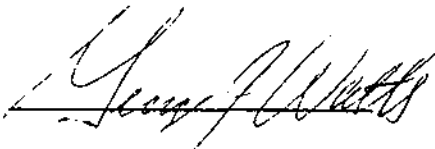
AYES: Byrd, Landes, Monarch, Negrón

NOES: None

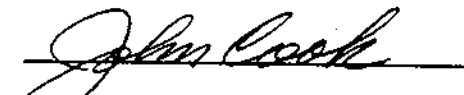
ABSENT: Henderson

ATTEST:

APPROVED AS TO FORM:



**GEORGE J. WATTS
CITY MANAGER/CITY CLERK**



**JOHN L. COOK
CITY ATTORNEY**

I HEREBY CERTIFY this to be a true copy of	
Resolution No. 99-46	
held (dated)	
July 15, 1999.	
Carole Johnson-Bodden	7/19/99
Deputy City Clerk	Date

RESOLUTION NO. 2000- 57

**RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF DIAMOND BAR TO SUPPORT A REGIONAL AIRPORT PLAN FOR
SOUTHERN CALIFORNIA**

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 92 million passengers per year and its cargo activity from its current 1.8 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding LAX's passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from the operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, and greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate the LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional tax payers; and

WHEREAS, there are many other commercial airports in Southern California, some with significant histories as commercial airports, and some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next 20 years, while LAX is nearest to communities expected to experience the least growth in the same period; and

WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF DIAMOND BAR
DOES HEREBY RESOLVE AS FOLLOWS:**

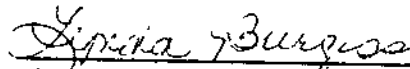
That the communities of Southern California, including the City of Los Angeles, the Counties of Los Angeles, Orange, San Bernardino, Riverside and Ventura; the State of California; and our congressional representatives to join together in developing a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

PASSED, ADOPTED AND APPROVED this 5th day of December, 2000.


MAYOR

I, LYNDA BURGESS, City Clerk of the City of Diamond Bar, do hereby certify that the foregoing Resolution was passed, adopted and approved at a regular meeting of the City Council of the City of Diamond Bar held on the 5th day of December, 2000, by the following vote:

AYES: COUNCIL MEMBERS: Ansari, Chang, O'Connor, MPT/Herrera,
M/Huff
NOES: COUNCIL MEMBERS: None
ABSENT: COUNCIL MEMBERS: None
ABSTAIN: COUNCIL MEMBERS: None

ATTEST: 
CITY CLERK OF THE
CITY OF DIAMOND BAR

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RESOLUTION NO. 98- R087

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
CULVER CITY, CALIFORNIA, CALLING FOR A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA.

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding the passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the Airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the Airport; and

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and


1 WHEREAS, developing airport capacity near high growth communities
2 rather than concentrating airport development at LAX may be an environmentally
3 superior, lower-cost and more equitable strategy for serving future growth in air
4 commerce in Southern California; and

5 WHEREAS, the development of these regional airport resources will
6 help spread jobs and economic development opportunities more equitably
7 throughout the region, and reduce the public health and environmental burdens on
8 communities near LAX.

9 NOW, THEREFORE, the City Council of the City of Culver City,
10 California, DOES HEREBY RESOLVE, as follows:

11 SECTION 1. The City of Culver City calls upon the communities of
12 Southern California, including the City of Los Angeles; the Counties of Los Angeles,
13 Orange, San Bernardino, Riverside, and Ventura; the State of California; and our
14 congressional representatives to join together in developing the Regional Airport
15 Plan for Southern California that constrains LAX to operate within the capacity of its
16 existing facilities and develops the capacity of the many other commercial airports in
17 Southern California to serve the expanding air commerce marketplace.


18 APPROVED and ADOPTED this 14th day of September, 1998.

19 
20 SANDRA J. LEVIN, Mayor
21 City of Culver City, California

22 ATTEST:

23 APPROVED AS TO FORM:

24 
25 TOM CRUNK
26 City Clerk

27 
28 CAROL A. SCHWAB
City Attorney

CAS:eh
rlax

RESOLUTION NO. 99-58

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHINO, CALIFORNIA,
CALLING FOR A REGIONAL AIRPORT PLAN FOR THE SOUTHERN CALIFORNIA
AREA

WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for the Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion, not including the costs of transportation improvements required to facilitate access to LAX which will be paid by regional taxpayers; and

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and

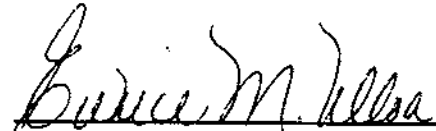
WHEREAS, developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmental superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and

WHEREAS, the development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burden on communities near LAX.

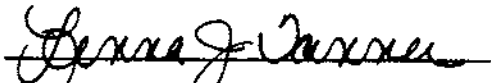
NOW, THEREFORE, BE IT RESOLVED, that the Chino City Council calls upon the Counties of Los Angeles, Orange, Riverside, and San Bernardino; the State of California; and our Congressional Representatives to join together in developing a regional airport plan for Southern California which will take into account the current and future needs of air travelers throughout

the Southern California region, including San Bernardino, Riverside, and Orange Counties, by evaluating and comparing the needs of residents throughout these counties with the availability of air travel resources in their local areas, along with taking into account the current and potential availability of facilities throughout these counties which could be transformed for public airport uses more easily and cost effectively than by expanding LAX.

APPROVED AND ADOPTED THIS 3rd DAY OF August 1999.


(EUNICE M. ULLOA, MAYOR

ATTEST:


LENNA J. TANNER, CITY CLERK

City of Chino)
County of San Bernardino) §
State of California)

I, Lenna J. Tanner, City Clerk of the City of Chino, do hereby certify that the foregoing Ordinance was duly adopted by the City Council at a regular meeting held on the 3rd day of August 1999, by the following votes:

AYES: COUNCIL MEMBERS: ULLOA/DUNCAN/ELROD/ROBBINS/YATES

NOES: COUNCIL MEMBERS: NONE

ABSENT: COUNCIL MEMBERS: NONE


LENNA J. TANNER, CITY CLERK

Redondo Beach Unified School District
R:98-99:5

Resolution to Urge the Federal Aviation Administration
to
Discontinue the Practice of Routing Aircraft Over the City of Redondo Beach

- Whereas, the Redondo Beach Unified School District is required to provide a safe and positive learning environment for all of its students, and
- Whereas, the Federal Aviation Administration has recently re-directed the flight paths of departing aircraft by re-directing their take-off pattern to loop back eastbound over the City of Redondo Beach, and
- Whereas, the loop flight path has become an increased annoyance to students, staff and community members due to the significantly lowered aircraft traveling altitude as a result of the Federal Aviation Administration's new direction, and
- Whereas, the proposed expansion of Los Angeles International Airport will increase the number of low altitude departure flights directly over the Redondo Beach Unified School District, thus adding to the disruption of the learning environment for students, and
- Whereas, the continued and proposed increase in low-level aircraft traffic over the Redondo Beach Unified School District will negatively impact the current positive learning environment for students and will result in a lesser degree of student learning;

Now, Therefore Be It Resolved, that the Board of Education of the Redondo Beach Unified School District:

1. Encourages the Federal Aviation Administration to take whatever steps necessary to rescind or re-direct the present loop flight path over the Redondo Beach Unified School District, Redondo Beach City Proper, and any and all other South Bay school districts, and
2. Encourages the City of Los Angeles to reject current proposals to expand Los Angeles International Airport until a regional approach to transportation can be studied further by the Los Angeles County Board of Supervisors, and
3. Encourages the various school districts within the South Bay communities to take similar action, and
4. Directs that a copy of this resolution be sent to the cities and school districts in the South Bay area affected by the new departure patterns from Los Angeles International Airport.

Adopted by the Board of Education of the Redondo Beach Unified School District on August 17, 1998.

By Rebecca F. Sargent
Rebecca F. Sargent, President

By Valerie K. Dombrowski
Valerie K. Dombrowski, Vice President

By Tom Downs
Tom Downs, Member

By Robin L. Shaw
Robin L. Shaw, Member

By D. Zeke Zeldler
D. Zeke Zeldler, Member

Working to avert runway disaster

Collisions could be the largest cause of aviation fatalities over the next 20 years, a study says

By Alan Levin
USA TODAY

GRAPEVINE, Texas — As the 757 roared toward a nighttime takeoff, the unthinkable happened. An unidentified vehicle slipped onto the same runway, blending invisibly into the backdrop of distant twinkling lights.

This scenario keeps federal aviation officials and airline safety officers awake nights. A government study predicts runway collisions will be the single largest cause of aviation fatalities over the next 20 years unless something is done. Near misses on runways are up sharply in recent years, and 34 people died on a runway in Los Angeles in 1991 after a similar mix-up.

But Wednesday at Dallas/Fort Worth International Airport, Capt. John Penney had help. The United Airlines pilot was at the controls of a NASA test jet equipped with computers and sensors that researchers hope represent the future. Even though Penney could not see the intruder, three things happened:

▶ A transparent screen inside the windshield, like those on the latest fighter jets, flashed a warning.

▶ A voice over his headset said: "Runway conflict. Runway conflict."

▶ A color display on the jet's control panel issued a separate warning and showed the intruder's exact location on its map of the airport.

Penney hit the brakes as co-pilot Harry Verstynen, a NASA test pilot, called to stop the takeoff, saying "Reject, reject, reject." The intruder, a van equipped to appear like a plane on radar, scooted off the runway.

Using the latest technology in satellites and computers, NASA is trying to pioneer ways to solve some of the toughest problems of aviation safety, such as potential for runway collisions.

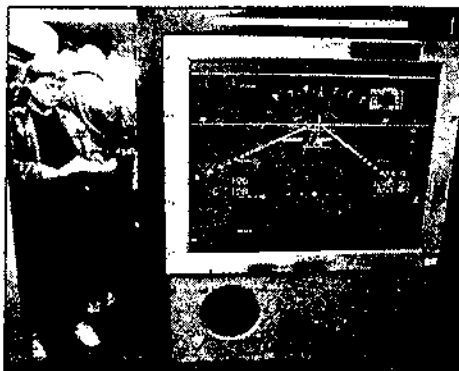
Penney and Capt. Rich Grue, a management pilot at American Airlines who also flew the NASA jet Wednesday, were impressed. Grue pronounced a moving map that shows a jet's precise location on the airport "the best thing since sliced bread."

"I think this is big," says Michael Lewis, director of the aviation safety program at NASA's Langley Research Cen-



Photos by Mark Williams for USA TODAY

Testing: United Airlines Capt. John Penney in cockpit of a NASA jet using new technology to help avoid runway collisions.



Aboard 757: A computer displays information pilot would see without checking instruments.

ter. "It's going to happen."

Lewis says that within a year or two, the first of the tools to prevent runway accidents — the moving map — might be available for commercial use. Not long afterward, he says, it will be possible to add warning systems that track other aircraft and airport vehicles.

NASA is even experimenting with "synthetic vision," on-board computers that track a jet's location with satellites, then paint the landscape below on a video screen so that pilots landing at night or in fog can "see" the runway.

The NASA systems are already being worked on by companies such as UPS,

which wants to put it on its cargo jets.

Many say they are an improvement on the runway-collision warning system the Federal Aviation Administration is preparing. That system, which has been delayed for years, will issue a collision warning to air traffic controllers, who must then relay it to pilots. NASA's system alerts pilots directly, saving time.

In addition, NASA was testing the FAA's formula that tells a computer when to issue an alert to a potential runway collision. In four instances Wednesday, the FAA-based system failed to issue an alert or its alert came late, while NASA's own formulas issued alerts each time.

FAA officials say their computer formulas, being tested in Detroit and San Francisco, have already been changed. And, they point out, the FAA system can be put in place sooner than NASA's.

Runway accidents will become the biggest killer in aviation during the next 20 years, according to a study commissioned by the FAA. Massachusetts Institute of Technology professor Arnold Barnett concluded that risks rise exponentially with increased traffic.

Barnett, the George Eastman Professor of Management Science at MIT, pre-

dicted that there will be 15 fatal runway collisions involving commercial planes over the next 20 years if nothing is done. Three of those will involve one jet slamming into another, he says.

Some remain skeptical that programs like NASA's will solve the problem. National Transportation Safety Board acting Chairman Jim Hall says he has seen too many promising demonstrations of technology that never proved useful. Hall says he will celebrate when workable warning systems are in cockpits.

Indeed, the NASA tests show that much work remains. Many of the pieces of data that drive NASA's system are physically possible, but not yet available at airports around the country.

For example, the NASA systems work best when Global Positioning Satellite data are enhanced with a local radio signal to provide more accuracy. But, while such systems are nearing completion, none has been approved by the FAA.

NASA's Lewis says he believes these hurdles will be easy to clear.

And for pilots such as American's Grue, it will not be too soon. Now, when they navigate across a busy airport like Dallas/Fort Worth, it is with complicated paper charts showing the complex web of taxiways. Having an easy-to-read moving map would make the pilot's job easier and safer, he said.

"Here, it's right there in front of you in beautiful color," Grue said.

Torrance, CA
(Los Angeles Co.)
Daily Breeze
(Cir. D. 77,755)
(Cir. S. 111,297)

JUL 25 2001

Allen's P. C. B. Est. 1888

Charting LAX safety

Computer replica finds ways to cut risk of collisions on busy runways

By Ian Gregor
STAFF WRITER

LAX could dramatically cut the risk of planes colliding on the south runway complex through relatively simple changes in the way air traffic controllers handle arriving aircraft, according to preliminary results of a landmark airfield computer simulation.

The world's third-busiest airport ranks the nation in potentially dangerous incidents known as runway incursions, which occur when a plane or vehicle on the ground gets too close to, or creates a collision hazard with, a plane that is landing or taking off.

Most of these incidents occur near the passenger terminals on the airport's south side, where arriving planes cross the inner runway to get to their gates, records show.

Under a promising change studied earlier this year, LAX air traffic controllers would stop shipping arriving planes across the inner runway. Instead, they would direct pilots to roll to a point beyond the western end of the inner runway and turn the aircraft north on a new taxiway where there would be no chance of a collision.

The change would result in slightly longer taxiing times for some arriving aircraft. But it would not lower the airport's arrival or departure capacity, according to the computer simulations conducted in February at FutureFlight Central, a new \$10 million facility at the NASA Ames Research Center in the Bay Area.

"We have something that is impossible to measure in dollar value, which is safety," said Boris Rabin, FutureFlight's simulation manager. "We practically eliminated the danger of collisions on 25-Right" — the inner runway on the airport's south side.

But Elliot Brann, a veteran LAX air traffic controller who participated in many of the simulations, said the changes could significantly lower the airport's ability to absorb landing aircraft on the south runway complex. Instead of scooting arriving planes across the inner runway in several locations, as controllers do today, the changes would funnel them all to one point that could get jammed, he said.

"You've taken the runway incursion problem out of it but you've created a gridlock problem on the airfield and you can't do that on a day-to-day basis,"

Brann said.

The findings in the FutureFlight draft report are the culmination of a year of efforts to find solutions to LAX runway incursions by airport directors, Federal Aviation Administration managers, airlines, pilots and air traffic controllers. While some of the findings appear to offer tantalizing solutions to a problem that has vexed LAX for years, FAA officials cautioned that any new procedures and taxiways must meet a bevy of federal and local standards before they can be implemented.

"So much of this stuff is up in the air," said Sherry Avery, the LAX control tower manager.

Michael Di Girolamo, LAX's director of airport operations, also noted that none of the solutions offers an immediate cure to the runway incursion problem. Moreover, they don't examine conditions on the north runway complex, and don't account for problems that LAX will experience trying to accommodate the next generation of super-huge aircraft, such as the 550-plus passenger Airbus A380.

Still, the simulation offers LAX options to address a specific safety problem, Di Girolamo said. Airport management wants to plan any airfield changes carefully so they can remain intact even if the airport undergoes its proposed \$11.4 billion expansion, he said.

LAX, the FAA, pilots and controllers have hunted for years for solutions to the airport's runway incursion problem. The airport has spent more than \$5 million on new signs and lighting to show pilots where taxiways meet runways; airlines have warned pilots of the problems at LAX; and air traffic controllers have tried to simplify their communications with flight crews.

Despite these efforts, runway incursions continue to plague the grossly overtaxed

LAX/A6

LAX 1684
FROM PAGE A1

airfield, which hosts about 2,200 flights a day but was designed for about 1,350.

The airport experienced 33 incursions between 1997 and 2000, 13 of which were classified as serious, according to a recent FAA report. In one infamous November 1999 incident, a United Airlines Boeing 757 carrying 133 passengers and crew, including former presidential candidates Bob and Elizabeth Dole, leaped into the air early and barely avoided slamming into an Aeromexico MD-80 that had blundered across the runway.

LAX leads the nation in runway incursions again this year with six, but none have been classified as serious, said FAA spokesman Jerry Snyder.

Last year, frustrated at their inability to stem the problem, the FAA and LAX paid FutureFlight \$475,000 to create the first-ever computer simulation of a major airport to determine whether the measures would improve safety without throwing a wrench into operations.

"What we wanted to do was model things so we didn't impact actual traffic operations on a daily basis," Avery said.

FutureFlight engineers created an exact replica of the 850 square-foot LAX control tower cab, and used projectors to beam meticulously detailed, 360-degree images of the airfield and the surrounding skies onto the windows, giving controllers the sense that they were seeing actual planes and vehicles moving outside.

In rooms on the floor below, pilots from airlines including United, Southwest and Alaska sat at computer consoles and moved the planes in real time according to the controllers' commands.

The air traffic controllers and pilots tested six possible solutions during about 40 simulations over a two-week period, Brann said.

The simulations showed that it's not practical to have arriving aircraft land on the inner runways and take off on the outer runways, which is the opposite of the current set-up. And having different controllers handle the two southern runways created confusion between them and was deemed dangerous.

But the simulations found that four variations of rolling arriving aircraft to the west end of the

airfield before turning them north eliminated the risk of a collision outside the terminal area and did not hurt operations.

All of these scenarios had arriving planes slip south off Runway 25-Left, the arrival runway, onto a taxiway that runs parallel to it. All assumed that a taxiway was built about 1,000 feet west of the end of the inner runway. Such construction would take 1½ to two years, airport officials said.

The scenarios differed in the number of taxiways available to whisk arriving planes to and from the north side of the airport, and in giving controllers the option to send some arrivals across the inner runway if no planes were about to take off or land on it.

According to the FutureFlight draft report, planes would have to taxi slightly longer to get to and from their gates and runways under some scenarios. But under other scenarios, taxiing times would drop.

More importantly, hourly departure capacity under clear skies actually edged up under all four of these scenarios, from the current 65 aircraft to between 66 and 74 planes. Arrival capacity, which is 84 aircraft an hour in good weather, varied from 81 to 94 planes.

Di Girolamo said he doubts the arrival rate would edge above 84 aircraft because the airport doesn't have enough passenger gates to accommodate more planes.

United Airlines Capt. Jon Russell, who is based at LAX, said he sees the possible solutions as "a start in the right direction."

"It will definitely curb the number of runway incursions," said Russell, who is the regional safety representative for the Airline Pilots Association.

But he added that the airport will continue to suffer from a shortage of terminals and passenger gates and still needs to be expanded.

Brann, however, said he believes the changes could have a "huge impact" on the arrival rate.

"Will capacity take a hit and will the airlines buy off on it?" he said.

Richard Cox, regional manager of the Air Transport Association, an airline lobbying group, said he hasn't seen the FutureFlight draft report but has complete confidence in Brann's analysis.

"There's always a balance where you can meet between safety and capacity," said Cox, who is a former FAA manager. "We want to look at every option. We enthusiastically support all efforts to increase the safety envelope at LAX."

STATEMENT OF MIKE GORDON, MAYOR, EL SEGUNDO, CA

Page 167PREV PAGETOP OF DOC

Mr. **GORDON**, Mr. Chairman, Ranking Member Conyers and members of the Judiciary Committee, my name is Mike Gordon. I am the mayor of the City of El Segundo.

I come before you today on behalf of the people of El Segundo to oppose the United-US Air merger. We firmly believe the prospect of further concentrating market share in the hands of a few mega-airlines represents the worst possible scenario for commercial aviation as it will eliminate needed competition and create even greater dependence on the hub-spoke system.

No one knows the negative impacts better than the people of El Segundo. The City of El Segundo is located literally across the street from the third busiest airport in the world, Los Angeles International Airport, which is United Airlines' hub.

For the past 4 1/2 years, our community along with the southern California region as a whole has been engaged in a bitter public debate about what aviation demand is in the 21st Century and how it should be met.

One approach supported by United Airlines calls for LAX to expand air capacity by over 50 percent. A second approach supported by our community and over 80 cities, counties and transportation agencies throughout southern California calls for constraining growth at the LAX hub in favor of a more equitable distribution of air commerce to the 12 airports available for commercial use in our region.

Each member of our growing coalition understands how the hub and spoke airport structure at LAX compromises our local economies, our infrastructure, our environment, our planning processes and our quality of life.

Page 168PREV PAGETOP OF DOC

For example, the refusal of dominant airlines such as United Airlines to provide adequate service at non-hub regional airports has resulted in artificial airport capacity shortages in a region where the LAX hub undergoes constant expansion at the command of the airlines even though available capacity at non-hub airports remains unused.

Furthermore, to reinforce dependence on hub airports, the airlines engage in ticket pricing strategies that render non-hub airports non-competitive. The airlines implement cost recovery measures at smaller airports in the form of higher ticket prices in order to finance investments at their hubs.

Such pricing strategies create a vicious cycle wherein passengers are forced away from alternative airports and back into the hub airports. Sadly that forced reliance on LAX deprives much of the region outside the catch basin of LAX of the economic opportunity that the development of passenger and air cargo service at non-hub airports would bring.

This desire of major airlines, such as United Airlines, to maintain dominance in the hub market

and their unwillingness to invest in competitive service at non-hub airports results in an economic imbalance in our region.

Communities ready, willing and able to provide air service, such as the Inland Empire, are locked out of the marketplace by the hub and spoke LAX structure and are deprived of the economic catalyst that airports would bring to their region.

Remarkably, by denying competitive service to non-hub airports, areas of the region facing the greatest increases in population and employment, such as the Inland Empire, Orange County, northern Los Angeles County, suffer a loss of critical air service for their residents and businesses.

Page 169

PREV PAGE

TOP OF DOC

Compounding our problems even further, while LAX strains to shoe-horn more and more passengers into its airport, it already leads the Nation in runway incidents or near-misses at today's levels.

We see the refusal of the airlines, led by United, to meet demand where the demand is generated only serves to exacerbate safety problems at the LAX hub. As serious a threat as we face in safety, safety is not our only problem.

By concentrating aviation, LAX passengers and their vehicles must pass through numerous cities and often multiple counties in order to get preferred flight schedules and reduced fares. This unnecessary traffic seriously impedes ground traffic movement and places undue burdens on the region's infrastructure.

Finally, we cannot ignore the human cost of the LAX Airport phenomenon. Noise and pollution emanating from large hub airports impose acute impacts on communities under or in the flight path and a disproportionate share of the burden is borne by low-income communities and communities of color.

According to preliminary environmental assessments, disbanding the hub and spoke airline structure in favor of a more rational distribution of air traffic throughout the region significantly reduces the impacts of aviation-related noise and pollution, particularly in low-income and ethnic communities.

In conclusion, while we fully recognize the importance of a robust air commerce economy, the LAX hub phenomenon supported by United Airlines unfairly compromises our regional economy, infrastructure, environment, planning process and quality of life.

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Mr. **HUTCHINSON** [assuming Chair]. Thank you, Mr. Gordon.

[The prepared statement of Mr. Gordon follows:]

PREPARED STATEMENT OF MIKE GORDON, MAYOR, EL SEGUNDO, CA

Mr. Chairman, Ranking Member Conyers, members of the Judiciary Committee. Thank you for this opportunity to present the views of the City of El Segundo. Today's hearing brings into focus the anti-competitive nature of the nation's largest airline carriers and the negative consequences of the hub-and-spoke structure fostered by airline deregulation. I am pleased to share with this committee our experiences in dealing with the fortress hub phenomenon.

The recent announcement of a proposed merger between United Airlines and US Airways certainly makes this issue all the more urgent.

My colleagues and I oppose the merger between United Airlines and US Airways. The prospect of further concentrating market share in the hands of a small but elite group of corporate giants represents the worst possible scenario for commercial aviation and for the American consumer in the air travel marketplace.

That threat looms larger as industry analysts predict this deal will touch off more mergers, more concentration of power, and further reduction in airline competition as other airlines scramble to meet or beat the United/US Airways stronghold.

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El Segundo is a community located literally across the street from the third busiest airport in the world—Los Angeles International Airport. We have witnessed first hand the crippling effect of large airlines growing even larger and exercising their power over aviation in our region with impunity.

We are not alone in our concern over the fortress hub empire the airlines have crafted in the wake of deregulation. More than 80 cities, counties and transportation agencies in Southern California have adopted resolutions calling for the constraint of growth at the LAX hub airport in favor of a more equitable distribution of air commerce to the many airports available for commercial use in our region.

The anti-competitive practices of giant carriers such as United and the hub-and-spoke airport structure the airlines have created have brought about a portfolio of negative impacts to Southern California. Judging from the Suburban O'Hare Commission's report, Southern California is not the only region of the country being held hostage by little more than a handful of mega carriers.

Among the most serious of negative impacts caused by carrier domination and the hub-and-spoke structure in Southern California are:

1. The creation of artificial airport capacity shortages
2. Ticket price strategies that constrain the ability of existing and emerging non-hub airports to accommodate growing demand

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3. Loss of critical air service to areas of the region facing the greatest increases in population and employment
4. Serious threats to the safety of air travelers as overburdened hub airports strain to shoehorn in more and more planes

5. Traffic impacts caused by importing passengers to hub airports
6. Health risks associated with high concentrations of air pollution around over-developed hub airports
7. Loss of quality of life in communities pounded by noise from concentrated aircraft operations
8. Economic loss to communities ready, willing and able to provide air service but who are locked out of the marketplace by the hub-and-spoke airport structure
9. Over-consumption of regional transportation dollars by hub airports in order to facilitate the hub-and-spoke structure and the consequent lack of resources to meet other regional transportation needs
10. The formidable impediment that dominant airlines present to effective regional transportation planning

CURRENT AND FUTURE AVIATION DEMAND IN SOUTHERN CALIFORNIA

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To put into perspective the backlash over hub-and-spoke aviation in Southern California consider the current and future outlook for aviation in the region.

Currently, the five-county region of Southern California serves approximately 87 million annual passengers and handles nearly two million annual tons of cargo. LAX, with United Airlines at the forefront of both passenger and cargo service, will handle approximately 64 million passengers and 2.1 million tons of cargo this year. That means that one airport—LAX—handles more than 73 percent of the total demand for the region, one of the busiest regions in the world.

By the year 2015, Southern California is projected to serve over 150 million annual passengers. Under its proposed expansion plan, LAX will take in up to 98 million of those passengers.

1. The Creation of Artificial Airport Capacity Shortages

The role of major airlines in creating artificial airport capacity shortages via the spoke-and-hub structure that now reigns in commercial aviation is evident at LAX.

United Airlines is the top passenger carrier at LAX, capturing more than 22% of the passenger market share in 1998—more than twice the market share enjoyed by United's closest competitors, Southwest and American Airlines. And, United Airlines is the second largest cargo carrier at LAX—second only to Federal Express.

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In 1999, United Airlines completed a \$260-million terminal expansion and promptly introduced 69 new daily flights out of LAX. United's capacity enhancements roughly coincided with the announcement by LAX officials of the development of a Master Plan for a \$12-\$15-billion airport

expansion project.

LAX, they said, was reaching its maximum capacity and would have to be expanded to meet the region's current and future aviation needs. Airport officials contend that failure to expand LAX will result in a severe shortage of airport capacity and a commensurate economic loss to the region.

What LAX officials fail to acknowledge, however, is the fact that there are 12 existing or potential airports in Southern California available for commercial use, including a second "international" airport. More than half of these airport opportunities lie in the heart of the counties expected to experience a large majority of the growth of the region.

Nevertheless, LAX remains the only airport in the region with a full complement of flight options, LAX remains the only airport offering truly international air service and LAX remains the only airport in Southern California where United and other dominant carriers are willing to invest.

The fact is there is NO SHORTAGE OF AIRPORT CAPACITY in Southern California.

The fact is the only shortage of capacity is at the LAX hub, and that shortage is artificial.

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The fact is this artificial capacity shortage is a direct result of the collective refusal of dominant airlines to provide adequate service at non-hub regional airports.

2. Ticket Price Strategies That Constrain the Ability of Existing and Emerging Airports to Accommodate Growing Demand

To further reinforce dependence on hub airports, the airlines engage in ticket pricing strategies that render non-hub airports non-competitive.

Airlines implement cost-recovery measures at smaller airports in the form of higher ticket prices in order to finance investments at their hubs. And by implementing such cost recovery measures, airlines create a vicious cycle wherein passengers are forced away from alternative airports and back into the hub airport.

Despite reduced landing fees and lower operating costs, the airlines overprice fares at non-hub airports. At Ontario International Airport, for example, the cost to fly to Florida is \$431. The fare to Florida from LAX, on the other hand, costs only \$230.

This same pattern and practice of overpricing tickets is duplicated at other non-hub airports throughout the region, as shown in this cost comparison:

Table 2

The practice of overcharging passengers for same-destination flights results in reduced usage at non-hub airports and *creates an* artificial need for additional capacity where the airlines want it most—at the stronghold hub airports.

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3. Loss of Critical Air Service to Areas of the Region Facing the Greatest Increases in Population and Employment

The refusal of dominant airlines to invest in non-hub airports, inequitable pricing strategies and unjustified capacity enhancements at large hubs conspire to deprive safe, convenient and affordable air travel in areas of Southern California expected to receive the greatest increases in population and job growth.

Southern California is expected to grow in population equivalent to two cities the size of Chicago. One of those Chicago-size growth areas is in the Inland Empire-San Bernardino and Riverside Counties.

There are five existing airports available for commercial use in the Inland Empire. Three were made available by military base closures. Despite the abundance of airports, the Inland Empire's growing resident and business population must travel up to 80 miles to Los Angeles in order to receive passenger service at a reasonable price.

Why? Because no passenger carrier has been willing to invest in any of the five non-hub airports in the Inland Empire that are currently operational.

4. Serious Threats to the Safety of Air Travelers at Overburdened Hub Airports Strain to Shoehorn in More And More Planes

The artificially inflated demand for added capacity at hub airports has created a serious threat to the safety of air travelers as more and more flights are shoehorned into already overburdened facilities. The major airlines' refusal to meet demand where the demand is generated only exacerbates safety problems at hub airports.

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At LAX, where United, Southwest and American Airlines maintain dominance over the region's air travel, safety issues remain a grave concern to the FAA and local communities.

For the past two years LAX has held the dubious distinction of being the airport with the highest number of runway incursions, or near misses, in the nation. LAX simply is unable to efficiently handle the volume of arriving and departing aircraft during peak traffic periods.

In fact, air traffic controllers at LAX tower estimate that the volume of operations at that airport is so great that they are unable to handle the load up to four hours each day resulting in serious arrival delays.

More ominous than delay is the increased risk to passengers as well as to communities under the LAX flight path as aircraft that are unable to land are stacked in the arrival stream for prolonged periods of time.

And in El Segundo, we are all too frequently alarmed at the sight and sound of low-flying craft sent over our city when runway congestion forces aborted landings.

5. Traffic Impacts Caused By Importing Passengers to Hub Airports

Hub airports have an adverse effect on ground traffic movement throughout the five-county region of Southern California and place undue burden on the region's infrastructure. By forcing a concentration of passengers into hub airports, air travelers and their vehicles must pass through numerous cities and, often, multiple counties in order to avail themselves of preferred flight schedules and reduced fares.

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More than half of the passengers currently using LAX for foreign and domestic travel live and work outside LAX's 20-mile catchment area. And transportation professionals conclude that the irrational concentration of air travelers flowing into the dense metropolitan area around the hub airport will continue to compromise ground traffic movement.

The Southern California Association of Governments, our only regional transportation planning authority, states that congested speeds on the main freeway into LAX will continue to deteriorate in years to come.

SCAG estimates that congested speeds on the 405 Freeway currently average 18–23 miles per hour. SCAG projects that those speeds will be reduced to 10–16 miles per hour in the next 20 years.

A significant amount of traffic adding to the congestion on the region's highways could be eliminated, and the repair and maintenance of highways reduced, if aviation demand were met in the county that generates the demand.

At present, and into the foreseeable future, counties will be unable to meet their aviation demand until dominant carriers relinquish their hold on hub airports and invest service in other airports.

6. Health Risks Associated With High Concentrations Of Air Pollution Around Overdeveloped Airports

The undue concentration of aviation at the LAX hub has resulted in significant increases in toxic pollution in and around Los Angeles where LAX tops the list of pollution offenders.

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LAX is the single largest source of NOx emissions in the Los Angeles Basin, ranking far above the next three biggest sources, including oil refineries. Studies show the LAX hub's aircraft operations and vehicle traffic generates more NOx, a critical element in the formation of ozone, than all the MTA's public transportation buses combined.

Local communities are blanketed by toxic emissions including Benzene, Formaldehyde and particulate matter from the more than 2000 flights per day taking off and landing at LAX.

The California Air Resources Board recently classified LAX and its proposed expansion, aimed at curing an artificial capacity shortage, as its number one concern relative to air quality.

On-going testing and air quality studies by the Southern California Air Quality Management District and other professionals show that communities near LAX and under its flight path are seriously impacted by health threatening pollution.

Moreover, the greatest impacts from pollution are disproportionately leveled upon low income communities and communities of color resulting in significant environmental justice issues in the region.

According to preliminary environmental assessments, disbanding the hub-and-spoke airline structure in favor of a more rational distribution of air traffic throughout the region significantly reduces the impacts of aviation-related pollution particularly in low income and ethnic communities.

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7. Loss Of Quality Of Life In Communities Pounded By Noise From Concentrated Aircraft Operations

Aircraft noise emanating from large hub airports imposes acute impacts on communities under or near the flight path. Here again, a disproportionate share of the burden is borne by low income communities and communities of color.

Noise impacts are particularly problematic near LAX where communities like El Segundo, Inglewood, Playa del Rey and others abut the airport.

Some areas are so profoundly impacted that LAX has agreed to purchase entire neighborhoods. Property owners in Belford and Manchester Square have petitioned airport authorities to buy them out because noise and other airport-related impacts have rendered those communities unlivable and have permanently and unrecoverably depressed property values.

Noise impacts are so severe that hundreds of millions of dollars have been spent to soundproof homes and schools in the broad swath that falls within the airport's 65-decibel noise level. While soundproofing homes provides a partial remedy to indoor noise impacts, residents gain no relief from relentless aircraft noise in their own back yards.

More significantly, soundproofing is a stealth tool used by large hub airports to expand facilities and increase capacity. Where airports are able to demonstrate that they have mitigated noise impacts in a majority of a given impact area, that area is no longer considered to be impacted by airport-related activity even though there has been no reduction in flights and no reduction in aircraft noise.

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The artificial reduction in the airport's impact zone allows airport growth to continue and disregards the overall quality of life in local communities.

8. Economic Loss To Communities Ready, Willing And Able To Provide Air Service But Who Are

http://commdocs.house.gov/committees/judiciary/hju67330.000/hju67330_0.htm

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Locked Out Of The Hub-And-Spoke Marketplace

Consistent with the findings of the Suburban O'Hare Commission's report, the desire of major airlines to maintain dominance in the hub market by refusing to invest service at other airports results in an imbalance in economic gain throughout Southern California.

LAX officials state that airport-related activity generates \$61-billion annually in economic activity and creates 393,000 jobs in the region.

While we do not dispute the economic stimulus provided by airports, it is clear that reliance on the hub airport structure deprives other parts of the region economic opportunity that development of passenger and cargo service at other airports would bring.

The Inland Empire, with five airports available for commercial use, lacks an economic engine to fuel a rapidly increasing population and remedy the economic loss resulting from the local military base closures. These airports are ready, willing and able to support substantial air commerce activity and have the support of the local communities and leadership. Yet, the airlines' intractable adherence to the LAX hub prevents any significant airport activity in the Inland Empire.

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Without the stimulus of investment in these airports by major carriers and the establishment of reliable flight options, Inland Empire airports will be unable to meet the aviation demand generated there and will suffer unfair economic loss.

9. Over-consumption Of Regional Transportation Dollars By Hub Airports In Order To Facilitate The Hub-And-Spoke Structure

The domination of airlines in hub airports has a significant but often overlooked impact on regional transportation funding. As hub airports continually expand to handle more and more passengers, ground access improvements requiring federal transportation funding are needed. Hub airport expansion projects consume large portions of the transportation funds available to the entire region.

The proposed expansion at LAX is estimated to cost \$12-15-billion including a high-cost traffic mitigation component. In order for LAX to handle anywhere near the 98 million annual passengers it desires, LAX proposes a number of ground access improvements, including:

Construction of a new freeway dedicated to airport traffic only

A dedicated ring-road around the airport

Extension of the light rail system into the airport at and below grade

Creation of HOV lanes on the 405-Freeway

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Obviously, these ground access improvements will be costly and much of the cost for these
http://commdocs.house.gov/committees/judiciary/hju67330.000/hju67330_0.htm

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projects will come out of the transportation funds needed for infrastructure improvements elsewhere in the region.

The over-consumption of transportation funds for hub airport expansion projects further impedes development of existing or emerging airports especially in Southern California where a number of airports lie in underdeveloped areas where transportation improvements are badly needed.

Surveys by the Southern California Association of Governments indicate that poor highway conditions or limited highway access to outlying airports is an impediment to passenger usage and further forces usage of hub airports.

10. The Formidable Impediment That Dominant Airlines Present to Effective Transportation Planning

Transportation planning is an essential undertaking especially where significant increases in population, ground traffic and air commerce are expected to occur. Southern California, as stated previously, anticipates significant increases in all of these areas in the next 20 years.

But the refusal of major airlines to make service investments outside the hub airport—at the other 11 existing or potential airports available in the region—yields distortions in transportation planning.

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Computer modeling and demand forecasting at the Southern California Association of Governments demonstrates that when the hub airport is constrained, air traffic demand easily distributes to other airports in a rational way—demand is met where the demand is generated.

But the entrenchment of air carriers at hub airports casts a pall over efforts to equitably distribute air traffic and forces transportation planners to accommodate the concentration of ground access and aviation demand at the hub.

CONCLUSION

The community of El Segundo has watched Los Angeles International Airport evolve from a small barnstorming field where it is said farmers planted seeds in the wheel ruts left behind by Charles Lindbergh's plane to become what it is today—a Fortress Hub for major air carriers.

As that transition took place, my community and many others in the region have suffered the negative impacts of the hub-and-spoke structure fostered by the airlines. While we fully recognize the importance of a robust air commerce economy, we cannot condone the willful disregard for the welfare of our communities, our health and our quality of life as corporate giants tighten their grip on profits.

The hub-and-spoke structure of the deregulated airline industry stifles competition among airlines, frustrates the goals of deregulation, and deprives consumers of the benefits of competition. Moreover, the negative effects of the fortress hub phenomenon, as I have demonstrated here today, ripple through local economies, infrastructure, environments and planning processes.

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The inevitable spiral of airline consolidations and the consequent reinforcement of the hub-and-spoke structure must be stopped now by blocking the United Airlines/US Airways merger.

I respectfully urge this committee to fully examine the anti-competitive practices in the airline industry, to consider the grave consequences of the fortress hub phenomenon on both the national and local level, and to recognize that the unmitigated consolidation of power through mergers and acquisitions in the airline industry is contrary to the principles of free trade and threatens to stunt safe, convenient and affordable air commerce in the United States.

Thank you for this opportunity to share our views and experiences in this matter.

STATEMENT OF JOE KARAGANIS, KARAGANIS & WHITE

Mr. **KARAGANIS**. Mr. Chairman, Ranking Member Conyers, members of the Judiciary Committee, thank you for the opportunity to present the views of the Suburban O'Hare Commission to the Judiciary Committee on the problem of fortress hub monopolies in the airline industry.

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The Suburban O'Hare Commission is the author of a report, and I want to clarify it for the record, that covers not only the Chicago area as a case study, but covers the national fortress hub system and makes the assertion that the fortress hub system has geographically carved up the Nation into geographic markets for the big seven airlines.

The concern I had in listening to the testimony today, and I also listened on C-Span last night to the testimony of two major airline executives who were urging the merger of US Airways and United. I felt as though I was going through an exercise of Alice in Wonderland.

Let me give you some examples of that. I won't go over. My prepared testimony is in the record and I won't go over the report on "If You Build It, We Won't Come" because I think you ought to examine that and its allegations.

There is no doubt, and I don't think there is any question as to the fact that the big seven have carved up the Nation into fortress hubs, nor is there any doubt, if anybody has any debate about it, that as a result of those fortress hubs certain categories of travelers, very significant categories of travelers, are paying billions of dollars a year in excess fares.

Now, the question was asked by Mr. Hutchinson, and I want to address that: What evidence do you have that these folks are actually colluding? Number one, we have the evidence in spades in the Chicago market. We have their letter that says they are concluding, "we do not want new competition in the Chicago market."

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Number two, I happened to have served as a special prosecutor in DuPage County, Illinois. What I have is a batch of evidence that we have recently filed in DuPage County in the Circuit Court, which is under seal at the request of the airlines, that graphically displays the anti-competitive efforts by United Airlines to keep competition out of the Chicago market, chapter and verse, memo quotations, you name it.

I would ask the committee to request from the DuPage County Circuit Court a release of this sealed information so that the Judiciary Committee and the Department of Justice can consider it.

Number three, I hope the committee understands, and when I hear the Department of Justice and the Department of Transportation say, oh, they are looking at these allegations, I was here two years ago. I made the same points that we are making now two years ago. In two years we haven't heard word one from the Department of Justice. In two years we haven't heard word one from the Department of Transportation.

The Department of Transportation and the Department of Justice, to their credit, are attacking one of the symptoms of this problem, and that is the predatory pricing.

If there is plenty of capacity, a new entrant comes in and the big boys try and squeeze them out. We know that situation. The problem exists, and to the credit of the Department of Justice, they are trying to address it.

But the Department of Transportation and the Department of Justice are totally ignoring what we refer to as "the elephant in the corner." They are totally ignoring the fact that the big seven has carved up the Nation.

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They are ignoring the relationship between antitrust law enforcement and another major segment of the Federal policy that Congressman Jackson was alluding to.

At the same time as we have the law enforcement tool of the antitrust laws, we have the funding tool of the Federal Aviation Program. The Department of Transportation, as Congressman Jackson has said, is on the one hand preventing new competition by deterring the construction of new airports, particularly the example we give is in south suburban Chicago where they have sat on new airport development for years.

At the same time, there is a current, proposed project, and you can pick your number, the project values are quoted at somewhere between \$6 and \$10 billion to expand O'Hare and expand the United and American monopoly at O'Hare.

I understand you are going to have the airlines in here next week. Ask them who gets the lion's share, the central control for the alliances with respect to the new development at O'Hare. Two names: American and United. The so-called spoke airlines are going to be off in the distance.

What we have been saying and what the Department of Transportation appears not to recognize is that, we agree, yes, there are costs involved in hub and spoke competition, but, question one: Is there a market that is attractive, pick your town, Atlanta, Chicago, is there a market that is attractive to compete? Yes, there is. They are not competing.

Congressman Hyde asked a question of the Department of Transportation and that is: Is O'Hare out of capacity. Anyone who goes to O'Hare in the last three years knows that we no longer refer to Fortress O'Hare as Fortress O'Hare. We refer to it as Camp O'Hare. It is a camp because hundreds of cots are put out every night because there are cancellations all across the country. People are jammed there.

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I was there yesterday. We waited six hours to get on a scheduled flight. Why? Because we are out of capacity. When people give you numbers, let us be specific. Let us back it up.

I just heard the Department of Transportation tell you that the capacity of an airport is measured by a delay level of four minutes, but we might let it go up to six minutes in certain circumstances.

In 1995, the Department of Transportation gave you a report that said in 1994, delays at O'Hare were 11 minutes per operation, double the acceptable level. And they are higher today. You don't need a computer to figure out that O'Hare is at capacity. So with the growth that is projected, we don't need to talk about a new airport 20 years from now. We need to talk about a new airport ten years ago and one that ought to be under construction today. Thank you.

PREPARED STATEMENT OF JOHN NANNES, DEPUTY ASSISTANT ATTORNEY GENERAL,
ANTITRUST DIVISION, UNITED STATES DEPARTMENT OF JUSTICE

Mr. Chairman and members of the Committee, I am pleased to appear before you today to discuss certain competition issues involving the nation's airlines. I know that this hearing was originally intended to consider implications of the hub-and-spoke system that emerged in the aftermath of deregulation, but I understand that the members are also interested in considering the implications of the proposed transaction between United and US Airways. While the Antitrust Division cannot comment on the specifics of any transaction that it is currently investigating, we fully understand the committee's interest in knowing how the Division analyzes airline mergers generally. Therefore, I propose first to review the circumstances that have produced the hub-and-spoke system, then to identify competitive issues that are presented by that system, and, finally, to review the standards that the Division utilizes in evaluating mergers and acquisitions among air carriers.

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I. EVOLUTION OF THE HUB-AND-SPOKE SYSTEM

During the Great Depression, Congress enacted a number of statutes that subjected major industries to substantial governmental regulation. Building largely upon the statutory regime first enacted in 1887 to regulate railroads, various industries, including other transportation industries such as trucking and airlines, were subjected to restrictions with respect to markets they could enter or exit, prices they could charge, and acquisitions they could make. In most instances, those decisions were subject to prior review and approval by an administrative agency, such as the Interstate Commerce Commission or what became the Civil Aeronautics Board ("CAB").

While the premise of such regulation was that regulatory agencies could restrain anticompetitive behavior by regulated industries and thereby protect the public interest, regulated industries and the public became dissatisfied with regulation. Regulated companies balked at having to obtain regulatory approval every time they wanted to change service or alter price, and consumers complained that agencies often seemed to reflect the views of the industry they regulated, rather than the public interest.

This dissatisfaction culminated in a series of regulatory reform initiatives in the 1970s that reflected a congressional determination that consumer welfare could be enhanced by reducing regulation and allowing consumers—through their buying decisions in the marketplace—to identify products and services they desired and the price that they were willing to pay. Thus, Congress enacted a number of deregulatory statutes that curtailed regulation and allowed formerly regulated industries far greater latitude in determining markets to serve and prices to charge.

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Following on the heels of a number of deregulatory experiments conducted by the CAB, Congress enacted the Airline Deregulation Act of 1978, which moved the domestic air transportation industry from government regulation to a new era of competition. Carriers were permitted to enter and leave domestic markets without governmental authorization and to set prices and conditions of service. Such behavior would thereafter be subject to the antitrust laws, but the CAB retained jurisdiction

over mergers and acquisitions and its authority to prohibit unfair practices.

Industry responses to deregulation were swift. While the prior regulatory regime had resulted in carriers largely providing point-to-point service, with deregulation they began to consolidate their operations at airports, forming what came to be known as hubs. A hub carrier combines "local" passengers (those originating at or destined to the hub) with "connecting" passengers (those not originating at or destined to the hub but traveling via the hub) on the same flight. This allows the hub carrier to serve more cities from their hubs (known as "spoke" routes) and offer greater frequency of service with its fleet of aircraft than had been possible with point-to-point service.

The hub system has become the dominant business model for most of the major domestic airlines. Such a hub system provides some important benefits for local and connecting passengers. Local passengers benefit because the hub carrier will operate many spoke routes, which means that passengers will be able to obtain nonstop service to many cities. Also, because the hub carrier combines local passengers with a substantial number of connecting passengers on its flights, it is likely to offer more flights to any spoke city than other carriers (with the possible exception of a spoke city that is another carrier's hub). Connecting passengers benefit not only from the frequency of flights, but also from the ability to choose among routing alternatives offered by various airlines. A passenger seeking to travel from Washington to San Diego, for example, may find that service is offered by multiple carriers, each via its respective hub(s).

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Notwithstanding these benefits, the dominance of spoke routes by hub carriers gives rise to concerns about the exercise of market power by those carriers on those routes. There will usually be at least two carriers providing nonstop service on spoke routes that connect two carriers' hubs, but on other routes there may well be no carrier providing nonstop service other than the hub carrier. Connecting service may be a reasonable alternative for some passengers, especially for those leisure passengers willing to endure the longer travel time that connecting service usually entails, but the absence of competing nonstop service can be especially problematic for business passengers, who often are in a hurry and generally place a higher value on minimizing travel time. Hub carriers can identify such "time-sensitive" passengers and discriminate in the fares they charge them. Studies have shown that carriers generally can, and do, charge higher fares on hub routes, where they face less competition, than on routes that are more competitive.

Once an airline has established a hub at an airport, several structural and strategic factors combine to present high entry barriers to any other airline that might try to enter spoke routes emanating from that hub. By providing more departures to more destinations, the hub carrier can attract a disproportionate share of the hub airport's passengers. This happens for several reasons, including the preference of many travelers to use the carrier with the most flights in a city pair (so that the passenger can change departure times if travel plans change), marketing programs (such as frequent flyer programs) that create loyalty incentives for consumers to concentrate their travel on the dominant airline in their home city, and travel agent commission practices that create incentives for travel agents to encourage their customers to use the hub carrier. A hub carrier often also enters into contracts with local businesses that provide incentives for the businesses to concentrate their travel on the hub carrier. All of these factors serve to discourage entry into a hub carrier's spoke routes, especially by other carriers with similar cost structures.

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There is little dispute that hub carriers dominate service at their respective hubs. Today, hub carriers often account for more than 70 percent and sometimes for more than 80 percent of passengers at their respective hubs. There is no reason to think this situation is likely to change in the short run.

II. COMPETITIVE ISSUES PRESENTED BY THE HUB SYSTEM

The hub system can present competitive issues under either Section 1 or Section 2 of the Sherman Act.

Section 1 of the Sherman Act prohibits contracts, combinations, and conspiracies that restrain trade. Price-fixing agreements and market allocation agreements are examples of the kinds of collusive conduct that are particularly injurious to consumers. One of the most significant section 1 cases that the Division has recently brought involved the pricing practices of airlines.

In 1992, the Division sued eight airlines and their tariff publishing company for unreasonably restraining trade in violation of section 1. The complaint alleged that the carriers had used computerized fare dissemination services to negotiate fare changes, to trade fare changes in some markets for changes in others, and to exchange assurances concerning implementation of those changes.

Although each of the major domestic carriers offers service in thousands of city pair markets, the Division found that carriers had varying preferences as to the prices that should be charged in any particular city pair. Preferences may differ for any of a number of reasons, including the importance of a route to the carrier's hub operations. A carrier might be very interested in the fare level in city pair A-B if it operated many daily frequencies and be less interested in the fare level in city pair C-D if it operated only one or two. Yet, city pair C-D might be very important to another carrier and city pair A-B less so. The Division found that the airlines had used computerized fare dissemination systems to work out trades: "I'll go along with an increase in A-B if you go along with an increase in C-D." A consent decree now prohibits certain practices that the airlines had used to reach agreements on fares.

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Section 2 of the Sherman Act prohibits monopolization and attempts to monopolize. Unlike section 1, which requires some form of agreement between two or more persons, section 2 focuses on single firm conduct. Generally speaking, even a firm with a dominant share of a market does not violate section 2 unless it engages in some form of exclusionary conduct. The law does not penalize a person for obtaining a monopoly through superior skill, foresight, and industry. However, if a person seeks to maintain a monopoly through exclusionary conduct or there is a dangerous probability that a person will obtain a monopoly through exclusionary conduct, the Division may sue under section 2.

In the airline industry, concerns have been expressed that hub carriers engage in exclusionary practices to keep low-cost carriers (LCCs) out of their hubs. The Division takes these concerns very seriously precisely because LCCs may offer the only realistic prospect of competition to hub carriers in precisely the markets that suffer from a lack of competition. The Division has found that major

carriers are not likely to challenge another carrier at its hub by offering point-to-point service (except on a spoke route from their own hubs). The advantages that a hub carrier enjoys at its hub make entry of that sort unlikely. But LCCs, with their lower cost structures, may be able to offer service on a hub carrier's spoke routes notwithstanding the hub carrier's advantages.

A hub carrier may therefore have a strong incentive to engage in predatory practices to drive LCCs out of its hub markets and to send a strong signal to others that might consider entry that the same response awaits them if they try. The airline industry has characteristics that may make such a strategy particularly attractive to a hub carrier. If an LCC begins service on a hub carrier's spoke route and the hub carrier engages in predatory conduct that drives the LCC out, the hub carrier has benefited in many ways. Not only has it driven the LCC out of that particular route, but it has also probably discouraged that LCC from expanding to serve other cities from that hub. And not only has this LCC been driven away, but all other LCCs contemplating entering that hub will see what fate awaits them if they dare to venture in. Thus, predatory practices directed at a single LCC in a single spoke route can protect the hub carrier's ability to charge high fares in other spoke routes it dominates.

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The Division has filed suit against American alleging monopolization and attempted monopolization at its Dallas/Ft. Worth hub in connection with predatory practices directed at LCCs. The case is still in discovery, and trial is scheduled for next spring.

III. EVALUATING MERGERS AND ACQUISITIONS AMONG AIR CARRIERS

During the first years following deregulation, antitrust jurisdiction was divided between the Division and the CAB. While airlines were generally subject to the antitrust laws, the CAB retained sole jurisdiction to review mergers and acquisitions. The CAB was presented with a number of proposed mergers in the late 1970s and into the 1980s. When Congress sunset the CAB in 1985, it temporarily transferred merger review authority to the Department of Transportation ("DOT"). In ensuing years, the Division submitted comments to the DOT in some merger proceedings and supported many of the DOT's decisions. But the DOT approved two mergers that the Division opposed: the acquisition of Ozark by TWA in 1986 and the acquisition of Republic by Northwest in the same year. Both of those transactions involved carriers that operated hubs at common airports; the merging carriers in each transaction thus provided the only nonstop service in many city pairs. The DOT predicted that entry or the threat of entry by other carriers into the affected markets—potential competition—would prevent non-competitive performance by the merged entities. A subsequent study by Division economists found that potential competition had not prevented fare increases and service reductions.

The DOT's jurisdiction over mergers terminated effective December 31, 1988, after which time the Division assumed responsibility for airline merger review, although we continue to work closely with the DOT, given its substantial expertise with respect to the airline industry. In reviewing airline mergers, the Antitrust Division applies Section 7 of the Clayton Act, which prohibits the acquisition of stock or assets "where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly." Section 7 reflects the congressional judgment that merger enforcement should be able to arrest anticompetitive transactions in their incipiency, to forestall the harm that would otherwise ensue but be difficult to undo. Thus, merger enforcement standards are forward

looking and, while we often consider historic performance in an industry, the primary focus is to determine the likely competitive effects of a proposed merger in the future.

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The Division and the FTC have jointly developed Merger Guidelines that describe the inquiry they will follow in analyzing mergers. "The unifying theme of the Guidelines is that mergers should not be permitted to create or enhance market power or to facilitate its exercise." Merger Guidelines 0.1. As suggested by the language of Section 7 itself, we usually start by seeking to define the relevant product or service ("line of commerce") and geographic ("section of the country") markets in which the parties to a merger compete and then determine whether the merger would be likely to lessen competition in those markets.

The purpose of this inquiry is to ascertain whether, with respect to a product or service offered by the merging parties, there are alternative products and services to which customers could reasonably turn if it were assumed that the merging parties were the only suppliers of the product or service and sought to increase prices. Once relevant markets are defined, we look at various factors in order to determine whether the transaction is likely to have an anticompetitive effect.

In performing this analysis, the Division considers both the post-merger market concentration and the increase in concentration resulting from the merger. As a yardstick for concentration, we utilize the Herfindahl-Hirschman Index ("HHI"), which is calculated by summing the squares of the individual market shares of all the participants. The Division will presume that mergers in highly concentrated industries that produce more than a small increase in concentration are likely to create or enhance market power or facilitate its exercise, unless other factors, such as the prospect of entry by other firms, make that unlikely.

We apply this basic approach to analysis of air carrier transactions. In this industry, the definition of product/service market and geographic market converge: relevant airline markets are likely to consist of scheduled airline service between a point of origin and a point of destination, generally referred to as city pairs. This market makes intuitive, as well as economic, sense. A passenger desiring to fly from Washington to San Francisco for a business meeting or a vacation is unlikely to regard a flight from Washington to Minneapolis as a reasonable alternative in the event the fare from Washington to San Francisco is increased. Thus, we should be concerned about a transaction that significantly raises concentration levels in city pair markets.

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The relevant market may, however, be narrower than all scheduled airline service in a city pair. Carriers can serve a city pair market on a connecting basis or a nonstop basis. If the only available service offered by carriers in a city pair is connecting service, there may be various routes that passengers regard as reasonable alternatives and from which they will choose based on fare, elapsed travel time, and other factors. However, there are many city pairs that are served by some carriers on a nonstop basis and others on a connecting basis, which poses the following question: is a passenger having the ability to take a nonstop flight likely to regard connecting service as a reasonable alternative, such that he or she would switch from nonstop service offered by one carrier to connecting service offered by another carrier if the first carrier raised its fare? Chances are that passengers traveling for leisure—on vacation perhaps—are more likely to consider switching; their

demand is said to be more elastic. However, passengers making business trips are significantly less likely to regard connecting service as a reasonable alternative—they are often in a hurry and may place a higher value on getting to their destination in a hurry—so that a carrier offering the only nonstop service has power to raise fares without losing these passengers to another carrier's connecting service. Thus, there may be circumstances in which a transaction will be competitively problematic because of its impact on nonstop service in city pair markets, even if other carriers provide service in those markets on a connecting basis.

Therefore, in considering the antitrust implications of a particular transaction, the Division looks at the effect in all city pair markets served by both of the carriers involved in terms of (1) nonstop service and (2) nonstop and connecting service. We have found, not surprisingly given the operation by carriers of hubs in the post-deregulation world, that the transactions most likely to be problematic are those that involve carriers with hubs at the same airport or at airports in the same metropolitan area. These carriers are likely to serve many of the same city pairs and, especially in spoke markets, they may be the only two carriers, or two of a very small number of carriers, providing service.

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That is not to suggest, however, that transactions involving carriers that do not have overlapping hubs may not also present problems. Carriers with hubs in nearby cities are often the dominant carriers—usually on a connecting basis—for a significant number of city pairs in their region. And even when carriers' hubs are substantial distances apart, it is often the case that they are the only two carriers providing nonstop service between their respective hubs. The Division has challenged, for example, the acquisition by Northwest of a controlling interest in Continental, even though the carriers do not operate hubs at the same airports. Our complaint alleges that the acquisition would lead to higher ticket prices and diminished service for millions of passengers, especially those traveling on routes dominated by the two airlines. Northwest and Continental are each other's most significant competitors—and sometimes the only competitors—for nonstop airline service between cities where they operate their hubs. The case is scheduled for trial later this year.

Once overlapping city pairs have been identified, the Division looks at the number of other carriers serving each of the markets and at the nature of that service, often by resorting to data that carriers report periodically to the DOT. This allows the Division to calculate market shares and focus further analysis on those city pairs in which pre-merger concentration levels suggest post-merger structure conducive to the creation or enhancement of market power.

As the Merger Guidelines indicate, however, the analysis does not end there. Pre-merger market shares are a useful tool for predicting future market shares of the incumbents in a market, but they do not take account of the possibility of entry by additional competitors. The prospect of potential competition can constrain the ability of incumbents to raise price or reduce output below a competitive level. Indeed, the possibility of potential competition was the linchpin for many of the DOT's decisions approving mergers between carriers. Potential competition, it was said, could be relied upon to discipline carriers, even those with dominant market shares: if a dominant carrier sought to raise fares above competitive levels or reduce service below competitive levels, new carriers could easily enter, especially if they already had some operations at the affected airports. Airplanes were the quintessential mobile asset, it was said, and ground facilities could be easily leased or subleased. Believing that noncompetitive behavior would attract entry, it was claimed that dominant incumbents would price competitively and offer competitive levels of service. Hence, the DOT reasoned that market shares—and the presumptions of market power that accompany them—

were of relatively little use in airline merger analysis. The airline industry became the poster child for contestable market theory.

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The Division does not subscribe to this entry analysis. It simply does not conform to the facts in a post-deregulation world consisting of hub airports. For all of the reasons I mentioned earlier, hub economics are powerful. In these circumstances, carriers with comparable cost structures to the hub carrier generally find it unattractive to take the hub carrier head on, and LCC entry in the affected markets, if it occurs at all, is likely to be limited and gradual. Under our Merger Guidelines, the Division considers whether entry into the affected markets is so easy, in the sense that it would be timely, likely, and sufficient in its magnitude, character and scope, that it will likely deter or counteract the competitive effects of concern. With respect to transactions between major air carriers with substantial overlaps in markets in which they are the dominant providers of service, it is unrealistic to expect that the prospect of potential competition can fully address the competitive problems of concern.

Finally, the Division will consider and take into account airline-specific business practices and characteristics that can affect merger analysis, especially those that differ from most other industries. Airline fare data is available instantaneously not only to consumers, but also to the airlines themselves, which can act as a disincentive to fare reductions. Airlines frequently propose general or systemwide price increases, which may be more likely to "stick" as the number of major carriers diminishes. Carriers have developed loyalty programs that tie passengers and travel agents to them at their hubs, making entry into those hubs more difficult. And, airlines apply sophisticated computer modeling techniques and ticketing restrictions to identify passengers to whom they can charge higher fares, a form of price discrimination. The Division will consider these and other factors, in seeking to determine whether any proposed transaction threatens substantially to lessen competition.

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IV. CONCLUSION

Mr. Chairman, competition in the airline industry is critical for the millions of people who depend on air travel in their business life and in their family life. If the Division concludes that hub carriers are engaging in collusive or monopolistic conduct or propose anticompetitive mergers that threaten to deprive consumers of the benefits of competitive air service, I assure you that the Antitrust Division will take appropriate enforcement action.

Mr. Chairman, this concludes my prepared remarks. I will be happy to answer any questions that you or other members of the Committee may have.

Mr. **HYDE**. Ms. McFadden?

STATEMENT OF NANCY E. MCFADDEN, GENERAL COUNSEL, UNITED STATES DEPARTMENT OF TRANSPORTATION

Ms. **MCFADDEN**. Thank you, Mr. Chairman. Ranking Member Conyers and members of the committee. I appreciate the opportunity to come before this distinguished committee to discuss the state of airline competition and to describe the Department of Transportation's role in reviewing

airline mergers and acquisitions.

I am always pleased to join my colleague, Deputy Assistant Attorney General, John Nannes.

At the outset, I must make the same cautions that John Nannes did. Of course, I know you understand that we cannot discuss the specifics of the proposed United-US Airways transaction, but we certainly understand the committee's great interest in this matter.

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Let me assure you that we will maintain our commitment to preserving airline competition, in order to assure that consumers throughout the United States benefit from airline deregulation, and we assure you that this proposed transaction, indeed any major transaction, will be thoroughly examined by the Department of Transportation with the goal of preserving competition in the airline industry.

The structure of the airline business today reflects Congress' decision to deregulate the industry in 1978. The airlines, as has been discussed, literally reshaped their point-to-point systems into hub-and-spoke systems.

Operating at a hub does create efficiency advantages for the carrier and service advantages for many travelers. But it also clearly creates competitive disadvantages for non-hubbing airlines.

Hub and spoke systems enable airlines to serve the maximum number of city pair markets with a minimum number of airplanes and to maximize traffic flow by consolidating connecting passengers with different destinations on each flight.

However, an airline operating at a hub gains such great competitive advantages on the spoke routes it operates that other airlines without a hub at one end point of such a spoke route find it hard to compete with the hubbing airline.

The resulting lack of competition in many hub routes usually causes fares in hub markets to be higher than fares in comparable non-hub markets. We have found that in general airlines are reluctant to compete at the hubs operated by other airlines. For this reason, low-fare airlines, we have found, are the best hope for competition at the major airlines hubs.

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We believe, as we discussed with the committee before, that some hubbing airlines may have engaged in practices intended to further foreclose competition in their hub markets.

My written testimony describes a number of other developments since deregulation which have reshaped the industry—the wave of airline mergers in the 1980's, creeping globalization and the development of international alliances, and the more recent phenomenon of domestic alliances.

In the 1990's we also saw increased focus on the value of new airline entrants, especially in dominated hub markets, and the difficulties faced by those new entrant carriers.

As you know, the Department of Transportation has taken a number of steps to promote

competition and protect against anti-competition practices.

Mr. Chairman, thank you for your comments in that regard.

Now, I paint this backdrop of the deregulated environment and the state of airline competition to make two points.

First, we have learned a lot about the airline industry over the past 15 to 20 years. We have a greater understanding now of how airlines act and react in a deregulated environment.

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Second, the Department of Justice and the Department of Transportation particularly over the past seven and a half years, have shown the ability and will to work to preserve airline competition, often working hand in hand with Congress.

Now, let me briefly describe the role that the Department of Transportation plays in the review of airline mergers and acquisitions.

The DOT will conduct its own analysis of the merger and submit its views and any relevant information in our possession to the Department of Justice as we have done in past cases. This process is, of course, confidential.

In addition, with respect to the proposed merger, we have some separate regulatory authority and must grant our approval before some parts of the transaction may go forward.

First, the parties have announced plans to spin off most of their operations at Reagan National Airport to a new airline. This new airline must obtain economic operating authority from the Department as well as safety authority from the FAA.

Second, the proposed acquisition will also involve the transfer of US Airways international route authority in some limited entry markets. Here, too, the Department of Transportation must first approve the transfer. We may approve a transfer only if we find that it is consistent with the public interest.

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Third, the Department of Transportation has the obligation to protect consumers from unfair and deceptive practices by airlines. In carrying out that responsibility, we will review the merger's arrangements to ensure that the rights of consumers are protected.

Mr. Chairman, in closing, let me reaffirm our commitment to continuing our effort to ensure that consumers benefit from airline deregulation and let me assure you that the need to ensure competition will guide our review of the United-US Airways transaction.

Thank you and I, of course, will be pleased to answer any questions of yours or the committee. As you noted, Mr. Galis is here as well to answer questions.

Traffic Impact Analysis Report Guidelines



January 1, 1997

Prepared by the County of Los Angeles
Department of Public Works

Harry W. Stone
Director of Public Works

AR00006

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I. Introduction

The County of Los Angeles Department of Public Works has established the following Guidelines for the preparation of Traffic Impact Analysis (TIA) reports. The purpose of these Guidelines is to establish procedures to ensure consistency of analysis and the adequacy of information presented and timely review by County staff. It is strongly recommended that the applicant's traffic engineer consult with County staff before beginning the study to establish the scope and basic assumptions of the study and any deviations from these Guidelines to avoid unnecessary delays or revisions. For assistance in the TIA scoping process, the Traffic and Lighting Division, Traffic Studies Unit, can be contacted at (626) 458-5909.

II. Requirements

Generally, the Department staff is concerned with adverse impacts on traffic if:

1. Traffic generated by a project considered alone or cumulatively with other related projects, when added to existing traffic volumes, exceeds certain capacity thresholds of an intersection or roadway, contributes to an unacceptable level of service (LOS), or exacerbates an existing congested condition.
2. Project generated traffic interferes with the existing traffic flow (e.g., due to the location of access roads, driveways, and parking facilities).
3. Proposed access locations do not provide for adequate safety (e.g., due to limited visibility on curving roadways).
4. Nonresidential uses generate commuter or truck traffic through a residential area.
5. Project generated traffic significantly increases on a residential street and alters its residential character.

A traffic report must be prepared by a registered Civil or Traffic Engineer. A traffic report is generally needed if a project generates over 500 trips per day or where other possible adverse impacts as discussed in the Analysis and Impact Section (see page 4) of these Guidelines are identified. Before a full review is conducted, the County staff will check the completeness of the TIA report using the attached check list (Exhibit A). If the report is missing any of the check list items, it will be returned for revision.

III. TIA Report Contents

A. Project Description

The following information is required:

1. A description of the project, including those factors which quantify traffic generators, e.g., dwelling units, square feet of office space, persons to be employed, restaurant seats, acres of raw land, etc. For residential developments, the description should indicate the type of residence, (e.g., one level or townhouse condominiums, and if its use is for families, adults or retirees).
2. A plot plan showing proposed driveways, streets, internal circulation, and any new parking facilities on the project site.
3. A vicinity map showing the site location and the study area relative to other transportation systems.
4. A brief history of the projects that are part of the phased Master Plan or a parent tract/parcel map.

B. Transportation Circulation Setting

The following information is required:

1. Existing and Proposed Site Uses

A description of the permitted and/or proposed uses of the project site in terms of the various zoning and land use categories of the County, and the status and the usage of any facilities currently existing on the site.

2. Existing and Proposed Roadways and Intersections

A description of existing streets and roadways, both within the project site (if any) and in the surrounding area. Include information on the roadway classifications (per the Highway Plan), the number of lanes and roadway widths, signalized intersections, separate turn lanes, and the signal phases for turning movements.

Existing daily directional and peak-hour through and turning traffic volumes on the roadways surrounding and/or logically associated with the project site, including Secondary and Major highways and freeways. Local streets affected by the project should also be shown. Each report shall include appendices providing count data used in the preparation of the report. The source and date of the traffic volume information shall be indicated. Count data should not be over one year old. Since peak volumes vary considerably, a ten percent daily variation is not uncommon, especially on recreational routes or roadways near shopping centers; therefore, representative peak-hour volumes are to be chosen carefully.

All assumed roadways and intersections or any other transportation circulation improvements must be identified and discussed. The discussion should include the scope and the status of the assumed improvements including the construction schedule and financing plan. It should be noted that all assumed roadways and intersections or any other transportation circulation improvements will be made a condition of approval for the project to be in place prior to the issuance of building permits. If assumed improvements do not get built on time due to an unforeseeable condition, traffic conditions for a different assumed highway network or other mitigation measures will be considered if a traffic study is submitted with a different assumed network or other measures are recommended to mitigate the traffic impact in question.

C. Analysis and Impact

The following information is required:

1. Trip Generation Analysis

Tabulate the estimated number of daily trips and a.m. and p.m. peak-hour trips generated by the proposed project entering and exiting the site. Trip generation factors and source are to be included. The trip generation rates contained in the latest edition of the Institute of Transportation Engineers Trip Generation manual should generally be used, except in the case of condominiums/townhomes when the following rates should be used per unit:

	ADT	A.M.-Peak	P.M.-Peak
		Outgoing/Incoming	Outgoing/Incoming
Condominiums/ Townhomes	8.0	0.48/0.06	0.26/0.47

There may be a trip reduction due to internal and/or pass-by trips. Internal trip reduction can only be applied for mixed-use types of developments and pass-by trip reduction for retail/commercial types of developments. Internal or pass-by trip reduction assumptions will require analytical support based on verifiable actual similar developments to demonstrate how the figures were derived and will require approval by the County.

2. Trip Distribution

Diagrams showing the percentages and volumes of the project and nearby project's a.m. and p.m. peak-hour trips logically distributed on the roadway system must be provided. The Regional Daily Trip Distribution Factors (Exhibit D-3) contained in the Congestion Management Program (CMP) Land Use Analysis Guidelines shall be referenced for regional trip distribution assumptions. If it is assumed that new routes will alter traffic patterns, adequate backup including traffic distribution maps must be provided showing how and why these routes will alter traffic patterns.

The study area should include arterial highways, freeways, and intersections generally within a one-mile radius of the project site.

Note: This distance may be greater than one-mile for rural areas depending on the proximity to nearby signalized intersections and the availability of master plan access routes.

3. Related Projects List

A list of related projects that are approximately within a one-and-a-half mile radius of the project site and would reasonably be expected to be in place by the project's build out year must be included in the report. Related projects shall include all pending, approved, recorded, or constructed projects that are not occupied at the time of the existing traffic counts.

The County of Los Angeles Department of Regional Planning (DRP) and other public agencies (if necessary) should be contacted to obtain the latest listings. A table and a map showing the status, project/zone change/conditional use permit/parcel map/tract number, and the location of each project must be provided. For a computer printout of the listing of all filed projects within the County, Land Development Management Section of the DRP, at (213) 974-6481 can be contacted.

4. LOS Analysis

If it appears that the project's generated traffic alone or together with other projects in the area could worsen the LOS of an intersection or roadway, a "before" and "after" LOS analysis is necessary. The Intersection Capacity Utilization (ICU) or Critical Movement Analysis are two methods often used to assess existing and future LOS at intersections.

If the ICU planning method is used, a maximum of 1,600 vehicles per hour per lane should be used (2,880 vehicles per hour should be used for dual left-turn lanes) and a ten percent yellow clearance cycle should be included. Intersection LOS analysis and calculation work sheets, as well as diagrams showing turning volumes shall be included in the report for the following traffic conditions.

- (a) Existing traffic;
- (b) Existing traffic plus ambient growth to the year the project will be completed (preproject);
- (c) Traffic in (b) plus project traffic;
- (d) Traffic in (c) with the proposed mitigation measures (if necessary);
- (e) Traffic in (c) plus the cumulative traffic of other known developments; and
- (f) Traffic in (e) with the proposed mitigation measures (if necessary).

The project's impact on two-lane roadways should also be analyzed for all of the above traffic conditions if those two-lane roadways are used for access. LOS service analysis contained in the Highway Capacity Analysis, Chapter 8, Two-Lane Highways, should be used to evaluate the project's impact. For simplified analysis, use the established significant impact thresholds for two-lane roadways as shown on page 7.

5. Significant Impact Threshold

For intersections, the impact is considered significant if the project related increase in the volume to capacity (v/c) ratio equals or exceeds the threshold shown below.

INTERSECTIONS		
Preproject		Project /C Increase
LOS	VIC	
C	0.71 to 0.80	0.04 or more
D	0.81 to 0.90	0.02 or more
E/F	0.91 or more	0.01 or more

The project is deemed to have a significant impact on two-lane roadways when it adds the following percentages based on LOS of the preproject conditions.

TWO-LANE ROADWAYS				
Directional Split	Total Capacity (PCPH)	Percentages increase in Passenger Car Per Hour (PCPH) by Project		
		Preproject LOS		
		C	D	E/F
50/50	2.800	4	2	1
60/40	2.650	4	2	1
70/30	2.500	4	2	1
80/20	2.300	4	2	1
90/10	2.100	4	2	1
100/0	2.000	4	2	1

6. Analysis Discussion

Discuss conclusions regarding the adverse impacts caused by the proposed project on the roadway system. If the cumulative traffic impact of this and other projects require mitigation measures, such as traffic signals, then estimate the percent share using the project percent share formula given in the Section III D of the TIA Guidelines. When the proposed project and other nearby developments are expected to significantly impact adjacent roadways, the developer may be required to enter into a secured agreement to contribute to a benefit district to fund major roadway and bridge improvements in the region. Also, for all recommendations to increase the number of travel lanes on a street or at an intersection as a mitigation measure, the report must clearly identify the impacts associated with such a change such as whether or not additional right of way will be required and whether it is feasible to acquire the right of way based on the level of development of the adjacent land and buildings (if any).

Discuss other possible adverse impacts on traffic. Examples of these are: (1) the limited visibility of access points on curved roadways; (2) the need for pavement widening to provide left-turn and right-turn lanes at access points into the proposed project; (3) the impact of increased traffic volumes on local residential streets; and (4) the need for road realignment to improve sight distance.

Projects which propose to amend the County's General Plan Land Use and substantially increase potential traffic generation must provide an analysis of the project at current planned land use versus proposed land use in the build out condition for the project area. The purpose of such analysis is to provide decision makers with the understanding of the planned circulation network's ability to accommodate additional traffic generation caused by the proposed General Plan Land Use amendments.

D. Traffic Models and Model Generated TIA's

Computerized traffic models are planning tools used to develop future traffic projections based on development growth patterns. The Department currently operates two traffic models, one for the Santa Clarita Valley and another for the Ventura Corridor area. The Department can test proposed development project traffic impacts for the public in these areas for a fee. For assistance in the traffic modeling, the Planning Division, Transportation Planning/Assessments Section, can be contacted at (626) 458-4351.

For TIA's prepared using data from outside traffic modeling, the following information is required:

1. The type of modeling software used to generate the traffic analysis report data (i.e., TRANPLAN, EMME/2, etc.).
2. The list of land use assumptions by traffic analysis zones (TAZ's) and their sources used in the traffic model in lieu of a related projects list.
3. A copy of the computerized roadway network assumed to be in place at the time of the project. Streets should be color-coded by street type. Also, TAZ's and their corresponding centroidal connectors, as well as number of lanes should be displayed.
4. The list of trip generation rates used in the traffic model and their sources.
5. Model runs (plots) identifying both the with and without project scenarios. The volumes displayed on the plots should be in 100's for Average Daily Vehicle Trips (ADT) and 10's for peak-hour plots.

E. Traffic Signals

The following information is required:

Traffic signal warrant analysis using the State of California Department of Transportation (Caltrans) Peak-Hour (Figures 9-8 and 9-9 of Caltrans Traffic Manual) and Estimated Average Daily (Figure 9-4 of Caltrans Traffic Manual) Traffic Warrant Analysis should be provided. If the installation of signals is warranted with the addition of the project's traffic, then the installation will be the sole responsibility of the project. If it is warranted with cumulative traffic of the project and other related projects, the following formula should be used to calculate the project percent share.

$$\text{Project Percentage Share} = \frac{\text{Project Traffic}}{\text{Project} + \text{Other Related Projects Traffic}}$$

The project percent share should be based on the peak-hour volumes that warrant signals. If both peak hours satisfy the installation of signals, the average of the two peak-hour volumes should be used in the percent share analysis.

F. Mitigation Measures

The following information is required.

Identify feasible mitigation measures which would mitigate the project and/or other related projects' significant impacts to a level of insignificance. Also, identify those mitigation measures which will be implemented by others. Those mitigation measures that are assumed to be implemented by others will be made a condition of approval for the project to be in place prior to issuance of building permits. Mitigation measures may include, but are not limited to, the following:

1. Traffic Engineering Techniques.

- a. Locate access points to optimize visibility and reduce potential conflict.
- b. Design parking facilities to avoid queuing into public streets during peak arrival periods.
- c. Provide additional off-street parking.
- d. Dedicate visibility easements to assure adequate sight distance at intersections and driveways.
- e. Signalize or modify traffic signals at intersections.
- f. Install left-turn phasing and/or multiple turning lanes to accommodate particularly heavy turning movements.
- g. Widen the pavement to provide left- or right-turn lanes to lessen the interference with the traffic flow.¹
- h. Widen intersection approaches to provide additional capacity.
- i. Prohibit left turns to and from the proposed development.
- j. Restrict on-street parking during peak hours to increase street capacity.¹

2. Contribute to a benefit district to fund major capital improvements

¹ Physical roadway improvements to improve capacity should be considered before considering parking restrictions.

- a. Construct a grade separation.
 - b. Improve or construct alternate routes.
 - c. Complete proposed routes shown on the Los Angeles Highway Plan.
 - d. Improve freeway interchanges (bridge, widening, modifications, and etc.).
3. **Transportation System Management (TSM) Techniques²**

- a. Establish flexible working hours.
- b. Encourage employee use of carpools and public transportation (specific measures must be indicated).
- c. Establish preferential parking for carpools.
- d. Restrict truck deliveries to Major and Secondary highways and encourage deliveries during the off-peak hours.
- e. Establish a monitoring program to ensure that project traffic volumes do not exceed projected traffic demand.

Note: When it appears that other jurisdictions will be impacted by a development, the Department will request that the involved jurisdiction also review the TIA. A written response from that jurisdiction should be provided with appropriate follow-up to the lead County agency.

G. CMP Guidelines

The following information is required:

Where the project meets the criteria established in the County of Los Angeles' CMP Land Use Analysis Guidelines, a CMP analysis must be provided. A copy of the latest Guidelines will be available upon request. A CMP TIA is required for all projects required to prepare an Environmental Assessment based on local determination or projects requiring a traffic study.

² Contributions to a benefit district and/or TSM techniques may not be used to lower LOS in the capacity calculations.

The geographic area examined in the TIA must include the following, at a minimum.

- All CMP arterial monitoring intersections (see Exhibit B of the Guidelines), including freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the a.m. or p.m. peak hours.
- Main line freeway monitoring locations (see Exhibit C of the Guidelines) where the project will add 150 or more trips, in either direction, during the a.m. or p.m. weekday peak hours.
- Caltrans must also be consulted to identify other specific locations to be analyzed on the State highway system.

If, based on these criteria, the TIA identifies no facilities for study, no further traffic analysis is required.

JHC:ce

T-2/ACCESS

(01/07/99)

Attach.

EXHIBIT A

TRAFFIC IMPACT ANALYSIS REPORT CONTENTS CHECK LIST

Note: Before a full review is conducted, PW's staff will check the completeness of the Traffic Impact Analysis Report. If the Report is missing any of the items listed below, it will be returned for revision.

CONTENT	YES/ NO	COMMENT
Site Plan <ul style="list-style-type: none"> • Access locations • Interior circulation 		
Trip Generation Rates <ul style="list-style-type: none"> • Institute of Transportation Engineers (ITE) trip generation rates • Documentation for alternate rates 		
Trip Distribution <ul style="list-style-type: none"> • Regional • Local project (am/pm) • Local related projects(am/pm) 		
Traffic Counts <ul style="list-style-type: none"> • Taken within one year • Date/Time 		
Discounting <ul style="list-style-type: none"> • Internal trip discounts for mixed use developments • Pass-by trip discounts for commercial/retail developments • Backup 		
Level of Service Calculations <ul style="list-style-type: none"> • Intersection Capacity Utilization (ICU) or Criteria Movement Analysis • 10 percent yellow clearance for ICU planning method • 1,600 vehicles per lane (vpl); 2,880 vpl for dual left-turn lanes for ICU planning method • Calculation sheets • Scenarios as required per Guidelines • Existing/Future lane configurations 		
Signal Warrant Analysis <ul style="list-style-type: none"> • Peak-hour/Average Daily Traffic per the State of California Department of Transportation standards 		
Mitigation Measures <ul style="list-style-type: none"> • Project impacts • Cumulative developments impacts • Projects percent share of the cost to mitigate cumulative development impacts 		
Congestion Management Program Analysis		

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T-2/ACCESS3
02/22/99

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RICHARD J. RIORDAN
MAYOR

DEPARTMENT OF
TRANSPORTATION
221 N. Figueroa Street, Suite 500
Los Angeles, CA 90012
(213) 580-1177
FAX: (213) 580-1188

September 28, 1999

Emmanuel Ursu
City of El Segundo
Department of Planning and Building Safety
350 Main Street
El Segundo, CA 90245

RECEIVED
OCT 01 1999

Subject: CITY OF EL SEGUNDO GENERAL PLAN CIRCULATION PLAN UPDATE

The Los Angeles Department of Transportation (LADOT) has reviewed the Notice of Preparation (dated August 19, 1999) for the "City of El Segundo General Plan Circulation Plan Update" and we have the following comments:

1. In preparing your General Plan Circulation Plan Update, please review the recently adopted City of Los Angeles Transportation Element of the General Plan to ensure that the network of roadway designations and their functions remain consistent across the city boundary lines. The document should be reviewed to ensure a seamless transition between the city boundaries and prevent abrupt changes in street function, width and capacity.
2. If the City of El Segundo General Plan Circulation Plan Update proposes to provide new connections or to eliminate existing connections, then the potential impacts of redistributing traffic within the City of Los Angeles need to be quantified, addressed and appropriately mitigated.

If you have any questions regarding our comments, please contact me at (213) 485-1062.

Sincerely,

Jay W. Kim
Transportation Engineer
Los Angeles Department of Transportation

JK:jk
el-segundo.nop.wpd

c: Allyn Rifkin, DOT
Alan Willis, DOT
Michael Davies, City Planning



United States Department of the Interior

Fish and Wildlife Service

Ecological Services

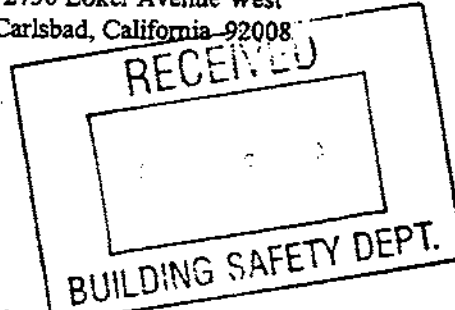
Carlsbad Fish and Wildlife Office

2730 Loker Avenue West

Carlsbad, California 92008



Emmanuel Ursu
City of El Segundo
350 Main Street
El Segundo, California 90245



OCT 08 1999

Re: Notice of Preparation for an Environmental Impact Report for the Proposed General Plan Circulation Element Update, City of El Segundo, Los Angeles County, California

Dear Mr Ursu:

We have reviewed the notice of preparation (NOP) for an environmental impact report for the proposed general plan circulation element update for the City of El Segundo. The following comments and recommendations regarding associated biological impacts are based on our review of the NOP and our knowledge of habitat types and species within Los Angeles County.

We are concerned for the protection of fish and wildlife resources and their habitats. In this regard, we provide comments on public notices issued for a Federal permit or license affecting the Nation's waters pursuant to the Clean Water Act. We also administer the Endangered Species Act of 1973 (Act), as amended. Section 7 of the Act requires Federal agencies to consult with the Fish and Wildlife Service (Service) should it be determined that their actions may affect federally listed species. Section 9 of the Act prohibits the "take" (e.g., harm, harassment, pursuit, injury, kill) of federally listed wildlife. "Harm" is further defined to include habitat modification or degradation where it kills or injures wildlife by impairing essential behavioral patterns including breeding, feeding, or sheltering. Take incidental to otherwise lawful activities can be permitted under the provisions of sections 7 (Federal consultations) and 10 (habitat conservation plans) of the Act.

Since the information describing the full nature of the project was incomplete we feel we can not fully comment on the referenced NOP. To facilitate the evaluation of the proposed project from the standpoint of fish and wildlife protection, we request that the DEIR contain the following specific information.

1. A description of the environment in the vicinity of the project.
2. A complete discussion of the purpose and need for the project and each of its alternatives.
3. A complete description of the proposed project, including the limits of the project area. The description should identify areas that would be affected due to the project. This project description should include all practicable alternatives that have been considered to avoid and reduce project impacts to sensitive habitats, wetlands; and endangered, threatened, or sensitive

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- species to the maximum extent practicable. The project should also identify sources of funding (e.g., Federal or State).
4. Quantitative and qualitative assessments of the biological resources and habitat types that will be impacted by the proposed project. This assessment should include a list of Federal candidate, proposed, or listed species; State-listed species; and locally sensitive species that are on or near the project site, including a detailed discussion of these species and information pertaining to their local status and distribution. The anticipated or real impacts of the projects on these species should be addressed fully. We are particularly interested in any and all information and data pertaining to potential impacts to populations of listed species, including the coastal California gnatcatcher (*Poliophtila californica californica*, "gnatcatcher"). We are also interested, if applicable, in protecting important wildlife corridors to preserve connectivity.
 5. An assessment of direct, indirect, and cumulative project impacts to fish and wildlife associated habitats, particularly growth-inducing effects of the project (e.g., increased population, increased development, increased traffic). All facets of the project (e.g., construction, implementation, operation, and maintenance) should be included in this assessment. Proposed developments in the surrounding area should be addressed in the analysis of cumulative impacts, including improvements to other segments of El Segundo.
 6. An assessment of potential impacts to wetlands and jurisdictional waters of the United States. Section 404 of the Clean Water Act prohibits the unauthorized discharge of dredged or fill material in such waters, including wetlands. This section also provides that the U.S. Army Corps of Engineers (Corps) may issue permits for discharges of dredged or fill material into jurisdictional waters and wetlands. Potential areas of Corps jurisdiction should be evaluated and wetlands should be delineated using the methodology set forth in the Corps' Wetland Delineation Manual (Environmental Laboratory 1987). The EIR should disclose all impacts to jurisdictional waters and wetlands, and proposed measures to be taken to avoid impacts, minimize impacts, and mitigate unavoidable impacts.

We appreciate the opportunity to comment on the NOP for potential impacts on sensitive and endangered species, wildlife and wetlands. If you have any questions pertaining to these comments, please contact Benjamin Matibag of my staff at (760) 431-9440.

Sincerely,



Jim A. Bartel
Assistant Field Supervisor

Appendix C

Circulation Element Update Technical Report

CIRCULATION ELEMENT UPDATE TECHNICAL REPORT

Prepared for

City of El Segundo

Prepared by

**Meyer, Mohaddes Associates, Inc.
400 Oceangate, Suite 480
Long Beach, CA 90802**

October 2000

J98-094

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EXECUTIVE SUMMARY

Overview

The purpose of the Circulation Element Update is to assess the impacts of future growth in traffic and recommend a transportation system that will accommodate that growth with acceptable traffic operating conditions. A significant level of traffic growth is projected in the future if the City's Land Use Plan is fully built-out. Approximately 9,600 new vehicle trips would be added to the City's roadway system during the afternoon peak hour as a result of development in the City. Additional traffic growth would occur due to regional growth such as growth at LAX and land use changes in adjacent cities.

A computer traffic model has been developed to assess future increases in trip making in the City, and a series of transportation system improvement recommendations have been developed for review by the City. The Current Master Plan of Streets has been assessed in terms of its ability to adequately handle anticipated future traffic. In some cases, build-out of the Master Plan of Streets will not be able to accommodate the level of anticipated growth without creating adverse traffic operating conditions. At those locations, additional improvements are recommended. The current (1992) Master Plan of Streets is illustrated on the following two Figures (ES-1 and ES-2).

In addition to the overall analysis of transportation system operating conditions and future growth in travel in El Segundo, a number of special issues were also addressed as part of the Circulation Element Update, including the following:

- **Nash/Douglas Couplet** - Traffic implications of converting Nash/Douglas back to two-way flow. This conversion was assumed as a baseline condition for all future year analyses
- **Unconstructed Master Plan Streets** - Potential to modify the Master Plan of Streets and delete certain proposed unconstructed segments from the Master Plan. Several modifications to the plans are proposed
- **Main Street** - Potential to convert Main Street to a more pedestrian environment with fewer travel lanes
- **Future Mitigation Recommendations** - Need for additional improvements beyond the current Master Plan of Streets to maintain adequate traffic operating conditions
- **Residential Street Traffic Intrusion** - Assessment of neighborhood residential street traffic intrusion issues and development of a plan to address residential street impacts

The analysis of these and other important circulation system issues is detailed in the body of this technical report.

Existing Transportation System Operating Conditions

Based on the results of the technical analysis, a number of intersections currently operate poorly (level of service E or F), including the following:

- Aviation Boulevard/El Segundo Boulevard (AM)
- Aviation Boulevard/Rosecrans Avenue (AM, PM)
- Sepulveda Boulevard/Imperial Highway (AM, PM)
- Sepulveda Boulevard/Grand Avenue (AM, PM)
- Sepulveda Boulevard/El Segundo Boulevard (AM, PM)

- Sepulveda Boulevard/Rosecrans Avenue (AM, PM)
- Main Street/Imperial Highway (AM)

Future Roadway Deficiencies With Build-out of the Current Transportation Master Plan

The level of growth noted above would result in several additional intersections operating at level of service E or F (considered significant and warranting improvement). With build-out of the Master Plan of Streets and anticipated land use growth, the following intersections are projected to operate at LOS E or F:

- Aviation Boulevard/Imperial Highway
- Aviation Boulevard/El Segundo Boulevard
- Aviation Boulevard/Rosecrans Avenue
- Douglas Street/Imperial Highway
- Douglas Street/El Segundo Boulevard
- Douglas Street/Utah Avenue
- Nash Street/Imperial Highway
- Sepulveda Boulevard/Imperial Highway
- Sepulveda Boulevard/Grand Avenue
- Sepulveda Boulevard/El Segundo Boulevard
- Sepulveda Boulevard/Rosecrans Avenue
- Center Street/El Segundo Boulevard

Improvement recommendations for these intersections are included in the technical documentation.

Nash/Douglas One-way Couplet Conversion Analysis

The potential conversion of the Nash/Douglas one-way couplet back to two-directional flow was conducted as part of the Circulation Element update. The results of the analysis indicate that conversion back to two-way traffic flow would not result in any significant intersection or roadway impacts given current levels of traffic. The one-way couplet system would provide somewhat greater capacity to handle future anticipated increases in traffic flow, however, other types of roadway and intersection improvements can be implemented that will enable the City to maintain acceptable levels of service along the corridor without the one-way street system. Therefore, it is concluded that conversion back to two-way flow will not adversely affect current operating conditions (with appropriate intersection design), and that potential future impacts can be mitigated by other types of improvement measures such as spot intersection widening, restriping and signal improvements. The conversion to two-way flow would temporarily disrupt traffic during the construction period when signalization, signing and striping changes are made. Based on the results of the analysis, the conversion back to two-way flow was assumed for future Master Plan analyses.

Unconstructed Master Plan Roadway Sections

There are a number of unconstructed roadway sections that are included in the current Master Plan of Streets. There is concern that some of those segments, if constructed, could cause adverse secondary traffic impacts such as increases in traffic flow in the western portion of the City. Also, some of the segments may not be feasible to implement due to right-of-way constraints and other issues. Due to these concerns, each of the unconstructed segments has been analyzed to determine if deleting that segment would result in significant circulation system impacts. In most cases, it has been determined that deletion of the roadway segment would not result in serious transportation system deficiencies in the future. It is

recommended that the following unconstructed Master Plan streets be removed from the Master Plan, or modified in the Master Plan as indicated:

- **Nash Street** - delete extension from Master Plan and include in potential future transportation corridor
- **Lairport Street** - maintain extension in Master Plan
- **Grand Avenue** - maintain extension to Douglas Street, but delete segment from Douglas to Aviation
- **Mariposa Avenue** - delete extension from Master Plan
- **Hughes Way** - delete extension from Master Plan and include in potential future transportation corridor.

The City should consider these extensions on a case-by-case basis as part of potential mitigation packages for future development projects. Also refer to discussion in the full technical report of a future transportation corridor for the southeast quadrant of the City in the place of the Hughes Way and Nash Street extensions.

Residential Street System Traffic Impacts

There is increasing concern regarding traffic intrusion into local residential streets. The traffic intrusion appears in the form of non-local "through" trips and/or excessive travel speeds. Other issues in addition to excessive speeds and volumes include the following:

- Narrow cross section width of Mariposa Avenue
- Peak period congestion around schools
- Secondary traffic impacts of Hillcrest Street closure

The issue of residential traffic intrusion is a serious issue that needs to be pursued in detail on a neighborhood-by-neighborhood basis. Many other Southern California cities have established formalized procedures to assess neighborhood traffic impacts, involve affected residents and businesses, develop mitigation programs, and prioritize improvement measures for funding. As part of the Circulation Element Update, a series of local residential street issues have been reviewed, and a detailed program to address neighborhood traffic intrusion has been developed for consideration by the City. The next step would be to implement a Neighborhood Traffic Control Program and begin detailed analysis of individual streets, hold public meetings, reach consensus on recommendations and identify funding. While that level of detail is not appropriate for a General Plan analysis, a plan is presented that would allow the City to systematically address local residential street issues with the proper level of citizen involvement throughout the process.

Main Street Analysis

The Downtown area, including Main Street was recently reviewed in the context of an overall Master Plan. A series of roadway alternatives and potential land use growth have been analyzed. Main Street has been assessed assuming one through-lane in each direction (it is currently two lanes in each direction), and also as one through-lane in each direction plus a center left turn lane. The results of the analysis indicate that Main Street would operate at acceptable levels of service with three lanes at intersections (one through lane plus a center left turn lane), however, the two lane configuration (only one through lane in each direction with no turn lanes at intersections) is not recommended.

Improvement Recommendations Beyond the Current (1992) Master Plan

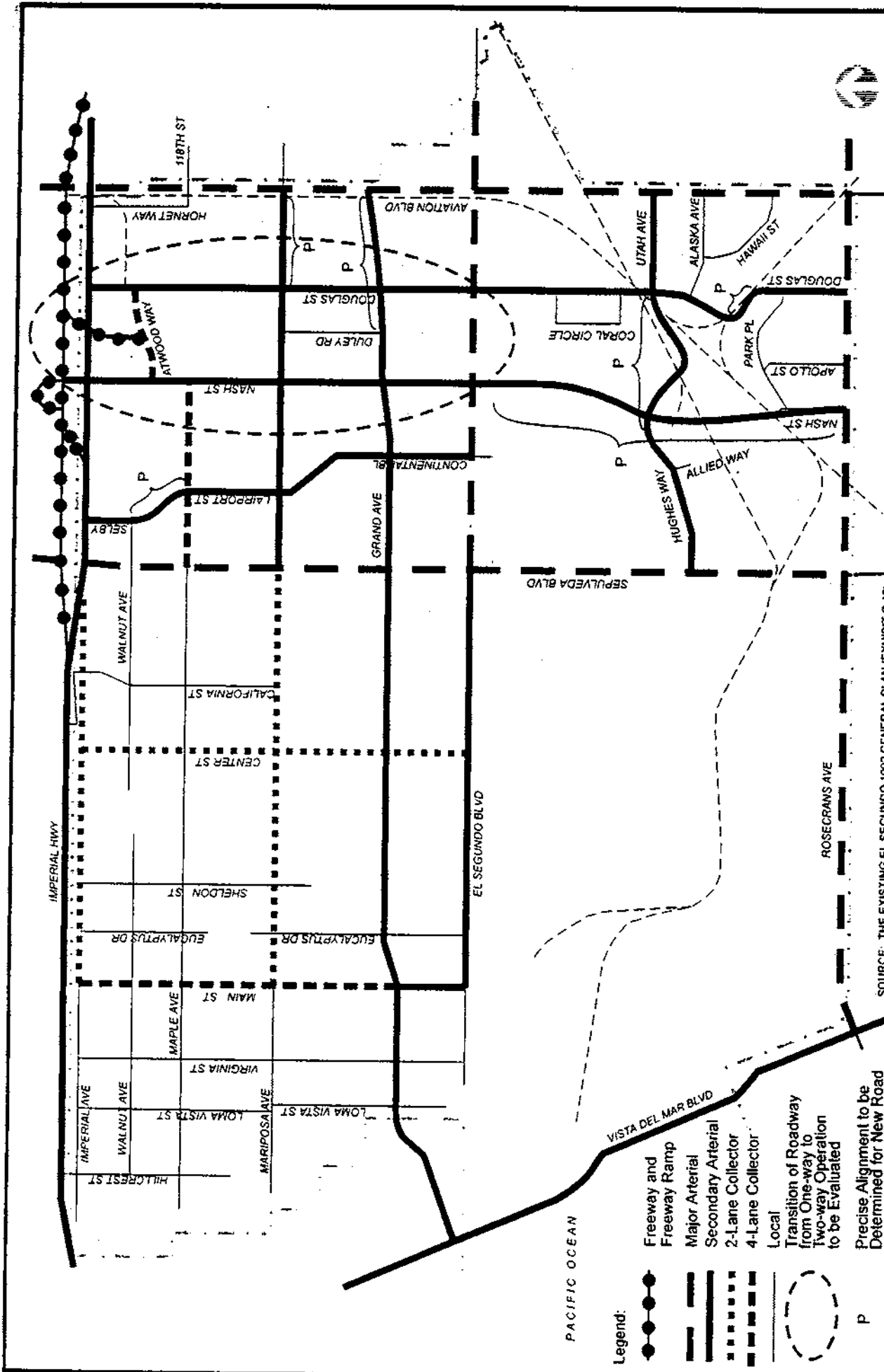
The level of growth anticipated by the Land Use Element of the General Plan will result in the need for improvement beyond what is shown in the current General Plan Circulation Element (per the Master Plan of Streets). Some intersections and street segments will require additional improvements beyond those anticipated in the Master Plan. For example, dual left turn lanes and additional through lanes will be required at some intersections to maintain acceptable service levels. Those improvements are detailed in the technical report. In some cases, such as along Sepulveda Boulevard, it has been determined that it would not be feasible to provide the level of improvement needed to maintain adequate levels of service. The improvements are not feasible because of the significant amount of additional right-of-way that would be required to construct the improvements. That amount of right-of-way would mean removing many structures and creating a virtual "Highway" through the City. Such improvements would result in severe secondary environmental and economic impacts that are greater than the net benefit of the improvements in terms of traffic flow. Much of the excess traffic volume is due to regional through traffic growth. Mitigation for regional through traffic will require the cooperation and funding from Caltrans, LACMTA and other regional agencies. These issues will be addressed as part of the environmental documentation for the Circulation Element Update.

EL SEGUNDO CIRCULATION ELEMENT
Adopted 1992 Master Plan of Streets

Meyer, Mohaddes Associates, Inc.
An Itieris Company

SOURCE: THE EXISTING EL SEGUNDO 1982 GENERAL PLAN (EXHIBIT C-10)

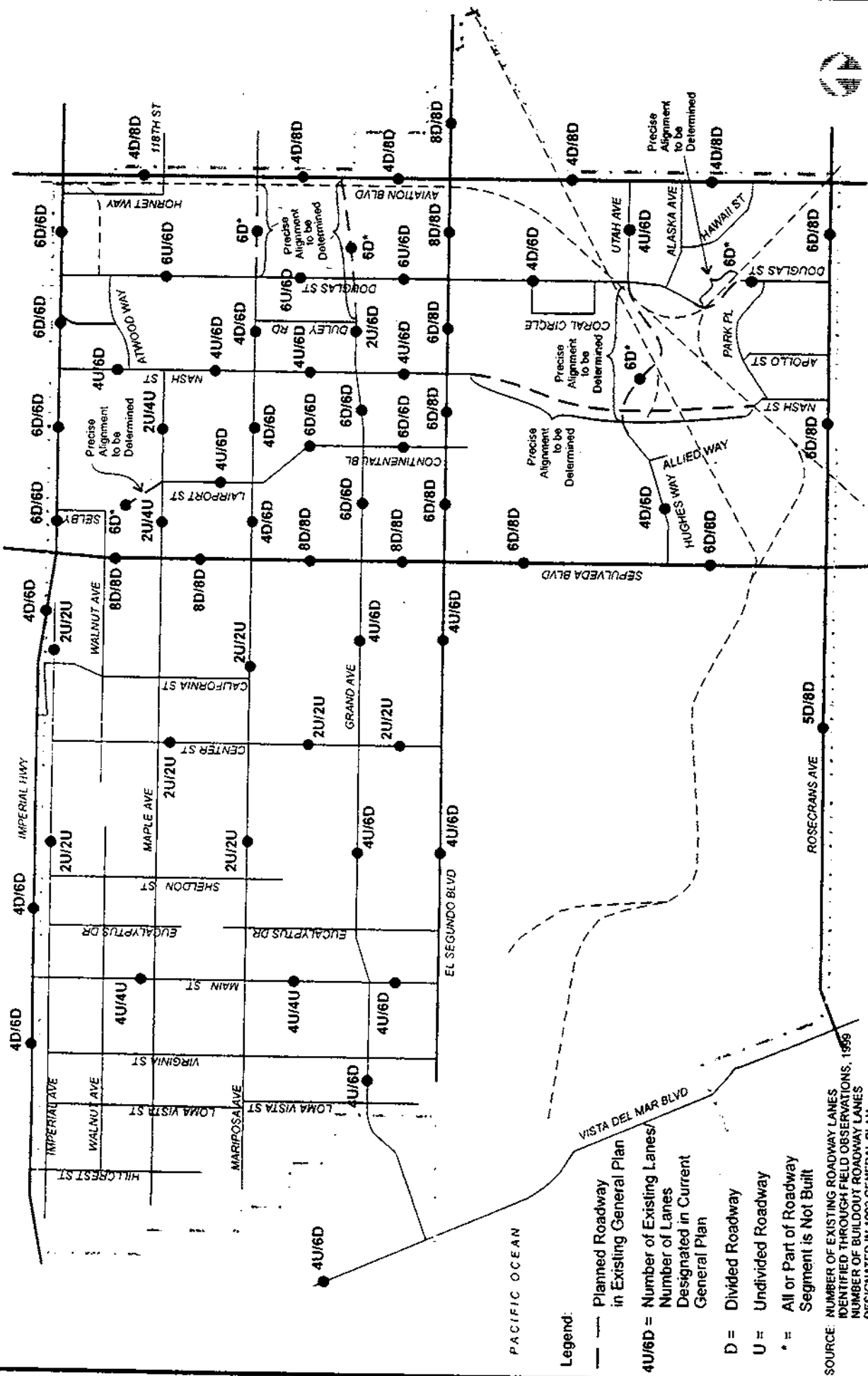
NOT TO SCALE



- Legend:**
- Freeway and Freeway Ramp
 - Major Arterial
 - Secondary Arterial
 - 2-Lane Collector
 - 4-Lane Collector
 - Local
 - Transition of Roadway from One-way to Two-way Operation to be Evaluated
 - Precise Alignment to be Determined for New Road
 - P

EL SEGUNDO CIRCULATION ELEMENT
Arterial Roadway Characteristics

NOT TO SCALE



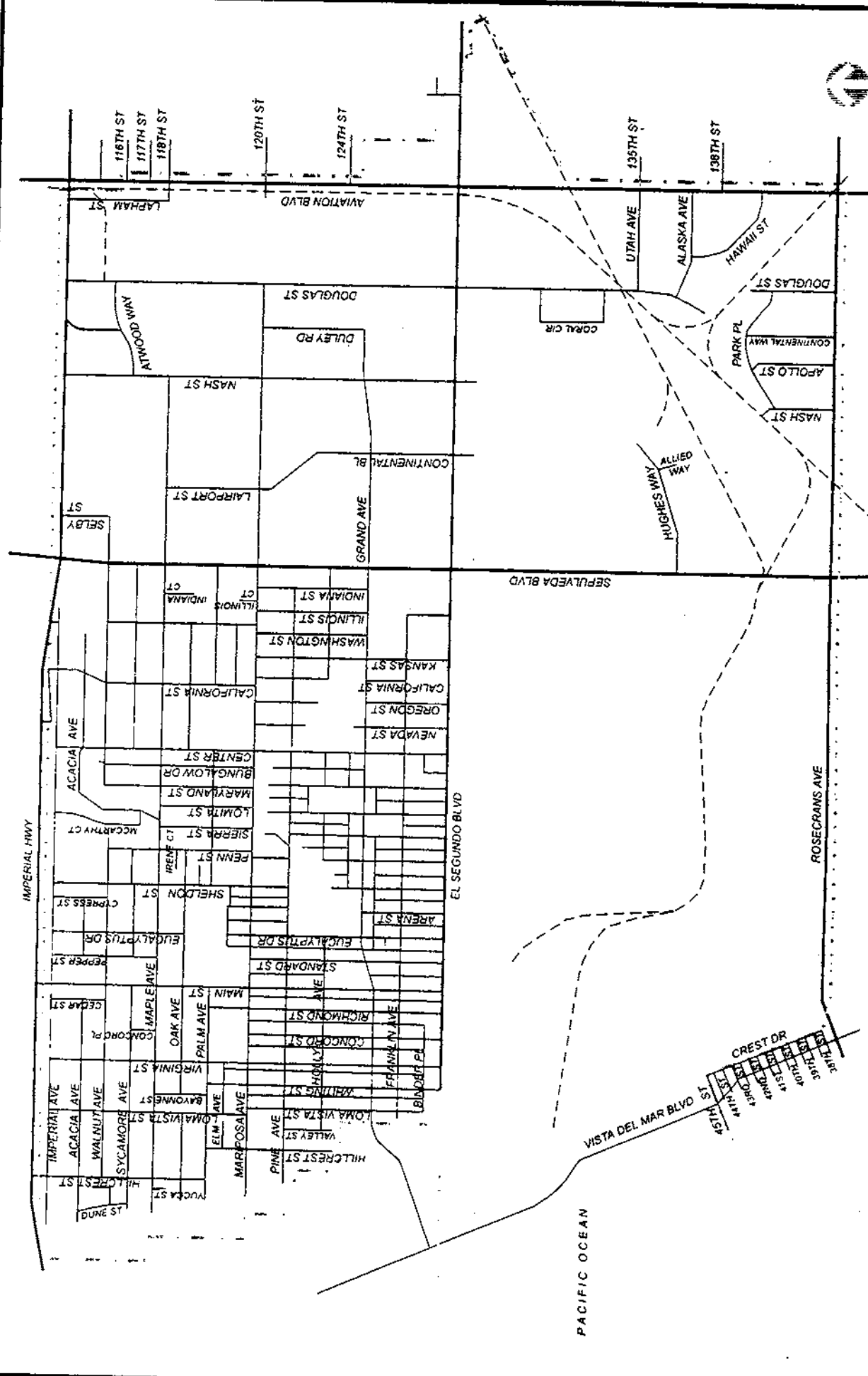
Legend:

- Planned Roadway in Existing General Plan
- 4U/6D = Number of Existing Lanes/ Number of Lanes Designated in Current General Plan
- D = Divided Roadway
- U = Undivided Roadway
- * = All or Part of Roadway Segment is Not Built

SOURCE: NUMBER OF EXISTING ROADWAY LANES IDENTIFIED THROUGH FIELD OBSERVATIONS, 1996
NUMBER OF BUILDOUT ROADWAY LANES DESIGNATED IN 1992 GENERAL PLAN



Meyer, Mohaddes Associates, Inc.
An Itrics Company



NOT TO SCALE

EXHIBIT
1

EL SEGUNDO CIRCULATION ELEMENT
Existing Street Network

Meyer, Mohaddes Associates, Inc.
An Ifers Company

EXISTING CONDITIONS

INTRODUCTION

Purpose

The purpose of this Circulation Element Update Technical Report is to document the methods and results of the analysis of the existing and future circulation conditions in the City of El Segundo, to assess impacts of growth, to review the Master Plan of Streets which was adopted in 1992 and to make recommendations regarding additional improvements that may be needed to accommodate anticipated growth.

Authorization

The City of El Segundo adopted a General Plan in 1992 and is now undertaking a revision of the Circulation Element of the Plan. The pertinent government code sections relating to the Circulation Element are as follows:

- Government Code Section 65302(b): (The general plan shall include) a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan.
- Government Code Section 95303: The general plan may . . . address any other subjects which, in the judgement of the legislative body, relate to the physical development of the county or city.

EXISTING CIRCULATION SYSTEM

The City of El Segundo is served by the existing network of roadways shown in Exhibit 1. The existing street network is essentially a grid system of north/south and east/west roadways. The primary north/south roadways are Aviation Boulevard, Douglas Street, Nash Street, Sepulveda Boulevard (State Highway), Center Street, Main Street and Vista Del Mar. The primary east/west streets are Imperial Highway, Imperial Avenue, Maple Avenue, Mariposa Avenue, Grand Avenue, El Segundo Boulevard and Rosecrans Avenue. The characteristics of each of these roadways (number of lanes, traffic control, parking, etc.) are described in Table 1.

**TABLE 1
CITY OF EL SEGUNDO ROADWAY CHARACTERISTICS**

Street	Section	No. of Lanes (Each Direction)	Separate Turn Lanes	Traffic Control	Curb Parking	Raised Median	Speed Limit (mph)	Current Master Plan Designation
Mariposa Ave.	Main St. to Sepulveda Blvd.	1	No	Stop controls at Sheldon, Center and California. Signals at Main St. and Sepulveda Blvd.	Yes	No	25	2-Lane Collector
Mariposa Ave.	Sepulveda Blvd. to Continental Blvd.	3 - EB 2 - WB	Yes	Signals at Sepulveda and Continental	No	No	40	Secondary Arterial
Mariposa Ave.	Continental Blvd. to Douglas St.	2	Yes	Signals at Continental, Nash and Douglas St.	No	No	40	Secondary Arterial
Maple Ave.	Main St. to Sepulveda Blvd.	1	No	Stop signs at Main, Sheldon, Penn, Lomita, Center, California and Washington	Yes	No	25	Local
Maple Ave.	Sepulveda Blvd. to Nash St.	1	Only at Sepulveda and Nash	Signals at Sepulveda Blvd. and Nash St.	Yes	No	35	4-Lane Collector
Grand Ave.	Vista Del Mar to Main St.	1 to 2	No	Signal at Main St. and Vista Del Mar	Yes, most segments	Yes, some segments	25	Secondary Arterial
Grand Ave.	Main St. to Sepulveda Blvd.	2	Only at Sepulveda	Signal at Main, Lomita, Kansas St. and Sepulveda Blvd.	Yes	Yes, some segments	25 to 35	Secondary Arterial
Grand Ave.	Sepulveda Blvd. to Nash St.	3	Yes, at Sepulveda	Signal at Sepulveda Blvd., Continental and Nash	No	Yes	35	Secondary Arterial
Grand Ave.	Nash St. to Duley Road	1	No	None	Yes	No	35	Secondary Arterial

Source: 1992 City of El Segundo Circulation Element and Field Observations, 1999.

**TABLE I
CITY OF EL SEGUNDO ROADWAY CHARACTERISTICS**

Street	Section	No. of Lanes (Each Direction)	Separate Turn Lanes	Traffic Control	Curb Parking	Raised Median	Speed Limit (mph)	Current Master Plan Designation
Vista Del Mar	Grand to 45th St.	2	None	Signals at 45th St. and Grand Avenue	No	None	45	Secondary Arterial
Main St.	Imperial Hwy. to Grand Ave.	2	None	Signals at Imperial Hwy., Imperial Ave., Palm, Mariposa, Holly and Grand, Stop Controls for Main at Maple and Pine	Yes	None	25	4-Lane Collector
Main St.	Grand Ave. to El Segundo Blvd.	2	None	Signal at Grand and Stop Control at El Segundo	Yes	None	25	Secondary Arterial
Center St.	Imperial Ave. to El Segundo Blvd.	1	None	Stop Controls for Center at El Segundo, Grand, Pine, Holly, Mariposa, Palm, Maple, Walnut and Imperial Ave.	Yes	None	25	2-Lane Collector
Sepulveda Blvd. (State Route 1)	Imperial Ave. to El Segundo Blvd.	4	Yes	Signals at all major cross streets	No - except for short section during of-peak hours	Yes	40	Major Arterial
Sepulveda Blvd. (State Route 1)	El Segundo Blvd. to Rosecrans Ave.	3	Yes	Signals at all major cross streets	No	No, painted median	45	Major Arterial
Nash St.	Imperial Hwy. to El Segundo Blvd.	4 (one-way SB only)	Yes	Signals at Imperial Hwy., Atwood Way, Maple Ave., Mariposa Ave., Grand Ave. and El Segundo Blvd. Pedestrian signal between Imperial Hwy. and Atwood Way	No	None	35	Secondary Arterial

Source: 1992 City of El Segundo Circulation Element and Field Observations, 1999.

**TABLE 1
CITY OF EL SEGUNDO ROADWAY CHARACTERISTICS**

Street	Section	No. of Lanes (Each Direction)	Separate Turn Lanes	Traffic Control	Curb Parking	Raised Median	Speed Limit (mph)	Current Master Plan Designation
Douglas St.	Imperial Hwy. to El Segundo Blvd.	6, one-way NB only	Yes, at Imperial Hwy., Mariposa, and El Segundo Blvd.	Signals at Imperial Hwy., Atwood Way, Mariposa Ave., El Segundo Blvd. and between Atwood Way and Mariposa Ave.	No	None	40	Secondary Arterial
Douglas St.	El Segundo to Utah	2	Yes	Signal at El Segundo	No	No	40	Secondary Arterial
Douglas St.	Utah to Alaska	2	No	Stop sign at Utah and Alaska	No	No	40	Secondary Arterial
Aviation Blvd.	Imperial Hwy. to Rosecrans Ave.	2	Yes	Signals at all major cross street	No	No, painted	40	Major Arterial
Imperial Hwy.	Vista Del Mar to Sepulveda Blvd.	2	Yes	Signals at Vista Del Mar, Pershing, Main, California and Sepulveda Blvd.	No	Yes	50	Secondary Arterial
Imperial Hwy.	Sepulveda Blvd. to Aviation Blvd.	3	Yes	Signals at Sepulveda, Hughes Way, Nash, Kilroy Center, Douglas and Aviation Blvd.	No	Yes	40	Secondary Arterial
Imperial Ave.	Main St. to Sepulveda Blvd.	1	No	Signal at Main St., Stop signs at Sheldon, Center and California	Yes	No	25	2-Lane Collector
El Segundo Blvd.	Main St. to Sepulveda Blvd.	2	No, except at Sepulveda	Signals at Illinois St. and Sepulveda, Stop control at Main St.	No	No	35	Secondary Arterial
El Segundo Blvd.	Sepulveda to Douglas	3	Yes	Signals at Sepulveda, Continental, Nash and Douglas	No	Yes	40	Major Arterial

Source: 1992 City of El Segundo Circulation Element and Field Observations, 1999.

**TABLE 1
CITY OF EL SEGUNDO ROADWAY CHARACTERISTICS**

Street	Section	No. of Lanes (Each Direction)	Separate Turn Lanes	Traffic Control	Curb Parking	Raised Median	Speed Limit (mph)	Current Master Plan Designation
El Segundo Blvd.	Douglas to Isis Ave.	4	Yes	Signals at Douglas, Aviation and Isis	No	Yes	40	Major Arterial
Rosecrans Ave.	Vista Del Mar to Sepulveda Blvd.	3 WB, 2EB	Yes	Signals at Vista Del Mar and Sepulveda Blvd.	Yes, on south side (Manhattan Beach); No, on north side	Yes	40	Major Arterial
Rosecrans Ave.	Sepulveda Blvd. to Aviation Blvd.	3	Yes	Signals at Nash, Apollo, Continental, Douglas and Aviation Blvd.	No	Yes	45	Major Arterial

Source: 1992 City of El Segundo Circulation Element and Field Observations, 1999.

Relation to the Regional Roadway System

Regional access to the City of El Segundo is provided primarily by the San Diego Freeway (I-405) to the east and the Century Freeway (I-105) to the north. Access to the San Diego Freeway is provided via Imperial Highway, El Segundo Boulevard and Rosecrans Avenue. On and off-ramp connectors to the Century Freeway are provided at Imperial Highway, Sepulveda Boulevard, Hughes Way, Atwood Way and a westbound off ramp at Nash Street. Other roadways which carry significant amounts of regional traffic are Aviation Boulevard, Sepulveda Boulevard, Imperial Highway and Rosecrans Avenue. The regional roadway network is shown in Exhibit 2.

Analysis of Daily Operating Conditions on Existing Street Network

The characteristics of key arterial roadways in the City of El Segundo are shown in Exhibit 3, including the present number of roadway lanes. Exhibit 3 also presents the number of roadway lanes designated in the City's 1992 adopted General Plan for each roadway upon buildout of the General Plan, including those roadways not yet constructed. Exhibits 4 and 5 illustrate daily traffic volume on the roadway system. Existing daily traffic volumes were collected by the City of El Segundo as part of the City's traffic count program. The counts were collected in May 1998.

Traffic operating conditions were analyzed on each of the arterials designated on the City's Master Plan of Roadways. This was done by comparing the average daily traffic volume for each arterial segment to the estimated daily capacity. A volume to capacity ratio (V/C) was determined for each roadway segment. The daily roadway capacity for each roadway was estimated by considering the existing number and type of roadway lanes (shown in Exhibit 3). Table 2 lists the estimated roadway capacities by type of roadway and number of lanes.

TABLE 2
ESTIMATED CAPACITIES OF EL SEGUNDO ROADWAYS
(at Level of Service "E")

Roadway Type	Estimated Daily Capacity
2-Lane Local	10,000
2-Lane Collector	14,000
4-Lane Undivided	31,000
4-Lane Divided	40,400
6-Lane Divided	53,000
8-Lane Divided	70,000

Note: The above Level of Service "E" daily capacities, are consistent with the assumptions used in the 1992 update of the City's Circulation Element.



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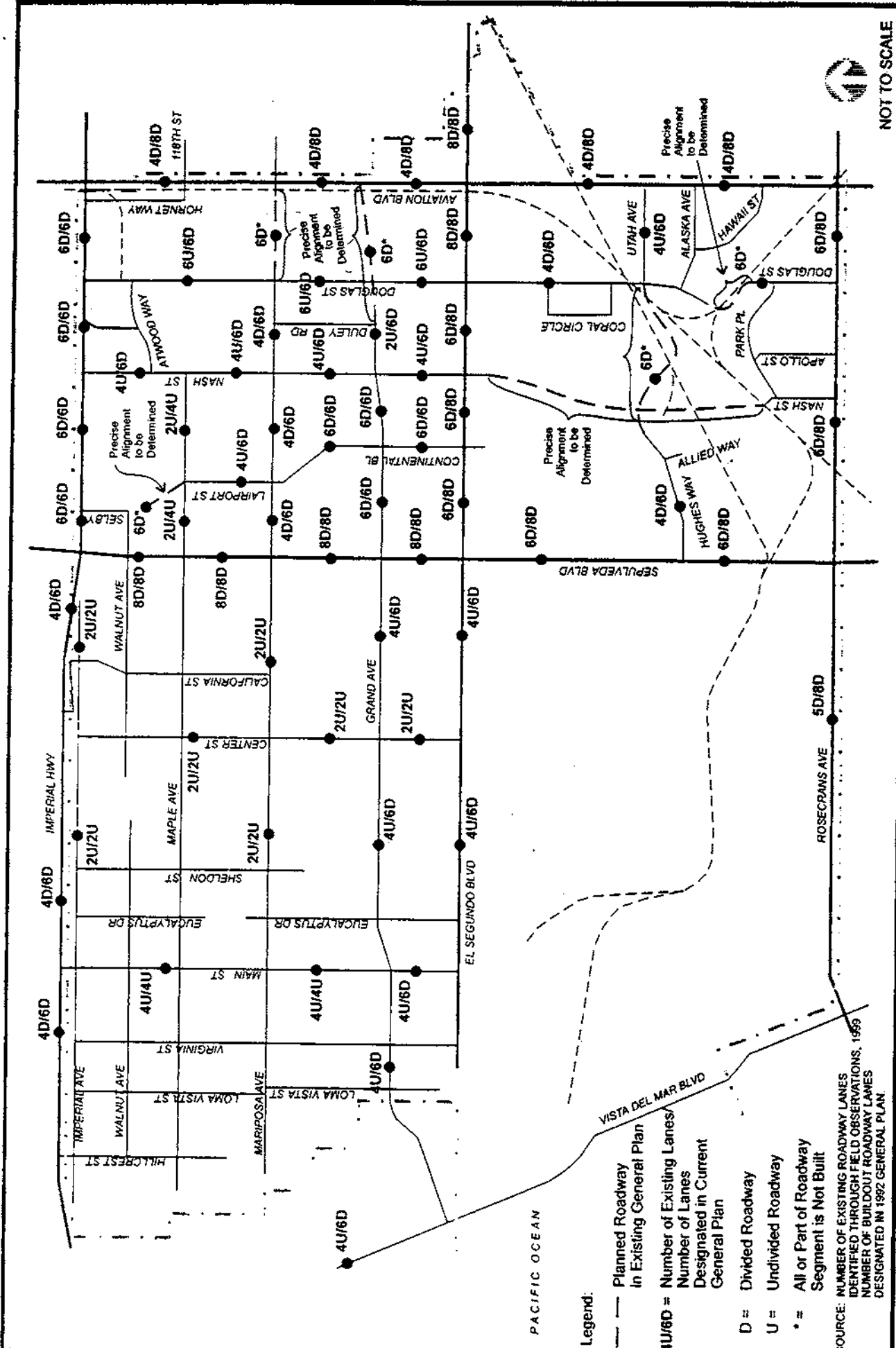


**EL SEGUNDO CIRCULATION ELEMENT
Regional Roadway System**

**EXHIBIT
2**

EL SEGUNDO CIRCULATION ELEMENT
Arterial Roadway Characteristics

Meyer, Mohaddes Associates, Inc.
An Iteris Company



NOT TO SCALE

Legend:

- Planned Roadway in Existing General Plan
- 4U/6D = Number of Existing Lanes/ Number of Lanes Designated in Current General Plan
- D = Divided Roadway
- U = Undivided Roadway
- * = All or Part of Roadway Segment is Not Built

SOURCE: NUMBER OF EXISTING ROADWAY LANES IDENTIFIED THROUGH FIELD OBSERVATIONS, 1999
NUMBER OF BULDOZER ROADWAY LANES DESIGNATED IN 1992 GENERAL PLAN

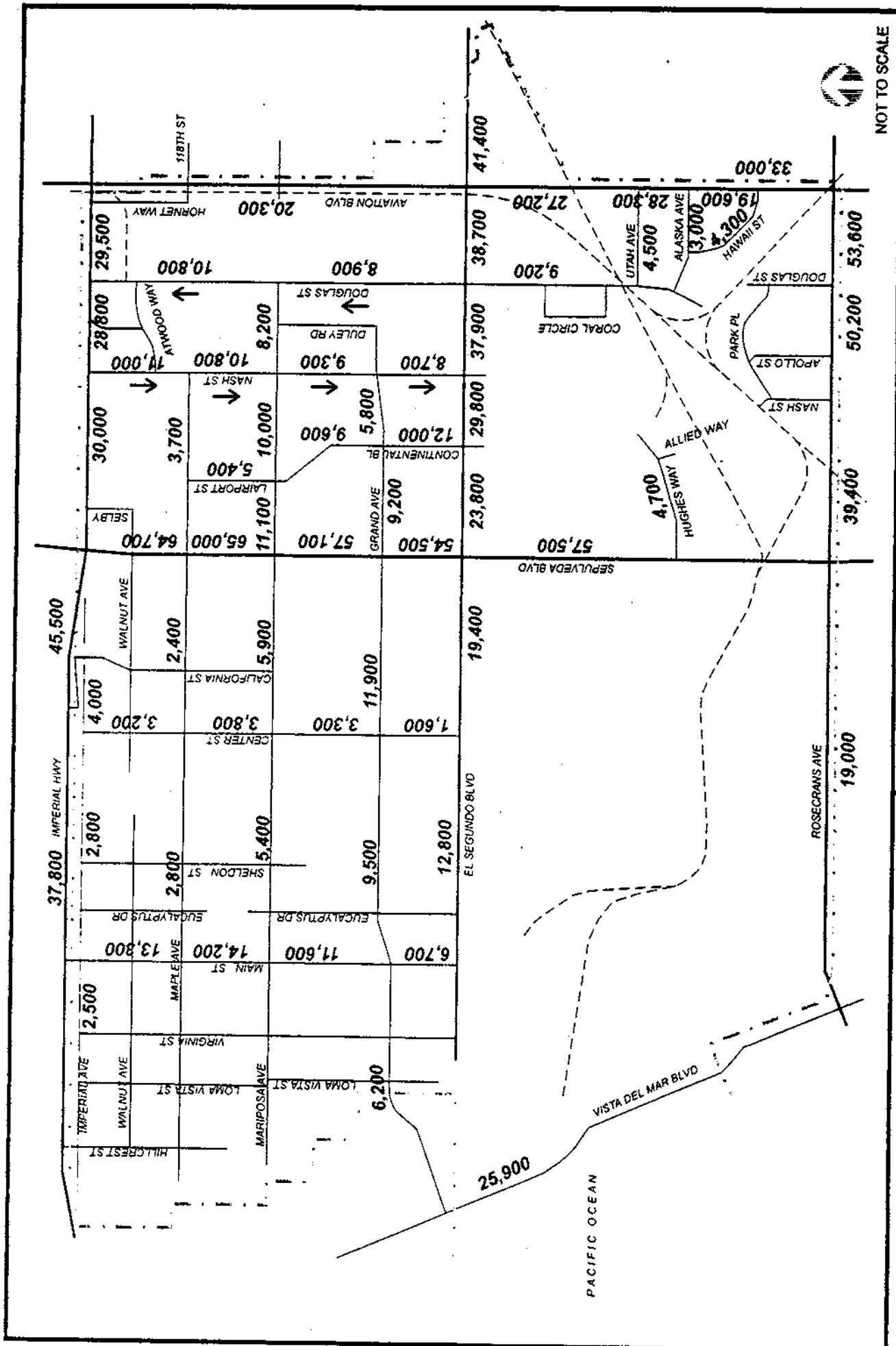


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An Itieris Company

EL SEGUNDO CIRCULATION ELEMENT
Existing Daily Traffic Volumes

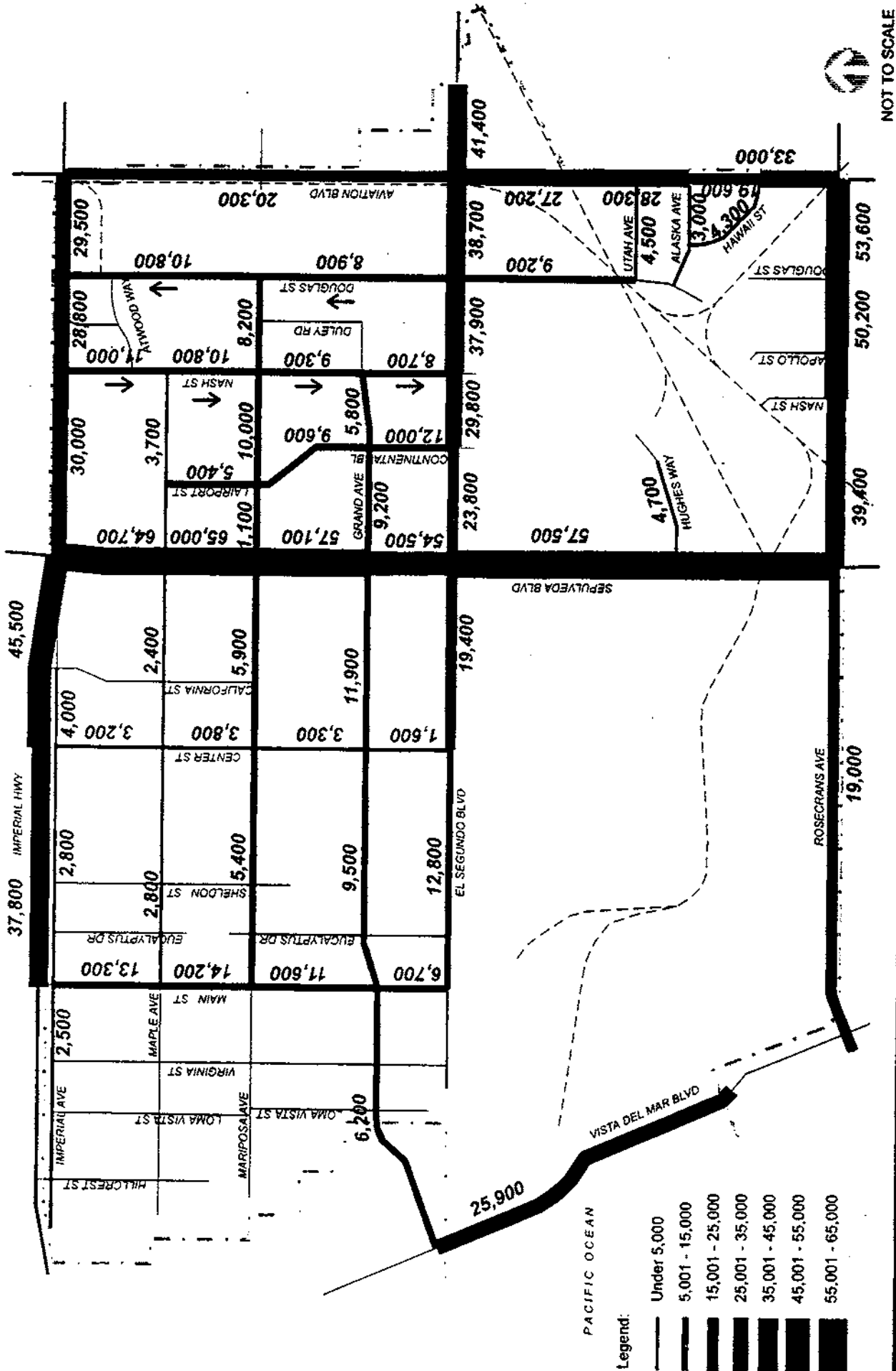
EXHIBIT
4

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EL SEGUNDO CIRCULATION ELEMENT
Existing Daily Traffic Volumes

Meyer, Mohades Associates, Inc.
An Itefs Company



Arterial Level of Service Concept

The concept of arterial level of service is typically defined in terms of *average travel speed* of all vehicles on the arterial. Average travel speed is strongly influenced by the density of signalized intersections per mile and average intersection delay. In some cases, such as the City of El Segundo, the volume-to-capacity ratio definition of arterial level of service is more appropriate due to the variations of signalized intersection densities within the city (i.e., the portion of the city west of Sepulveda Boulevard is more residential in nature with fewer traffic signals per mile versus the portion of the city east of Sepulveda Boulevard which is more commercial/business oriented and has more signals). Exhibit 6 shows a graphical representation of level of service (LOS), traffic flow conditions and average travel speed ranges for arterial roadway segments.

Levels of Service range from LOS A to LOS F. Level of Service A indicates excellent operating conditions and little motorist delay. Level of Service F represents congested conditions with excessive vehicle delay. Typically, LOS D is considered the lowest acceptable operating condition on urban arterial roadways.

The analysis of the daily arterial operating conditions was conducted by comparing the daily traffic volume and estimated daily capacity for each roadway defined in Table 2. The results of this analysis are summarized in Table 3 and presented graphically on Exhibit 7.

A review of Table 3 and Exhibit 7 reveals that the majority of roadways in the City of Segundo operate at LOS "C" or better. The roadway links that operate at LOS "D" are as follows:

- Aviation Boulevard from Hawaii Street to Rosecrans Avenue
- Sepulveda Boulevard from Mariposa Avenue to Grand Avenue

The following roadway segments operate at LOS "E":

- Imperial Highway from Main Street to Center Street
- Rosecrans Avenue from Nash Street to Douglas Street
- Sepulveda Boulevard from Imperial Highway to Maple Avenue
- Sepulveda Boulevard from Maple Avenue to Mariposa Avenue

An analysis of daily operating conditions also indicates that the following three roadway segments currently experience LOS "F":

- Imperial Highway from Center Street to Sepulveda Boulevard
- Rosecrans Avenue from Douglas Street to Aviation Boulevard
- Sepulveda Boulevard from El Segundo Boulevard to Rosecrans Avenue








LEVEL OF SERVICE	FLOW CONDITIONS	AVERAGE TRAVEL SPEED (MPH)
A 	<p>LOS A describes primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.</p>	≥ 35
B 	<p>LOS B represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the arterial classification. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.</p>	≥ 28
C 	<p>LOS C represents stable operations; however, ability to maneuver and change lanes in midblock locations may be more restricted than at LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50 percent of the average free-flow speed for the arterial classification. Motorists will experience appreciable tension while</p>	≥ 22
D 	<p>LOS D borders on a range in which small increases in flow may cause substantial increase in delay and hence decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these factors. Average travel speeds are about 40 percent of free-flow speed.</p>	≥ 17
E 	<p>LOS E is characterized by significant delays and average travel speeds of one-third the free-flow speed or less. Such operations are caused by some combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.</p>	≥ 13
F 	<p>LOS F characterizes arterial flow at extremely low speeds below one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized locations, with high delays and extensive queueing. Adverse progression is frequently a contributor to this condition.</p>	< 13
 <p>Meyer, Mohaddes Associates, Inc. An Ileris Company</p>		<p>EL SEGUNDO CIRCULATION ELEMENT Arterial Level of Service Interpretation</p> <p>EXHIBIT 6</p>

TABLE 3

COMPARISON OF EXISTING DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES

ROADWAY SEGMENT	CLASSIFICATION (a)	EXISTING LANES	EXISTING ROADWAY CAPACITY (b)	EXISTING ADT (1998) (c)	V/C Ratio (d)	LOS (e)
Aviation Boulevard						
Imperial to El Segundo	Major Arterial	4 - lanes divided	40,400	20,300	0.502	A
El Segundo to Utah	Major Arterial	4 - lanes divided	40,400	27,200	0.673	B
Utah to Alaska	Major Arterial	4 - lanes divided	40,400	28,300	0.701	B
Alaska to Hawaii	Major Arterial	4 - lanes divided	40,400	19,600	0.485	A
Hawaii to Rosecrans	Major Arterial	4 - lanes divided	40,400	33,000	0.817	D
Center Street						
Imperial Ave. to Maple	2-Lane Collector	2 - lane undivided	14,000	3,200	0.229	A
Maple to Mariposa	2-Lane Collector	2 - lane undivided	14,000	3,800	0.271	A
Mariposa to Grand	2-Lane Collector	2 - lane undivided	14,000	3,300	0.236	A
Grand to El Segundo	2-Lane Collector	2 - lane undivided	14,000	1,600	0.114	A
Continental (Lairport St.) Boulevard						
Maple to Mariposa	Secondary Arterial	2 - lane undivided	14,000	5,400	0.386	A
<p>(a) Per Circulation Element of the City's 1992 General Plan (b) From Table 2 (c) Counts collected in 1998 (d) Ratio of Daily traffic volume to capacity (e) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.</p>						

TABLE 3

**COMPARISON OF EXISTING DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES**

ROADWAY SEGMENT	CLASSIFICATION (a)	EXISTING LANES	EXISTING ROADWAY CAPACITY (b)	EXISTING ADT (1998) (c)	V/C Ratio (d)	LOS (e)
Grand to El Segundo	Secondary Arterial	6 - lanes divided	53,000	12,000	0.226	A
Douglas Street						
Imperial Hwy to Mariposa (one-way northbound)	Secondary Arterial	6 - lanes undivided	53,000	10,800	0.204	A
Mariposa to El Segundo (one-way northbound)	Secondary Arterial	6 - lanes undivided	53,000	8,900	0.168	A
El Segundo to Utah	Secondary Arterial	4 - lanes divided	40,400	9,200	0.228	A
Utah to Rosecrans	Secondary Arterial	None	NA	NA	NA	NA
El Segundo Blvd.						
Main to Center	Secondary Arterial	4 - lanes undivided	31,000	12,800	0.413	A
Center to Sepulveda	Secondary Arterial	4 - lanes undivided	31,000	19,400	0.626	B
Continental to Nash	Major Arterial	6 - lanes divided	53,000	29,800	0.562	A
Nash to Douglas	Major Arterial	6 - lanes divided	53,000	37,900	0.715	C

(a) Per Circulation Element of the City's 1992 General Plan

(b) From Table 2

(c) Counts collected in 1998

(d) Ratio of Daily traffic volume to capacity

(e) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.

TABLE 3

**COMPARISON OF EXISTING DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES**

ROADWAY SEGMENT	CLASSIFICATION (a)	EXISTING LANES	EXISTING ROADWAY CAPACITY (b)	EXISTING ADT (1998) (c)	V/C Ratio (d)	LOS (e)
Douglas to Aviation	Major Arterial	8 - lanes divided	70,000	38,700	0.553	A
Aviation to Isis	Major Arterial	8 - lanes divided	70,000	41,400	0.591	A
Grand Avenue						
Vista Del Mar to Main	Secondary Arterial	4 - lanes undivided	31,000	6,200	0.200	A
Main to Center	Secondary Arterial	4 - lanes undivided	31,000	9,500	0.306	A
Center to Sepulveda	Secondary Arterial	4 - lanes undivided	31,000	11,900	0.384	A
Sepulveda to Continental	Secondary Arterial	6 - lanes divided	53,000	9,200	0.174	A
Continental to Nash	Secondary Arterial	6 - lanes divided	53,000	5,800	0.109	A
Nash to Duley	Secondary Arterial	2 - lane collector	14,000	NA	NA	NA
Duley to Aviation	Secondary Arterial	None	NA	NA	NA	NA
Hughes Way						
Sepulveda to Allied Way	Secondary Arterial	4 - lanes divided	40,400	4,700	0.116	A
<p>(a) Per Circulation Element of the City's 1992 General Plan (b) From Table 2 (c) Counts collected in 1998 (d) Ratio of Daily traffic volume to capacity (e) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.</p>						

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TO ESTIMATED DAILY ROADWAY CAPACITIES**

ROADWAY SEGMENT	CLASSIFICATION (a)	EXISTING LANES	EXISTING ROADWAY CAPACITY (b)	EXISTING ADT (1998) (c)	V/C Ratio (d)	LOS (e)
Imperial Highway						
Main to Center	Secondary Arterial	4 - lanes divided	40,400	37,800	0.936	E
Center to Sepulveda	Secondary Arterial	4 - lanes divided	40,400	45,500	1.126	F
Sepulveda to Nash	Secondary Arterial	6 - lanes divided	53,000	30,000	0.566	A
Nash to Douglas	Secondary Arterial	6 - lanes divided	53,000	28,800	0.543	A
Douglas to Aviation	Secondary Arterial	6 - lanes divided	53,000	29,500	0.557	A
Imperial Avenue						
Main to Center	2-Lane Collector	2 - lane undivided	14,000	2,800	0.200	A
Center to California	2-Lane Collector	2 - lane undivided	14,000	4,000	0.286	A
Main Street						
Imperial Hwy to Maple	4-Lane Collector	4 - lanes undivided	31,000	13,300	0.429	A
Maple to Mariposa	4-Lane Collector	4 - lanes undivided	31,000	14,200	0.458	A
Mariposa to Grand	4-Lane Collector	4 - lanes undivided	31,000	11,600	0.374	A
<p>(a) Per Circulation Element of the City's 1992 General Plan (b) From Table 2 (c) Counts collected in 1998 (d) Ratio of Daily traffic volume to capacity (e) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.</p>						

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COMPARISON OF EXISTING DAILY TRAFFIC VOLUMES TO ESTIMATED DAILY ROADWAY CAPACITIES

ROADWAY SEGMENT	CLASSIFICATION (a)	EXISTING LANES	EXISTING ROADWAY CAPACITY (b)	EXISTING ADT (1998) (c)	V/C Ratio (d)	LOS (e)
Grand to El Segundo	Secondary Arterial	4 - lanes undivided	31,000	6,700	0.216	A
Maple Avenue						
Main to Center	Local-Not Designated	2 - lane undivided	10,000	2,800	0.280	A
Center to Sepulveda	Local-Not Designated	2 - lane undivided	10,000	2,400	0.240	A
Sepulveda to Nash	4-Lane Collector	2 - lane undivided	14,000	3,700	0.264	A
Mariposa Avenue						
Main to Center	2-Lane Collector	2 - lane undivided	14,000	5,400	0.386	A
Center to Sepulveda	2-Lane Collector	2 - lane undivided	14,000	5,900	0.421	A
Sepulveda to Continental	Secondary Arterial	4 - lanes divided	40,400	11,100	0.275	A
Continental to Nash	Secondary Arterial	4 - lanes divided	40,400	10,000	0.248	A
Nash to Douglas	Secondary Arterial	4 - lanes divided	40,400	8,200	0.203	A
Douglas to Aviation	Secondary Arterial	None	NA	NA	NA	NA

(a) Per Circulation Element of the City's 1992 General Plan
 (b) From Table 2
 (c) Counts collected in 1998
 (d) Ratio of Daily traffic volume to capacity
 (e) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.

TABLE 3

COMPARISON OF EXISTING DAILY TRAFFIC VOLUMES TO ESTIMATED DAILY ROADWAY CAPACITIES

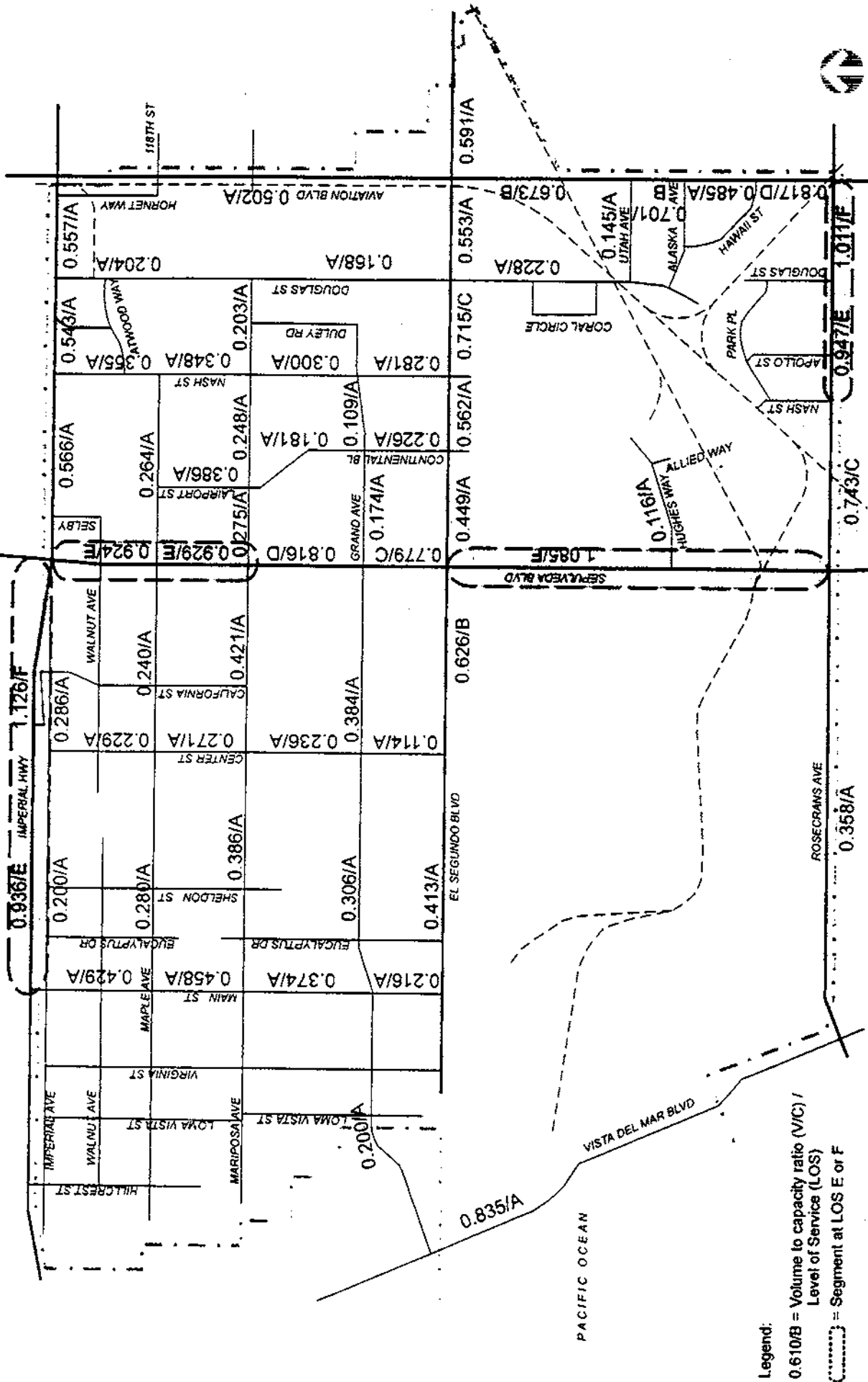
ROADWAY SEGMENT	CLASSIFICATION (a)	EXISTING LANES	EXISTING ROADWAY CAPACITY (b)	EXISTING ADT (1998) (c)	V/C Ratio (d)	LOS (e)
Nash Street						
Imperial Hwy to Maple (one-way southbound)	Secondary Arterial	4 - lanes undivided	31,000	11,000	0.355	A
Maple to Mariposa (one-way southbound)	Secondary Arterial	4 - lanes undivided	31,000	10,800	0.348	A
Mariposa to Grand (one-way southbound)	Secondary Arterial	4 - lanes undivided	31,000	9,300	0.300	A
Grand to El Segundo (one-way southbound)	Secondary Arterial	4 - lanes undivided	31,000	8,700	0.281	A
Rosecrans Avenue						
West City Boundary to Sepulveda	Major Arterial	5 - lanes divided (3 WB and 2 EB)	53,000	19,000	0.358	A
Sepulveda to Nash	Major Arterial	6 - lanes divided	53,000	39,400	0.743	C
Nash to Douglas	Major Arterial	6 - lanes divided	53,000	50,200	0.947	E
Douglas to Aviation	Major Arterial	6 - lanes divided	53,000	53,600	1.011	F

(a) Per Circulation Element of the City's 1992 General Plan
 (b) From Table 2
 (c) Counts collected in 1998
 (d) Ratio of Daily traffic volume to capacity
 (e) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.

TABLE 3

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TO ESTIMATED DAILY ROADWAY CAPACITIES**

ROADWAY SEGMENT	CLASSIFICATION (a)	EXISTING LANES	EXISTING ROADWAY CAPACITY (b)	EXISTING ADT (1998) (c)	V/C Ratio (d)	LOS (e)
Sepulveda Boulevard						
Imperial Hwy to Maple	Major Arterial	8 - lanes divided	70,000	64,700	0.924	E
Maple to Mariposa	Major Arterial	8 - lanes divided	70,000	65,000	0.929	E
Mariposa to Grand	Major Arterial	8 - lanes divided	70,000	57,100	0.816	D
Grand to El Segundo	Major Arterial	8 - lanes divided	70,000	54,500	0.779	C
El Segundo to Rosecrans	Major Arterial	6 - lanes divided	53,000	57,500	1.085	F
Utah Avenue						
Douglas to Aviation	Secondary Arterial	4 - lanes undivided	31,000	4,500	0.145	A
Vista Del Mar						
Grand to South City Boundary	Secondary Arterial	4 - lanes undivided	31,000	25,900	0.835	A
<p>(a) Per Circulation Element of the City's 1992 General Plan (b) From Table 2 (c) Counts collected in 1998 (d) Ratio of Daily traffic volume to capacity (e) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.</p>						



Legend:
 0.610/B = Volume to capacity ratio (V/C) /
 Level of Service (LOS)
 (---) = Segment at LOS E or F

NOT TO SCALE

EXHIBIT
7

EL SEGUNDO CIRCULATION ELEMENT
Summary of Daily Roadway Analysis

Meyer, Mohaddes Associates, Inc.
 An Herfis Company

Analysis of Peak Hourly Operating Conditions on Existing Street Network

Intersections are the locations where most arterial roadway network congestion usually occurs since the available roadway capacity must be shared by two intersecting streets. Therefore, in addition to the analysis of roadway segments, existing peak hour traffic conditions at intersections have been assessed. A computer traffic model (TRAFFIX) has been used to assess traffic operating conditions at 34 key intersections.

Consistent with City of El Segundo guidelines for traffic impact analyses, traffic operating conditions were analyzed using standard intersection capacity analysis techniques known as Intersection Capacity Utilization (which is referred to hereinafter as "ICU"). The ICU methodology was used to analyze signalized intersections.

ICU Methodology

The Intersection Capacity Utilization (ICU) Method is based on the calculation of intersection volume/capacity (V/C) ratio. The methodology calculates the volume/capacity ratio based on a default capacity [C] per lane usually 1600 vehicles per hour (vph) per lane; however some jurisdictions in California assign different default capacity values. The intersection V/C or critical movement total is the summation of the critical flow ratios (volume/capacity per lane) during a given signal phase when concurrent signal phasing is provided or by summing the critical (V/C's) opposing flow ratios (highest combination of opposing movements, for example, opposing left turn V/C plus opposing through movement V/C). ICU is calculated simply as follows:

$$ICU = V/C + Loss/Cycle$$

V/C = sum of critical movement volume/capacity ratios (critical east-west and critical north-south volume/capacity ratios)

Cycle = cycle length in seconds (typically 100 seconds)

Loss = total intersection loss time in seconds (typically 5 seconds)

For this method, the loss time for a default cycle of 100 seconds is the loss percent that is added to the critical volume/capacity total at an intersection. For example, the ICU would be 0.84 for a V/C of 0.79 and a loss time of 5 seconds (loss time percent of 0.05 for the default 100 second cycle length). Finally, the grading system that describes intersection performance in handling traffic flow is the intersection level of service (LOS). The LOS is directly related to certain gradations of intersection V/C, with LOS "A" being 0.60 or less, LOS "B" being between 0.61 and 0.70, LOS "C" being between 0.71 and 0.80, LOS "D" being between 0.81 and 0.90, and LOS "E" being between 0.91 and 1.00. LOS "F" is a V/C that exceeds 1.00.

The efficiency of traffic operations at an intersection is measured in terms of Level of Service (LOS). Level of service is a description of traffic performance at intersections. The level of service concept is a measure of average operating conditions at intersections during an hour. It is based on average vehicle delay measurements and/or volume-to-capacity ratio. Levels of service range from A to F, with A representing excellent (free-flow) conditions and F representing extreme congestion. Based on the General Plan, LOS A, B, C and D are considered acceptable operating conditions while LOS E and F are considered to be deficiencies on the arterial network. Table 4 describes the level of service concept and the operating conditions expected under each level of service for signalized intersections.

Four of the 31 study intersections are not signalized, but instead are controlled by stop signs on some or all approaches. Since they are stop sign controlled, those intersections operate differently than signalized intersections and are analyzed using a different methodological approach. Two study intersections (Center St./Grand Ave. and Main St./El Segundo Blvd.) are all-way stop sign controlled meaning all four approaches are stop-controlled, while two study intersections (Douglas St./Utah Ave. and Center St./El Segundo Blvd.) are stop/uncontrolled meaning only the minor street approaches are stopped while the major street approaches are uncontrolled. The specific average vehicle delay ranges relating to level of service for all-way stop controlled locations are as follows:

UNSIGNALIZED INTERSECTION
LEVEL OF SERVICE INTERPRETATION

Level of Service	Average Vehicle Delay at All-Way Stop Controlled Intersection
A	≤ 5 seconds
B	> 5 and ≤ 10 seconds
C	> 10 and ≤ 20 seconds
D	> 20 and ≤ 30 seconds
E	> 30 and ≤ 45 seconds
F	> 45 seconds

TABLE 4
SIGNALIZED INTERSECTION
LEVEL OF SERVICE INTERPRETATION

Level of Service	Description	Volume to Capacity Ratio
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0-.60
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	.61-.70
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	.71-.80
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues. <u>This level is typically associated with design practice for peak periods.</u>	.81-.90
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	.91-1.00
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.00

Source: *Highway Capacity Manual*, Special Report 209, Transportation Research Board, Washington, D.C., 1985 and *Interim Materials on Highway Capacity*, NCHRP Circular 212, 1982.

The results of the intersection analysis are summarized in Table 5 and presented graphically on Exhibit 8. The intersection analysis worksheets are included in the Technical Appendix. Review of Table 5 and Exhibit 8 shows that several intersections within the City currently operate at poor Levels of Service (LOS E or F). The following intersections currently operate at LOS "E" or "F" with the corresponding peak hour in parenthesis.

- Aviation Boulevard/El Segundo Boulevard (AM)
- Aviation Boulevard/Rosecrans Avenue (AM, PM)
- Sepulveda Boulevard/Imperial Highway (AM, PM)
- Sepulveda Boulevard/Grand Avenue (AM, PM)
- Sepulveda Boulevard/El Segundo Boulevard (AM, PM)
- Sepulveda Boulevard/Rosecrans Avenue (AM, PM)
- Main Street/Imperial Highway (AM)

**TABLE 5
SUMMARY OF EXISTING PEAK HOUR
INTERSECTION CAPACITY UTILIZATION (ICU) ANALYSIS**

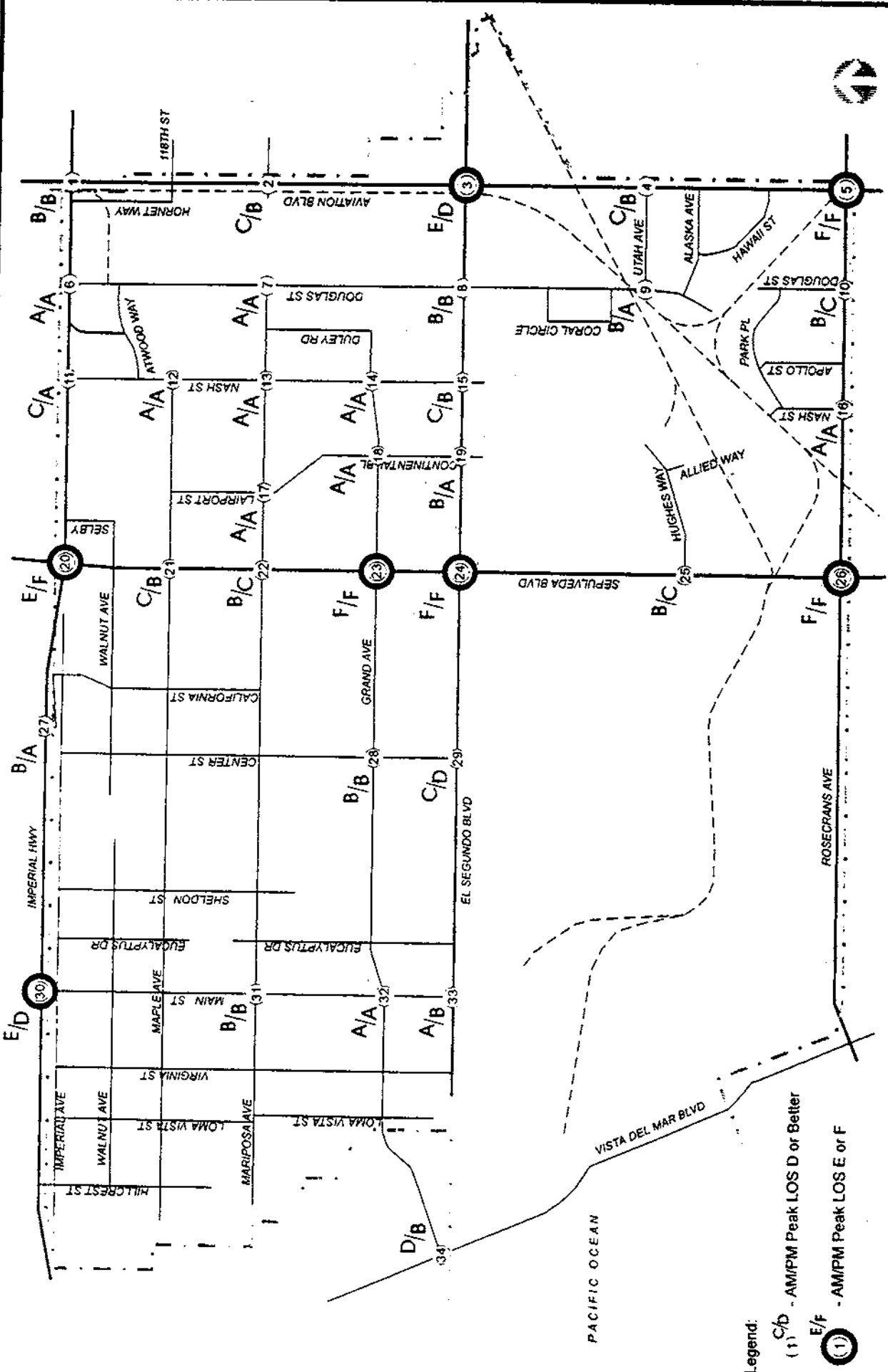
No.	Intersection	AM Peak Hour		PM Peak Hour	
		LOS	V/C	LOS	V/C
1	Aviation Boulevard/Imperial Highway	B	0.619	B	0.673
2	Aviation Boulevard/120th Street	C	0.747	B	0.657
3	Aviation Boulevard/El Segundo Boulevard	E	0.920	D	0.874
4	Aviation Boulevard/Utah-135th Street	C	0.707	B	0.665
5	Aviation Boulevard/Rosecrans Avenue	F	1.242	F	1.220
6	Douglas Street/Imperial Highway	A	0.404	A	0.593
7	Douglas Street/Mariposa Avenue	A	0.282	A	0.343
8	Douglas Street/El Segundo Boulevard	B	0.634	B	0.648
9	Douglas Street/Utah Avenue [1]	B	[1]	A	[1]
10	Douglas Street/Rosecrans Avenue	B	0.667	C	0.716
11	Nash Street/Imperial Highway	C	0.714	A	0.363
12	Nash Street/Maple Avenue	A	0.282	A	0.183
13	Nash Street/Mariposa Avenue	A	0.349	A	0.340
14	Nash Street/Grand Avenue	A	0.328	A	0.341
15	Nash Street/El Segundo Boulevard	C	0.707	B	0.651
16	Nash Street/Rosecrans Avenue	A	0.453	A	0.587
17	Continental Boulevard/Mariposa Avenue	A	0.519	A	0.327
18	Continental Boulevard/Grand Avenue	A	0.375	A	0.444
19	Continental Boulevard/El Segundo Boulevard	B	0.651	A	0.532
20	Sepulveda Boulevard/Imperial Highway	E	0.923	F	1.106
<p><i>Notes:</i> [1] - Intersection has stop signs on one cross street - no V/C analysis possible [2] - Intersection has stop signs on all approaches (all-way stop control) <i>General Notes:</i> - Some intersections are partially owned or wholly under control of other jurisdictions (City and County of Los Angeles, Caltrans, Manhattan Beach, etc.), but are included in analysis since they are important traffic control locations.</p>					
21	Sepulveda Boulevard/Maple Avenue	C	0.753	B	0.699

**TABLE 5
SUMMARY OF EXISTING PEAK HOUR
INTERSECTION CAPACITY UTILIZATION (ICU) ANALYSIS**

No.	Intersection	AM Peak Hour		PM Peak Hour	
		LOS	V/C	LOS	V/C
22	Sepulveda Boulevard/Mariposa Avenue	B	0.694	C	0.736
23	Sepulveda Boulevard/Grand Avenue	F	1.138	F	1.076
24	Sepulveda Boulevard/El Segundo Boulevard	F	1.014	F	1.054
25	Sepulveda Boulevard/Hughes Way	B	0.653	C	0.787
26	Sepulveda Boulevard/Rosecrans Avenue	F	1.151	F	1.127
27	California Street/Imperial Highway	B	0.635	A	0.551
28	Center Street/Grand Avenue [2]	B	0.611	B	0.664
29	Center Street/El Segundo Boulevard [1]	C	[1]	D	[1]
30	Main Street/Imperial Highway	E	0.902	D	0.849
31	Main Street/Mariposa Avenue	B	0.646	B	0.698
32	Main Street/Grand Avenue	A	0.443	A	0.519
33	Main Street/El Segundo Boulevard [2]	A	0.368	B	0.788
34	Vista Del Mar Boulevard/Grand Avenue	D	0.828	B	0.611

Notes:
 [1] - Intersection has stop signs on one cross street - no V/C analysis possible
 [2] - Intersection has stop signs on all approaches (all-way stop control)

General Notes:
 - Some intersections are partially owned or wholly under control of other jurisdictions (City and County of Los Angeles, Caltrans, Manhattan Beach, etc.), but are included in analysis since they are important traffic control locations.



NOT TO SCALE

EXHIBIT
8

EL SEGUNDO CIRCULATION ELEMENT
Summary of Peak Hourly Intersection Analysis
(Existing Conditions)

Meyer, Mohabdes Associates, Inc.
 An Itrix Company

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CURRENT MASTER PLAN OF STREETS

The current El Segundo Master Plan of Streets was adopted in 1992 as part of the City's General Plan and is shown on Exhibit 9. The City's Master Plan of Streets designates roadways as one of the five street classifications according to function. The five classifications are:

- Local Streets
- Collector Streets
- Secondary Arterials
- Major Arterials and
- Freeways

The current street classification standards for each of the non-freeway roads are shown on Exhibit 10. The function and brief description of each classification is provided in the following paragraphs.

FREEWAYS. Freeways are controlled access, high speed roadways with grade-separated interchanges intended to expedite movement between distant areas in a metropolitan community or region. Planning, design, construction, and maintenance of freeways in California are the responsibility of Caltrans. As a result, they fall outside of the jurisdiction of the City of El Segundo. Nonetheless, the Century (I-105) Freeway carries significant traffic volumes and plays an integral role in the City's roadway system, and thus is included in the City's Master Plan of Streets.

MAJOR ARTERIALS. Major arterials function to connect traffic from collectors to the major freeway system as well as to provide access to adjacent land uses. They move large volumes of automobiles, trucks and buses, and link the principal elements within the City to other adjacent regions. These facilities typically handle inter-city vehicular trips in the magnitude of 40,000 to 60,000 vehicles per day. In the majority of cases in El Segundo, curb parking is prohibited during peak periods. Bicycle traffic would travel with vehicular flow or be separated by a path behind the curb. Raised medians to separate opposing flows are typical and access control, (i.e., driveways and minor intersecting streets) should be minimized.

Separate left-turn lanes at major signalized intersections are required with double left-turn lanes often provided. Separate right-turn lanes, which also serve as bus loading areas, are provided at locations where warranted by high turn volumes.

SECONDARY ARTERIALS. Secondary arterials are similar to major arterials in function. They connect traffic from collectors to the major freeway system. They move large volumes of automobiles, trucks and buses, and link the principal elements within the City to other adjacent regions. These streets also handle intra-city trips in other adjacent regions. These streets carry from 25,000 to 40,000 vehicles per day. Four to six though lanes are provided along with single or double left turn lanes at major signalized intersections. Curb parking is often prohibited during peak periods. Bicycle traffic uses paths behind the curb, separate bicycle lanes, or travel in the street with autos, trucks and buses.

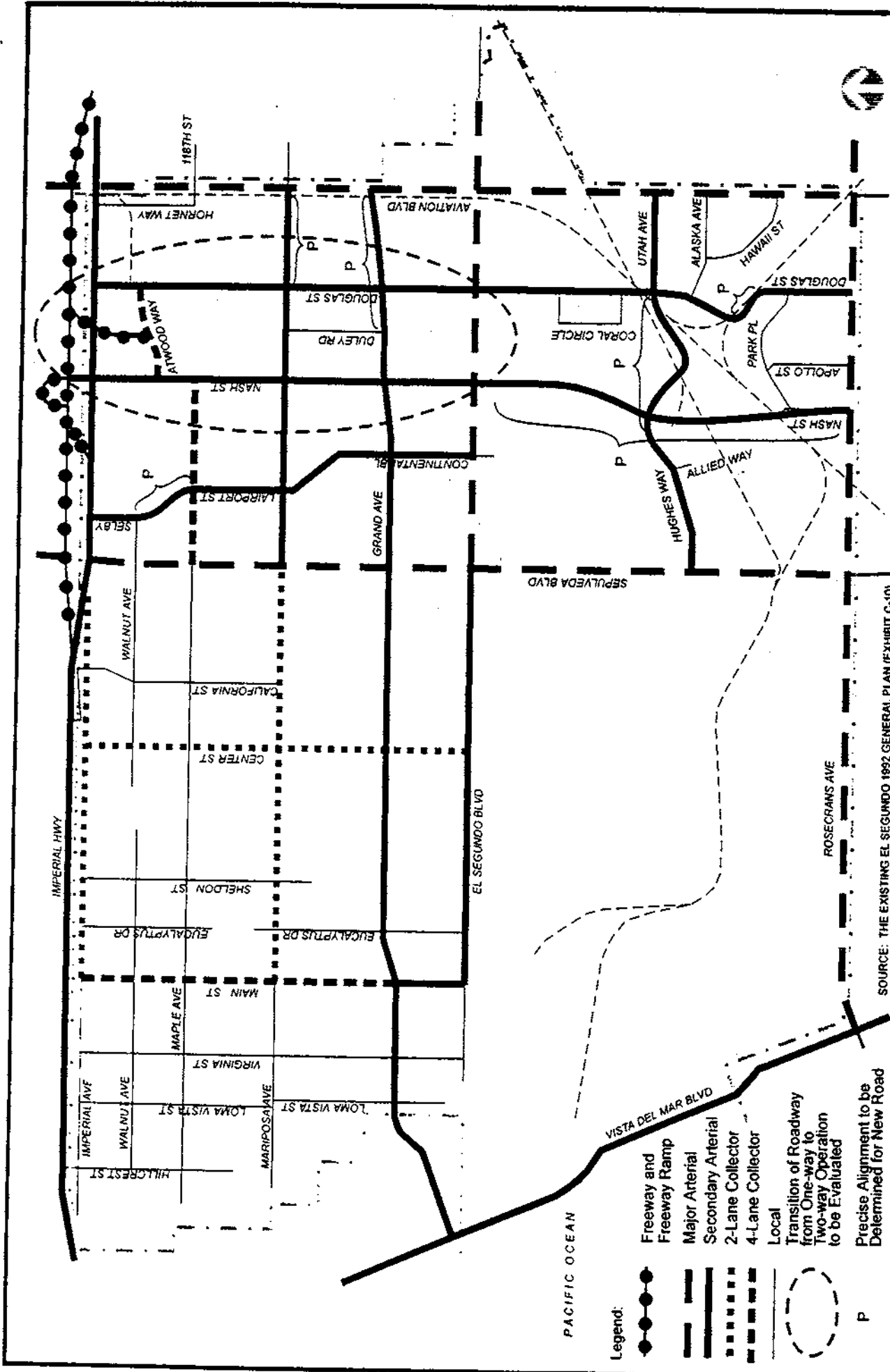
COLLECTOR STREETS. The collector street is intended to serve as intermediate route to handle traffic between local streets and arterials. In addition, collector streets provide access to abutting property. Collector streets are anticipated to carry traffic volumes between 15,000 to 25,000 vehicles per day and serve important internal functions within the community. A collector street may have one or two through lanes in each direction and curb parking is often provided. The primary function of the collector is to

EL SEGUNDO CIRCULATION ELEMENT
Current Master Plan of Streets

Meyer, Mohaddes Associates, Inc.
An Odetics ITS Company

SOURCE: THE EXISTING EL SEGUNDO 1992 GENERAL PLAN (EXHIBIT C-10)

NOT TO SCALE



P

Precise Alignment to be Determined for New Road

Transition of Roadway from One-way to Two-way Operation to be Evaluated

Local

4-Lane Collector

2-Lane Collector

Secondary Arterial

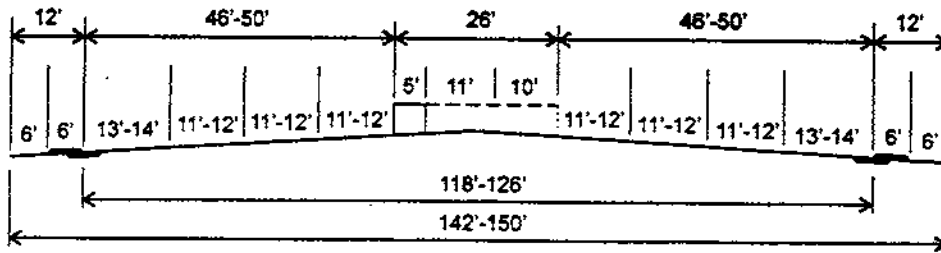
Major Arterial

Freeway Ramp

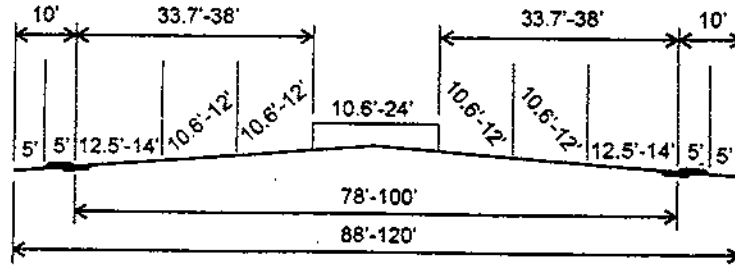
Freeway and

Legend:

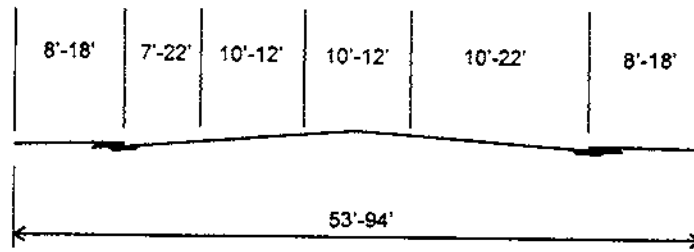
PACIFIC OCEAN



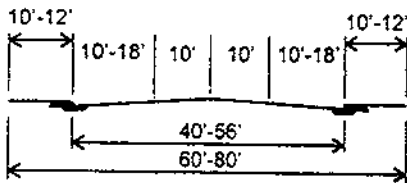
MAJOR ARTERIAL (8 LANES MINIMUM)



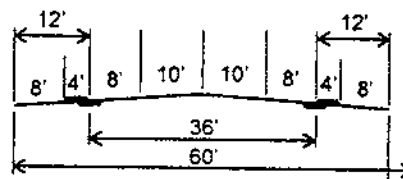
SECONDARY ARTERIAL



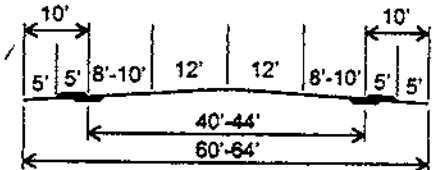
DOWNTOWN COLLECTOR (2 or 3 LANES)



**COLLECTOR
(2 OR 4 LANES)**



**LOCAL STREET
(RESIDENTIAL)**



**LOCAL STREET
(COMMERCIAL)**

Note: The 100-500 blocks of Main Street, in the DSP area, may also be a 4 lane collector. See text.

"collect" vehicles from the local street system and transport them to the arterial system as efficiently as possible.

DOWNTOWN COLLECTOR. This designation is intended to implement the goals of the Downtown Specific Plan to create a pedestrian-oriented environment, and is only applicable to Main Street in the Downtown. The downtown collector provides flexibility in roadway design, lane, roadway and sidewalk widths, and on-street parking. The street is anticipated to carry traffic volumes between 15,000 to 25,000 vehicles per day. In general, the downtown collector may have one through lane in each direction, or a third center left-turn lane or pocket. Curb parking may include parallel and/or angled parking, as the right-of-way width allows. The 300 block of Main Street provides the opportunity for additional width in front of the Civic Center. As an option, Main Street may be developed as a collector street, as described below.

LOCAL STREETS. Local streets principally provide vehicular, pedestrian, and bicycle access to property abutting the public right-of-way. Cross sections of local streets vary, depending on the abutting land uses, parking requirements, street trees, and other considerations. Where both sides of the street are served equally in residential areas, the common right-of-way width for a local street is 60 feet with a 36-foot pavement width.

In multi-family areas, where there is significant parking demand throughout the day, a minimum of 40 feet of pavement maybe required, to provide two moving lanes of traffic in addition to street parking on both sides. In commercial and industrial areas, a minimum pavement width of 40 feet is considered necessary. In industrial areas, consideration of the predominant type of trucking, and whether or not maneuvering of trailers must be provided, may require a pavement width of 44 feet or more.

BICYCLE ROUTES

Definitions

The following bicycle route definitions (recognized Statewide per Caltrans Standards) are identified in the current Circulation Element, and are presented for informational purposes.

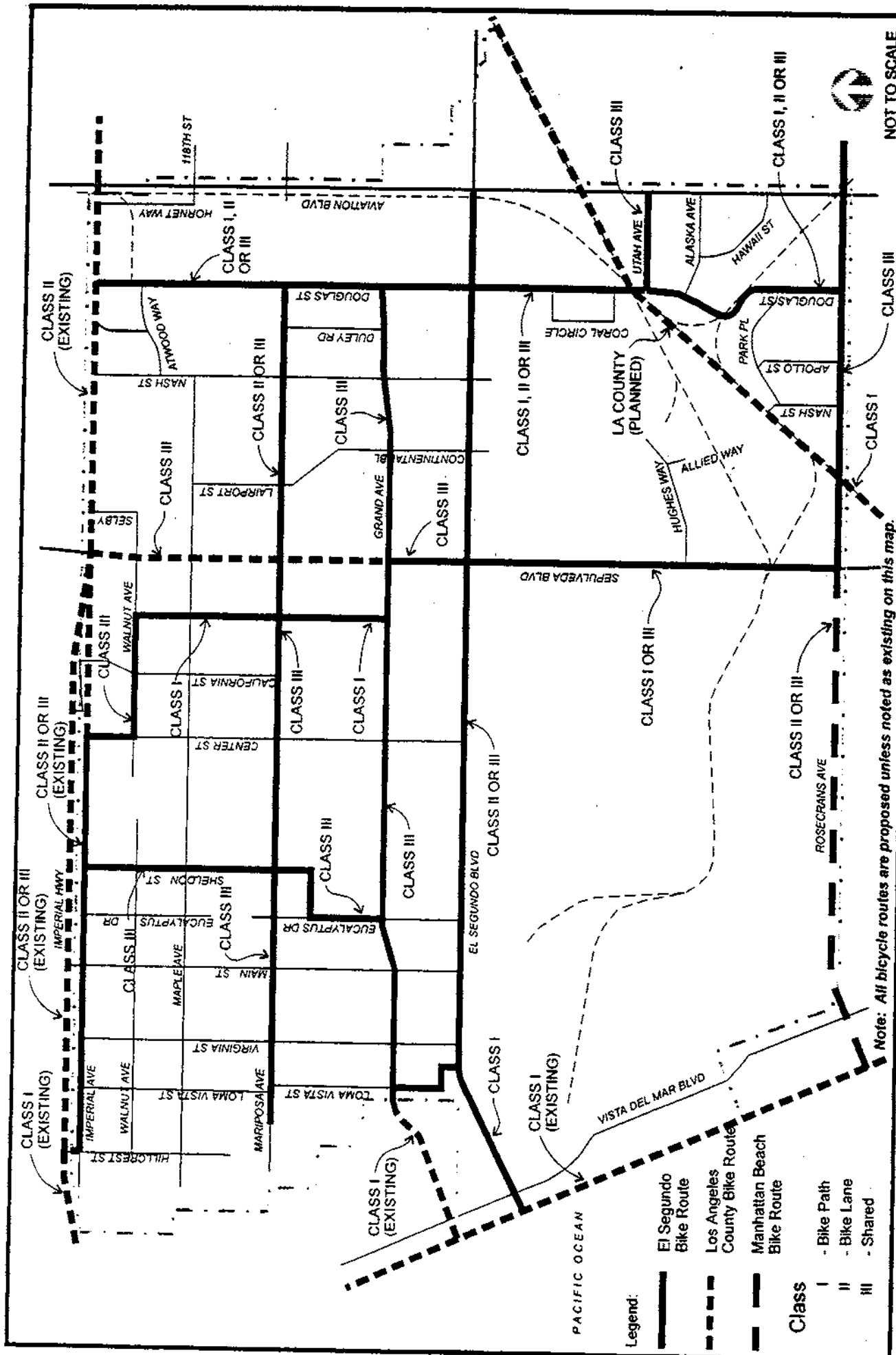
Bicycle Route - A bicycle way designated within a public right-of-way. The purpose of the bike route is primarily that of transportation, allowing the bicyclist to travel from one point in the City to another. A "shared bicycle route" is a street identified as a bicycle facility by BIKE ROUTE signing only. No special markings on the pavement are provided. Per Caltrans standards, these routes are referred to as Class III.

Bicycle Lane - A bicycle facility where a portion of the paved area is marked as a lane for use of bicycles. It is identified by BIKE LANE signing, pavement marking and lane line markings. Usually, special ordinances are necessary to legally define the exclusive use of bicycle traffic and to exclude mopeds and infringement by motor vehicles. Per Caltrans standards, these routes are referred to as Class II.

Bicycle Path - This facility is a special path for exclusive use of bicycles which is completely separated from the motor vehicle traffic by space or a physical barrier. Per Caltrans standards, these routes are referred to as Class I.

Existing Bicycle Route System

The existing system of bicycle facilities in El Segundo currently is limited to bicycle paths (Class I) , lanes (Class II) and route markings (Class III) along Imperial Highway, bicycle paths (Class I) along the beach (Los Angeles County) and portions of Grand Avenue approaching the beach. Exhibit 11 illustrates existing and planned bicycle routes in the City. All routes shown on the exhibit are future planned routes unless specifically indicated as existing on the map.



EL SEGUNDO CIRCULATION ELEMENT
Bicycle Master Plan

Meyer, Mohaddes Associates, Inc.
An Iferis Company

PUBLIC TRANSPORTATION

Public transportation consists of fixed bus routes, demand responsive transit and light rail.

Existing Public Fixed Bus Routes

The current transit service in El Segundo is provided by fixed bus routes operated by the Los Angeles County Metropolitan Authority (LACMTA), Torrance Transit system, Santa Monica Municipal Bus Line, Municipal Area Express and Westchester Shuttle system and a Dial-a-Ride operation conducted by the City of El Segundo. A description of each line that operates in or around the City is provided below and transit routes are shown graphically in Exhibit 12.

Metro Bus Line 120 - LAX City Bus Center - Imperial Highway - Imperial/Wilmington Station

Line 120 operates from the Imperial/Wilmington Metro Station to the Los Angeles International Airport with service to Harbor Transitway/I-105 Station, Los Angeles Southwest College and Hawthorne/I-105 Station. Within the City of El Segundo, it runs along Aviation Boulevard and Imperial Highway. Headway during the peak period is 20 minutes. Saturday service operates every 29 minutes.

Metro Bus Line 124 - El Segundo Boulevard - Santa Fe Avenue

Line 124 operates from Compton to El Segundo with service to Compton Metro Station, Martin Luther King Junior Transit Station, Imperial/Wilmington Metro Station, Martin Luther King Hospital and El Segundo/Nash Metro Station. Within the City of El Segundo, it runs along El Segundo Boulevard, Continental Boulevard, Holly Avenue, Richmond Street and Main Street. Headway during the peak period is one hour. Saturday service operates every hour.

Metro Bus Line 125 - Rosecrans Avenue

Line 125 operates from La Mirada to El Segundo with service to I-605/I-105 Metro Station, Martin Luther King Junior Transit Center, Compton Metro Station and Douglas/Rosecrans Metro Station. Within the City of El Segundo, it runs along Rosecrans Avenue, Vista Del Mar, Grand Avenue, Eucalyptus Drive, El Segundo Boulevard and Main Street. Headway during the peak period is 20 minutes. Saturday service operates every 20 minutes.

Metro Bus Line 220 - Robertson Boulevard - Culver Boulevard - LAX City Bus Center

Line 220 operates from West Hollywood to Los Angeles International Airport with service to Fisherman's Village, Daniel Freeman Marina Hospital and Beverly Center. Within the City of El Segundo, it runs along Imperial Highway. Headway during the peak period is one hour. Saturday service operates every hour.

Metro Bus Line 225 and 226 - LAX City Bus Center - Aviation - Palos Verdes - San Pedro

Line 225 and 226 operate from the Palos Verdes Peninsula and San Pedro to the LAX City Bus Center. Within El Segundo it runs along Aviation Boulevard, El Segundo Boulevard, Continental Boulevard, Maple Avenue and Sepulveda Boulevard. Headway during the peak period is one hour. Saturday service operates every hour.

Metro Bus Line 232 - Long Beach - Anaheim Street - Pacific Coast Highway - Sepulveda Boulevard - LAX City Bus Center

Line 232 operates from Long Beach to El Segundo with service to Long Beach Plaza, Los Angeles Harbor College, Manhattan Village, El Segundo/Nash Metro Station and Los Angeles International Airport City Bus Center. Within the City of El Segundo, It runs along Sepulveda Boulevard, Mariposa Avenue, Nash Street and Grand Avenue. Headway during the peak period is 31 minutes. Saturday service operates every hour.

Metro Bus Line 439 - Redondo Beach - LAX City Bus Center - Patsaouras Transit Plaza/Union Station Express

Line 439 operates from Redondo Beach to Downtown Los Angeles with service to Redondo Beach Pier, Manhattan Beach Pier, Los Angeles International Airport City Bus Center, Aviation/I-105 Metro Station, Fox Hills Mall Transit Center, Kenneth Hahn State Recreation Area and West Los Angeles Transit Center. Within the City of El Segundo, it runs along Vista Del Mar, Grand Avenue, Main Street, California Street, Imperial Avenue and Imperial Highway. Headway during the peak period is 30 minutes. Saturday service operates every hour.

Metro Bus Line 626 - Mariposa Station Shuttle

Line 626 operates within El Segundo with service to Mariposa/Nash Metro Station, Xerox Center, International Center and Sepulveda Place. It runs along Nash Street, Grand Avenue, Continental Boulevard, El Segundo Boulevard, Sepulveda Boulevard and Imperial Highway. Headway during the peak period is 12 minutes. No Saturday service is provided for Line 626.

Metro Bus Line 627 - El Segundo Station Shuttle

Line 627 operates within El Segundo with service to El Segundo/Nash Metro Station and Xerox Center. It runs along El Segundo Boulevard, Aviation Boulevard, Alaska Avenue, Douglas Street, Continental Boulevard and Grand Avenue. Headway during the peak period is 15 minutes. No Saturday service is provided for Line 627.

Metro Bus Line 628 - Douglas Station Shuttle

Line 628 operates within El Segundo and Manhattan Beach with service to Douglas Metro Station, Radisson Plaza Hotel and Manhattan Village. Within the City of El Segundo, it runs along Douglas Street, Park Place and Apollo Street. Headway during the peak period is 12 minutes. No Saturday service is provided for Line 628.

Torrance Transit Route 8 - Hawthorne Boulevard - LAX Terminal

Route 8 operates from Torrance to Los Angeles International Airport with service to Del Amo Fashion Center, South Bay Galleria, El Segundo/Nash Metro Station and City Bus Center. Within the City of El Segundo, It runs along Aviation Boulevard, Alaska Avenue, Douglas Street, Nash Street, Imperial Highway and Sepulveda Boulevard. Headway during the peak period is 30 minutes. Saturday service operates every 30 minutes.

Santa Monica Bus Route 3 - Lincoln Boulevard - Montana

Route 3 operates from Santa Monica to El Segundo with service to University of California Los Angeles, West Los Angeles Veterans Hospital, 3rd Street Promenade, Santa Monica City Hall, Daniel Freeman Memorial Hospital, City Bus Center and Imperial/Aviation Metro Station. Within the City of El Segundo, it runs along Imperial Highway and Aviation Boulevard. Headway during the peak hour is 10 minutes. Saturday service operates every 20 minute.

MAX Routes 2 and 3

MAX Route 2 and provides transit service to the El Segundo Employment Center.

Route 2 operates from the Palos Verdes Peninsula and Torrance while Route 3 operates from San Pedro and Torrance.

Demand Responsive Transit Service (Dial-a-Ride)

In El Segundo, the City provides one fourteen-passenger van that operates on a "Dial-a-Ride" basis in response to specific demand. This service has been in operation since 1975. Residents phone for appointments and a door-to-door response time of approximately 10 minutes is provided.

The service is currently funded by Proposition A Funds. Dial-a-ride service is free to El Segundo residents and only operates within the City limits. The van operates Mondays to Friday from 8:50 AM to 3:00 PM and 3:00 to 6:00 PM on Thursday with Farmers Market and Saturdays from 10:00 AM to 3:00 PM.

Ridership levels have stabilized over the years to approximately 38 passengers per day (approximately 12,000 passengers per year).

The predominant users of this service are senior citizens, accounting for approximately 80% of the trips.

Rail Rapid Transit

The completion of the 2.9 mile Green Line Extension running from the Century Freeway south through El Segundo provides access to the regional rail rapid transit system via rail stations at various locations in El Segundo. The following stations provide access to the Green Line:

- Douglas/Rosecrans Station
- El Segundo/Nash Station
- Mariposa/Nash Station
- Aviation/I-105 Freeway Station

Connecting bus and shuttle service are available at the stations as well as some park and ride facilities.

Summer Beach Shuttle

The City of El Segundo Department of Parks and Recreation operates a summer beach shuttle service during the months of June through September. The purpose of the shuttle service is to provide a transportation system for the public that serves El Segundo and Manhattan Beach beaches during the summer months. The program is available to all citizens of El Segundo with priority to young people who have limited transportation options. Passenger pick-ups are at the following locations: Recreation and Parks south parking lot at Eucalyptus, in front of Center Street School, just west of Imperial Avenue School and at Richmond Street School. There are no pick-ups or drop-offs at any other location. Operating hours are from 10:00 AM to 4:00 PM, 7 days a week.

Green Line Shuttles (MTA)

The following MTA shuttles serve the Green Line stations within El Segundo:

- Westchester Shuttle (Line 625) - serves Aviation/I-105 Metro Station
- Mariposa Station Shuttle (Line 626) - serves Mariposa/Nash Metro Station
- El Segundo Station Shuttle (Line 627) - serves El Segundo/Nash Metro Station
- Douglas Station Shuttle (Line 628) - serves Douglas/Rosecrans Metro Station

TRUCK ROUTES

The El Segundo Municipal Code officially authorizes the City Council, by resolution, to designate truck routes on streets where vehicles in excess of three tons may travel. Existing truck routes are provided with appropriate sign posting to guide truck traffic through the City. These routes are shown in Exhibit 13.

FREIGHT RAILROAD FACILITIES

The City of El Segundo has several railroad lines that are actively used for freight transport. Most prominently located in the southeast portion of the City are the Burlington Northern/Santa Fe (BNSF) Railroad and the Southern Pacific Railroad. These rail lines do not provide public transportation service. The crossing of freight trains occasionally disrupt vehicular traffic in the City's streets. This contributes to the existing delay and congestion in the vicinity of the crossings. The Alameda Corridor project, which is scheduled to be completed by 2003, will provide additional north/south rail capacity. This will result in a reduction in train activity in the South Bay and the City of El Segundo.

PEDESTRIAN CIRCULATION

The pedestrian is an integral part of the circulation system and requires appropriate attention in the Circulation Element. The sidewalk is an area of refuge that represents a convenient and safe route for pedestrian transport. The relatively high percentage of elderly residential population in El Segundo, plus

school children coupled with mid-day walkers for shopping trips and jogging, necessitate the establishment of a pedestrian circulation system that will support and encourage walking as a mode of transportation.

The El Segundo Municipal Code Section on "Street and Sidewalks" does not address the issue of sidewalk design nor the policies for sidewalk implementation. The City Department of Public Works, however, has prepared Standard Plans and Specifications for the installation of sidewalks. The primary criteria is minimum width of sidewalk on new installation which is standard at 4 feet for residential streets. Sidewalks in commercial areas should be a minimum of 8 feet wide. The only exception is the case where the distance from face of curb to property line is 5 feet. The sidewalk minimum requirement then becomes 4 feet, 6 inches.

Implementation of sidewalks is mandatory with all new improvements in the City. Existing locations that do not have sidewalks can only require implementation on an assessment district basis; i.e., petition from the homeowners with City installation and cost of the sidewalk distributed to each homeowner on the basis of their street frontage.

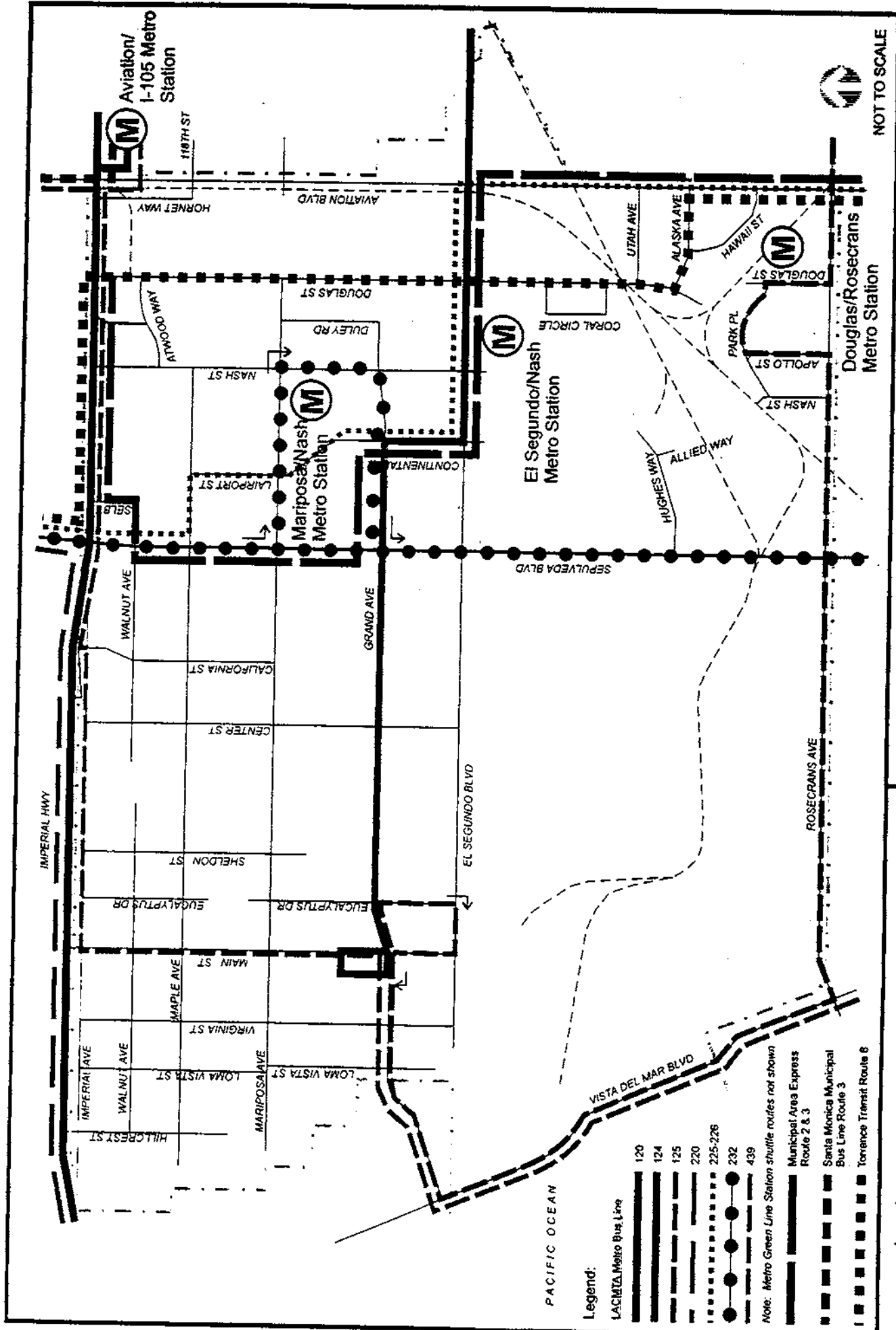
The City has pursued sidewalk installation on the basis of the 1911 Act. This Act allows installation of a sidewalk by an agency in all blocks where over 50 percent of the block has existing sidewalk. Protest from the citizens can be made to nullify installation under this Act with the final decision resting with the City Council. The City of El Segundo in the past has used this Act to install sidewalks to "close the gaps" in many of the residential areas.

It is necessary to keep the sidewalk area free of obstructions to allow for the free flow of pedestrians. When there is a need to place certain obstructions, i.e., traffic signal poles, they should be designed to present the least interference to pedestrians. In the areas of new planned development, the separation of pedestrians from autos must be considered. Utilizing pedestrian overpasses between buildings is one method of accomplishing this. The removal of the pedestrian from at-grade crossings significantly improves signal timing conditions, thus improving traffic flows.

EL SEGUNDO CIRCULATION ELEMENT
Existing Transit Service Fixed Bus Routes

Meyer, Mohaddes Associates, Inc.
An Ileris Company

NOT TO SCALE



- Legend:**
- LACMTA Metro Bus Line
 - 120
 - 124
 - 125
 - 220
 - 225-226
 - 232
 - 439
 - - - Note: Metro Green Line Station shuttle routes not shown
 - - - Municipal Area Express Route 2 & 3
 - Santa Monica Municipal Bus Line Route 3
 - Torrance Transit Route 6

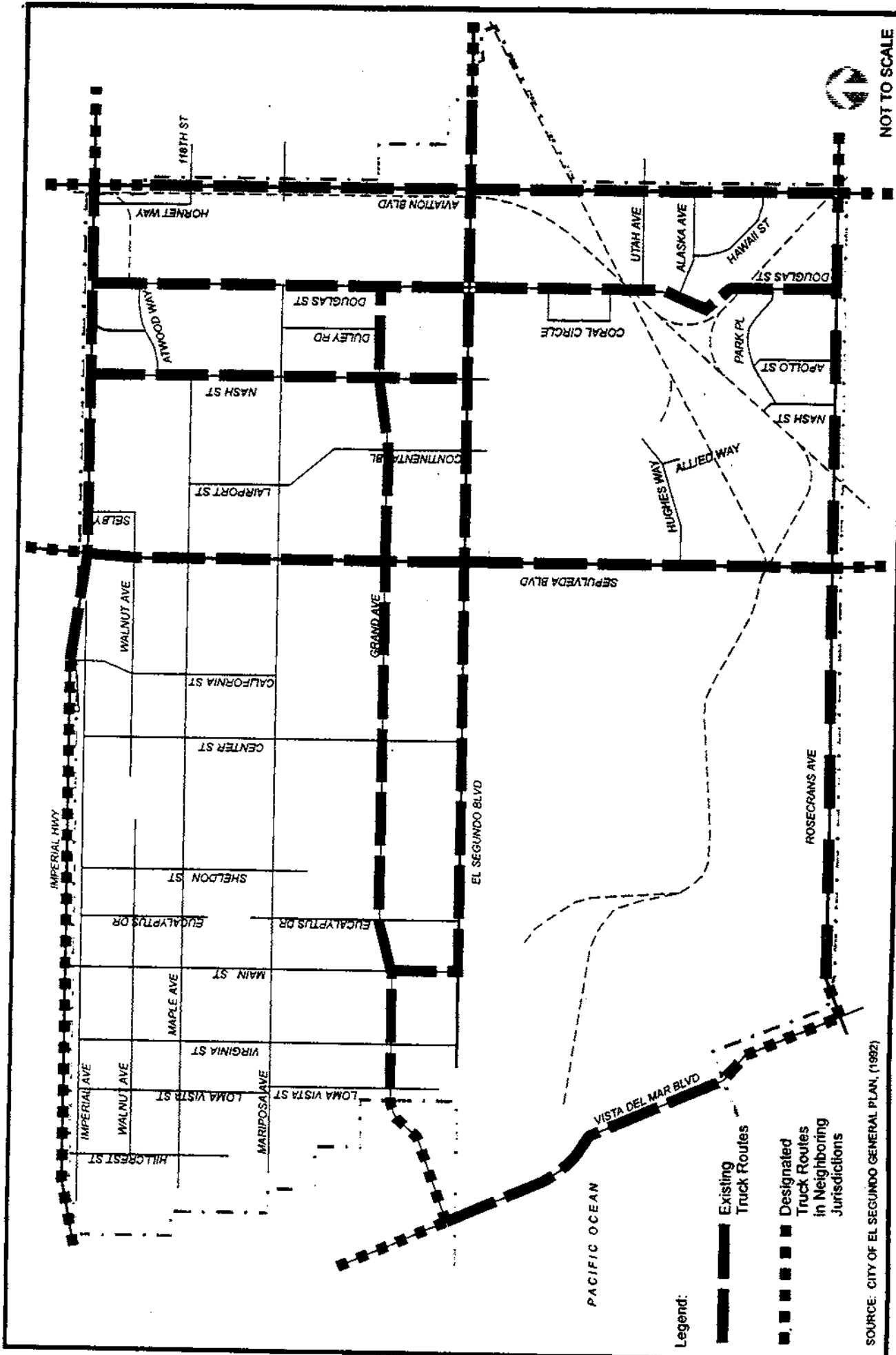
EL SEGUNDO CIRCULATION ELEMENT
Existing Master Plan of Truck Routes

Meyer, Mohaddes Associates, Inc.
An Ittles Company

SOURCE: CITY OF EL SEGUNDO GENERAL PLAN, (1992)

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FUTURE TRAVEL FORECASTS

In order to plan for the future travel conditions in El Segundo, traffic forecasts were developed for anticipated growth under the City's Land Use Plan as presented in the General Plan Land Use Element. The traffic forecasts incorporated the type and density of future land uses within the City, the location and potential interaction of various land use types, as well as the characteristics and capacity of each of the City's roadways. The following types of development activity in the City have been considered:

- Approved Projects - Those projects which have already received discretionary approval. Approved projects are summarized in the table below.
- Vacant Parcels - Potential development of all vacant parcels has been assessed, assuming appropriate zoning categories and floor-area-ratios
- Recyclable Parcels - Parcels which currently have buildings but which are likely to be recycled within the time frame of the Circulation Element have been assessed.

MAJOR APPROVED AND ACTIVE PROJECTS INCLUDED IN ANALYSIS

Project	Address	Proposed Use	Size
Office Building	2301 Rosecrans Ave.	Office	290, 096 SF
Xerox Phase IV	1951-1961 El Segundo Blvd.	Office Hotel	255,242 SF 350 Rooms
Continental Grand	400 & 444 Continental Blvd.	Office	233,500 SF
Mattel	445 & 475 Continental Blvd.	Research & Development	300,000 SF
Kizirian	1415 E. Grand Ave.	Townhome	28 Units
Grand Avenue Corp. Center	155-555 N. Nash St.	Offices Hotel Recreation	463,000 SF 312 Rooms 135,000 SF
Mini-Storage	N/W corner Aviation Blvd./Rosecrans Ave.	Mini- Storage	350 Units
Mini-Storage	401 Aviation Blvd.	Mini-Storage	708 Units
Rockwell Site	S/W corner Douglas St./Mariposa Ave.	Office Manufacturing	99,450 SF 111,150 SF
Media Center	Bounded by Nash St., Mariposa Ave., Douglas St. and Atwood Way	Office Retail Hotel	1,280,000 SF 20,000 SF 500 Rooms

The approved projects would generate approximately 5,209 new AM peak hour and 5,107 new PM peak hour trips. They would account for approximately 65 percent (AM) and 53 percent (PM) of all added trips to and from the City.

Total buildout to maximum allowed densities of all vacant and recyclable parcels in the City is not likely within the 10-year horizon of the Circulation Element. Therefore, City planning staff have estimated the likely "market" buildout throughout the City. Based on historic trends and patterns, it is assumed that 20 percent (2 percent annually) of total potential buildout will occur within the horizon of the Circulation Element. Table 6 illustrates growth projections that have been assumed for purposes of the future traffic forecasts. As indicated, there is the potential for development of 9.3 million square feet on the vacant and recyclable parcels, with 1.9 million or 20 percent occurring within the 10-year time horizon of the Circulation Element.

Trip generation rates from the Institute of Transportation Engineers were applied to the forecast land use growth to determine the estimated future increase in trip generation to and from vacant and recyclable parcels in the City. As shown in the table, the greatest number of new trips would occur due to development in the Urban Mixed Use-North (MU-N) zone, which accounts for approximately 54 to 57 percent of all new trips, followed by development in the General Commercial (C-3) and Corporate Office (CO) zones. The traffic forecasts indicate that development will add approximately 8,060 new AM peak hour, 9,570 new PM peak hour and 95,700 daily trips to the City's roadway system.

NASH/DOUGLAS ONE-WAY COUPLET VERSUS TWO-WAY TRAFFIC FLOW

Nash and Douglas Streets currently operate as one-way streets from El Segundo Boulevard to Imperial Highway. The change to one-way operation was completed in response to the opening of the I-105 Freeway and concerns associated with freeway access and related congestion. In 1996 when the streets were converted from two-way to one-way the construction cost was \$612,000 (not including design and engineering) and the conversion took 9 - 12 months to complete after approval. Since the conversion to one-way operation there have been concerns related to the circuitous travel paths created for some businesses. As part of the Circulation Element update, a technical traffic analysis of traffic operating conditions under both one-way and two-way configurations has been conducted. The traffic analysis indicated that conversion to two-way flow, with appropriate mitigation measures would provide acceptable traffic operating conditions. Conversion to two-way traffic flow was also indicated as a high priority by the City Council. Based on the technical findings and the City's strong desire to return to two-way flow, the remainder of the Circulation Element, assumes two-way flow as a baseline condition.

Pros and Cons of One-way Couplets Versus Two-way Traffic Flow

One-way couplet systems generally operate more efficiently than two-way streets due to the efficient operations experienced at signalized intersections. With one-way streets, there are fewer "conflicting" traffic movements at intersections. Therefore, the amount of green signal time can be fully utilized by the traffic flowing in the single direction. With two-way streets, some of the green time is typically used for left turn movements. Speeds are often also higher along the mid-block segments of one-way streets due to the fact that there are fewer mid-block conflicts between turning vehicles and through traffic. Overall, conversion to one-way operations is considered where there is the need to most efficiently utilize the available roadway capacity.

Conversely, one-way operations present a trade-off in terms of direct and convenient access to properties. One-way streets create the need for more circuitous traffic circulation for certain land parcels since there

is access from only one direction. In the case of parcels in El Segundo, access to and from the freeway is more circuitous for certain businesses. For example, businesses with access on Nash Street currently must go south first even if the destination is the I-105 freeway ramps to the north. Some retail businesses that rely on pass-by traffic may also view one-way circulation as detrimental to business operations due to higher speeds and access limited to only one direction which makes it more difficult to access the business.

One-way street operations also may result in driver confusion for some motorists that are not familiar with the local area. Motorists may not see "one-way" streets sign designations and turn the wrong way onto a one-way street. This can create safety problems for both other motorists as well as pedestrians who are not expecting the wrong-direction driver. Also the types of accidents due to wrong-way travel may be more severe on arterial streets due to the relatively higher speeds. Although one-way traffic flow also reduces the potential for some types of accidents due to the reduction in vehicle conflicts (i.e., left turn versus through vehicles at intersections), the increased potential for severe accidents caused by one-way traffic flow must be considered in any decision to switch from one-way to two-way flow or vice-versa. Police department personnel have also noted a preference for two-way flow to prevent driver confusion and resulting safety concerns.

PROJECTED TRAFFIC VOLUMES ON EL SEGUNDO ARTERIAL ROADWAYS

Future Traffic Volumes with Growth in El Segundo

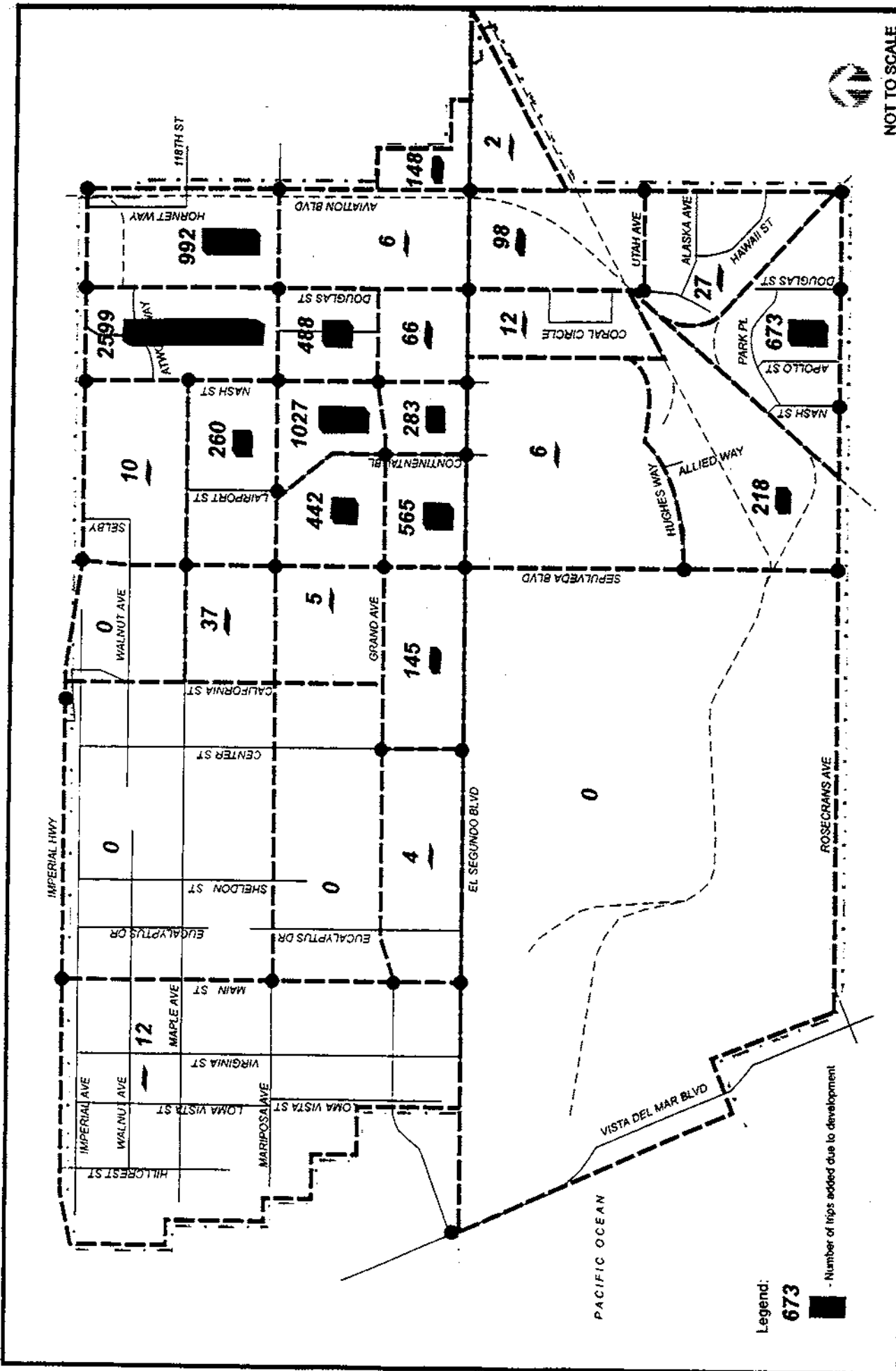
Future conditions were assessed with growth in El Segundo but without any regional through trip growth related to LAX. The purpose of that analysis is to determine the intersection deficiencies and levels of service that will result of the City's own anticipated growth. After that, the growth due to LAX is also factored in separately. The forecast traffic added in each traffic analysis zone is shown in Exhibits 14 and 15. As indicated by the illustrations, the greatest traffic volume increases are forecast to occur in the area between Douglas Street and Continental Boulevard north of Grand Avenue, and also between Nash Street and Aviation Boulevard south of Imperial Highway. Streets with the highest anticipated traffic volume increases include Aviation Boulevard, Sepulveda Boulevard, Nash Street, Douglas Street, Imperial Highway and El Segundo Boulevard. These streets are expected to experience significant increases in traffic as well as degradation in level of service due to the large concentration of development and new tripmaking which will occur adjacent to them. Table 7 presents the Future Conditions with growth in El Segundo. (Note that all future analysis results assume conversion of Nash/Douglas to two-way flow)

The following locations are forecast to operate at LOS E or F as a result of growth in El Segundo (i.e., the growth would cause them to change from LOS D or better to LOS E or LOS F):

LOS E or F intersections due to growth in the City

- Aviation Boulevard/Imperial Highway
- Aviation Boulevard/el Segundo Boulevard
- Douglas Street/Imperial Highway
- Douglas Street/El Segundo Boulevard
- Nash Street/Imperial Highway
- Nash Street/Maple Avenue
- Nash Street/El Segundo Boulevard
- Continental Boulevard/El Segundo Boulevard

In addition, growth in the City would worsen several intersections that are currently at LOS E or F.

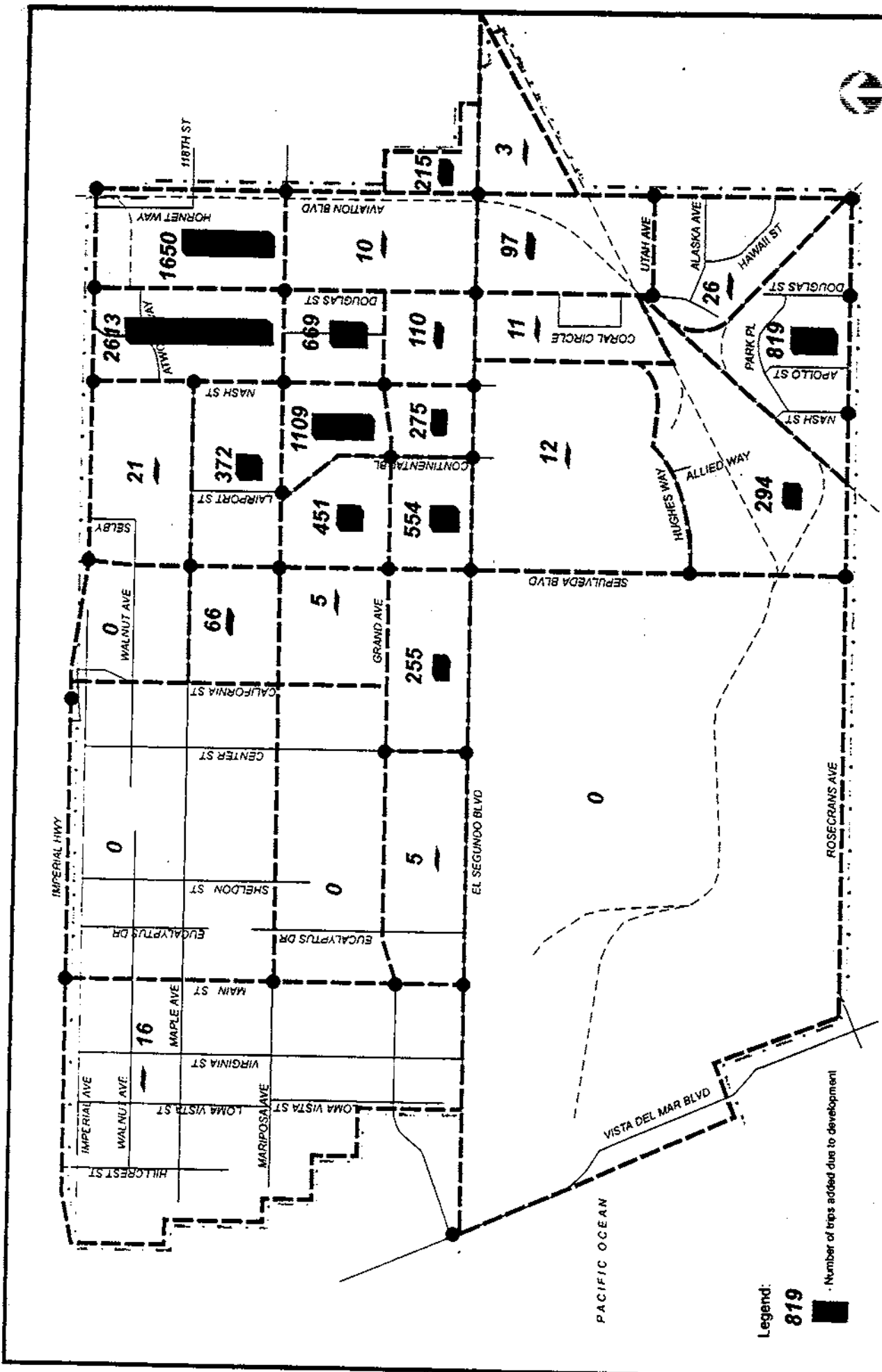


NOT TO SCALE

EL SEGUNDO CIRCULATION ELEMENT

Future Added Trips Due to Development

AM Peak Hour



EL SEGUNDO CIRCULATION ELEMENT
Future Added Trips Due to Development
PM Peak Hour

EXHIBIT
15

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Future with Growth in El Segundo Plus Regional Through Trips

In addition to growth in the City, LAX is expected to contribute "through" trips to the City's major arterial facilities. Those trips will be non-local through trips which pass through the City without stopping at a land use location within the City. The anticipated effects of LAX growth on City roadways is incorporated into the analysis. That assumed growth includes 700 PM peak trips on Sepulveda, 400 PM peak trips on Aviation and 100 PM peak trips added on El Segundo Boulevard due to the growth of LAX. These assumptions are consistent with recent figures utilized in environmental traffic studies in the City. Table 7 from the previous section presents the results of the future analysis with growth in El Segundo plus LAX through trip growth. The results of the analysis indicate that LAX through trip growth will result in a new LOS E intersection and it will push three intersections into LOS D operations and also worsen several others already forecast to operate at LOS E or LOS F. Table 8 compares future intersection operating conditions under each analysis scenario. Exhibit 16 illustrates added future trips during the PM peak hour. The results of the future conditions analysis are (with local City growth and LAX through trip growth) shown graphically in Exhibit 17.

**TABLE 6
FORECAST LAND USE GROWTH TRIP GENERATION IN EL SEGUNDO**

Land Use Type	Total Potential Buildout (square feet)	Buildout in El Segundo Assumed in Forecasts		
		(20 Percent of Total Buildout square feet)	Estimated New Trips	
			AM Peak Hour	PM Peak Hour
Approved and Active Projects	3.18 million sf office / R&D / other; 1162 hotel rooms; 1058 storage units; 28 town homes	3.18 million sf office / R&D / other; 1162 hotel rooms; 1058 storage units; 28 town homes * 100 percent of approved and active projects are included in forecasted trip generation	5,209	5,107
C-RS/DSP	14,000	2,800	7	10
C-3	602,590	120,518	292	529
CO	934,502	186,900	381	495
MU-N	3,786,068	757,213	1,530	2,544
MU-S	631,093	126,219	255	424
M-1	982,631	196,526	155	155
M-2	2,260,977	452,195	217	294
MM	49,028	9,806	10	11
SB	19,536	3,907	4	4
Totals	12,467,863	5,043,522	8,060	9,573
Key:		M-1 - Light Industrial		
C-RS - Downtown Commercial		M-2 - Heavy Industrial		
C-3 - General Commercial		MM - Medium Manufacturing		
CO - Corporate Office		SB - Small Business		
DSP - Downtown Specific Plan		MU-S - Urban Mixed Use South		
MU-N - Urban Mixed Use North				

TABLE 7

EXISTING AND FUTURE INTERSECTION OPERATING CONDITIONS

Intersection	1999 Existing Conditions				Future with Growth in El Segundo				Future with Growth in El Segundo plus Regional Through Trips			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Aviation Boulevard / Imperial Highway	B	0.619	B	0.673	C	0.781	F	1.376	C	0.789	F	1.400
Aviation Boulevard / 120th Street	C	0.747	B	0.657	C	0.742	B	0.669	C	0.766	C	0.701
Aviation Boulevard / El Segundo Boulevard	E	0.920	D	0.874	F	1.750	F	1.579	F	1.807	F	1.660
Aviation Boulevard / Utah-135th Street	C	0.707	B	0.665	D	0.858	D	0.843	D	0.879	D	0.891
Aviation Boulevard / Rosecrans Avenue	F	1.242	F	1.220	F	1.582	F	1.362	F	1.604	F	1.362
Douglas Street / Imperial Highway	A	0.404	A	0.593	C	0.796	F	1.266	D	0.812	F	1.290
Douglas Street / Mariposa Avenue	A	0.282	A	0.343	C	0.724	B	0.647	C	0.724	B	0.647
Douglas Street / El Segundo Boulevard	B	0.634	B	0.648	F	1.041	F	1.389	F	1.051	F	1.402
Douglas Street / Utah Avenue [1]	B	[1]	A	[1]	B	0.000	A	0.000	B	0.000	A	0.000
Douglas Street / Rosecrans Avenue	B	0.667	C	0.716	D	0.803	D	0.843	D	0.803	D	0.843
Nash Street / Imperial Highway	C	0.714	A	0.363	F	1.142	D	0.886	F	1.158	E	0.909
Nash Street / Maple Avenue	A	0.282	A	0.183	F	1.073	D	0.857	F	1.073	D	0.857
Nash Street / Mariposa Avenue	A	0.349	A	0.340	D	0.838	C	0.738	D	0.838	C	0.738
Nash Street / Grand Avenue	A	0.328	A	0.341	D	0.861	C	0.727	D	0.861	C	0.727

Notes:

1) Intersection has stop signs on one cross street - no V/C analysis possible; 2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: - Level of Service estimates based on traffic counts conducted in 1998

- Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations

- Assumes conversion to two-way flow for Nash/Douglas couplet.

Bold and shade indicate Level of Service E or F Intersection conditions

TABLE 7

EXISTING AND FUTURE INTERSECTION OPERATING CONDITIONS

Intersection	1999 Existing Conditions				Future with Growth in El Segundo				Future with Growth in El Segundo plus Regional Through Trips			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Nash Street / El Segundo Boulevard	C	0.707	B	0.651	D	0.886	E	0.912	D	0.886	E	0.924
Nash Street / Rosecrans Avenue	A	0.453	A	0.587	A	0.482	B	0.670	D	0.482	B	0.670
Continental Boulevard / Mariposa Avenue	A	0.519	A	0.327	B	0.661	A	0.399	D	0.661	A	0.399
Continental Boulevard / Grand Avenue	A	0.375	A	0.444	A	0.512	A	0.588	A	0.512	A	0.588
Continental Boulevard / El Segundo Boulevard	B	0.651	A	0.532	E	0.900	B	0.695	E	0.900	C	0.708
Sepulveda Boulevard / Imperial Highway	E	0.923	F	1.106	F	1.068	F	1.467	F	1.118	F	1.536
Sepulveda Boulevard / Maple Avenue	C	0.753	B	0.699	D	0.801	D	0.819	D	0.840	D	0.871
Sepulveda Boulevard / Mariposa Avenue	B	0.694	C	0.736	C	0.777	D	0.836	D	0.835	D	0.900
Sepulveda Boulevard / Grand Avenue	F	1.138	F	1.076	F	1.050	F	1.477	F	1.083	F	1.531
Sepulveda Boulevard / El Segundo Boulevard	F	1.014	F	1.054	E	0.947	F	1.081	F	1.018	F	1.165
Sepulveda Boulevard / Hughes Way	B	0.653	C	0.787	C	0.750	C	0.715	C	0.769	C	0.751
Sepulveda Boulevard / Rosecrans Avenue	F	1.151	F	1.127	F	1.035	F	1.167	F	1.055	F	1.215

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible; 2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: - Level of Service estimates based on traffic counts conducted in 1998

- Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations

- Assumes conversion to two-way flow for Nash/Douglas couplet.

Bold and shade indicate Level of Service F at F Intersection conditions

TABLE 7

EXISTING AND FUTURE INTERSECTION OPERATING CONDITIONS

Intersection	1999 Existing Conditions				Future with Growth in El Segundo				Future with Growth in El Segundo plus Regional Through Trips			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
California Street / Imperial Highway	B	0.635	A	0.551	B	0.643	A	0.556	B	0.643	A	0.556
Center Street / Grand Avenue [2]	B	0.611	B	0.664	B	0.636	B	0.549	B	0.636	B	0.549
Center Street / El Segundo Boulevard [1]	C	[1]	D	[1]	C	0.000	D	0.000	C	0.000	E	0.000
Main Street / Imperial Highway	E	0.902	D	0.849	E	0.921	D	0.860	E	0.921	D	0.860
Main Street / Mariposa Avenue	B	0.646	B	0.698	B	0.648	C	0.700	B	0.648	C	0.700
Main Street / Grand Avenue	A	0.443	A	0.519	A	0.446	A	0.523	A	0.446	A	0.523
Main Street / El Segundo Boulevard [2]	A	0.368	B	0.788	A	0.378	B	0.804	A	0.410	B	0.764
Vista Del Mar Boulevard / Grand Avenue	D	0.828	B	0.611	D	0.830	B	0.613	D	0.830	B	0.613

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible; 2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: - Level of Service estimates based on traffic counts conducted in 1998

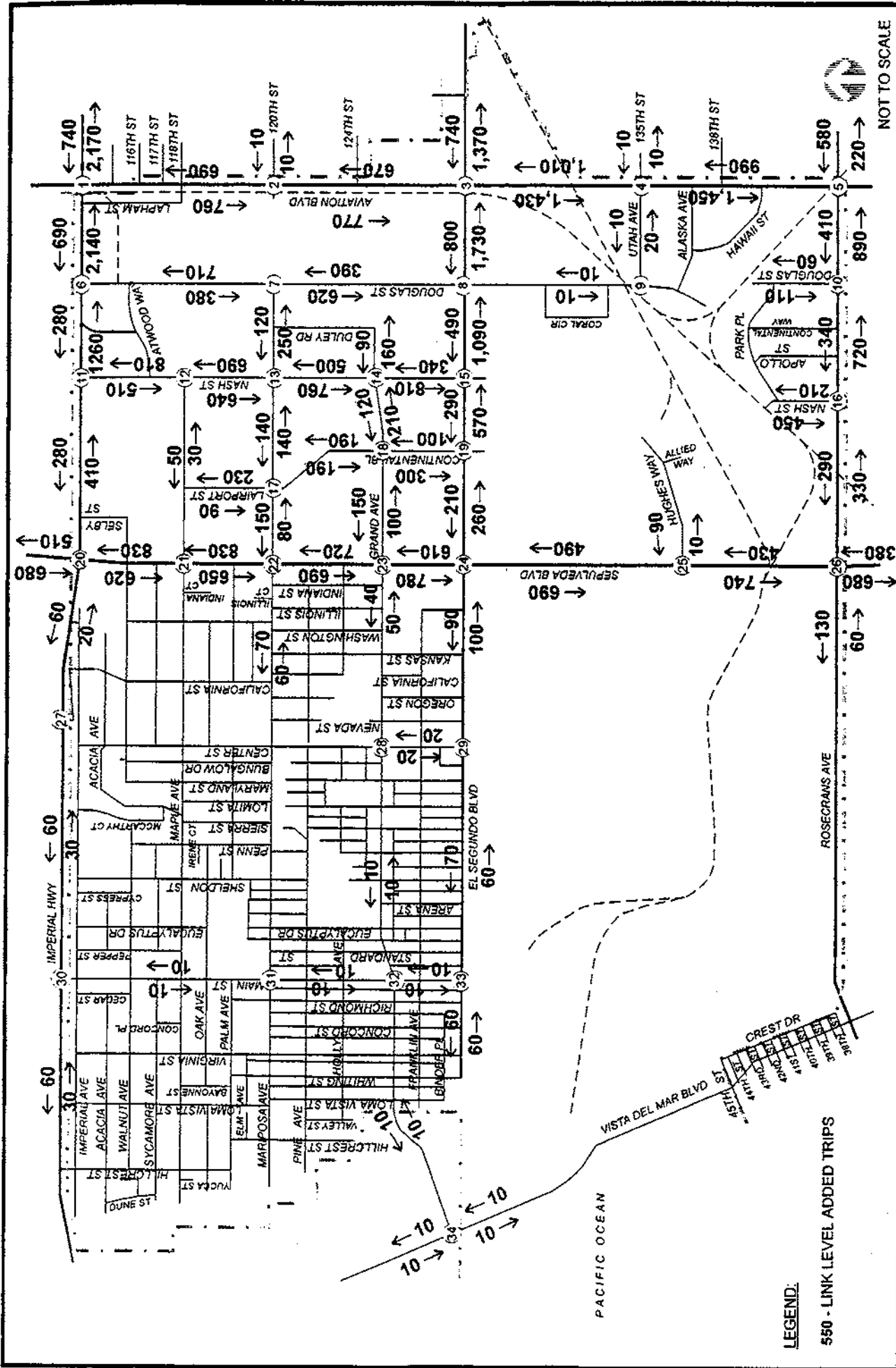
- Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations

- Assumes conversion to two-way flow for Nash/Douglas couplet.

Bold and shade indicate Level of Service E or F intersection conditions

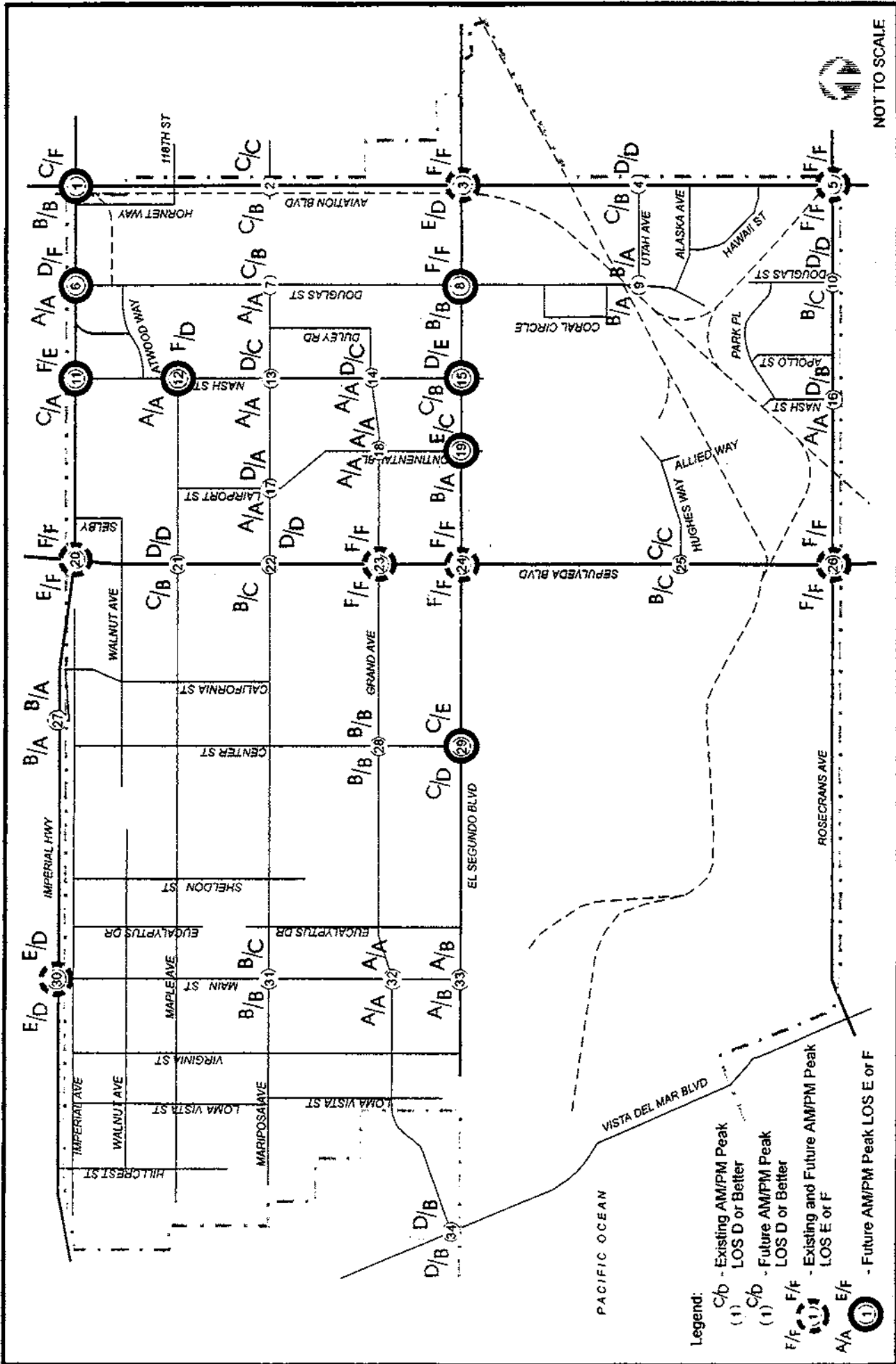
**TABLE 8
NUMBER OF INTERSECTIONS AT EACH LEVEL OF SERVICE**

	AM Peak Hour				PM Peak Hour			
	LOS F	LOS E	LOS D	LOS A-C	LOS F	LOS E	LOS D	LOS A-C
Existing Conditions	4	3	1	26	5	0	3	26
Future Conditions with Growth in El Segundo	8	3	7	16	9	1	7	17
Future Conditions with Regional Through Trip and Growth in El Segundo	9	2	11	12	9	3	6	16



EL SEGUNDO CIRCULATION ELEMENT
Future PM Peak Hour Directional Added Trips

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NOT TO SCALE

EL SEGUNDO CIRCULATION ELEMENT
Summary of Peak Hourly Intersection Analysis
(Existing and Future Conditions)

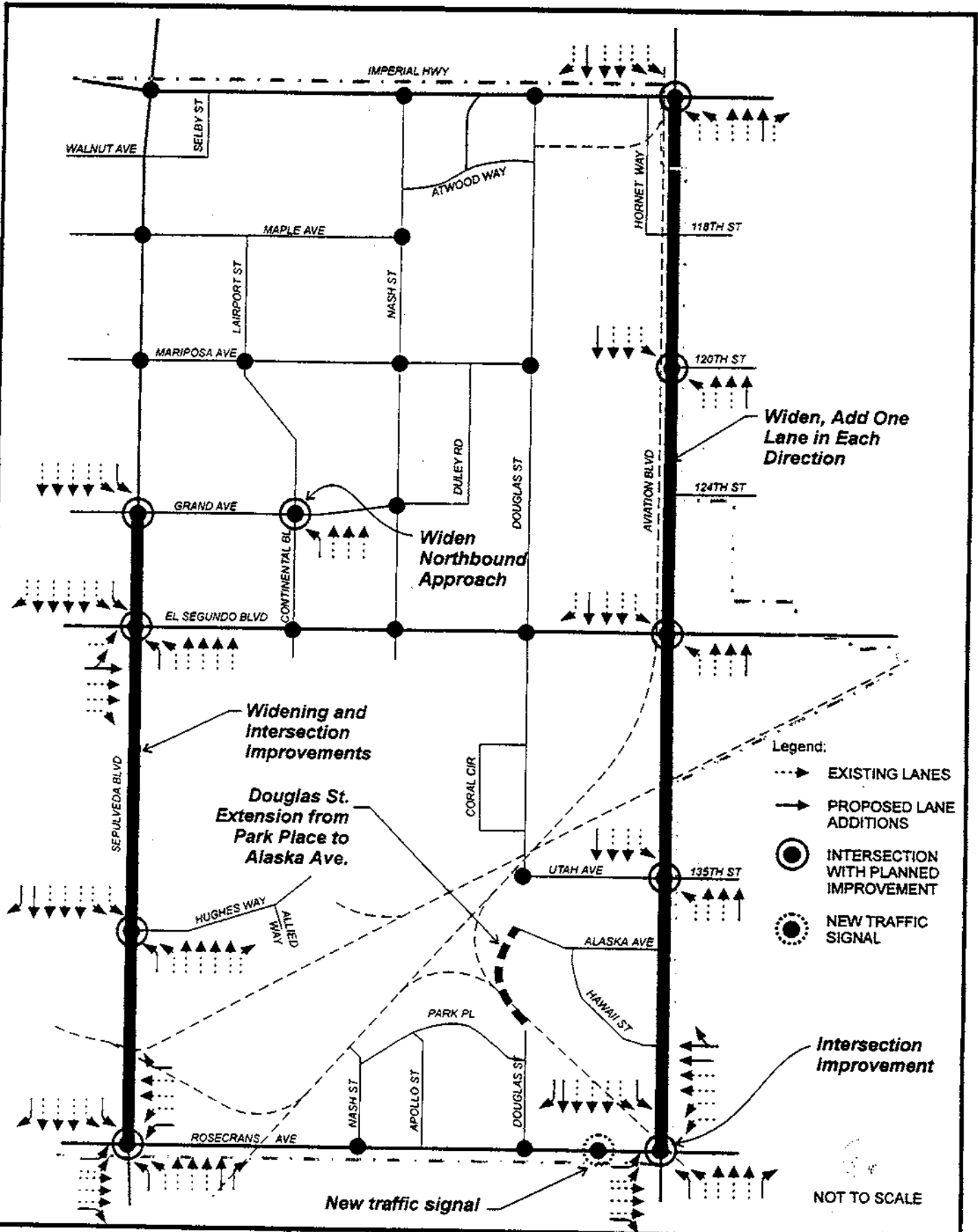
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PLANNED/FUNDED ROADWAY IMPROVEMENTS

A series of roadway improvements are planned, funded or currently under construction. The traffic model forecasts have included these roadway improvements since they will be completed prior to buildout of the Land Use Element. These roadway improvements are illustrated in Exhibit 18 and listed below.

Widening of Aviation Boulevard - Rosecrans Avenue to Imperial Highway. The project cost within El Segundo City limits is \$4.6 million. (\$3.9 million of MTA and federal grants have been allocated for this work). The scope of work involves adding one lane in each direction. The project is scheduled to be completed by 3rd quarter 2000. The following intersections will benefit from this project.

- Aviation Boulevard/Imperial Highway - Add one through lane in each direction for northbound and southbound movements, resulting in dual lefts, 3 through and one right turn only lane for both movements.
- Aviation Boulevard/120th Street - Add one through lane in each direction for northbound and southbound movements, resulting in one left and 3 through lanes for both movements.
- Aviation Boulevard/El Segundo Boulevard - Add one through lane in each direction for northbound and southbound movements, resulting in one left, 3 through and one right turn only lane for the southbound movement; one left and 3 through lanes for the northbound movement.
- Aviation Boulevard/Utah-135th Street - Add one through lane in each direction for northbound and southbound movements, resulting in one left and 3 through lanes for both movements.
- Aviation Boulevard/Rosecrans Avenue Improvements - The intersection improvements are being implemented by City of Hawthorne. The proposed intersection lane configurations will be as follows:
 - Dual lefts, three through lanes and one exclusive right lane in the northbound movement.
 - Dual lefts, four through lanes and one exclusive right lane in the southbound movement.
 - Dual lefts, three through lanes and one through-right lane combination in the eastbound movement.
 - Dual lefts, three through lanes and one through-right lane combination in the westbound movement.



Widening of Sepulveda Boulevard - Rosecrans to Grand Avenue. The City's share of project cost per City-Caltrans agreement is \$870,000. Caltrans implementation is scheduled to start by August 1999, and be completed by early-2001. The proposed Caltrans improvements are as follows.

- Sepulveda Boulevard/Grand Avenue - Add one left turn lane southbound, resulting in dual left turns and 4 through lanes southbound. Installation of protected left turn phase for the eastbound left turn movement.
- Sepulveda Boulevard/El Segundo Boulevard - Add one left turn lane on the northbound and southbound direction, resulting in dual left turns, four through and one right turn only lane southbound; dual left turns and 4 through lanes northbound. Add one through/left lane eastbound resulting in one left, one through-left, 2 through and one right turn only lane eastbound.
- Sepulveda Boulevard/Hughes Way - Add one left turn lane northbound, resulting in dual left turns, four through and one right turn only lane northbound. Add one through and one right turn only lane southbound resulting in dual left turns, four through and one right turn only lane southbound.
- Sepulveda Boulevard /Rosecrans Avenue - Add one left turn lane on all approaches resulting in dual left turns on all approaches. Add one through lane northbound and one exclusive right turn lane for the southbound, eastbound and westbound approaches. The resulting configuration after improvements follows:
 - Northbound movement - dual left, four through and one right turn only lane.
 - Southbound movement - dual left three through and one right turn only lane.
 - Eastbound movement - dual left three through and one right turn only lane.
 - Westbound movement - dual left two through and one right turn only lane.

Construct left turn pocket for northbound Continental Boulevard at Grand Avenue - This improvement will result in one left and three through lanes for the northbound movement. Estimated project cost is \$65,000. It is scheduled for completion by mid-2001.

Douglas Street Extension from Park Place to Alaska Avenue - \$2,000,000 of the total \$12.9 million cost is recoverable from new development. The remaining costs are covered by other funding sources which includes a grant from MTA to cover 65% of the project cost.

ANALYSIS OF CURRENT MASTER PLAN STREETS

CURRENT MASTER PLAN OF STREETS (1992)

The current Master Plan of Streets (adopted in 1992) was developed to serve the future traffic needs based upon the anticipated level of development in the General Plan. To determine the form of that network, it was necessary to consider the existing street alignments, constraints in the City, and the potential for new routes. Exhibit 9 (presented in a previous section of the report) illustrates the current Master Plan.

The current Master Plan of Streets has designated a preferred number of traffic lanes to support buildout of the General Plan land use element. That master plan has been re-evaluated to determine if it will adequately handle forecast future traffic volumes. The traffic model has been run **assuming full implementation of the current master plan of streets** (excluding street extensions). This means that the full cross section of lanes for each street designation is assumed as shown in Exhibit 9. Therefore, all streets designated as "6D" or "six lane divided", are assumed to have three through lanes in each direction (six through lanes total) in the future, all streets designated as "8D" are assumed to have four through lanes in each direction.

The current master plan of streets, if implemented, would result in the mitigation of several forecast level of service E or F conditions. Even with the master plan fully implemented, however, several intersection deficiencies would still occur due to local growth and increases in regional traffic. Intersection deficiencies that would remain with the master plan fully built are described in the next section of the report. Table 9 displays intersection deficiencies with the buildout of the current master plan of streets (excluding unconstructed segments which are considered separately as described in the following section). The analysis has been conducted separately assuming growth in the City of El Segundo and also growth due to LAX.

UNCONSTRUCTED MASTER PLAN STREET EXTENSIONS

There are a number of streets on the City's current Master Plan of Streets that are unconstructed. To predict the operational conditions of the unconstructed Master Plan streets, the future Land Use Element buildout traffic conditions were forecasted for each street segment. Each street segment has been considered individually in terms of the necessity to keep it in the Master Plan or the feasibility of deleting it from the Master Plan.

The evaluation process included the measurement of volume-to-capacity (V/C) changes in the vicinity of each individual street segment extension assuming all other Master Plan improvements are implemented. That is, would the extension significantly improve or worsen traffic operating conditions in the vicinity, or would there be negligible change? Other potential advantages and disadvantages of each Master Plan street extension have also been reviewed. The results of the analysis for each potential street extension are described below. Table 10 summarizes the potential advantages and disadvantages of each street extension, with a recommendation for each segment. The adopted Master Plan of Streets includes several street extensions in both the north/south and east/west directions. None of the street extensions would be expected to relieve "through" traffic since none would provide continuous travel routes for regional through trips. Therefore, the main purpose of each street extension is to serve local parcels of land as they are developed and provide access to each parcel. In general, given the downtown's grid-like circulation

TABLE 9

FUTURE INTERSECTION OPERATING CONDITIONS
WITH MASTER PLAN IMPROVEMENTS

Intersection	Future with Growth in El Segundo				Future with Growth in El Segundo plus Master Plan of Streets				Future with Growth in El Segundo plus Regional Through Trips plus Master Plan of Streets			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Aviation Boulevard / Imperial Highway	C	0.781	F	1.376	C	0.779	F	1.262	C	0.788	F	1.286
Aviation Boulevard / 120th Street	C	0.742	B	0.669	B	0.670	A	0.590	B	0.688	B	0.614
Aviation Boulevard / El Segundo Boulevard	F	1.750	F	1.579	F	1.416	F	1.336	F	1.441	F	1.391
Aviation Boulevard / Utah-135th Street	D	0.858	D	0.843	B	0.681	B	0.661	B	0.698	B	0.697
Aviation Boulevard / Rosecrans Avenue	F	1.582	F	1.362	F	1.450	F	1.346	F	1.450	F	1.346
Douglas Street / Imperial Highway	C	0.796	F	1.266	D	0.808	F	1.259	D	0.824	F	1.283
Douglas Street / Mariposa Avenue	C	0.724	B	0.647	C	0.784	D	0.843	C	0.784	D	0.843
Douglas Street / El Segundo Boulevard	F	1.041	F	1.389	D	0.818	F	1.220	D	0.825	F	1.229
Douglas Street / Utah Avenue [1]	B	0.000	A	0.000	C	0.000	E	0.000	C	0.000	E	0.000
Douglas Street / Rosecrans Avenue	D	0.803	D	0.843	B	0.674	C	0.733	B	0.674	C	0.733
Nash Street / Imperial Highway	F	1.142	D	0.886	F	1.081	D	0.826	F	1.097	D	0.850
Nash Street / Maple Avenue	F	1.073	D	0.857	A	0.553	A	0.339	A	0.553	A	0.339
Nash Street / Mariposa Avenue	D	0.838	C	0.738	A	0.540	A	0.524	A	0.540	A	0.524
Nash Street / Grand Avenue	D	0.861	C	0.727	A	0.591	A	0.572	A	0.591	A	0.572

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible; 2) F Intersection has stop signs on all approaches (all-way stop control)
 General Notes: - Level of Service estimates based on traffic counts conducted in 1998
 - Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations
 - Assumes conversion to two-way flow for Nash/Douglas couplet.
 Bold and shade indicate Level of Service F or E intersection conditions

TABLE 9

FUTURE INTERSECTION OPERATING CONDITIONS
WITH MASTER PLAN IMPROVEMENTS

Intersection	Future with Growth in El Segundo				Future with Growth in El Segundo plus Master Plan of Streets				Future with Growth in El Segundo plus Regional Through Trips plus Master Plan of Streets			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Nash Street / El Segundo Boulevard	D	0.886	E	0.912	C	0.789	C	0.722	D	0.805	C	0.731
Nash Street / Rosecrans Avenue	A	0.482	B	0.670	A	0.438	B	0.652	A	0.438	B	0.652
Continental Boulevard / Mariposa Avenue	B	0.661	A	0.399	A	0.517	A	0.308	A	0.517	A	0.308
Continental Boulevard / Grand Avenue	A	0.512	A	0.588	A	0.457	A	0.521	A	0.457	A	0.521
Continental Boulevard / El Segundo Boulevard	E	0.900	B	0.695	D	0.859	B	0.613	D	0.859	B	0.622
Sepulveda Boulevard / Imperial Highway	F	1.068	F	1.467	F	1.056	F	1.413	F	1.107	F	1.482
Sepulveda Boulevard / Maple Avenue	D	0.801	D	0.819	C	0.796	C	0.793	D	0.835	D	0.845
Sepulveda Boulevard / Mariposa Avenue	C	0.777	D	0.836	C	0.736	C	0.734	C	0.794	D	0.818
Sepulveda Boulevard / Grand Avenue	F	1.050	F	1.477	F	1.075	F	1.117	F	1.108	F	1.171
Sepulveda Boulevard / El Segundo Boulevard	E	0.947	F	1.081	D	0.891	E	0.932	E	0.947	E	0.997
Sepulveda Boulevard / Hughes Way	C	0.750	C	0.715	C	0.734	B	0.700	C	0.753	C	0.735
Sepulveda Boulevard / Rosecrans Avenue	F	1.035	F	1.167	F	1.018	E	0.984	F	1.037	F	1.020

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible; 2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: Level of Service estimates based on traffic counts conducted in 1998

Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations

Assumes conversion to two-way flow for Nash/Douglas couplet.

Red and shade indicate Level of Service E or F intersection conditions

TABLE 9

FUTURE INTERSECTION OPERATING CONDITIONS
WITH MASTER PLAN IMPROVEMENTS

Intersection	Future with Growth in El Segundo				Future with Growth in El Segundo plus Master Plan of Streets				Future with Growth in El Segundo plus Regional Through Trips plus Master Plan of Streets			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
California Street / Imperial Highway	B	0.643	A	0.556	B	0.643	A	0.556	B	0.643	A	0.556
Center Street / Grand Avenue [2]	B	0.636	B	0.549	B	0.636	B	0.549	B	0.636	B	0.549
Center Street / El Segundo Boulevard [1]	C	0.000	D	0.000	C	0.000	D	0.000	C	0.000	E	0.000
Main Street / Imperial Highway	E	0.921	D	0.860	C	0.797	C	0.783	C	0.797	C	0.783
Main Street / Mariposa Avenue	B	0.648	C	0.700	B	0.648	C	0.700	B	0.648	C	0.700
Main Street / Grand Avenue	A	0.446	A	0.523	A	0.405	A	0.490	A	0.405	A	0.490
Main Street / El Segundo Boulevard [2]	A	0.378	B	0.804	A	0.566	A	1.207	A	0.537	B	1.150
Vista Del Mar Boulevard / Grand Avenue	D	0.830	B	0.613	A	0.600	A	0.474	A	0.600	A	0.474

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible; 2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: - Level of Service estimates based on traffic counts conducted in 1998

- Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations

- Assumes conversion to two-way flow for Nash/Douglas couplet.

TABLE 10
SUMMARY OF MASTER PLAN STREET EXTENSION ANALYSIS

STREET EXTENSIONS	LIMITS	POTENTIAL ADVANTAGES	POTENTIAL DISADVANTAGES	RECOMMENDATIONS
Nash Street	El Segundo Boulevard to segment north of Rosecrans Ave.	<ul style="list-style-type: none"> provide alternative route for north/south traffic, relieve some north/south traffic demand on Sepulveda 	<ul style="list-style-type: none"> create a "cut-through" route for regional north/south traffic may not be feasible due to current and anticipated patterns of development 	<ul style="list-style-type: none"> delete from Master Plan of Streets review potential for partial street extensions as mitigation for new development on a case-by-case basis include in Potential Future Transportation Corridor
Lairport Street	Maple Avenue to Selby St.	<ul style="list-style-type: none"> relieve some traffic demand at Sepulveda Boulevard/Imperial Hwy. intersection. provide additional north/south capacity for locally oriented traffic 	<ul style="list-style-type: none"> none anticipated 	<ul style="list-style-type: none"> maintain Lairport Street extension in Master Plan
Grand Avenue	Duley Rd. to Aviation Boulevard	<ul style="list-style-type: none"> relieve some east/west traffic demand on El Segundo Boulevard 	<ul style="list-style-type: none"> disrupt traffic flow on Aviation Boulevard by constructing an additional traffic signal increase traffic volume on Grand west of Sepulveda by providing new through route from Aviation 	<ul style="list-style-type: none"> maintain Grand Ave. extension in Master Plan to Douglas St., delete portion from Douglas to Aviation review potential for partial street extensions as mitigation for new development on a case-by-case basis
Mariposa Avenue	Douglas St. to Aviation Boulevard	<ul style="list-style-type: none"> relieve some east/west traffic demand on El Segundo Boulevard, or Imperial Hwy. 	<ul style="list-style-type: none"> disrupt traffic flow on Aviation Boulevard, by constructing an additional traffic signal increase traffic volume on Mariposa west of Sepulveda by providing a new through route from Aviation Boulevard 	<ul style="list-style-type: none"> delete street extension from Master Plan new development to provide appropriate access to Aviation Boulevard, and Douglas St. review potential for partial street extensions as mitigation for new development on a case-by-case basis

TABLE 10
SUMMARY OF MASTER PLAN STREET EXTENSIONS

STREET EXTENSIONS	LIMITS	POTENTIAL ADVANTAGES	POTENTIAL DISADVANTAGES	RECOMMENDATIONS
Hughes Way	Existing Hughes Way to Utah Ave.	<ul style="list-style-type: none"> relieve some east/west traffic demand on Rosecrans Ave. and El Segundo Boulevard 	<ul style="list-style-type: none"> may not be feasible due to current and anticipated patterns of development would be a discontinuous street since it would terminate at Sepulveda Boulevard and therefore would be of limited value in relieving traffic congestion on parallel "through" routes 	<ul style="list-style-type: none"> delete street extension from Master Plan new development to provide appropriate access to Douglas St., Utah Ave. and Sepulveda Boulevard review potential for partial street extensions as mitigation for new development on a case-by-case basis include in Potential Future Transportation Corridor

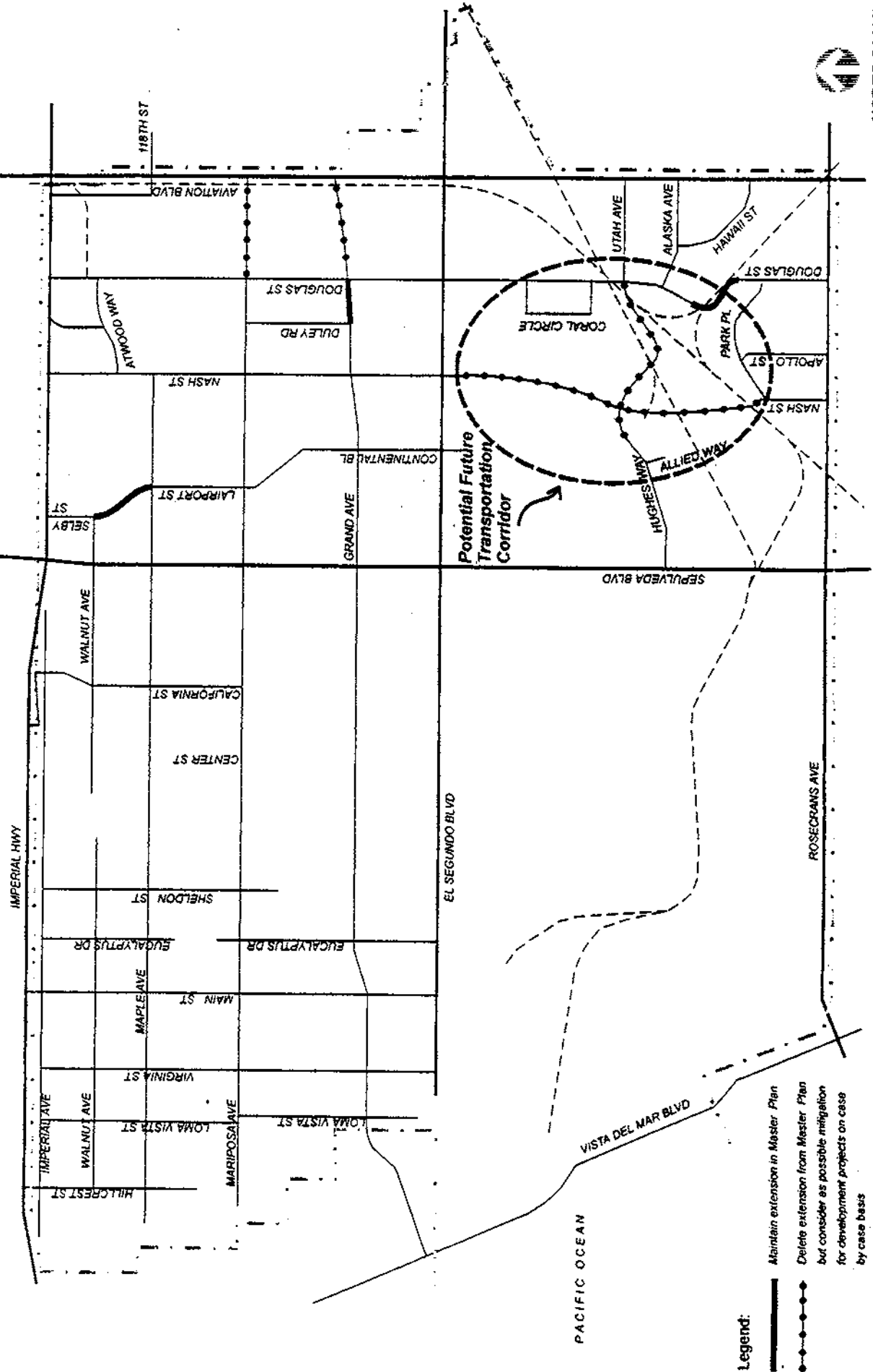
system, the parcels can be efficiently served by a series of well designed access points, driveways and internal roadways as opposed to new through streets.

One of the serious concerns associated with new east/west through streets is the potential to also increase traffic flow on streets west of Sepulveda Boulevard. This concern is especially critical for Mariposa Avenue and Grand Avenue. Extension of either street through to Aviation Boulevard would likely result in increased traffic volume on those streets to the west of Sepulveda Boulevard as a result of the creation of new convenient routes for through traffic. A discussion of each Master Plan street extension is provided below. Exhibit 19 illustrates the recommendations for deletion or maintaining unconstructed street extensions.

Grand Avenue - The current Master Plan of Streets includes the extension of Grand Avenue from Duley Road east to Aviation Boulevard. Based on significant traffic growth in the vicinity of Grand Avenue between Continental Boulevard and Douglas Street, is recommended that Grand Avenue be maintained in the Master Plan as far as Douglas Street. This will help to relieve congestion at the intersections of Nash/El Segundo and Douglas/El Segundo. The segment of Grand from Douglas to Aviation should be deleted as a through route on the Master Plan of Streets. New development in the parcels between Douglas Street and Aviation Boulevard may include driveways/access points where the Master Plan alignment is currently shown, however, a through street would not be constructed. This will protect the segment of Grand Avenue west of Sepulveda Boulevard from becoming a through route for commuter traffic. **Recommendation: Extend only to Douglas Avenue, delete Master Plan extension from Douglas Avenue to Aviation Boulevard.** Consider full roadway extension as possible mitigation for specific development projects.

Mariposa Avenue - The current Master Plan of Streets includes the connection of Mariposa Avenue from Douglas Street to Aviation Boulevard. The construction of this street extension would primarily serve the land uses in that vicinity as they are developed. There would be some potential relief to the parallel streets of Imperial Highway and El Segundo in the local vicinity. There are, however, potential secondary impacts associated with this street extension. It would create a convenient through route from Aviation Boulevard and the employment center into the west side of the City. This would likely increase traffic volumes on Mariposa Avenue in the residential neighborhoods. For this reason, it recommended that the street extension be deleted from the Master Plan. As development applications are reviewed by the City for the area in the vicinity of the current Master Plan extension, the City should require driveways and access points as appropriate and require internal roadways as mitigation for the new development. A continuous through route, however, would not be constructed. **Recommendation: Delete Mariposa Avenue Extension from the Master Plan due to potential significant impacts to Mariposa Avenue west of Sepulveda.**

Lairport Street - The current Master Plan of Street includes the connection of Lairport Street from Maple Avenue to Selby Street. This connection would serve though traffic volumes from the area south of Maple Avenue, however, little growth is forecast in the area between Maple Avenue and Imperial Highway. This link would connect Lairport Street to Imperial Highway relatively close to the intersection with Sepulveda Boulevard. Freeway access would be enhanced by this connection. Overall, this extension is forecast to improve local traffic operating conditions and it is recommended that the connection be maintained in the Master Plan. **Recommendation: Maintain Lairport Street extension in the Master Plan of Streets.**



NOT TO SCALE

EXHIBIT
19

EL SEGUNDO CIRCULATION ELEMENT
Master Plan Street Extension Recommendations

Meyer, Mohaddes Associates, Inc.
An Itiris Company

- Legend:**
- Maintain extension in Master Plan
 - - - Delete extension from Master Plan but consider as possible mitigation for development projects on case by case basis

Douglas Street - The current Master Plan of Streets includes connection of Douglas Street from its current terminus through to existing Douglas Street near Park Place (for connection through to Rosecrans Avenue). Given the significant forecast congestion on both Sepulveda Boulevard and Aviation Boulevard, as well as the forecast increase in trips along Douglas Street north of Rosecrans Avenue, this connection is warranted and it is recommended that it remain in the Master Plan. The future traffic model forecasts included the Douglas Street extension improvements as an assumed baseline condition since it is anticipated to be completed prior to buildout of the Land Use Element. **Recommendation: Maintain Douglas Street extension in the Master Plan of Streets.**

Nash Street - The current Master Plan of Streets includes the connection of Nash Street from El Segundo Boulevard to the existing terminus north of Rosecrans Avenue. This connection would potentially provide relief for some north/south traffic on Sepulveda Boulevard, but it would primarily serve local traffic in the area between Sepulveda Boulevard and Aviation Boulevard north of Rosecrans. It would also possibly serve as a commuter cut-through route as an alternative to Sepulveda Boulevard and Aviation Boulevard. Due to current and anticipated future land use patterns, this connection is not likely to be feasible within the time frame of the Circulation Element. It is therefore recommended for deletion from the Master Plan. As development applications are reviewed by the City for the area in the vicinity of the current Master Plan extension, the City should require driveways and access points as appropriate and require internal roadways as mitigation for the new development. A continuous roadway, however, would not be developed. **Recommendation: Delete Nash Street extension from Master Plan of Streets.**

Hughes Way - The current Master Plan of Streets includes the connection of existing Hughes Way to Utah Avenue to the east. This connection would potentially provide some relief for east/west traffic on Rosecrans Avenue and El Segundo Boulevard, but it would primarily serve local traffic in the area between Sepulveda Boulevard and Aviation Boulevard north of Rosecrans. It would be a discontinuous roadway that would end at Sepulveda Boulevard due to the Chevron property to the west. It would also possibly serve as a commuter cut-through route as an alternative to El Segundo Boulevard. Due to current and anticipated future land use patterns, this connection is not likely to be feasible within the time frame of the Circulation Element. It is therefore recommended for deletion from the Master Plan. As development applications are reviewed by the City for the area in the vicinity of the current Master Plan extension, the City should require driveways and access points as appropriate and require internal roadways as mitigation for the new development. A continuous roadway, however, would not be developed. **Recommendation: Delete Hughes Way extension from Master Plan of Streets.**

FUTURE TRANSPORTATION CORRIDOR

At this time, there are no specific plans for redevelopment a significant portion of the southeast portion of the City (south of El Segundo Boulevard and east of Sepulveda Boulevard). If redevelopment activity occurs in the future, there may be a need for additional roadway capacity to support the increased trips that would occur as a result of the development activity. Although the Nash Street and Hughes Way extensions are not warranted at this time, and they are both proposed for deletion from the Master Plan, it is recommended that the City maintain a "Future Transportation Corridor" in that quadrant of the City. The Corridor will allow the City to reserve potential right-of-way, to be determined as development is proposed, to complete the necessary transportation networks, which will serve the new development. At this time, it is not possible to designate the precise alignment of roadway connections; however, it must be recognized that additional east/west and north/south circulation capacity will be required.

Exhibit 19 illustrates the general location of the future transportation corridor area. The City of El Segundo should evaluate the need for additional east/west and north/south capacity based upon

development proposals as they arise. The alignment of the new transportation facilities will be determined based upon further studies and should include capacity to serve the new development as well as anticipated through traffic that may use the new roadways.

RECOMMENDED IMPROVEMENTS BEYOND MASTER PLAN

The analysis presented within this document demonstrates that several intersections are forecast to experience congestion and level of service E or F conditions even with the completion of the Master Plan of Streets (note that the Master Plan analysis does not assume build-out of the unconstructed street segments, which are assessed separately). Therefore, further transportation system enhancements are warranted to maintain adequate service levels beyond those achieved only with the Master Plan. Recommended improvements to the transportation system are described below and summarized in Table 11. These improvements are in addition to the Master Plan of Streets.

Intelligent Transportation Systems (ITS)

Nearly every jurisdiction in southern California has experienced roadway congestion problems that cannot be solved simply by adding roadway capacity. This is for several reasons including the lack of right-of-way to accomplish various widening projects as well as the environmental impacts associated with major roadway enhancements. As an alternative and supplemental improvement, many local agencies are implementing Intelligent Transportation Systems projects using advanced computer and communication technologies. The ITS projects that are being implemented provide improved traveler information, manage the flow of traffic, and utilize existing transportation systems more efficiently.

The goals of ITS are to reduce travel times, provide more reliable travel times, improve safety, reduce delay and reduce congestion. The high concentration of employment in the northeast quadrant of El Segundo makes it an area that is perfectly suited for application of advanced technology to accomplish the goals of ITS. This is because of the high density of employment, the large number of peak hour trips, the potentially high growth rate and the constraints on physical improvements. Examples of ITS system components include a centralized computer transportation management center, advanced transportation monitoring systems such as closed circuit TV (CCTV), transit traveler information, dynamic information displays at activity centers, bus priority treatment, real-time traffic management, coordination of local circulators, corporate Intranet information and other elements. In other jurisdictions, these types of improvements have resulted in significant savings in vehicle and motorist delay, significant travel time reductions and significant environmental benefits all without major roadway widening or reconstruction projects. Recent deployment of ITS technologies has occurred throughout Los Angeles (ATSAC and other systems), Orange County (SMART STREETS), the South Bay, Santa Monica and many other agencies.

Due to its many benefits and cost effectiveness, ITS could be considered as an integral part of the future transportation system of El Segundo. Similar to the City of Los Angeles methodology, a seven percent enhancement in capacity has been incorporated into the analysis to represent the savings in vehicle stops and delays that would occur as a result of an ITS system in the City.

Intersection Capacity Enhancements

As described earlier in this section, even with the Master Plan of Streets fully built out there would still be some intersections operating at level of service E or F, (considered to be deficient). In those cases, additional intersection enhancements beyond the Master Plan have been investigated. The types of improvements that have been investigated include the following:

- ITS signal system and real time monitoring system (see previous discussion)
- Dual left turn lanes
- Exclusive right turn lanes and right turn overlap phases
- Additional through lanes beyond the Master Plan of Streets

Additional improvements have been identified for each location that is predicted to be at LOS E or F with the Master Plan of Streets fully implemented. Table 11 describes the type of additional intersection improvement that is recommended for each location. In some cases, a review of plans indicates that the necessary capacity right of way constraints or the potential for secondary impacts. For example, to maintain level of service D along Sepulveda Boulevard would require five through lanes in each direction. This is not a realistic mitigation measure, and it would result in severe secondary economic and environmental impacts. Those locations are noted in Table 11 and they will require further review as part of the Circulation Element Environmental Impact Report.

TABLE 11

SUMMARY OF RECOMMENDED IMPROVEMENTS BEYOND CURRENT (1992) MASTER PLAN OF STREETS
(2-WAY STREET ASSUMPTIONS AT NASH AND DOUGLAS STREETS)

Intersection	Future with El Segundo Growth, LAX Growth and with Master Plan Level of Service		Most Critical Traffic Movements	Additional Capacity Improvements Required Beyond Master Plan	Level of Service with Master Plan and Additional Capacity Improvements	
	AM Peak	PM Peak			AM Peak	PM Peak
Aviation Boulevard / Imperial Highway	C	F	<ul style="list-style-type: none"> northbound right turn eastbound through 	<ul style="list-style-type: none"> ITS Improvements add dual northbound right turn lanes add fourth eastbound through lane 	LOS C	Unable to achieve LOS D without 4 through lanes eastbound
Aviation Boulevard / El Segundo Boulevard	F	F	<ul style="list-style-type: none"> northbound and southbound left turn eastbound and northbound right turn 	<ul style="list-style-type: none"> ITS Improvements add dual northbound and southbound left lanes add dual eastbound and northbound right turn lanes add westbound through lane 	Unable to achieve LOS D without sixth westbound through lane	Unable to achieve LOS D without fifth eastbound through lane
Aviation Boulevard / Rosecrans Avenue	F	F	<ul style="list-style-type: none"> northbound and southbound right turns eastbound through 	<ul style="list-style-type: none"> ITS Improvements add eastbound right turn lane 	Unable to achieve LOS D due to constraints of the overcrossing on the southeast corner of the intersection. Railroad bridge columns are very close to roadway	
Douglas Street / Imperial Highway	D	F	<ul style="list-style-type: none"> northbound right turn eastbound through 	<ul style="list-style-type: none"> ITS Improvements Signal modifications/reconfiguration to maximize efficiency 	LOS B	LOS D

TABLE 11

SUMMARY OF RECOMMENDED IMPROVEMENTS BEYOND CURRENT (1992) MASTER PLAN OF STREETS
(2-WAY STREET ASSUMPTIONS AT NASH AND DOUGLAS STREETS)

Intersection	Future with El Segundo Growth, LAX Growth and with Master Plan Level of Service		Most Critical Traffic Movements	Additional Capacity Improvements Required Beyond Master Plan	Level of Service with Master Plan and Additional Capacity Improvements	
	AM Peak	PM Peak			AM Peak	PM Peak
Douglas Street / El Segundo Boulevard	D	F	<ul style="list-style-type: none"> southbound left turn 	<ul style="list-style-type: none"> ITS Improvements add dual left turn lane southbound 	LOS B	LOS D
Douglas Street / Utah Avenue	C	E	<ul style="list-style-type: none"> all movements controlled by stop signs 	<ul style="list-style-type: none"> install traffic signal when traffic volume and other conditions meet Caltrans warrants for signalization 	LOS A	LOS A
Nash Street / Imperial Highway	F	D	<ul style="list-style-type: none"> southbound thru 	<ul style="list-style-type: none"> ITS Improvements add one lane on southbound off-ramp approach Signal modifications/reconfiguration to maximize efficiency 	LOS D	LOS C
Sepulveda Boulevard / Imperial Highway	F	F	<ul style="list-style-type: none"> northbound and southbound right turn 	<ul style="list-style-type: none"> ITS Improvements add dual right turn lanes northbound, with right turn overlap phases as appropriate 	LOS C	LOS C

TABLE II

SUMMARY OF RECOMMENDED IMPROVEMENTS BEYOND CURRENT (1992) MASTER PLAN OF STREETS
(2-WAY STREET ASSUMPTIONS AT NASH AND DOUGLAS STREETS)

Intersection	Future with El Segundo Growth, LAX Growth and with Master Plan Level of Service		Most Critical Traffic Movements	Additional Capacity Improvements Required Beyond Master Plan	Level of Service with Master Plan and Additional Capacity Improvements	
	AM Peak	PM Peak			AM Peak	PM Peak
Sepulveda Boulevard / Grand Avenue	F	F	<ul style="list-style-type: none"> northbound thru southbound thru 	<ul style="list-style-type: none"> ITS Improvements additional through lanes north/south 	Unable to achieve LOS D conditions without 5 through lanes or more in each direction on Sepulveda plus dual left turn lanes in each direction, which is not feasible given existing development patterns and available right-of-way	Unable to achieve LOS D conditions without 5 or more through lanes in each direction on Sepulveda, which is not feasible given existing development patterns and available right-of-way
Sepulveda Boulevard / El Segundo Boulevard	E	E	<ul style="list-style-type: none"> northbound and southbound through 	<ul style="list-style-type: none"> ITS Improvements additional through lanes north/south 	LOS C	Unable to achieve LOS D conditions without 5 or more through lanes in each direction on Sepulveda, which is not feasible given existing development patterns and available right-of-way
Sepulveda Boulevard / Rosecrans Avenue	F	F	<ul style="list-style-type: none"> northbound through, WB right, southbound through 	<ul style="list-style-type: none"> ITS improvements westbound right turn overlap phasing 	LOS D	LOS D

TABLE II

SUMMARY OF RECOMMENDED IMPROVEMENTS BEYOND CURRENT (1992) MASTER PLAN OF STREETS
(2-WAY STREET ASSUMPTIONS AT NASH AND DOUGLAS STREETS)

Intersection	Future with El Segundo Growth, LAX Growth and with Master Plan Level of Service		Most Critical Traffic Movements	Additional Capacity Improvements Required Beyond Master Plan	Level of Service with Master Plan and Additional Capacity Improvements	
	AM Peak	PM Peak			AM Peak	PM Peak
Center Street / El Segundo Boulevard (1)	C	E	<ul style="list-style-type: none"> all movements controlled by stop sign 	<ul style="list-style-type: none"> install traffic signal when traffic volume and other conditions meet Caltrans warrants for signalization 	LOS A	LOS A

MAIN STREET/DOWNTOWN COMMERCIAL DISTRICT CIRCULATION ANALYSIS

The downtown Main Street corridor is undergoing detailed analysis as part of a Specific Planning Study. The Circulation Element is supporting that effort by analyzing various development scenarios and roadway configurations for Main Street. The roadway analysis includes Main Street assumed as a two-lane facility (one lane in each direction) or a three-lane facility (one lane in each direction plus a center two-way left turn lane). In conjunction with this analysis is the potential conversion of Main Street from a designated secondary arterial to a designated collector street.

MAIN STREET ROADWAY ALTERNATIVE CONFIGURATION ANALYSIS

In conjunction with the Specific Planning Study for the downtown Main Street corridor, two roadway alternatives for Main Street have been analyzed using future General Plan Buildout conditions. The roadway analysis includes Main Street assumed as a two lane facility (one lane in each direction) or a three lane facility (one lane in each direction plus a center two-way left turn lane). Exhibit 20 illustrates the alternative roadway configurations. The results of the Main Street roadway alternative analysis are presented below.

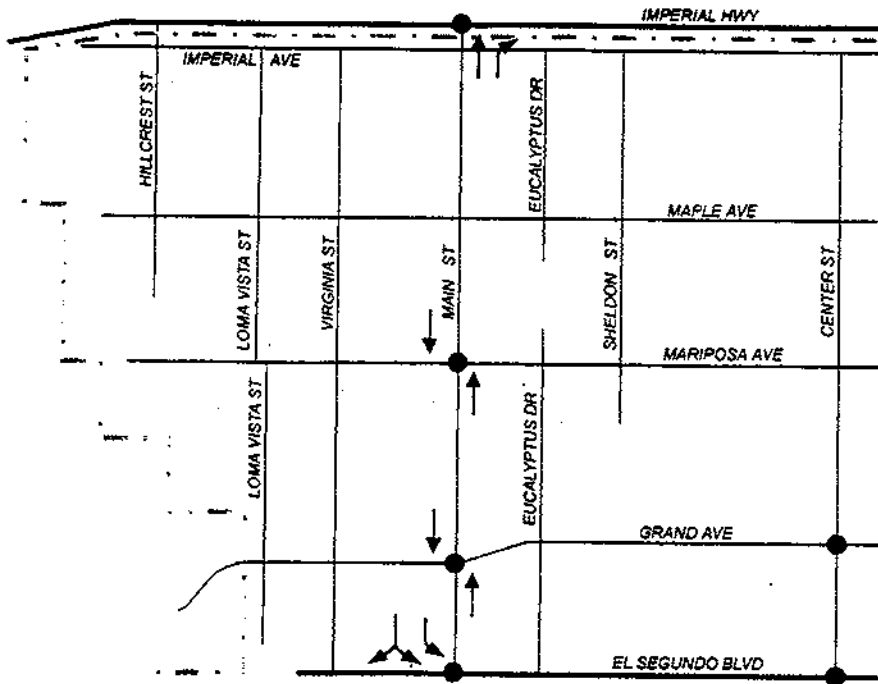
Two lane facility - (one through lane each way, no left turn pockets) This roadway alternative would result in the degradation of intersection level of service at the following intersections:

- Main Street/Mariposa Avenue - from LOS B to LOS E during the AM peak hour and from LOS C to LOS F during the PM hour.
- Main Street/Grand Avenue - from LOS A to B during the AM peak hour and from LOS A to D during the PM peak hour.

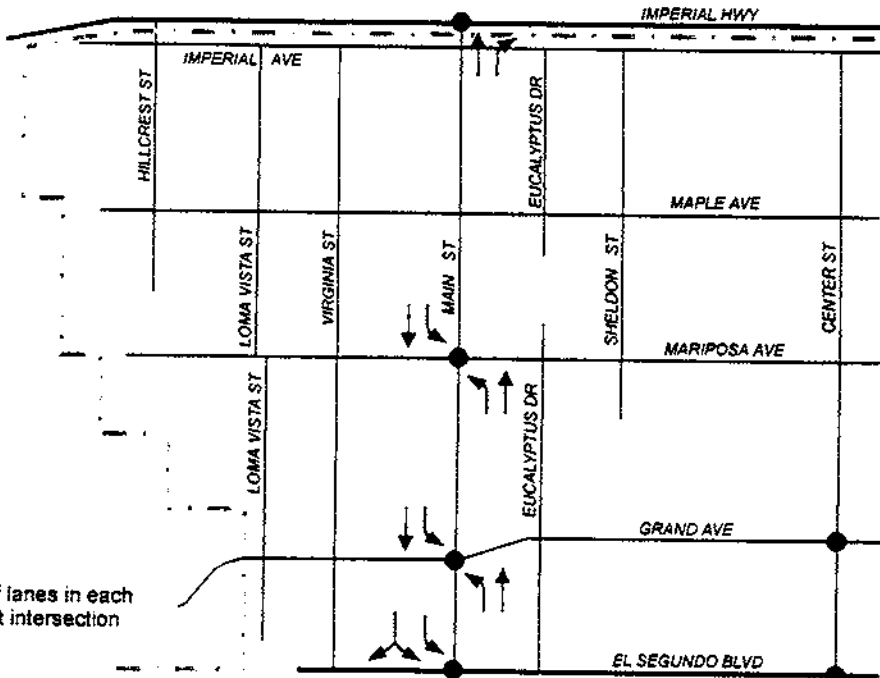
Table 12 and Exhibit 21 shows results of the two-lane Main Street facility analysis.

Three lane facility - (one through lane each way with left turn pockets) This roadway alternative would not significantly change the traffic operations or degrade future General Plan Buildout intersection levels of service along Main Street. Therefore, no intersections would be significantly impacted with the proposed three lane facility configuration (assuming General Plan level of growth).



In summary, a two lane facility would significantly affect traffic flow and is not recommended, however, a three lane facility (including a left turn lane) is expected to adequately handle anticipated traffic volumes. Table 13 and Exhibit 22 shows results of the three-lane Main Street facility analysis.



TWO LANE ALTERNATIVE



Legend:

 - Number of lanes in each direction at intersection


NOT TO SCALE

THREE LANE ALTERNATIVE

TABLE 12

FUTURE INTERSECTION OPERATING CONDITIONS
WITH TWO-LANE MAIN STREET
(ONE LANE EACH DIRECTION)

Intersection	Future LOS Analysis without Lane As (2) lanes each directions						Future LOS with Main Street One Lane Each Direction						Change in V/C	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C		
Main Street / Imperial Highway	E	0.917	D	0.861	E	0.917	D	0.861	E	0.917	D	0.861	0.000	0.000
Main Street / Mariposa Avenue	B	0.648	C	0.700	E	0.980	F	1.121	E	0.980	F	1.121	0.332	0.421
Main Street / Grand Avenue	A	0.446	A	0.523	B	0.649	D	0.820	B	0.649	D	0.820	0.203	0.297
Main Street / El Segundo Boulevard	A	0.410	B	0.764	A	0.410	B	0.764	A	0.410	B	0.764	0.000	0.000

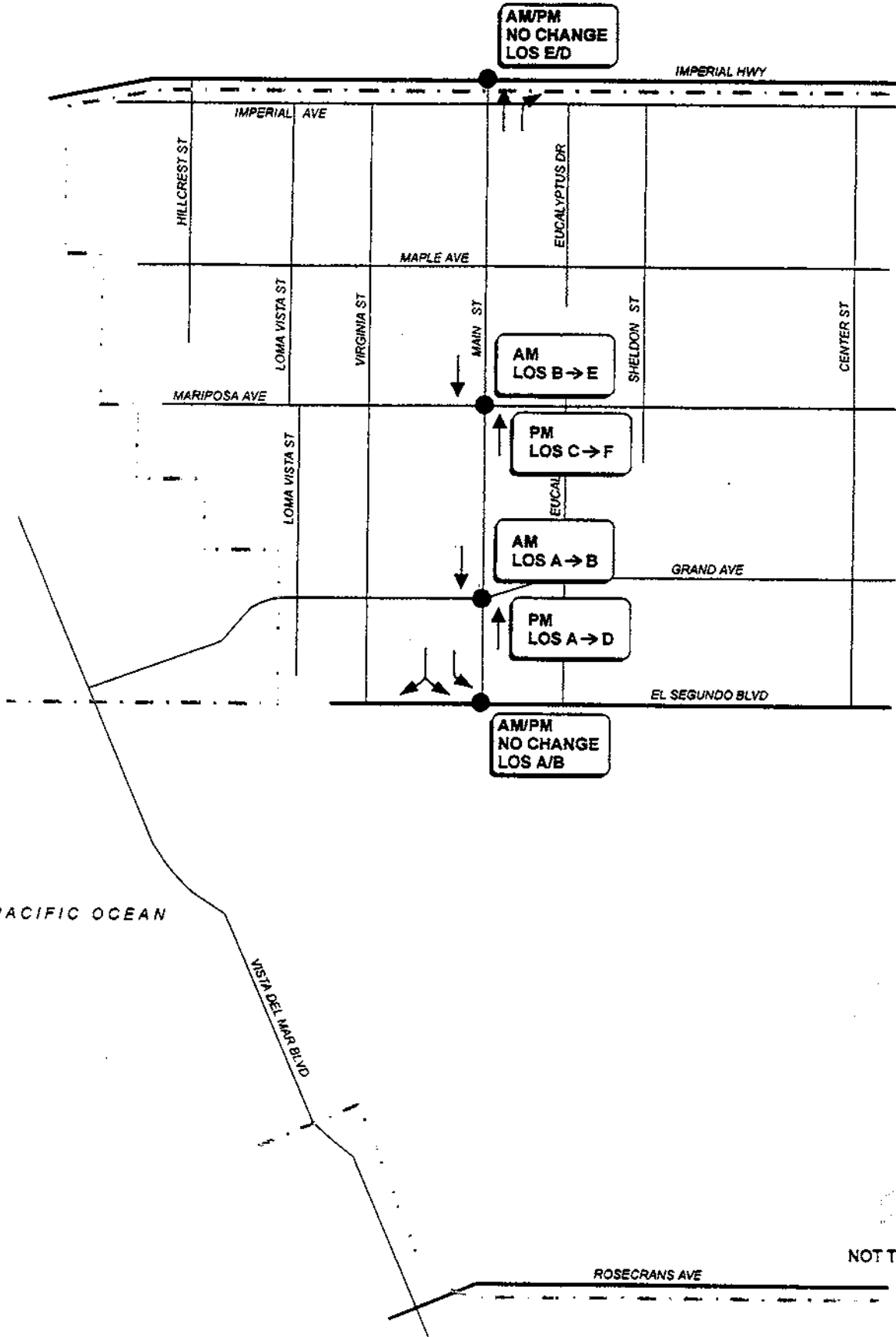
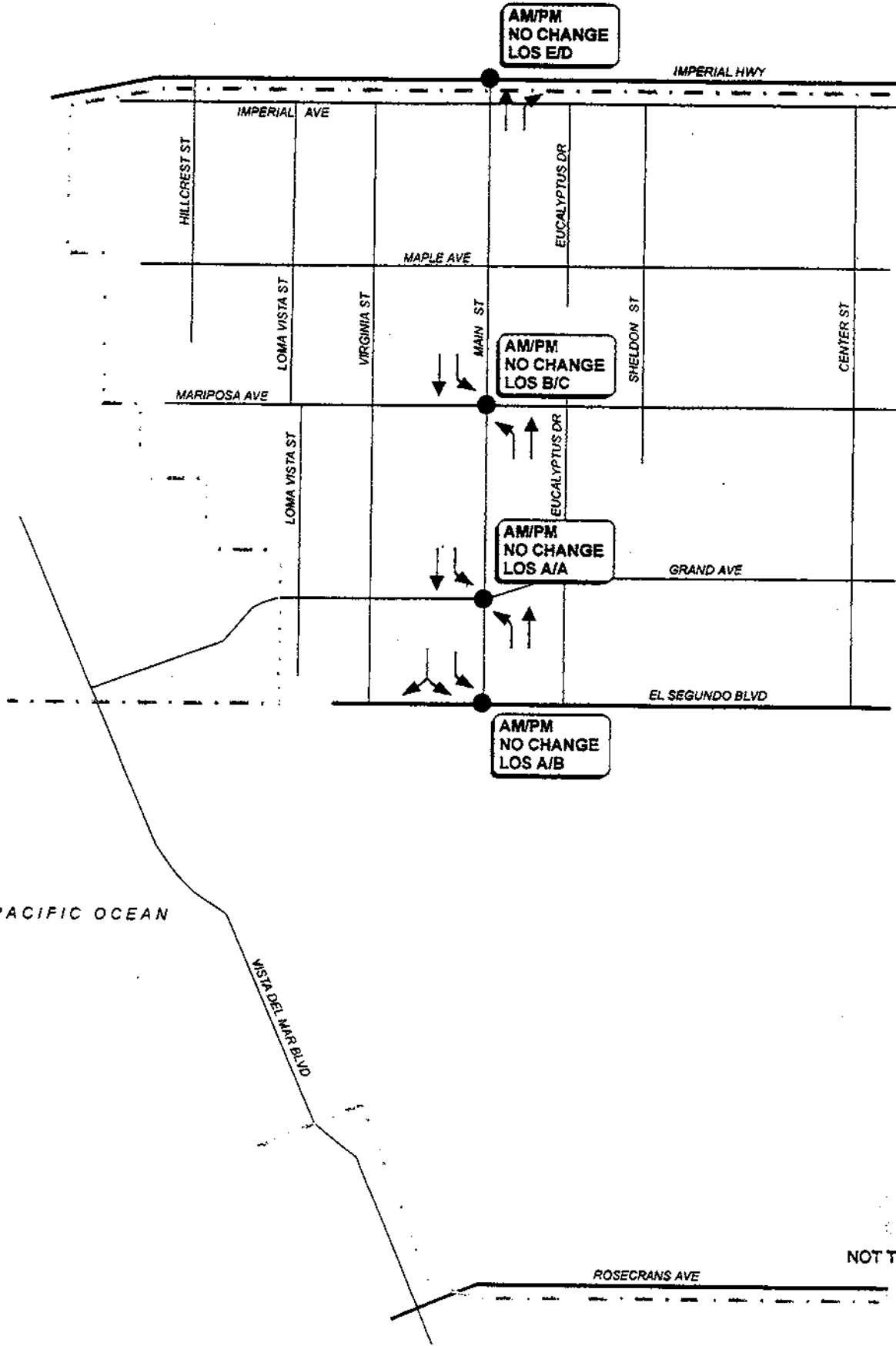


TABLE 13

FUTURE INTERSECTION OPERATING CONDITIONS
 WITH THREE-LANE MAIN STREET
 (ONE LANE EACH DIRECTION PLUS 2-WAY LEFT TURN MEDIUM)

Intersection	Future Analysis without Lane Δs (2 lanes each direction)				Future LOS with Main Street One Lane Each Direction plus 2-way left turn median				Change in V/C	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C		
Main Street / Imperial Highway	E	0.917	D	0.861	E	0.917	D	0.861	0.000	0.000
Main Street / Mariposa Avenue	B	0.648	C	0.700	B	0.683	C	0.759	0.035	0.059
Main Street / Grand Avenue	A	0.446	A	0.523	A	0.453	A	0.558	0.007	0.035
Main Street / El Segundo Boulevard	A	0.410	B	0.764	A	0.410	B	0.764	0.000	0.000



NOT TO SCALE



EL SEGUNDO CIRCULATION ELEMENT
Main Street - Three Lane Facility
(G Plan Buildout)

EXHIBIT
22

**MAIN STREET ROADWAY ALTERNATIVE CONFIGURATION ANALYSIS
(Increased Downtown Density)**

In addition to the future General Plan Buildout conditions, an analysis of traffic impacts on Main Street associated with increased Downtown density was conducted assuming Main Street as a two lane facility (one lane in each direction) or a three lane facility (one lane in each direction plus a center two-way left turn lane). The increased Downtown density assumes the following level of development:

- Total potential commercial floor area is 1,359,072 square feet which is based on an area of 31.2 acres and a 1.0:1 FAR. This represents a 290,151 square foot (27 percent) increase over the commercial floor area used in the baseline analysis. Twenty percent of the revised total floor area was assumed built during the horizon year of the General Plan buildout which equals 271,814 square feet of commercial uses.
- Proposed dwelling units in addition to the commercial area increase include 749 units based on 24 dwelling units/acre of which 20 percent was assumed built during the 10-year horizon of the General Plan buildout = 150 dwelling unit

The results of the Main Street roadway alternative analysis with increase Downtown density conditions are presented below.

Two lane facility - This roadway alternative would result in the degradation of intersection level of service at the following intersections:

- Main Street/Imperial Highway - No change (LOS E) during the AM peak hour and from LOS D to LOS E during the PM hour.
- Main Street/Mariposa Avenue - from LOS B to LOS F during the AM peak hour and from LOS C to LOS F during the PM hour.
- Main Street/Grand Avenue - from LOS A to C during the AM peak hour and from LOS A to F during the PM peak hour.
- Main Street/El Segundo Boulevard - from LOS A to B during the AM peak hour and from LOS B to E during the PM peak hour.
- Table 14 and Exhibit 23 shows results of the two-lane Main Street facility analysis with increase Downtown density conditions.

Three lane facility - This roadway alternative would result in the degradation of intersection level of service at the following intersections:

- Main Street/Imperial Highway - No change (LOS E) during the AM peak hour and from LOS D to LOS E during the PM hour.
- Main Street/Mariposa Avenue - from LOS B to LOS C during the AM peak hour and from LOS C to LOS D during the PM hour.
- Main Street/Grand Avenue -No change (LOS A) during the AM peak hour and from LOS A to B during the PM peak hour.

- Main Street/El Segundo Boulevard - from LOS A to B during the AM peak hour and from LOS B to E during the PM peak hour.

Table 15 and Exhibit 24 shows results of the three-lane Main Street facility analysis with increase Downtown density conditions.

In summary, both two lane and three lane facilities would significantly affect traffic flow. This is expected due to the increase in Downtown development density which require a additional roadway capacity to handle forecast traffic volumes along Main Street. A three lane Main Street facility with potential intersection mitigation at Imperial Highway and El Segundo Boulevard is anticipated to adequately handle traffic volumes associated with the increase in Downtown density conditions.

Proposed Change of Main Street from Secondary Arterial to Downtown Collector

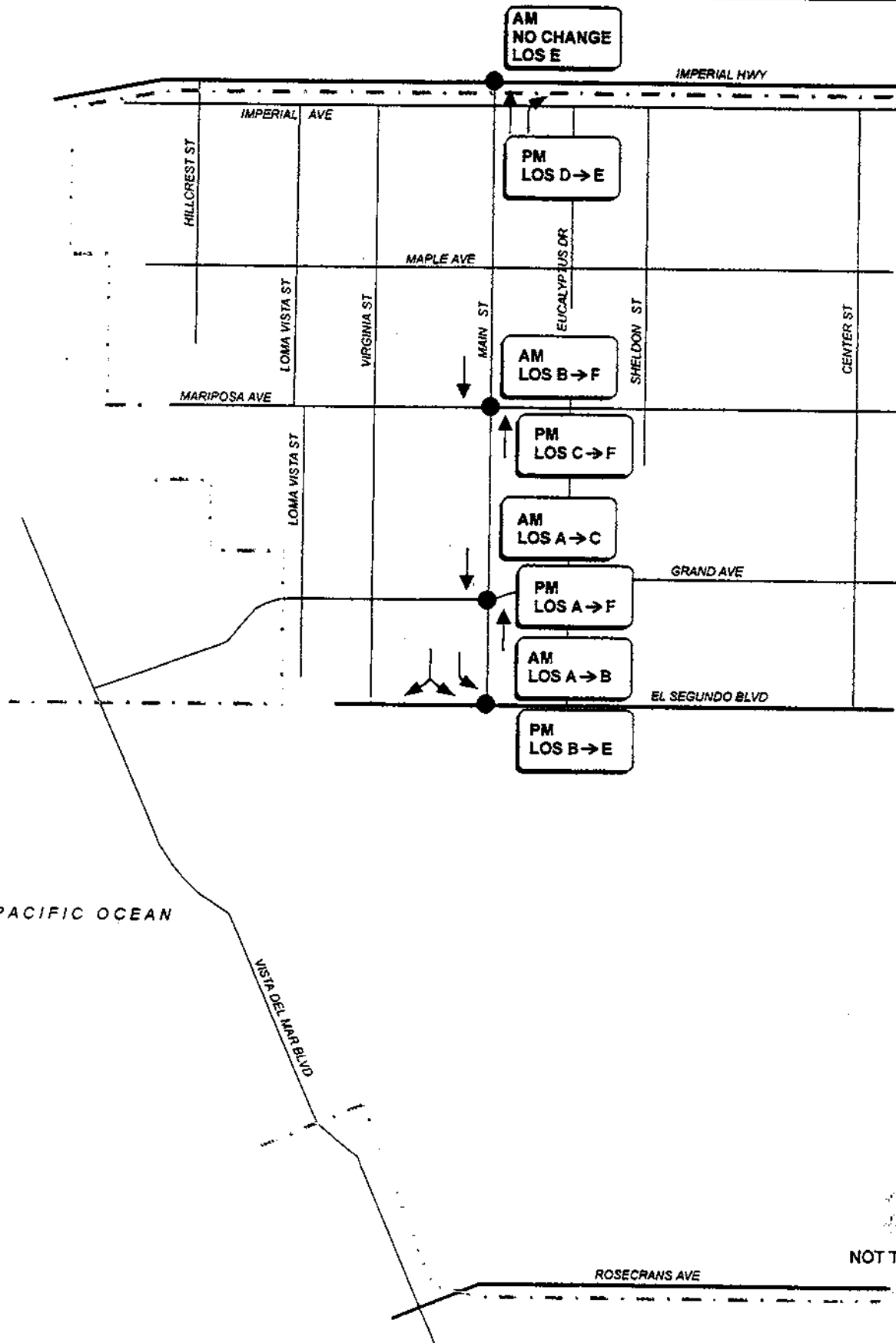
The City's secondary arterial standard includes a roadway which is 78 to 100 feet curb-to-curb within an 88 to 120 foot right-of-way. If Main Street was downgraded to collector status it would change the designation to 44 feet curb-to-curb with 64 feet of right-of-way. A secondary arterial has 4 to 6 lanes and a center median. A collector street has 2 to 4 lanes with no median. Main Street from Grand Avenue to El Segundo Boulevard currently carries 4 lanes of traffic and is 56 feet wide curb-to-curb. Downgrading Main Street from Grand Avenue to El Segundo Boulevard would technically make the cross-section inconsistent with the City's standard for collector streets (i.e. Main Street is already wider than the collector street standard). From an operational perspective, the section of Main Street in question carries only 6,700 vehicles per day, which is consistent with collector street standards.

In summary, given planned growth in the downtown district, reclassification of Main Street from Grand Avenue to El Segundo Boulevard would be appropriate, however, a new classification called "downtown collector" is recommended. See Exhibit C-6 for the recommended cross section for the downtown collector classification.

TABLE 14

FUTURE INTERSECTION OPERATING CONDITIONS (INCREASED DOWNTOWN DENSITY)
WITH TWO-LANE MAIN STREET
(ONE LANE EACH DIRECTION)

Intersection	Future LOS Analysis without Lane As (2) lanes each directions				Future LOS with Main Street One Lane Each Direction (Increased Downtown Density)				Change in V/C	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C		
Main Street / Imperial Highway	E	0.917	D	0.861	E	0.990	E	0.952	0.073	0.091
Main Street / Mariposa Avenue	B	0.648	C	0.700	F	1.102	F	1.291	0.454	0.591
Main Street / Grand Avenue	A	0.446	A	0.523	C	0.798	F	1.025	0.352	0.502
Main Street / El Segundo Boulevard	A	0.410	B	0.764	B	0.706	E	1.225	0.296	0.461



NOT TO SCALE



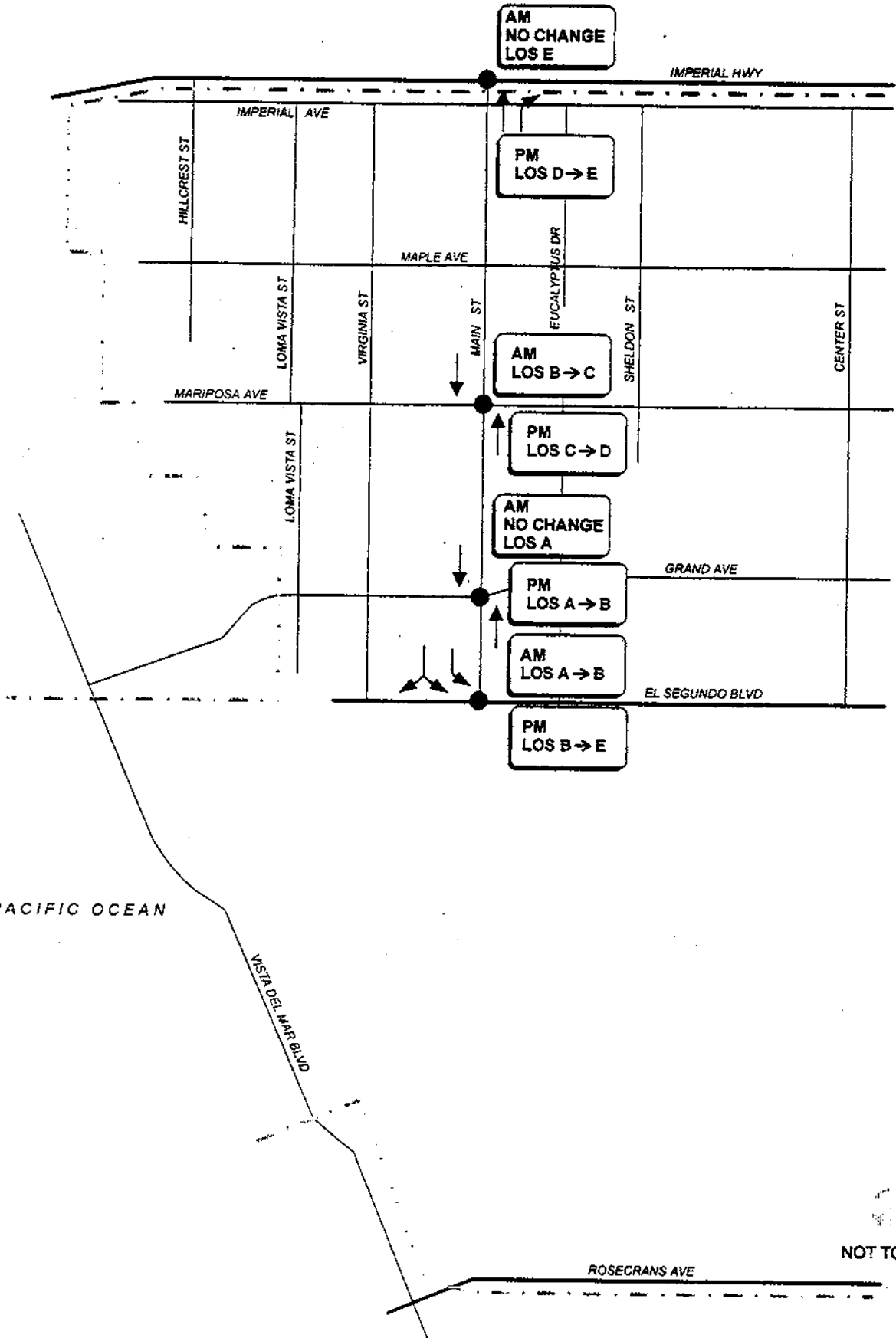
EL SEGUNDO CIRCULATION ELEMENT
Main Street - Two Lane Facility
(Increased Density)

EXHIBIT
23

TABLE 15

FUTURE INTERSECTION OPERATING CONDITIONS (INCREASED DOWNTOWN DENSITY)
 WITH THREE-LANE MAIN STREET
 (ONE LANE EACH DIRECTION PLUS 2-WAY LEFT TURN MEDIUM)

Intersection	Future Analysis without Lane As (2 lanes each direction)				Future LOS with Main Street One Lane Each Direction plus 2-way left turn median				Change in V/C	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C		
Main Street / Imperial Highway	E	0.917	D	0.861	E	0.990	E	0.952	0.073	0.091
Main Street / Mariposa Avenue	B	0.648	C	0.700	C	0.731	D	0.839	0.083	0.139
Main Street / Grand Avenue	A	0.446	A	0.523	A	0.545	B	0.646	0.099	0.123
Main Street / El Segundo Boulevard	A	0.410	B	0.764	B	0.706	E	1.225	0.296	0.461



NOT TO SCALE



**EL SEGUNDO CIRCULATION ELEMENT
Main Street - Three Lane Facility
(Increased Density)**

**EXHIBIT
24**

SMOKY HOLLOW SPECIFIC PLAN AREA LAND USE ALTERNATIVES

Two land use growth alternatives for the Smoky Hollow Specific Plan Area have been analyzed based on the proposed development of Small Business (SB) and Medium Manufacturing (MM) land uses. Currently there are no proposed or approved development projects within the Specific Plan Area. The focus of the analysis is the potential net change of the proposed SB and MM land uses over the existing conditions. Both are currently zoned at 0.6:1 Floor Area Ratio (FAR) but they are built out to 0.8:1 FAR. Changes from 0.8:1 FAR to 1:1 FAR and from 0.8:1 to 1.3:1 FAR have been evaluated. For analysis purposes, 20 percent of the net land use change over existing FAR was used to evaluate the two Smoky Hollow land use alternatives. The forecast net trip increases of the two land use alternatives are shown below:

Smoky Hollow Specific Plan at 1:1 FAR

- AM Peak Hour = 152 net trip increase over existing
- PM Peak Hour = 162 net trip increase over existing

Smoky Hollow Specific Plan at 1.3:1 FAR

- AM Peak Hour = 381 net trip increase over existing
- PM Peak Hour = 406 net trip increase over existing

In summary, the future traffic forecast under both 1:1 and 1.3:1 FAR alternatives of the Smoky Hollow Specific Plan Area reflect small to moderate increases in tripmaking and minor increases in intersection V/C (volume-to-capacity ratio) as compared to General Plan Buildout conditions.

- 1:1 FAR - no significant change in level of service
- 1.3:1 FAR - one change from LOS E to F in the PM peak (Center St./El Segundo Blvd.)

Tables 16 and 17 show the forecast Alternative 1 (1:1 FAR) and Alternative 2 (1.3:1 FAR) level of service conditions as compared to the General Plan Buildout Conditions. The 1.3:1 FAR alternative would result in one additional intersection at LOS F compared to existing zoning.

TABLE 16

EXISTING AND FUTURE INTERSECTION OPERATING CONDITIONS
(WITH SMOKY HOLLOW AT 1:1 FAR)

Intersection	1999 Existing Conditions				Circulation Element Future Analysis				Future with Smoky Hollow at 1:1 FAR			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Aviation Boulevard / Imperial Highway	B	0.619	B	0.673	C	0.789	F	1.400	C	0.789	F	1.399
Aviation Boulevard / 120th Street	C	0.747	B	0.657	C	0.766	C	0.701	C	0.766	C	0.701
Aviation Boulevard / El Segundo Boulevard	E	0.920	D	0.874	F	1.807	F	1.660	F	1.809	F	1.656
Aviation Boulevard / 135th Street	F	1.182	B	0.665	D	0.879	D	0.891	D	0.879	D	0.890
Aviation Boulevard / Rosecrans Avenue	F	1.242	F	1.220	F	1.604	F	1.362	F	1.604	F	1.361
Douglas Street / Imperial Highway	A	0.404	A	0.593	D	0.812	F	1.290	D	0.811	F	1.290
Douglas Street / Mariposa Avenue	A	0.282	A	0.343	C	0.724	B	0.647	C	0.724	B	0.647
Douglas Street / El Segundo Boulevard	B	0.634	B	0.648	F	1.051	F	1.402	F	1.052	F	1.399
Douglas Street / Utah Avenue [1]	B	[1]	A	[1]	B	0.000	A	0.000	B	0.000	A	0.000
Douglas Street / Rosecrans Avenue	B	0.667	C	0.716	D	0.803	D	0.843	D	0.804	D	0.841
Nash Street / Imperial Highway	C	0.714	A	0.363	F	1.158	E	0.909	F	1.157	E	0.909
Nash Street / Maple Avenue	A	0.282	A	0.183	F	1.073	D	0.857	F	1.073	D	0.857

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible

2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: - Level of Service estimates based on traffic counts conducted in 1998

- Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations

Bold and shade indicate Level of Service E or F intersection conditions

TABLE 16

EXISTING AND FUTURE INTERSECTION OPERATING CONDITIONS
(WITH SMOKY HOLLOW AT 1:1 FAR)

Intersection	1999 Existing Conditions						Circulation Element Future Analysis						Future with Smoky Hollow at 1:1 FAR					
	AM Peak Hour		PM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Nash Street / Mariposa Avenue	A	0.349	A	0.340	D	0.838	C	0.738	D	0.838	D	0.838	C	0.738	D	0.838	C	0.738
Nash Street / Grand Avenue	A	0.328	A	0.341	D	0.861	C	0.727	D	0.861	D	0.861	C	0.727	D	0.861	C	0.727
Nash Street / El Segundo Boulevard	C	0.707	B	0.651	D	0.886	E	0.924	D	0.886	D	0.886	E	0.924	D	0.886	E	0.922
Nash Street / Rosecrans Avenue	A	0.453	A	0.587	D	0.482	B	0.670	D	0.481	D	0.481	B	0.668	A	0.481	B	0.668
Continental Boulevard / Mariposa Avenue	A	0.519	A	0.327	D	0.661	A	0.399	D	0.661	D	0.661	A	0.399	B	0.661	A	0.399
Continental Boulevard / Grand Avenue	A	0.375	A	0.444	A	0.512	A	0.588	A	0.512	A	0.512	A	0.588	A	0.512	A	0.588
Continental Boulevard / El Segundo Boulevard	B	0.651	A	0.532	E	0.900	C	0.708	E	0.900	E	0.900	C	0.708	E	0.900	C	0.705
Sepulveda Boulevard / Imperial Highway	E	0.923	F	1.106	F	1.118	F	1.536	F	1.112	F	1.112	F	1.536	F	1.112	F	1.519
Sepulveda Boulevard / Maple Avenue	C	0.753	B	0.699	D	0.840	D	0.871	D	0.840	D	0.840	D	0.871	D	0.838	D	0.867
Sepulveda Boulevard / Mariposa Avenue	B	0.694	C	0.736	D	0.835	D	0.900	D	0.835	D	0.835	D	0.900	D	0.834	D	0.895
Sepulveda Boulevard / Grand Avenue	F	1.138	F	1.076	F	1.083	F	1.531	F	1.078	F	1.078	F	1.531	F	1.078	F	1.519
Sepulveda Boulevard / El Segundo Boulevard	F	1.014	F	1.054	F	1.018	F	1.165	F	1.013	F	1.013	F	1.165	F	1.013	F	1.155

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible

2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: - Level of Service estimates based on traffic counts conducted in 1998

- Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations

Bold and shade indicate Level of Service E or F intersection conditions

TABLE 16

EXISTING AND FUTURE INTERSECTION OPERATING CONDITIONS
(WITH SMOKY HOLLOW AT 1:1 FAR)

Intersection	1999 Existing Conditions						Circulation Element Future Analysis						Future with Smoky Hollow at 1:1 FAR						
	AM Peak Hour		PM Peak Hour		V/C		AM Peak Hour		PM Peak Hour		V/C		AM Peak Hour		PM Peak Hour		V/C		
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	
Sepulveda Boulevard / Hughes Way	B	0.653	C	0.787	C	0.769	C	0.751	C	0.770	C	0.749	C	0.770	C	0.749	C	0.749	C
Sepulveda Boulevard / Rosecrans Avenue	F	1.151	F	1.127	F	1.055	F	1.215	F	1.056	F	1.209	F	1.056	F	1.209	F	1.209	F
California Street / Imperial Highway	B	0.635	A	0.551	B	0.643	A	0.556	A	0.643	B	0.557	A	0.643	B	0.557	A	0.557	A
Center Street / Grand Avenue [2]	B	0.611	B	0.664	B	0.636	B	0.549	B	0.642	B	0.587	B	0.642	B	0.587	B	0.587	B
Center Street / El Segundo Boulevard [1]	C	[1]	D	[1]	C	0.000	E	0.000	E	0.000	C	0.000	E	0.000	C	0.000	E	0.000	E
Main Street / Imperial Highway	E	0.902	D	0.849	E	0.921	E	0.860	D	0.924	E	0.862	D	0.860	E	0.862	D	0.862	D
Main Street / Mariposa Avenue	B	0.646	B	0.698	B	0.648	B	0.700	C	0.649	B	0.703	C	0.649	B	0.703	C	0.703	C
Main Street / Grand Avenue	A	0.443	A	0.519	A	0.446	A	0.523	A	0.448	A	0.525	A	0.448	A	0.525	A	0.525	A
Main Street / El Segundo Boulevard [2]	A	0.368	B	0.788	A	0.410	A	0.764	B	0.410	A	0.776	B	0.410	A	0.776	B	0.776	B
Vista Del Mar Boulevard / Grand Avenue	D	0.828	B	0.611	D	0.830	D	0.613	B	0.830	D	0.613	B	0.830	D	0.613	B	0.613	B

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible
2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: - Level of Service estimates based on traffic counts conducted in 1998

- Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations
Bold and shade indicate Level of Service E or F intersection conditions

TABLE 17

EXISTING AND FUTURE INTERSECTION OPERATING CONDITIONS
(WITH SMOKY HOLLOW AT 1.3:1 FAR)

Intersection	1999 Existing Conditions				Circulation Element Future Analysis				Future with Smoky Hollow at 1.3:1 FAR			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Aviation Boulevard / Imperial Highway	B	0.619	B	0.673	C	0.789	F	1.400	C	0.793	F	1.401
Aviation Boulevard / 120th Street	C	0.747	B	0.657	C	0.766	C	0.701	C	0.766	C	0.701
Aviation Boulevard / El Segundo Boulevard	E	0.920	D	0.874	F	1.807	F	1.660	F	1.823	F	1.667
Aviation Boulevard / 135th Street	F	1.182	B	0.665	D	0.879	D	0.891	D	0.882	D	0.893
Aviation Boulevard / Rosecrans Avenue	F	1.242	F	1.220	F	1.604	F	1.362	F	1.607	F	1.365
Douglas Street / Imperial Highway	A	0.404	A	0.593	D	0.812	F	1.290	D	0.812	F	1.291
Douglas Street / Mariposa Avenue	A	0.282	A	0.343	C	0.724	B	0.647	C	0.724	B	0.647
Douglas Street / El Segundo Boulevard	B	0.634	B	0.648	F	1.051	F	1.402	F	1.061	F	1.408
Douglas Street / Utah Avenue [1]	B	[1]	A	[1]	B	0.000	A	0.000	B	0.000	A	0.000
Douglas Street / Rosecrans Avenue	B	0.667	C	0.716	D	0.803	D	0.843	D	0.810	D	0.845
Nash Street / Imperial Highway	C	0.714	A	0.363	F	1.158	E	0.909	F	1.158	E	0.911
Nash Street / Maple Avenue	A	0.282	A	0.183	F	1.073	D	0.857	F	1.073	D	0.857

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible

2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: - Level of Service estimates based on traffic counts conducted in 1998

- Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations

Bold and shade indicate Level of Service E or F intersection conditions

TABLE 17

EXISTING AND FUTURE INTERSECTION OPERATING CONDITIONS
(WITH SMOKY HOLLOW AT 1.3:1 FAR)

Intersection	1999 Existing Conditions						Circulation Element Future Analysis						Future with Smoky Hollow at 1.3:1 FAR							
	AM Peak Hour		PM Peak Hour		V/C		AM Peak Hour		PM Peak Hour		V/C		AM Peak Hour		PM Peak Hour		V/C			
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C		
Nash Street / Mariposa Avenue	A	0.349	A	0.340	D	0.838	C	0.738	D	0.838	C	0.738	D	0.838	C	0.738	D	0.838	C	0.738
Nash Street / Grand Avenue	A	0.328	A	0.341	D	0.861	C	0.727	D	0.861	C	0.727	D	0.861	C	0.727	D	0.861	C	0.727
Nash Street / El Segundo Boulevard	C	0.707	B	0.651	D	0.886	E	0.924	D	0.886	E	0.924	D	0.889	E	0.930	D	0.889	E	0.930
Nash Street / Rosecrans Avenue	A	0.453	A	0.587	D	0.482	B	0.670	D	0.482	B	0.670	A	0.484	B	0.673	D	0.484	B	0.673
Continental Boulevard / Mariposa Avenue	A	0.519	A	0.327	D	0.661	A	0.399	D	0.661	A	0.399	B	0.661	A	0.399	D	0.661	A	0.399
Continental Boulevard / Grand Avenue	A	0.375	A	0.444	A	0.512	A	0.588	A	0.512	A	0.588	A	0.512	A	0.588	A	0.512	A	0.588
Continental Boulevard / El Segundo Boulevard	B	0.651	A	0.532	E	0.900	C	0.708	E	0.900	C	0.708	E	0.900	C	0.710	E	0.900	C	0.710
Sepulveda Boulevard / Imperial Highway	E	0.923	F	1.106	F	1.118	F	1.536	F	1.106	F	1.536	F	1.126	F	1.559	F	1.126	F	1.559
Sepulveda Boulevard / Maple Avenue	C	0.753	B	0.699	D	0.840	D	0.871	D	0.699	D	0.871	D	0.842	D	0.877	D	0.842	D	0.877
Sepulveda Boulevard / Mariposa Avenue	B	0.694	C	0.736	D	0.835	D	0.900	D	0.736	D	0.900	D	0.838	E	0.901	D	0.838	E	0.901
Sepulveda Boulevard / Grand Avenue	F	1.138	F	1.076	F	1.083	F	1.531	F	1.076	F	1.531	F	1.089	F	1.535	F	1.089	F	1.535
Sepulveda Boulevard / El Segundo Boulevard	F	1.014	F	1.054	F	1.018	F	1.165	F	1.014	F	1.165	F	1.027	F	1.170	F	1.027	F	1.170

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible

2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: - Level of Service estimates based on traffic counts conducted in 1998

- Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations

Bold and shade indicate Level of Service E or F intersection conditions

TABLE 17

EXISTING AND FUTURE INTERSECTION OPERATING CONDITIONS
(WITH SMOKY HOLLOW AT 1.3:1 FAR)

Intersection	1999 Existing Conditions				Circulation Element Future Analysis				Future with Smoky Hollow at 1.3:1 FAR			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Sepulveda Boulevard / Hughes Way	B	0.653	C	0.787	C	0.769	C	0.751	C	0.777	C	0.755
Sepulveda Boulevard / Rosecrans Avenue	F	1.151	F	1.127	F	1.055	F	1.215	F	1.079	F	1.221
California Street / Imperial Highway	B	0.635	A	0.551	B	0.643	A	0.556	B	0.644	A	0.559
Center Street / Grand Avenue [2]	B	0.611	B	0.664	B	0.636	B	0.549	B	0.690	B	0.558
Center Street / El Segundo Boulevard [1]	C	[1]	D	[1]	C	0.000	E	0.000	C	0.000	F	0.000
Main Street / Imperial Highway	E	0.902	D	0.849	E	0.921	D	0.860	E	0.929	D	0.864
Main Street / Mariposa Avenue	B	0.646	B	0.698	B	0.648	C	0.700	B	0.653	C	0.706
Main Street / Grand Avenue	A	0.443	A	0.519	A	0.446	A	0.523	A	0.453	A	0.531
Main Street / El Segundo Boulevard [2]	A	0.368	B	0.788	A	0.410	B	0.764	A	0.412	C	0.800
Vista Del Mar Boulevard / Grand Avenue	D	0.828	B	0.611	D	0.830	B	0.613	D	0.833	B	0.615

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible

2) F Intersection has stop signs on all approaches (all-way stop control)

General Notes: - Level of Service estimates based on traffic counts conducted in 1998

- Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations

Bold and shade indicate Level of Service E or F intersection conditions

OTHER CIRCULATION ISSUES

TRUCK ROUTES

The residents and businesses of El Segundo rely heavily on trucks for the efficient movement of goods in an economical and safe manner. For this reason, the truck route system within and through the City is an important aspect of the Circulation Element. The El Segundo Municipal Code officially authorizes the City Council, by resolution, to designate truck routes on streets where vehicles in excess of three tons may travel. Existing truck routes are provided with appropriate sign posting to guide truck traffic through the City. These routes were shown in Exhibit 13 of this report.

No changes to the Master Plan of Truck Routes are proposed except those that would be affected by potential changes to the Master Plan of Streets. Future truck routes in the Master Plan include Nash and Douglas Streets between El Segundo Boulevard and Rosecrans Avenue. The deletion of either of those connections from the Master Plan of Streets would, of course, also result in the deletion of the truck routes. Per the recommendations noted above, the Nash Street extension is recommended for deletion from the Master Plan, therefore, it should also be deleted from the Master Plan of Truck Routes.

There are presently narrow streets and alleys within some of the industrial areas of the City that serve as impediments to truck operation. Current land uses and future development require truck access in many of these areas. The City needs to work toward widening the streets and alleys, eliminating the impediments for truck operation from the City's street system. In addition, the City should work toward implementing the appropriate policies listed later in the Circulation Element in order to minimize the truck access impediments wherever street widening is not feasible.

BICYCLE FACILITIES

For many years, roadway facilities have been built exclusively to meet the needs of the motorized vehicle, resulting in street geometrics, lane widths, and intersections that have not been designed for bicyclist concerns. Bicycle safety is jeopardized due to bike/auto and bike/pedestrian confrontation on the street, and the lack of space given to bicycle movement. Conflicts between bicycles and pedestrians at intersections and on sidewalks results in the need to separate these three modes, wherever possible, to provide a safer and more efficient operational environment for each. No changes are proposed to the current Bicycle Master Plan as presented in Exhibit 11.

RESIDENTIAL NEIGHBORHOOD CIRCULATION ISSUES

SPECIFIC RESIDENTIAL NEIGHBORHOOD CIRCULATION ISSUES

Specific residential neighborhood circulation issues have been raised as part of the update of the Circulation Element. Those include the following specialized issues:

- 1) Narrow cross section of Mariposa Avenue
- 2) Peak period congestion around schools during pick-up and drop-off

These issues are discussed below with respect to the Circulation Element update.

Mariposa Avenue Circulation Issues

Mariposa Avenue is designated as a Collector Street from Sepulveda Boulevard to Main Street and a local street west of Main. One issue raised regarding Mariposa Street is its very narrow cross section and the effect of Mariposa's design on traffic flow. The roadway was measured and observed in the field. Mariposa Avenue is 35 feet wide curb to curb to the east of Penn Street, and only 30 feet wide to the west of Penn Street. From the narrow section near Penn Street to Main Street, parking and stopping are prohibited on the north side of the street. With the parking prohibition, there is approximately 22 to 24 feet available for moving vehicle traffic (also referred to as the "traveled way"). This is adequate to support one lane of traffic in each direction. To the west of Main Street, however, parking is allowed on both sides of the street. This means that the roadway width available for moving traffic is reduced to only 14 feet total, or seven feet in each direction. This is not adequate to support two moving lanes of traffic. At this section of the roadway, oncoming vehicles must yield to one another with one pulling over to allow the oncoming vehicle to pass.

Some citizens have indicated that the traffic flow on Mariposa Avenue west of Main Street is not adequate and may warrant modification. The police department has, however, indicated that this section of Mariposa Avenue does not experience a disproportionate number of accidents. Field observations revealed that vehicles must clearly yield the right-of-way when approaching another vehicle. In practice, this slows traffic down because motorists must pay careful attention to opposing traffic and parked vehicles. Since this section of roadway is in a residential neighborhood, it is not feasible or desirable to consider any type of widening or physical improvement. Physical improvement would require eliminating sidewalks, taking part of front yards or even taking homes. These measures would result in severe impacts. The only potential changes would include parking removal on one or both sides of the street, or changing the circulation to one-way flow. Both of these options are discussed below.

One-way traffic flow would enable Mariposa west of Main Street to provide parking on both sides with one lane of traffic in between. This would eliminate the need for oncoming vehicles to yield the right-of-way to other vehicles. Typically, one-way street systems are operated in "couplets" to allow motorists opposite traffic flow on the next parallel street. For Mariposa, that would be either Pine Avenue or Palm Avenue. Changing to one-way flow would have the potential to disrupt local traffic patterns and would cause some homeowners to revise their paths to and from their driveways and garages. It would also require re-design of the signs, roadway striping and signalization at Main Street. The speed of traffic with a one-way flow configuration would likely rise due to the removal of traffic "conflicts" or friction.

Removing parking on one side of the road would also facilitate the flow of parking by increasing the traveled way from only 14 feet to approximately 22 to 24 feet. This would result in higher speeds, and oncoming traffic would no longer be forced to yield the right-of-way. The removal of parking on one side could have potential serious secondary parking loss impacts. Those spaces are likely well-used by local residents.

In summary, there is are no feasible physical improvements for Mariposa Avenue west of Main Street due to the residential character of the neighborhood. There are a couple of operational changes that could be considered to provide more roadway capacity for moving vehicles. Those changes would generate secondary impacts such as higher speeds and loss of parking. Given the available options, it is not recommended that the operations of Mariposa Avenue be modified at this time.

School Circulation Issues

In El Segundo, like nearly every other Southern California city, school-area traffic circulation is becoming a greater problem. This is due to several factors including the use of school buildings for more students than they were originally designed to support, lack of busing programs, and the tendency for more parents to drive children to and from school for safety and other lifestyle reasons. As a result, local streets are often extremely congested during peak school drop-off and student pick-up times.

As part of the Circulation Element update, the schools in the City were field reviewed with respect to potential circulation system enhancements to improve local traffic flow. Also, the police department personnel responsible for school traffic safety were consulted. At this time, major physical changes to the local circulation system at school sites are not recommended as part of the General Plan. At each school site, the City, school officials and police must continue to monitor traffic patterns and pedestrian circulation. The most appropriate methods for dealing with localized school circulation issues is through proper planning of the pick-up and drop-off patterns and timing, education of parents and staff, and proper traffic control personnel as needed. Additional improvement alternatives for school sites will be reviewed and presented as part of the Circulation Element environmental review.

NEIGHBORHOOD TRAFFIC CONTROL

The neighborhood traffic control program described below would be used to address these general issues as they arise throughout the City:

- Too much traffic on selected residential streets
- Excessive speeds on some residential streets
- Secondary traffic impacts of Hillcrest Street closure

The City experiences traffic intrusion into residential neighborhoods as a result of many factors including arterial congestion (creating traffic by-passes), high student populations at schools, adjacent commercial activities and other reasons. As these problems occur, they cause impacts on local residential streets such as speeding and excessive traffic volumes. In many cases, the impact is an "environmental impact" on the residential street. While the street has the total capacity for more traffic, the "environmental capacity" is exceeded based on the residential character of the adjoining land uses. Speeds and volume are perceived to be too high and disrupt the character of the street.

When such impacts occur, it is necessary to address problems on a case-by-case basis, including the affected residents in the process. To accomplish this, a "Neighborhood Traffic Control Program" is proposed as part of the Circulation Element update. Details of a Neighborhood Traffic Control process are outlined below. It should be noted that a program for neighborhood traffic control could require significant staff resources outside consultant costs and capital expenditures, depending on the extent of the program. This will require review and prioritization compared to other roadway infrastructure needs.

Overall Objective

The overall objective of the Neighborhood Traffic Control Program is to improve the livability of neighborhood streets by mitigating the impacts of vehicular traffic on residential neighborhoods. Specific impacts to be addressed by the Program include high non-local cut-through traffic volumes, high speeds, truck traffic intrusion, demonstrated accident history and other related problems.

Process Overview

The Neighborhood Traffic Control Program process will ensure that every neighborhood with demonstrated problems and overall community support (determined via petitions) has equal access to neighborhood traffic control measures. The program depends upon citizen involvement and may vary from year to year based upon funding available for neighborhood traffic control. The process includes the nine following steps:

- Step 1 - Identify Candidate Streets/Neighborhoods
- Step 2 - Preliminary Screening and Evaluation
- Step 3 - Survey/Petition Affected Persons
- Step 4 - Engineering Analysis
- Step 5 - Neighborhood Meetings
- Step 6 - Prioritization and Funding Assessment
- Step 7 - Develop Demonstration Project
- Step 8 - Determination of Permanent Project
- Step 9 - Monitoring

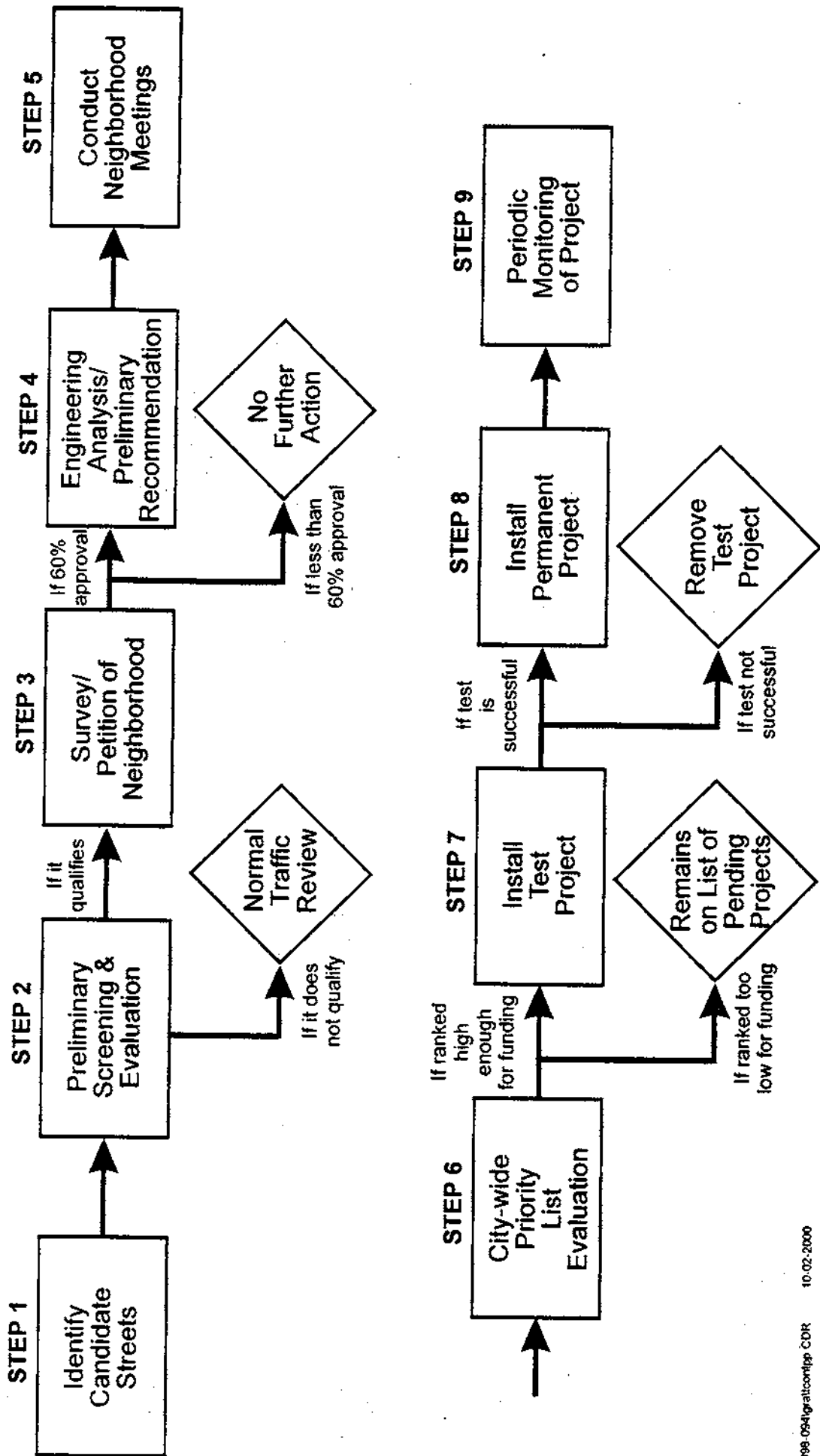
The process and individual steps are explained in more detail below. See the flow chart attached to this report for a geographical summary of the process.

Goals/Policies of Neighborhood Traffic Control Program

Goals/Policies of the Program include the following:

- Reduce demonstrated accident patterns on local streets where feasible.

Neighborhood Traffic Control Program Process



- Eliminate or discourage non-local cut-through traffic on local residential streets. Focus such traffic on the arterial roadway system.
- Reduce traffic speeds on residential streets with demonstrated problems to levels consistent with other non-impacted local streets in the City.
- Limit shifting traffic intrusion or speeding problems from one residential street to another.
- Ensure citizen participation throughout the Neighborhood Traffic Control Program process, obtaining the input of affected residents, business owners and non-resident property owners regularly
- Minimize impacts on emergency vehicle response times due to implementation of neighborhood traffic control measures

Program steps are detailed below.

Step 1 - Identify Candidate Streets/neighborhoods

Residential neighborhood traffic control improvements (for either one street or a larger neighborhood) shall be considered for local or collector residential streets, as classified in the City's General Plan Circulation Element, based on one of the following actions:

- After receipt of written requests from one or more residents, business owners or non-resident property owners of the affected neighborhood, or City Council
- Traffic problems identified by City staff
- Written requests and/or public workshop comments

Step 2 - Preliminary Screening and Evaluation

The Public Works Department will review requests to determine whether or not they should be handled as part of the normal traffic engineering function of the City, or if they qualify for consideration under the Neighborhood Traffic Control Program. The following initial criteria will be used to assess requests:

- Is the street in question classified as a local or collector street? If not, is the neighborhood predominantly residential in character?
- Are requests related to speeding, high traffic volumes, accidents, cut-through traffic, truck traffic or other related impacts on a residential or collector street or district?

If it is determined that the requests fall under the Neighborhood Traffic Control Program, then Step 3 is initiated. If not, the request shall be followed up as appropriate by the Public Works Department as part of the Department's normal function, including coordination with Police Department and Traffic Committee as needed.

Step 3 - Survey/petition of Neighborhood

Following the preliminary screening and evaluation, a survey/petition will be circulated to the affected persons to ascertain whether or not others agree that there is a problem. The persons receiving the survey/petition will include all households, businesses and non-resident property owners that have frontage on the project street segment(s) or in the neighborhood and could potentially be impacted by the improvement(s). The purpose of the survey is to establish the level of support among affected persons to proceed with a more detailed analysis and potentially a project. A study will be carried forward if the following level of support is received:

- At least 60% of responses must indicate that they feel there is a problem which warrants a study and consideration for neighborhood traffic control.

Step 4 begins if positive survey responses equal or exceed 60%.

Step 4 - Engineering Analysis by Public Works Department

The Public Work Department will undertake an engineering study of streets or neighborhoods with qualifying petitions. The study will include at a minimum the following actions:

- Review by Police and Fire Departments. This review will determine if the specific streets in question are critical police or fire response routes. If so, Public Works will work with Police and Fire to ensure that measures are not installed which significantly impact response times.
- Traffic data collection to include (as appropriate based on identified problem) one or more of the following:
 - determine the area affected and then conduct field investigation to note traffic operating conditions, geometric conditions (roadway width, pavement condition, parking availability, type and location of existing traffic control devices, etc).
 - traffic volume counts (24 hour broken down into 15-minute increments and aggregated hour-by-hour)
 - radar or machine-based speed surveys
 - truck volume counts
 - pedestrian counts
 - accident investigation (review of accidents over prior two year period)
 - other investigations deemed appropriate by the Public Works Director

Based on this investigation, the Public Works Director will make a preliminary determination of the need for specific traffic control measures. The traffic control measures may include one or more of the following:

- neighborhood speed watch program
- selective police enforcement/radar trailer
- chokers (curb bulbs)
- speed humps
- traffic circles
- diverters (full or partial)
- one-way streets
- cul-de-sacs
- truck restrictions
- school crossing guards
- other measures based on specific conditions

Using the criteria listed in Table 18 (Neighborhood Traffic Control Program Criteria) and applying recognized traffic engineering standards, the Public Works Director will recommend the use of one or more neighborhood traffic control measures where they are appropriate. In determining the types and location of measures, estimates of potential secondary impacts (e.g., diversion to other streets) will be made where feasible.

Step 5 - Neighborhood Meeting(s)

One or more neighborhood meetings will be conducted as required for purposes of notifying local residents, business owners and non-resident property owners of the results of the technical analysis, findings and preliminary recommendations. Based on the results of the public meetings, the preliminary recommendations will be carried forward, amended or deleted consistent with adopted guidelines.

Step 6 - Prioritization and Funding Assessment

The problems in the neighborhood will be assessed using a point-based criteria system. Points will be assigned for every problem exceeding established thresholds. The score will then be compared to the scores received for problems in other areas and the neighborhood/street will be ranked for implementation based on priority order.

Projects will be implemented as funding becomes available, with the top ranked projects receiving funding first. The overall list of projects will be re-evaluated every two years. Projects remaining on the list for three years without obtaining enough priority for funding will be dropped.

Step 7 - Develop and Install Test Projects on Temporary Basis

Once funding becomes available, temporary test projects will be designed by the Public Works Department for the neighborhoods/streets at the top of the priority list. The test project(s) will be implemented with temporary materials and will remain in place for approximately six months to one year depending on the types of improvements (if significant citizen complaints warrant, the time period could be reduced to less than six months). The project will be evaluated during the test period to determine if it addresses the identified problems and is consistent with Neighborhood Traffic Control Program goals. The Public Works Director shall conduct follow-up studies as necessary to evaluate effectiveness of individual measures. Such analysis may include, but not necessarily be limited to, ADT traffic counts and radar speed surveys on affected streets and parallel streets.

Step 8 - Determination of Permanent Project

If the temporary test project shows that the traffic control program has sufficiently addressed the targeted traffic problem(s) and there have not been significant citizen complaints nor excessive diversion of the problem to another residential street, the traffic control measures shall be made permanent as funding becomes available. If it is determined that the measures will be installed on a permanent basis, the list of affected residents, business owners and non-resident property owners will be notified via (could use meeting, mailing, public notices, or a combination).

If it is found that the measures do not achieve the intended goals of reducing speeds, cut through traffic or other identified problems, the Public Works Department will review other potential measures and recommend either elimination of all measures at the location or test installation of different neighborhood control measures. If additional or different measures are recommended, the street will be re-evaluated and added back on to the city-wide priority list if appropriate.

Step 9 - Monitoring

The City will conduct periodic monitoring as necessary to determine if the project continues to meet the goals of the Neighborhood Traffic Control Program. This monitoring will be conducted at the discretion of the Public Works Director based on available funding, staffing levels and resident comments. If monitoring shows that the measures fail to achieve the intended goals of reducing speeds, cut through traffic or other identified problems, the measures may be removed.

TABLE 18

NEIGHBORHOOD TRAFFIC CONTROL PROGRAM CRITERIA

TRAFFIC CONTROL MEASURE	PROBLEMS TARGETED	STREET TYPE	CRITERIA				OTHER CONSIDERATIONS
			VOLUME (1)	SPEED	DIVERSION TO ADJACENT STREETS	GRADE	
Speed Humps	High Speeds, Cut-through Traffic	Local/Collector	from 1,500 to 5,000 ADT on local streets, from 3,000 to 5,000 on collector streets (2)	85th % speed is greater than 30 MPH (2)	Acceptable Diversion Based on Diversion Curve	less than 10%	Street must have only one lane for moving traffic in each direction
Diverter	High Cut-through Traffic	Local	greater than 2,500 ADT	N/A	Acceptable Diversion Based on Diversion Curve	N/A	If full diverter, cannot be truck or transit route, emergency access to be considered
Traffic Circles	High Speeds, Accident History, Geometric Design Problems	Local/Collector	from 1,000 to 5,000 ADT	N/A	Acceptable Diversion Based on Diversion Curve	less than 10%	Intersecting roadways must be of sufficient width. Loss of parking must be assessed. Cost of landscaping must be considered
Chokers	High Speeds, Cut-through Traffic	Local	from 1,000 to 5,000 ADT	N/A	N/A	less than 10%	Loss of parking must be assessed. Cost of landscaping must be considered
Cul-de-sac	High Cut-through Traffic	Local	ADT greater than 2,000 with 20% non-local	N/A	Acceptable Diversion Based on Diversion Curve	N/A	Cannot be truck or transit route, emergency access to be considered

Notes: 1) all volumes criteria based on average daily traffic. Refer to calendar of acceptable count days prior to taking counts

2) criteria is also met if 80% of both ADT and speed thresholds are met

General Notes:

- final determination of control application based on review by City Public Works Director

- subject to modification by City Council on a case-by-case basis

- N/A - criteria does not apply to specific control measure

TABLE 18

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TRAFFIC CONTROL MEASURE	PROBLEMS TARGETED	STREET TYPE	CRITERIA					OTHER CONSIDERATIONS
			VOLUME (1)	SPEED	DIVERSION TO ADJACENT STREETS	GRADE		
One-way Operation	Cut-through Traffic	Local/ Collector	N/A	N/A	Acceptable Diversion Based on Diversion Curve	N/A		Best if applied as one-way couplet
Radar Trailer	High Speeds	Local/ Collector	N/A	85th % speed is greater than 28 MPH	N/A	N/A		
Neighborhood Speed Watch Program	High Speeds	Local/ Collector	N/A	N/A	N/A	N/A		

Notes: 1) all volumes criteria based on average daily traffic. Refer to calendar of acceptable count days prior to taking counts
 2) criteria is also met if 80% of both ADT and speed thresholds are met

General Notes:
 - final determination of control application based on review by City Public Works Director
 - subject to modification by City Council on a case-by-case basis
 - N/A - criteria does not apply to specific control measure

GOALS, OBJECTIVES, AND POLICIES

GOALS, OBJECTIVES, AND POLICIES

Circulation goals, objectives, and policies are presented as part of the Circulation Element for the City of El Segundo to guide policy makers and City staff in the planning and provision of the City's circulation system. The goals, objectives, and policies were developed through consideration of existing circulation issues, projected circulation needs associated with the Land Use Element, growth outside of the City, and the interests of the residents and businesses of El Segundo. Each of the goals identifies the general direction for the City's circulation system. The objectives outline more specific circulation guidelines for the City's decision makers and staff to work toward. The implementation policies are recommended actions or policies that will assist the City in achieving the identified goals and objectives.

GOAL C1: PROVISION FOR A SAFE, CONVENIENT, AND COST EFFECTIVE CIRCULATION SYSTEM

Provide a safe, convenient, and cost-effective circulation system to serve the present and future circulation needs of the El Segundo community.

Objective C1-1

Provide a roadway system that accommodates the City's existing and projected land use and circulation needs.

Policy C1-1.1

~~Develop citywide traffic model for purposes of evaluating project-related and external traffic impacts on the City circulation system.~~

Maintain and update citywide traffic model as needed for purposes of evaluating project-related and external traffic impacts on the City circulation system.

Policy C1-1.2

~~Aggressively pursue implementation of all Circulation Element policies such that all Master Plan roadways are upgraded and maintained at acceptable levels of service.~~

Pursue implementation of all Circulation Element policies such that all Master Plan roadways are upgraded and maintained at acceptable levels of service.

Policy C1-1.3

Provide adequate roadway capacity on all Circulation Plan roadways.

Policy C1-1.4

Construct missing roadway links to complete the roadway system designated in the Circulation Element as warranted by roadway operating conditions of Level of Service "E" or "F."

Policy C1-1.5

Upgrade roadways to full Circulation Element standards as designated in the General Plan as warranted by roadway operating conditions of Level of Service "E" or "F."

Policy C1-1.6

Provide adequate intersection capacity to the extent possible on Major, Secondary, and Collector Arterials to prevent diversion of through traffic into local residential streets.

Policy C1-1.7

Provide all residential, commercial, and industrial areas with efficient and safe access to the major regional transportation facilities.

Policy C1-1.8

Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles.

Policy C1-1.9

Ensure that new roadway links are constructed as designated in the Circulation Plan and link with existing roadways within the City such that efficient operation of the circulation system is maintained at an operating Level of Service of "D" or better.

Policy C1-1.10

Ensure that the transition from any Master Plan roadway to a second Master Plan roadway at a higher classification operates safely and efficiently, incorporating the appropriate intersection configuration and any turn lanes that are necessary.

Policy C1-1.11

~~Convert Nash Street and Douglas Street from two-way roadway operation to a one-way couplet from El Segundo Boulevard to Imperial Highway, incorporating proper transition from one-way to two-way traffic on both ends of the couplet and accommodating proper access to the freeway on-ramps south of Imperial.~~

Establish and maintain a citywide traffic count program, to ensure the availability of data needed to identify circulation problems and to evaluate potential improvements.

Policy C1-1.12

~~Establish and maintain a citywide traffic count program, to ensure the availability of data needed to identify circulation problems and to evaluate potential improvements. The 1988 count data should be used to represent "worst-case" baseline data until new counts surpass the 1988 traffic levels.~~

Address Main Street circulation issues as part of the Downtown Specific Plan. Ensure Plan consistency with the General Plan Circulation Element.

Policy C1-1.13

Require a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further, require the implementation of appropriate mitigation measures prior to, or in conjunction with, project development. Mitigation measures may include new roadway links on segments that would connect the new development to the existing roadway system. Mitigation measures shall be provided by or paid for by the project developer.

Policy C1-1.14

~~Within one year after adoption of the General Plan, the City shall initiate development of a Downtown traffic mitigation plan designed to mitigate impacts associated with development at FAR 1.0.~~

Pursue and protect adequate right-of-way to accommodate future circulation system improvements.

Policy C1-1.15

Pursue and protect adequate right-of-way to accommodate future circulation system improvements. Encourage the widening of substandard streets and alleys to meet City standards wherever feasible.

Policy C1-1.16

Encourage the widening of substandard streets and alleys to meet City standards wherever feasible. Encourage cooperation with other governmental agencies to provide adequate vehicular traffic movements on streets and through intersections by means of synchronized signalization.

Policy C1-1.17

Encourage cooperation with other governmental agencies to provide adequate vehicular traffic movements on streets and through intersections by means of synchronized signalization. Future developments should be reviewed to ensure uniformity of street naming and avoidance of name duplication or name inconsistencies on a continuous link.

Policy C1-1.18

Establish a neighborhood traffic control program to address traffic concerns in the residential areas of the City.

Policy C1-1.19

~~Monitor the impacts of the I-105 Freeway on local El Segundo streets. If it is determined that freeway traffic is using local streets like California Street as a short cut through the City, evaluate potential mitigations.~~

Objective C1-2

Provide a circulation system consistent with current and future engineering standards to ensure the safety of the residents, workers, and visitors of El Segundo.

Policy C1-2.1

Develop and maintain a circulation system which shall include a functional hierarchy and classification system of arterial highways that will correlate capacity and service function to specific road design and land use requirements.

Objective C1-3

Ensure that the City's Master Plan Truck Route System efficiently serves the shipping needs of the commercial and industrial land uses in El Segundo while balancing potential conflicts with residential and recreational land uses throughout the City.

Policy C1-3.1

Ensure that the City's designated truck routes provide efficient access to and from the I-105 Freeway.

Policy C1-3.2

Ensure that the development review process incorporates consideration of off-street commercial loading requirements for all new projects.

Policy C1-3.3

All new construction on streets or corridors that are designated truck routes should have a Traffic Index calculation as stated by the State Department of Transportation in order to provide a roadway structural section that will accommodate the projected truck volumes and weights. Develop, implement and promote alternative modes of transportation.

Policy C1-3.4

Prohibit parking within the public right-of-way on either side of most two-way alleys. Parking on one side of a one-way alley could be allowed if the alley width is a minimum of 19 feet.

Policy C1-3.5

Ensure that the trucks from the cargo facility north of Imperial Highway at Main Street stay on the City truck route system and do not travel along Main Street.

GOAL C2: PROVISIONS FOR ALTERNATIVE MODES OF TRANSPORTATION

Provide a circulation system that incorporates alternatives to the single-occupant vehicle, to create a balance among travel modes based on travel needs, costs, social values, user acceptance, and air quality considerations.

Objective C2-1

Provide a pedestrian circulation system to support and encourage walking as a safe and convenient travel mode within the City's circulation system.

Policy C2-1.1

Encourage the development of pedestrian linkages to and from the Green Line stations to encourage and attract intermodal transit/ walking trips.

Policy C2-1.2

Develop a citywide system of pedestrian walkways, alleviating the conflict between pedestrians, autos, and bicyclists throughout the City.

Policy C2-1.3

Encourage new developments in the City to participate in the development of the citywide system of pedestrian walkways and require participation funded by the project developer where appropriate.

Policy C2-1.4

Ensure the installation of sidewalks on all future arterial widening or new construction projects, to establish a continuous and convenient link for pedestrians.

Policy C2-1.5

Encourage the continued use of the 1911 Act to provide missing sidewalk sections where applicable in residential and commercial areas.

Policy C2-1.6

Encourage shopping areas to design their facilities for ease of pedestrian access.

Policy C2-1.7

Closely monitor design practices to ensure a clear pedestrian walking area by minimizing obstructions, especially in the vicinity of intersections.

Objective C2-2

Provide a bikeway system throughout the City to support and encourage the use of the bicycle as a safe and convenient travel mode within the City's circulation system.

Policy C2-2.1

Implement the recommendations on the Bicycle Master Plan contained in the Circulation Element, as the availability arises; i.e., through development, private grants, signing of shared routes.

Policy C2-2.2

Encourage new development to provide facilities for bicyclists to park and store their bicycles and provide shower and clothes change facilities at or close to the bicyclist's work destination.

Policy C2-2.3

Develop off-street bicycle paths in corridors where appropriate throughout the City.

Policy C2-2.4

Encourage the use of bicycles for trips to and from elementary and high schools in the area as well as parks, libraries, and other public facilities.

Policy C2-2.5

Continue coordination of bicycle route planning and implementation with adjacent jurisdictions and regional agencies.

Policy C2-2.6

Encourage design of new streets with the potential for Class I or Class II bicycle routes that separate the automobile, bicycle, and pedestrian to the maximum extent feasible.

Policy C2-2.7

Ensure that when Hillcrest Street is closed to allow emergency vehicular access only, that the link in the Master Plan of Bicycle Routes is maintained, via the Hillcrest Street right-of-way or any appropriate alternative route.

Policy C2-2.8

Evaluate bikeway system links with the Green Line rail stations and improve access wherever feasible.

Objective C2-3

Ensure the provision of a safe and efficient transit system that will offer the residents, workers, and visitors of El Segundo a viable alternative to the automobile.

Policy C2-3.1

~~Work closely with the Southern California Rapid Transit District (SCRTD), the Los Angeles County Transportation Commission (LACTC), the Rail Construction Corporation (RCC), Torrance Municipal Bus Lines, the El Segundo Employers Association (ESEA), and private businesses to expand and improve the public transit service within and adjacent to the City.~~

Work closely with the Los Angeles Metropolitan Transportation Authority (LACMTA), Torrance Municipal Bus Lines, the El Segundo Employers Association (ESEA), and private businesses to expand and improve the public transit service within and adjacent to the City.

Policy C2-3.2

Ensure that transit planning is considered and integrated into all related elements of City planning. Develop, implement, and promote alternative modes of transportation

Policy C2-3.3

Encourage the development of pedestrian linkages to and from the Green Line stations to encourage and attract intermodal transit/ walking trips.

Policy C2-3.4

Evaluate and implement feeder bus service through the City where appropriate. Feeder bus service could potentially take commuters from the fixed transit services (rail and bus) in the eastern portion of the City to the industrial and commercial areas to the west. In addition, midday shuttling of workers east of Sepulveda Boulevard to the Downtown retail area should also be considered.

Policy C2-3.5

Pursue potential Proposition A and Proposition C funds for bus transit shelters, signing, advertising, and bus turnouts to encourage bus ridership.

Policy C2-3.6

Continue the Dial-a-Ride operation and City subsidy to serve all residents of El Segundo, especially the elderly and handicapped.

Policy C2-3.7

Explore the feasibility of using excess government right-of-way, purchased property, or land use arrangements for multiple use of existing facilities, in order to establish or construct park-and-ride services of benefit to El Segundo residents and employees.

Policy C2-3.8

Encourage the implementation of park-and-ride facilities proximate to the I-405 and I-105 Freeways for shuttle service into El Segundo.

Policy C2-3.9

~~Investigate all LACTC programs which may be beneficial to the City.~~
Investigate all LACMTA programs which may be beneficial to the City.

Policy C2-3.10

~~Encourage the LACTC and SCRTD to provide bike storage facilities at the Green Line rail stations.~~
Encourage the LACMTA to provide bike storage facilities at the Green Line rail stations.

Policy C2.3.11

Ensure that all new development provides electric vehicle charging stations.

Objective C2-4

Ensure the use of Transportation System Management (TSM) measures throughout the City, to ensure that the City's circulation system is as efficient and cost effective as possible.

Policy C2-4.1

Establish and maintain a citywide traffic count program to ensure the availability of data needed to identify necessary operational improvements to the roadway system.

Policy C2-4.2

Continue to increase operational efficiencies of the transportation system by implementing all appropriate Transportation System Management (TSM) measures, including but not limited to improving design standards, upgrading and coordination of traffic control devices, controlling on-street parking, and using sophisticated electronic control methods to supervise the flow of traffic.

Objective C2-5

Ensure the use of Transportation Demand Management (TDM) measures throughout the City, where appropriate, to discourage the single-occupant vehicle, particularly during the peak hours. In addition, ensure that any developments that are approved based on TDM plans incorporate monitoring and enforcement of TDM targets as part of those plans.

Policy C2-5.1

Ensure that Transportation Demand Management (TDM) policies are considered during the evaluation of new developments within the City, including but not limited to ridesharing, carpooling and vanpooling, flexible work schedules, telecommuting and car/vanpool preferential parking.

Policy C2-5.2

Coordinate activities with neighboring jurisdictions and the El Segundo Employers Association (ESEA) to optimize the effectiveness of Transportation Demand Management (TDM) activities.

Policy C2-5.3

Encourage the provision of preferential parking for high occupancy vehicles wherever possible.

GOAL C3: DEVELOPMENT OF CIRCULATION POLICIES THAT ARE CONSISTENT WITH OTHER CITY POLICIES

Develop a balanced general plan, coordinating the circulation element with all other elements, ensuring that the city's decision making and planning activities are consistent among all city departments.

Objective C3-1

Ensure that potential circulation system impacts are considered when the City's decision makers and staff are evaluating land use changes.

Policy C3-1.1

Require all new development to mitigate project-related impacts on the existing and future circulation system such that all Master Plan roadways are upgraded and maintained at acceptable levels of service through implementation of all applicable Circulation Element policies. Mitigation measures shall be provided by or paid for by the project developer.

Policy C3-1.2

The minimum acceptable level of service (LOS) at an intersection is LOS "D". Intersections operating at LOS "E" or "F" shall be considered deficient. If traffic is caused by a development project is forecast to result in an intersection level of service change from LOS "D" or better to LOS "E" or "F", then the development impact shall be considered significant. If a development project is forecast to result in the increase of intersection volume/capacity ratio (V/C) of 0.02 or greater at any intersection that is forecast to operate at LOS "E" or "F", the impact shall be considered significant.

Policy C3-1.3

Encourage development projects that effectively integrate major transportation facilities with land use planning and the surrounding environment. These joint uses will obtain economic and aesthetic benefits of coordinated design, achieve land conservation in space-short urban areas of El Segundo, and maintain neighborhood continuity in built-up areas affected by future major transportation routes.

Policy C3-1.4

Ensure that transit planning is considered and integrated into all related elements of City planning.

Policy C3-1.5

Planning principles and Circulation Element goals, objectives, and policies should apply consistently to all land uses in the City.

~~**Policy C3-1.5**~~

~~Require a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further, require the implementation of appropriate mitigation measures prior to, or in conjunction with, project development. Mitigation measures shall be provided by or paid for by the project developer.~~

Policy C3-1.6

The City shall require submittal and implementation of a Transportation Management Plan (TMP) for all projects within the Urban Mixed-Use area, and shall encourage a TMP for all projects within the northeast quadrant.

Policy C3-1.7

~~Require the provision of adequate pedestrian and bicycle access for new development projects through the site plan review process.~~

Require the provision of adequate pedestrian and bicycle access for new development projects through the development review process.

Policy C3-1.8

Ensure that the driveway stacking distance for multi-family housing is evaluated during the development review process.

Objective C3-2

Ensure the consideration of the impacts of land use decisions on the City's parking situation.

Policy C3-2.1

Ensure the provision of sufficient on-site parking in all new development.

Policy C3-2.2

Ensure that the City's parking codes and zoning ordinances are kept up-to-date.

GOAL C4: COMPLIANCE WITH ALL FEDERAL, STATE, AND REGIONAL REGULATIONS

Ensure that the City of El Segundo remains in compliance with all Federal, State, and Regional regulations, remains consistent with the plans of neighboring jurisdictions and thus remains eligible for all potential transportation improvement programs.

Objective C4-1

Cooperate to the fullest extent possible with State, County, and regional planning agencies responsible for maintaining and implementing the Circulation Element to ensure an orderly and consistent development of the entire South Bay region.

Policy C4-1.1

The City will actively participate in various committees and other planning forums associated with County, Regional, and State Congestion Management Programs.

Policy C4-1.2

Ensure that the City remains in compliance with the County, Regional, and State Congestion Management Programs (CMP) through the development of appropriate City programs and traffic impact analyses of new projects impacting the CMP routes of Sepulveda Boulevard, the I-105 Freeway, and the I-405 Freeway.

Policy C4-1.3

The City will investigate and evaluate the feasibility and merits of adding more routes that are impacted by external traffic sources, to the County CMP Highway system.

Objective C4-2

Ensure that the City's circulation system is consistent with those of neighboring jurisdictions.

Policy C4-2.1

Ensure that new roadway links are constructed as designated in the Circulation Element, and link with existing roadways in neighboring jurisdictions to allow efficient access into and out of the City.

Policy C4-2.2

Adjacent local agencies' plans should be carefully assessed to ensure compatibility across political boundaries. This does not imply that such compatibility is a requirement for adoption of the Circulation Element.

Policy C4-2.3

Continuously monitor and ~~incorporate planning and development of~~ evaluate Los Angeles International Airport (LAX) ~~into all aspects of the City's planning.~~ Master Planning and evaluate impacts of LAX on the City's circulation system.

Policy C4-2.4

Encourage cooperation with other governmental agencies to provide adequate vehicular traffic movements on streets and through intersections by means of synchronized signalization.

Policy C4-2.5

Support regional and subregional truck movements programs including truck route coordination, truck route signage improvements, and oversize truck permit streamlining.

Objective C4-3

Establish the City's short-term (5-year) Capital Improvement Program (CIP) consistent with the Circulation Element and the entire General Plan, and ensure that the CIP incorporates adequate funding for the City's circulation needs.

Policy C4-3.1

Identify and evaluate potential revenue sources for financing circulation system development and improvement projects.

GOAL C5: PROVISIONS FOR THE DOWNTOWN AND SURROUNDING AREA

Provide a circulation system and support parking for pedestrians and vehicles in the Downtown area that are consistent with the goals and vision of the Downtown Specific Plan.

Objective C5-1

Provide a pedestrian-oriented circulation system.

Policy C5-1.1

Implement the circulation and streetscape improvements envisioned in the Downtown Specific Plan.

Policy C5-1.2

Focus circulation improvements on enhancing the pedestrian environment, while still accommodating vehicular circulation and parking.

Objective C5-2

Provide a dynamic and flexible circulation system.

Policy C5-2.1

Allow flexible standards in roadway and sidewalk widths, and on-street parking, to accommodate the unique qualities of the Downtown while still maintaining circulation. These flexible standards shall apply to the Downtown Specific Plan and immediate surrounding area.

Policy C5-2.2

Allow side streets that abut Main Street to be modified to accommodate surface parking lots or parking structures.

Project Master Plan of Streets

Exhibit 25 illustrates the proposed master plan of streets. The Exhibit reflects the recommended changes to the master plan as discussed in this document.

NOT TO SCALE

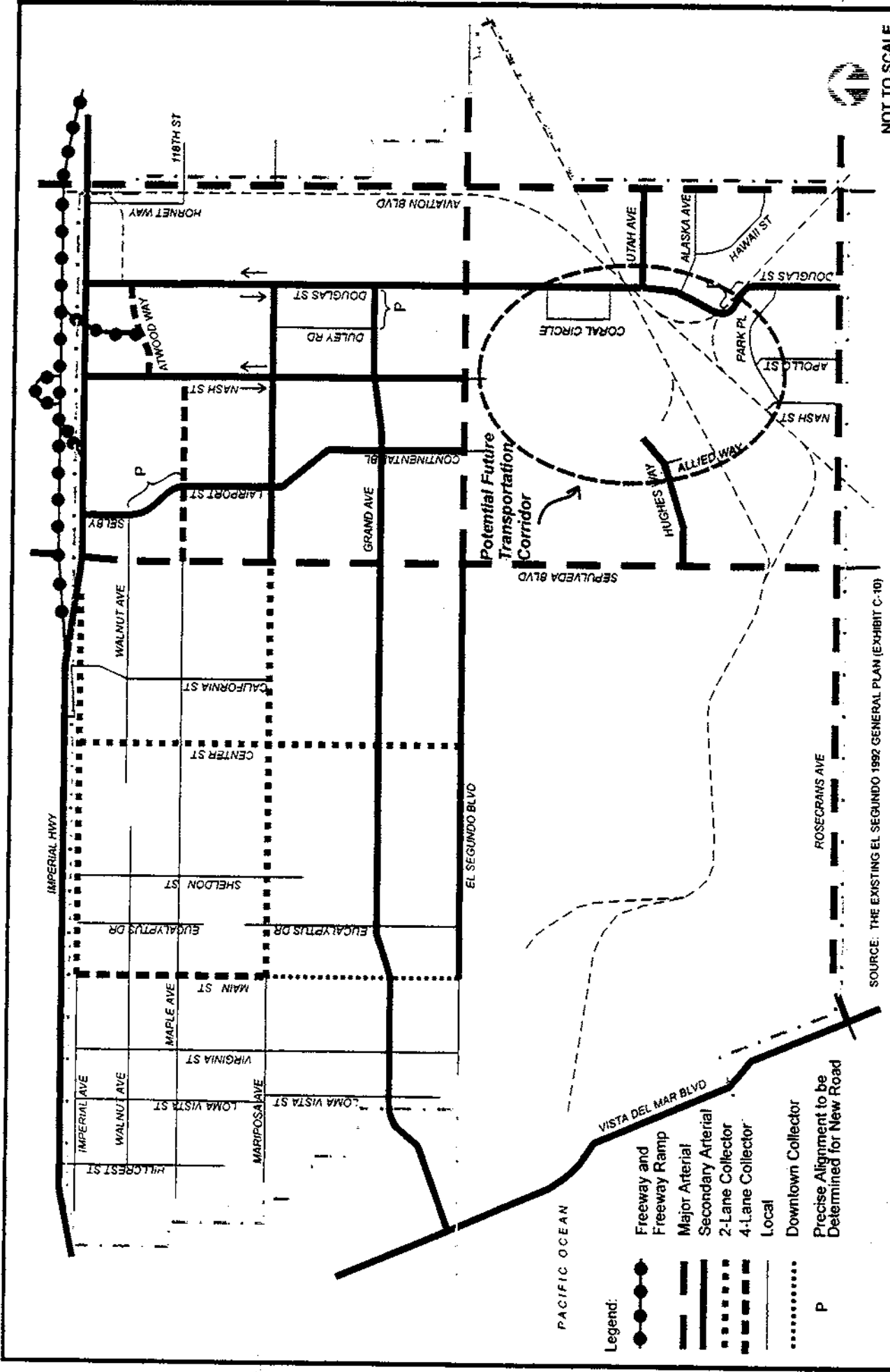
EXHIBIT
25

EL SEGUNDO CIRCULATION ELEMENT Proposed Master Plan of Streets

Meyer, Mohaddes Associates, Inc.
An Itaris Company

198-09-47gralcc000propmplan CDR 10-10-00

AR00006

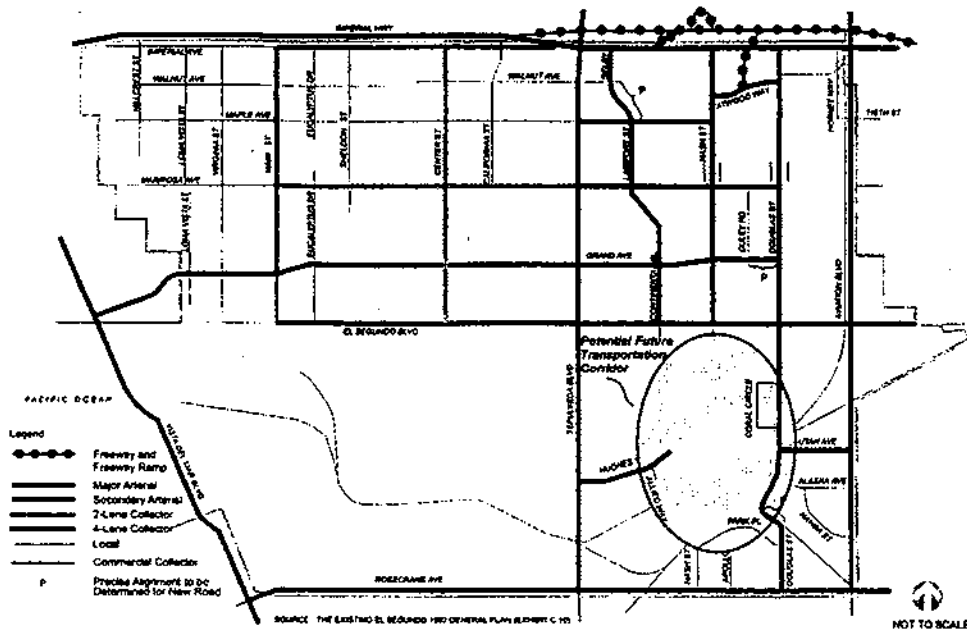


SOURCE: THE EXISTING EL SEGUNDO 1992 GENERAL PLAN (EXHIBIT C-10)

El Segundo Circulation Element Update Draft Environmental Impact Report

State Clearinghouse Number 99081120

October 13, 2000



Prepared for



City of El Segundo
350 Main Street
El Segundo, California 90245

Contact: Paul Garry, Associate Planner

Prepared by



EIP Associates
11601 Wilshire Boulevard, Suite 1440
Los Angeles, California 90025

Contact: Steven L. Gerhardt, Project Manager

AR00006



City of El Segundo

**NOTICE OF COMPLETION AND AVAILABILITY OF
DRAFT ENVIRONMENTAL IMPACT REPORT.
NOTICE OF PUBLIC HEARING.
NOTICE OF PROPOSED CONDITIONAL USE PERMIT.
NOTICE TO PROPERTY OWNERS WITHIN A 300-FOOT RADIUS.
NOTICE TO ALL OTHER INTERESTED PARTIES AND AGENCIES.**

Environmental Assessment EA-454 and General Plan Amendment No. 98-4 (Circulation Element Update)

Applicant: City of El Segundo
Address: Citywide

Project Description

The proposed project is an update to the Circulation Element of the City of El Segundo General Plan. The objective of the update is to maintain consistency with State and local congestion and transportation policies and practices. The purpose of the Circulation Element is to assist the City in providing a safe, convenient, and efficient circulation system capable of responding to growth occurring consistent with the policies and land use densities permitted in the Land Use Element of the General Plan. The Circulation Element also analyzes the existing and future circulation conditions in the City of El Segundo, assesses impacts of growth, and establishes goals, objectives, and policies to accommodate traffic associated with future growth.

The Circulation Element includes a discussion of future traffic projections, street classifications, planned roadways, truck routes, bicycle routes, public transportation, pedestrian infrastructure, and transportation demand management practices.

The update to the Circulation Element includes discussion of the following proposed revisions:

1. Conversion of Nash/Douglas one-way couplet to two-way traffic.
2. Deletion of several planned/unconstructed roadway extensions from the Master Plan of Streets.
3. Reconfiguration of Main Street in Downtown to two or three lanes of traffic.
4. Development of a Residential Street Traffic Intrusion Program.
5. Analysis of traffic impacts from a potential increase in land use density in the Smoky Hollow Specific Plan area.
6. Implementation of Intelligent Transportation Systems (ITS).
7. Intersection capacity enhancements to improve traffic flow.
8. Revisions to the goals, objectives, and policies.

Significant Environmental Impacts of Project

An Environmental Impact Report (EIR) is proposed for this project pursuant to the requirements of the California Environmental Quality Act (CEQA). The Draft EIR concludes that the Circulation Element update will result in unavoidable traffic impacts. Potentially significant impacts that can be mitigated to less-than-significant levels include noise and air quality impacts.

Public Review Period

The Draft EIR is scheduled to be available for a 45-day public review and comment period from October 13 through November 27, 2000. All comments on the Draft EIR must be submitted to the City before the end of the review period. Comments should be mailed or faxed to Paul Garry, Associate Planner, City of El Segundo, Department of Community, Economic and Development Services, 350 Main Street, El Segundo, CA 90245. The fax number is 310-322-4167.

Public Hearing

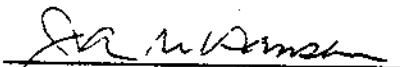
A Planning Commission public hearing on the Draft EIR will be held on November 9, 2000. The City Council will hold a public hearing on the Draft EIR on December 19, 2000. Both public hearings will be held at 7:00 p.m. at the City Council Chambers at City Hall, 350 Main Street, El Segundo, CA 90245.

The purpose of the hearings are for the Planning Commission to take public testimony, review the Circulation Element Update and Draft EIR, and make a recommendation to the City Council. The City Council will hold a public hearing upon completion of the review by the Planning Commission. The action by the City Council will be final.

If you challenge the proposed action in Court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Planning Commission or City Council prior to or at the public hearings.

Where to find the Draft EIR

The Environmental Assessment, Environmental Impact Report, legal description and related files for the above-mentioned proposals will be available for public review Monday through Friday between 7:30 a.m. and 5:30 p.m. in the Planning Division, of the Department of Community, Economic and Development Services, located at 350 Main Street, El Segundo. The EIR will also be available for review, beginning October 13, 2000, at the El Segundo Public Library, located at 111 West Mariposa Avenue. Please contact Paul Garry, in the City Planning Division at (310) 524-2342, for further information.



James M. Hansen

Director of Community, Economic and Development Services; and,
Secretary to the Planning Commission
City of El Segundo

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Summary

INTRODUCTION

This Environmental Impact Report (EIR) discusses the environmental impacts associated with the proposed City of El Segundo General Plan Circulation Element Update and related activities (proposed project). This EIR provides a discussion of impacts by issue area and recommends mitigation measures where appropriate. An analysis of alternatives is also provided. An introduction to this document is provided in Section 1.0 of this DEIR.

SUMMARY OF PROPOSED PROJECT

The Circulation Element Update Technical Report prepared by Meyer, Mohaddes Associates (MMA October 2000, attached as Appendix C of to this document) analyzes the methods and results of the existing and future circulation conditions in the City of El Segundo, assesses impacts of growth, and reviews the current Master Plan of Streets (adopted in 1992) making recommendations regarding additional improvements that may be needed to accommodate anticipated growth. The analysis found that several intersections are forecast to experience congestion and poor conditions even with the completion of the existing Master Plan of Streets.

Therefore, the following further transportation system enhancements are proposed beyond those included in the current Master Plan of Streets for inclusion in the City of El Segundo Circulation Element, and are warranted to maintain adequate service levels.

- Intelligent Transportation Systems (ITS);
- Dual left turn lanes;
- Exclusive right turn lanes and right turn overlap phases;
- Additional through lanes beyond the Master Plan of Streets;
- Revisions to Master Plan of Streets planned street extension;
- Conversion of the Nash/Douglas one-way couplet back to two-way flow;
- Guidance for redevelopment of the Chevron refinery site;
- Guidance for development of the Downtown Specific Plan;
- Guidance for implementation of the Smoky Hollow Specific Plan; and
- Revision of the Master Plan of Truck Routes according to revisions to the Master Plan of Streets.

SYNOPSIS OF ALTERNATIVES

As required by Section 15126.6(a) of the State CEQA Guidelines and recent court cases, an EIR must:

Describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effect of the project, and evaluate the comparative merits of the alternatives.

Further, Section 15126.6(b) Guidelines state:

The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

Alternatives usually take the form of no project, a different type of project, different amplifications of the proposed project, or suitable alternative project sites. The range of alternatives discussed in an EIR is governed by a "rule of reason" that requires the identification of only those alternatives necessary to permit a recognized choice between the alternatives and proposed project.

The range of feasible alternatives are selected and discussed in a manner to foster meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic vitality, availability of infrastructure, general plan consistency, other plan or regulatory limitations, jurisdictional boundaries, and whether the proponent could reasonably acquire, control, or otherwise have access to the alternative site. An EIR need not consider an alternative whose effects could not be reasonably identified, and whose implementation is remote or speculative.

Feasible alternatives evaluated in this EIR include the following:

- No Project Alternative; and
- Reduced Project Alternative

These alternatives are discussed fully in Section 4.0 of this document. Alternatives considered, but found to be infeasible include an alternative site and an enhanced project alternative.

CLASSIFICATION OF ENVIRONMENTAL IMPACTS

Potential environmental impacts have been classified in the following categories:

- *Less Than Significant (LS)*: Results in no substantial adverse change to existing environmental conditions;
- *Significant (S)*: Constitutes a substantial adverse change to existing environmental conditions that can be mitigated to less than significant levels by implementation of feasible mitigation measures or by the selection of an environmentally superior project alternative;
- *Significant and Unavoidable (SU)*: Constitutes a substantial adverse change to existing environmental conditions that cannot be fully mitigated by implementation of all feasible mitigation measures, or by the selection of an environmentally superior project alternative; and
- *Beneficial (B)*: Results in a positive change to environmental conditions. This classification is not strictly required by CEQA; however, it provides a useful addition to the range of information being disclosed to the public in this environmental document.

Impacts are also classified as direct or indirect. Direct impacts occur both at the same time and the same place as the proposed project. Indirect impacts are also caused by implementation of the project; however, they occur at a later time or are removed in distance. Lastly, cumulative impacts are also analyzed in this environmental document. Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table S-1 contains a summary of environmental impacts associated with the proposed project, the mitigation measures proposed, and the level of significance of the impacts following the implementation of those measures.

Pursuant to Section 15123(b)(1) of the State CEQA Guidelines, the following table contains a summary of significant environmental impacts associated with the proposed project, the mitigation measures proposed, and the level of significance of the impacts following the implementation of those measures.

TABLE S-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

3.1 Traffic and Circulation

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact 3.1-1: Impacted Intersections - Implementation of the proposed project will result in five significantly impacted intersections.	No feasible mitigation measures exist. Measures to create acceptable levels of service would result in unacceptable right-of-way acquisition costs and secondary impacts requiring additional mitigation.	Significant and unavoidable.

3.2 Noise

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact 3.2-1: Construction Noise - Activities related to constructing recommended improvements could result in increased noise during construction.	Mitigation Measure 3.2-1: To minimize construction noise, construction activities shall be conducted in a manner consistent with the El Segundo Noise Ordinance (Chapter 9.06 of the El Segundo Municipal Code). Contractors shall use mufflers on construction vehicles; place stationary construction equipment, such as compressors, concrete pumps, etc., as far as possible from existing residential areas; and select quiet construction equipment whenever possible, particularly regarding pavement breaking or jack hammers. These actions shall be particularly important for nighttime construction along major corridors.	Less than significant.

Impact 3.2-2: Recommended Improvements beyond the Current Master Plan of Streets - Additional capacity enhancements and implementation of Intelligent Transportation Systems (ITS) are recommended to reduce travel times and congestion.	Mitigation Measure 3.2-2: To minimize the noise consequences caused by increased vehicle speeds on roadways with intersection capacity improvements and ITS technologies, noise impacts to sensitive receptors should be analyzed during the design phase of any improvements causing adjacent roadway segments to upgrade more than one LOS rating. If the analysis shows noise impacts could be significant, mitigation measures (including possibly noise barriers or sound walls) shall be identified for inclusion in the Capital Improvement Plan or other implementation program.	Less than significant.
---	--	------------------------

Impact 3.2-3: Cumulative Impacts - Implementation of the proposed project would enable the transportation system to accommodate anticipated future traffic growth.	Implementation of Mitigation Measure 3.2-1, and 3.2-2.	Less than significant.
--	--	------------------------

3.3 Air Quality

Impacts	Mitigation Measures	Level of Significance After Mitigation
<p>Impact 3.2-1: Construction Emissions - Activities related to constructing recommended improvements could result in increased pollutant emissions during construction.</p>	<p>Mitigation Measure 3.3-1: To minimize dust and equipment exhaust emissions during construction of the improvement recommendations identified in the Circulation Element Update, construction activities shall be conducted in a manner consistent with SCAQMD Rule 403 for fugitive dust, unnecessary idling of equipment shall be minimized, and diesel equipment shall be located as far away as possible from existing residential uses.</p>	<p>Less than significant.</p>
<p>Impact 3.2-2: Main Street Configuration - Elevated localized carbon monoxide could exceed ambient air quality standards during periods of heavy congestion if the left-turn lane is not provided.</p>	<p>Mitigation Measure 3.3-2: To minimize the potential for elevated air pollutant concentrations to occur along Main Street, a three-lane configuration (one travel lane in each direction, plus a two-way left turn lane or pockets) shall be implemented in lieu of a two-lane configuration.</p>	<p>Less than significant.</p>
<p>Impact 3.2-3: Smokey Hollow Specific Plan Area Land Use - Traffic associated with potential development from the higher 1.3:1 floor area ratio scenario could cause significant regional emissions.</p>	<p>Mitigation Measure 3.3-3: Potential significant air quality impacts associated with new vehicle trips generated by 1.3:1 FAR development in the Smokey Hollow Specific Plan area without mitigation would be significant and unavoidable and require a Statement of Overriding Considerations. To avoid such significant impacts, a 1.1:1 FAR could be implemented. As an alternative mitigation to this, trip reduction strategies that would minimize the new trips induced by the development to levels that would cause air quality impacts below the significance thresholds shall be implemented to the extent feasible for the Smokey Hollow Specific Plan area, including increased transit service to the area.</p>	<p>Less than significant.</p>
<p>Impact 3.2-4: Cumulative Impacts - Implementation of the proposed project would enable the transportation system to accommodate anticipated future traffic growth.</p>	<p>Implementation of Mitigation Measure 3.3-2 and 3.2-3.</p>	<p>Less than significant.</p>

1.0 Introduction

1.1 OVERVIEW OF THE PROPOSED PROJECT

The City adopted the current Circulation Element of its General Plan in 1992. Recent assessment of the City's transportation system, as described in the Circulation Element Update Technical Report prepared by Meyer, Mohaddes Associates (provided as Appendix C), suggests that build-out of the current Master Plan of Streets will not be able to accommodate the level of growth anticipated by the City's Land Use Plan without creating adverse traffic operating conditions into the foreseeable future. The Technical Report assesses the impacts of future growth in traffic and recommends a transportation system that will accommodate that growth with acceptable traffic operating conditions. Therefore the project analyzed in this EIR is the Circulation Element update of the City's General Plan, and any implementation actions associated with this update.

1.2 SCOPE OF THE EIR

This Environmental Impact Report (EIR) addresses the potential environmental effects of the proposed project. The scope of the EIR includes issues identified by the City of El Segundo during the preparation of the Initial Study (IS) and Notice of Preparation (NOP) for the proposed project. The IS/NOP, and comment letters received during the NOP review period, are included in Appendix A (IS/NOP) and Appendix B (IS/NOP Comment Letters) of this EIR. Based on the findings in the IS/NOP, and because no substantial environmental comments were received during the scoping period for this EIR, it has been determined that a focused EIR can be prepared for the proposed project, according to CEQA Guidelines Section 15160.

The environmental issues that are determined to result in potentially significant impacts and, therefore, are addressed in detail in this focused EIR are:

- Transportation and Circulation;
- Noise; and
- Air Quality.

In accordance with Section 15128 of the State CEQA Guidelines, the IS/NOP (Appendix A) provides reasons why the following environmental components were not considered significant and, therefore, are not addressed this EIR:

- Geology;
- Land Use;
- Energy and Mineral Resources;
- Public Services;
- Cultural Resources;
- Population and Housing;
- Water;
- Biological Resources;
- Hazards;
- Utilities and Service Systems; and
- Recreation.

1.3 ENVIRONMENTAL REVIEW PROCESS

This EIR has been prepared to meet all of the substantive and procedural requirements of the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code Section 21000 et seq.), California CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.), and the rules, regulations and procedures for the implementation of CEQA as adopted by the City of El Segundo. Accordingly, the City of El Segundo has been identified as the Lead Agency for this project, taking primary responsibility for conducting the environmental review and approving or denying the project.

As a first step in complying with the procedural requirements of CEQA, the City prepared an Initial Study (IS) to determine whether any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment and, if so, to narrow the focus (or scope) of the environmental analysis. For this project, the IS indicated that a focused EIR would be the appropriate type of environmental document to address potential environmental impacts resulting from project implementation.

After completion of the IS, the City filed a Notice of Preparation (NOP) with the California Office of Planning and Research as an indication that an EIR would be prepared. In turn, the IS/NOP was distributed to the public and involved public agencies for a 30-day public review period, which

began on October 2, 1998 and ended on November 2, 1998. The purpose of the public review period was to solicit comments on the scope and content of the environmental analysis to be included in the EIR. The IS/NOP is included as Appendix A of this document. Comment letters on the IS/NOP are included as Appendix B of this document.

In summary, this EIR has been prepared to identify any potentially significant environmental impacts associated with the planning, construction, or operation of the project, as well as appropriate and feasible mitigation measures or project alternatives that would minimize or eliminate these impacts. This document is intended to serve as an informational document, as outlined in Section 15121(a) of the CEQA Guidelines:

An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency.

Furthermore, this EIR will provide the primary source of environmental information for the lead, responsible, and trustee agencies to consider when exercising any permitting authority or approval power directly related to implementation of this project.

During the preparation of the Draft EIR, agencies, organizations, and persons who the City believed may have an interest in this project were specifically contacted. Information, data, and observations from these contacts are included in the EIR. Agencies or interested persons who did not respond during the public review period of the IS/NOP will have an opportunity to comment during the public review period of the Draft EIR, as well as at subsequent hearings on the project.

It should be noted that environmental impacts may not always be mitigated to a level considered less than significant; when this occurs, impacts are considered significant and unavoidable (Class I) impacts. If a public agency approves a project that has significant unavoidable impacts the agency shall state in writing the specific reasons for approving the project, based on the Final EIR and any other information in the public record for the project. This is termed a "statement of overriding considerations" and is used to clearly balance the benefits of a proposed project against its unavoidable environmental risks. The statement is prepared, if required, after the Final EIR has been completed, yet before the Notice of Determination has been filed.

1.4 EIR ADEQUACY

The level of detail contained throughout this EIR is consistent with the State CEQA Guidelines (Section 15151) and recent court decisions which state that:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.

1.5 INTENDED USE OF THE EIR

As previously mentioned, this EIR is intended to provide decision-makers and the public with information which enables them to intelligently consider the environmental consequences of the proposed action. EIRs not only identify significant or potentially significant environmental effects, but also identify ways in which those impacts can be reduced to less-than-significant levels, whether through the imposition of mitigation measures or through the implementation of specific alternatives to the project. In a practical sense, EIRs function as a technique for fact-finding, allowing an applicant, concerned citizens and agency staff an opportunity to collectively review and evaluate baseline conditions and project impacts through a process of full disclosure.

To gain the most value from this report, certain key points should be kept in mind:

- This report should be used as a tool to give the reader an overview of the possible ramifications of the proposed project. It is designed to be an "early warning system" with regard to potential environmental impacts and subsequent effects on the local community's resources and quality of life.
- A specific environmental impact is not necessarily irreversible or permanent. Most impacts, particularly in urban, more developed areas, can be wholly or partially mitigated by incorporating changes recommended in this report during the design and construction phases of project development and program implementation.

- As a policy document, the Circulation Element provides direction related to transportation and circulation within the City of El Segundo for a planning horizon of 10 years. All of the roadway improvements and other changes discussed in this report are not anticipated to occur during this timeframe.
- This report, while a summary of facts, reflects the professional judgment of the author. Therefore, the reader will have to individually weigh and prioritize the facts it reports.

1.6 REQUIRED APPROVALS BY THE CITY OF EL SEGUNDO

This EIR will be used in connection with permits and other discretionary approvals necessary for the implementation of the proposed project. The proposed project is expected to require the following discretionary approvals by the City of El Segundo:

- Certification of the Final EIR;
- Adoption of the Circulation Element; and
- Adoption of Findings Related to the Adoption of the Circulation Element, including determination of conformity to regional transportation plans.

1.7 OTHER AGENCY ROLES AND APPROVALS

In addition to the lead agency, there are also local, state, and federal responsible agencies who have discretionary or appellate authority over specific aspects of the proposed project. The responsible agencies will also rely on this EIR when acting on those aspects of the project that require their approval. Lastly, there are state trustee agencies who have jurisdiction over natural resources held in trust for the people of the State of California. These agencies will similarly rely upon the information contained in this EIR when making decisions, recommendations, or determinations regarding this project. The following approvals (approving agencies in parentheses) are anticipated:

- Certification of compliance with the Congestion Management Program (Southern California Association of Governments);
- Review of the Transportation Demand Management Program and Certification of compliance with the Congestion Management Plan (Caltrans); and

- Review of the Transportation Demand Management Program (South Coast Air Quality Management District).

1.8 PROJECT SPONSORS AND CONTACT PERSONS

The City of El Segundo is the lead agency for the preparation of this EIR. EIP Associates is the environmental consultant to the City and a principal preparer of this EIR. Key contact persons are as follows:

Lead Agency:	City of El Segundo 350 Main Street El Segundo, CA 90245 (310) 322-4670 Attn: Paul Garry, Associate Planner
EIR Consultant:	EIP Associates 11601 Wilshire Boulevard, Suite 1440 Los Angeles, CA 90025 (310) 268-8132 Attn: Steven L. Gerhardt, Project Manager
Primary Consultant:	Meyer, Mohaddes and Associates 400 Oceangate, Suite 480 Long Beach, CA 90802 (562) 432-8484 Attn: Gary Hamrick, Principal in Charge

1.9 PUBLIC REVIEW OF THE DRAFT EIR

This Draft EIR was distributed to affected agencies, surrounding cities, and interested parties for a 45-day review period in accordance with Section 15087 of the State CEQA Guidelines. During the 45-day public review period, which began on October 13, 2000, and ends November 27, 2000, the Draft EIR is available for review at the following locations:

Department of Community, Economic, and Development Services
City of El Segundo
350 Main Street
El Segundo, CA 90245

City of El Segundo Public Library
111 W. Mariposa Avenue
El Segundo, CA 90245

Written comments on the Draft EIR should be addressed to:

Mr. Paul Garry, Associate Planner
City of El Segundo
350 Main Street
El Segundo, CA 90245

Upon completion of the 45-day public review period, written responses to all significant and substantive environmental issues will be prepared for and/or incorporated in the Final EIR. Furthermore, written responses to comments received from state agencies will be made available to these agencies at least 10 days prior to the public hearing at which the Certification of the Final EIR will be considered. These comments, and their responses, will be included in the Final EIR for consideration by the City of El Segundo Planning Commission and City Council, as well as any other public decision makers.

1.10 DOCUMENT ORGANIZATION

This EIR has been designed for easy use and reference. To help the reader locate information of particular interest, a brief summary of the contents of each section of the EIR is provided. The following chapters are contained within the EIR:

- Summary** This section contains an overview of the scope of the EIR, as well as a summary of environmental impacts, proposed mitigation, level of significance after mitigation, and unavoidable impacts. Also contained within this section is a summary discussion of project alternatives and potential growth-inducing impacts.
- Section 1. Introduction** - This section provides an overview of the proposed project, the environmental process, and the approvals for which this EIR will be used.
- Section 2. Project Description** - This section defines the project location, summarizes the proposed project, and outlines the applicant's project objectives.
- Section 3. Environmental Impact Analysis** - This section describes and evaluates the environmental issue areas, including the existing environmental setting and background, applicable environmental thresholds, environmental impacts (both short-term and long-term), policy considerations related to the particular environmental issue area under analysis, mitigation measures capable of minimizing environmental harm, and a residual statement as to the effectiveness of mitigation measures. Where additional actions must be taken to ensure consistency with environmental policies, recommendations are made as appropriate. By consolidating environmental impact assessment and site specific policy directives within each impact area, clear linkages between impact assessment and related policy consistency can be established.
- Section 4. Alternatives to the Proposed Project** - This section analyzes alternatives to the proposed project, which include the no project alternative, buildout of the current Master Plan of Streets only, an alternative site for the proposed project, and an enhanced project alternative.
- Section 5. Long-Term Implications** - This section provides a summary of the proposed project's potential to lead to population growth and the indirect implications of that

growth on the city, summarizes the discussion of cumulative impacts, provides a list of proposed project impacts that are significant and unavoidable by issue area, and identifies the irreversible changes to the natural environment resulting from the proposed project.

Section 6. Organizations and Persons Consulted/List of EIR Preparers - This section identifies the public and private agencies and individuals contacted during the preparation of this report, and all individuals responsible for the preparation of this report.

Section 7. References - This section identifies all references used and cited in the preparation of this report.

2.0 Project Description

2.1 PROJECT LOCATION

The City of El Segundo is a coastal town located immediately south of Los Angeles International Airport, north of Manhattan Beach, and west of the communities of Del Aire and Hawthorne, in the County of Los Angeles, California. Figure 2-1 illustrates the City's location with respect to the southern California region. Figure 2-2 further illustrates the local vicinity of the City.

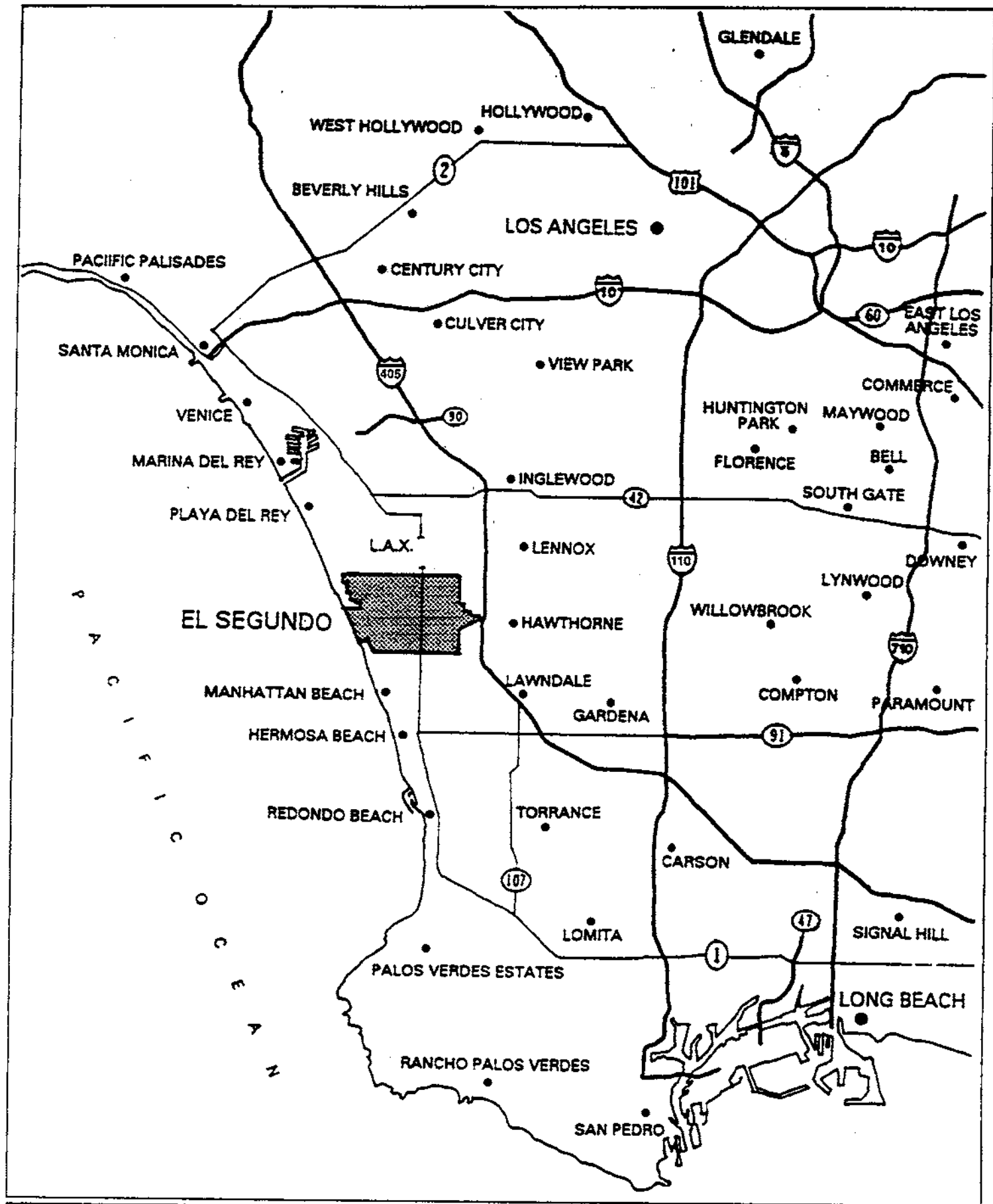
2.2 SITE CHARACTERISTICS

Topography

According to the USGS topographic map of the Venice, California quadrangle (1964, photorevised in 1981), the City covers an area of gently rolling terrain that varies in elevation from approximately 100 to 200 feet above mean sea level. To the west of the City are steep coastal bluffs, exceeding 30% slope, descending to a coastal beach area.

Existing On-Site and Surrounding Land Uses

In general, the City is a primarily urban and suburban environment with a variety of commercial, residential and industrial land uses. Across Imperial Highway to the north is Los Angeles International Airport. The Hyperion Waste Treatment Plant occupies the land area beyond north-western city limits. The south-western portion of the City is occupied by the Chevron Oil Refinery, the City of Los Angeles Scattergood Energy Plant, and former Southern California Edison Energy Plant. All of the City's residential neighborhoods are located west of Sepulveda Boulevard, and North of El Segundo Boulevard. A number of parks and schools are scattered throughout the City's residential neighborhoods. Along Sepulveda and Rosecrans Boulevards, in the Smokey Hollow area, and east of Sepulveda Boulevard, there are larger parcels containing office complexes, industrial uses, and other more intense uses, including high-rise office buildings. To the east of the City is the unincorporated community of Del Aire in Los Angeles County and the City of Hawthorne.



Not to Scale



EIP

SOURCE: City of El Segundo, 1991

10228-00

FIGURE 2-1
Regional Location

City of El Segundo

Existing General Plan Designations

The City of El Segundo (City) is served by a network of roadways designated as major arterials (8 lanes divided), secondary arterials (6 lanes divided), collector 4-lane (4 lanes undivided), collector 2-lane (2 lanes undivided), and local (2 lanes undivided).

Existing Zoning

Within the City, land is zoned for use as open space, automobile parking, single-family residential, planned residential, two-family residential, multi-family residential, public facilities, downtown commercial, neighborhood commercial, general commercial, corporate office, urban mixed-use north, urban mixed-use south, light industrial, heavy industrial, small business, medium manufacturing, Grand Avenue commercial, medium density residential, and multi-media overlay.

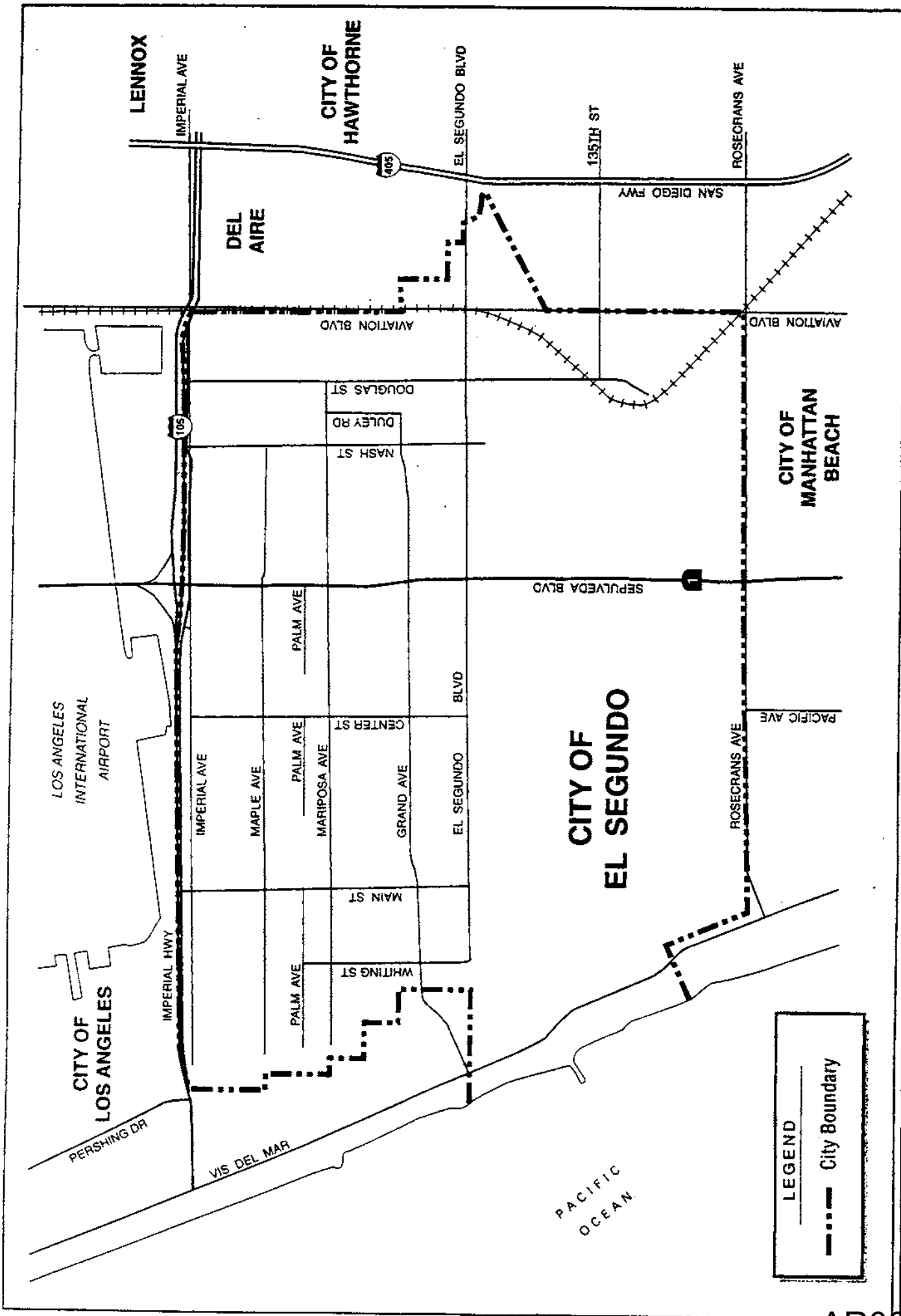
2.3 Project Objectives

The City seeks to revise the Circulation Element of the General Plan, adopted in 1992. The objective of the Circulation Element Update is to maintain consistency with State and local congestion and transportation policies and practices and consistency with the City's Land Use Element. Pertinent California Government Code (CGC) sections are as follows:

CGC Section 65302(b): "[The general plan shall include] a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public facilities, all correlated with the land use element of plan."

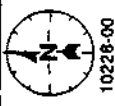
CGC Section 95303: "The general plan may... address any other subjects which, in the judgement of the legislative body, relates to the physical development of the county or city."

Specific goals, objectives and policies related to transportation system planning are presented in the Circulation Element Update Technical Report (Technical Report, MMA 2000), included as Appendix C of this document.



LEGEND

--- City Boundary



10226-00

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FIGURE 2-2
Local Vicinity
City of El Segundo

2.4 PROPOSED PROJECT DESCRIPTION

The City adopted the current Circulation Element of its General Plan in 1992. Recent assessment of the City's transportation system as described in the Technical Report suggests that build-out of the current Master Plan of Streets will not be able to accommodate the level of growth anticipated by the City's Land Use Plan without creating adverse traffic operating conditions into the foreseeable future. The Circulation Element Update assesses the impacts of future growth in traffic and recommends a transportation system that will accommodate that growth with acceptable traffic operating conditions. The project analyzed in this EIR is the Circulation Element update of the City's General Plan, and any implementation actions associated with this update.

Specifically, a number of recommendations are described in the Technical Report for improvements beyond those associated with build-out of the current Master Plan of Streets. These improvements include incorporation of:

- Intelligent Transportation System (ITS) signaling and real-time monitoring systems;
- Conversion of the Nash/Douglas Street one-way couplet back to two-way flow;
- Inclusion of the future transportation corridor on the Southeast quadrant of the City to replace the extension of Hughes Way as a specific improvement;
- Dual left turn lanes;
- Exclusive right turn lanes and right turn overlap phases; and
- Additional through lanes.

Discussion of these improvements is found in the Circulation Element Update Technical Report (MMA 2000), included as Appendix C of this document.

The Technical Report assesses a number of additional transportation issues and makes recommendations for these as well. Therefore, the following are considered additional components of the proposed project:

- Deletion of several unconstructed roadway sections designated in the current Master Plan of Streets (i.e., Nash Street extension, Grand Avenue extension from Douglas Street to Aviation Boulevard, Mariposa Avenue extension);
- Implementation of a Neighborhood Traffic Control Program with an analysis protocol for evaluation of candidate streets;

- Review of the Downtown area, including Main Street and other adjacent streets, in the context of an overall Downtown Specific Plan recently adopted by the City;
- Implementation of an increase in development density within the Smoky Hollow Specific Plan Area;
- Future redevelopment of the Chevron refinery site;
- Revision of the Master Plan of Truck Routes according to revisions of the Master Plan of Streets; and
- Revisions to the Goals, Objectives, and Policies of the Circulation Element.

Detailed discussion of these project components are found in the Technical Report.

Implementation of the roadway improvements and other components of the Circulation Element will occur incrementally as the City completes projects as part of the Capital Improvement Program and as individual development projects are required to implement improvements as mitigation measures to offset traffic impacts of those projects. The overall timeframe for the Circulation Element extends to 2010. Specific improvements will be completed over time and as budget permits. It is conceivable that some components of the circulation element will not be complete by 2010, or may be replaced by other improvement measures deemed appropriate at the time individual projects are considered for approval.

3.0 Environmental Analysis

INTRODUCTION

This section is the primary component of the EIR as it provides information on a project's existing conditions, its potential impacts, and feasible mitigation measures. The existing conditions component defines the environmental conditions as they currently exist on and near the project site, while project impacts are defined as the project's effect on the existing environment. Mitigation measures are designed to reduce a project's potential impact to less than significant levels. Environmental topics addressed in the EIR were defined by the City of El Segundo through the IS/NOP process. The purpose of this section is to inform readers of the type and magnitude of the project's environmental impacts and how such impacts would affect the existing environment.

CUMULATIVE IMPACT ANALYSIS

Cumulative impacts refer to the combined effect of project impacts with the impacts of other past, present, and foreseeable future projects. Both CEQA and the CEQA Guidelines require that cumulative impacts be analyzed in an EIR when the resulting impacts are considered significant. The discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. Further, the discussion is intended to be guided by the standards of practicality and reasonableness. According to Section 15355 of the CEQA Guidelines:

"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

CEQA Guidelines Section 15130 (a)(1) provides the scenario for the analysis of cumulative impacts associated with the proposed project.

As defined in Section 15355, a "cumulative impact" consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.

In addition, as stated in the CEQA Guidelines, Section 15064(i)(5):

The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable.

Therefore, the cumulative discussion in an EIR focuses on whether the impacts of the project under review are cumulatively considerable, not the impacts of other past, present, or future projects.

Development projects that have been recently completed, are under construction, or have been approved are described in the Circulation Element Update Technical Report (MMA 2000), included as Appendix C of this document. These projects contribute to a cumulative development scenario of the City and provide the basis of analysis of cumulative impacts for each of the issue areas of this section.

As shown in Exhibit 2 of the Technical Report, the transportation network in the City of El Segundo is connected to a regional transportation network that includes major freeways such as the San Diego Freeway (I-405) and the Century Freeway (I-105). Access to I-405 is provided via Imperial Highway, El Segundo Boulevard, and Rosecrans Avenue. On and off-ramp connectors to the I-105 are provided at Imperial Highway, Sepulveda Boulevard, Hughes Way, Arwood Way and a westbound off-ramp at Nash Street. Other roadways within El Segundo that carry regional traffic are Aviation Boulevard, Sepulveda Boulevard, Imperial Highway, and Rosecrans Avenue. Thus the cumulative scenario considers transportation issues associated with these roadways such as growth of Los Angeles International Airport and land use changes in adjacent cities.

ORGANIZATION OF THE ENVIRONMENTAL ANALYSIS

The environmental impact analysis has been organized into a series of sections addressing each environmental issue area, and are divided into the following subsections:

Introduction. Each section contains an introduction which describes the contents of the section and references other important studies and reports, such as technical appendices and related EIRs used in preparation of the section.

Existing Conditions. This subsection describes existing conditions which may be subject to change as a result of implementation of the proposed project.

Thresholds of Significance. Before potential impacts are evaluated for significance, the threshold which will serve as the basis for judging impact significance is presented. This subsection defines appropriate thresholds of significance as determined by the lead agency.

Impacts. This subsection states and explains significant impacts caused by the project, as well as effects considered to be less than significant.

Cumulative Impacts. A brief discussion of the cumulative impacts of the project is provided, as appropriate. Cumulative impacts are considered with respect to the cumulative development scenario described below, in this introduction to the environmental analysis.

Mitigation Measures. If the impacts are considered to be potentially significant, mitigation measures are proposed to reduce or avoid the impacts. This subsection lists appropriate mitigation measures and relates them to their corresponding significant impact.

Level of Significance After Mitigation. This section provides a brief discussion of whether or not any significant impacts will result from the project after appropriate mitigation measures are implemented.

3.1 Transportation and Circulation

3.1.1 Introduction

This section addresses the environmental setting and impacts related to the implementation of the Circulation Element Update (proposed project.) The section provides descriptions of the existing transportation and circulation system in the City of El Segundo, State and local transportation planning regulations, thresholds of significance, and an analysis of impacts associated with implementation of the proposed project. This section is based, in large part, on the Circulation Element Update Technical Report (Technical Report), prepared by Meyer, Mohaddes Associates (MMA 2000), attached as Appendix C to this document. According to CEQA Guidelines (Section 15147), the Technical Report is incorporated into this EIR by reference. Please refer to the Technical Report for text, exhibits, and tables referred to in this section.

3.1.2 Existing Conditions

Existing Circulation System

The City of El Segundo is served by the existing network of roadways shown in Exhibit 1 of the Technical Report. The existing street network is essentially a grid system of north/south and east/west roadways. The primary north/south roadways are Aviation Boulevard, Douglas Street, Nash Street, Sepulveda Boulevard (State Highway), Center Street, Main Street and Vista Del Mar. The primary east/west streets are Imperial Highway, Imperial Avenue, Maple Avenue, Mariposa Avenue, Grand Avenue, El Segundo Boulevard and Rosecrans Avenue. The characteristics of each of these roadways (number of lanes, traffic control, parking, etc.) are described in Table 1 of the Technical Report.

Regional access to the City of El Segundo is provided primarily by the San Diego Freeway (I-405) to the east and the Century Freeway (I-105) to the north. Access to the San Diego Freeway is provided via Imperial Highway, El Segundo Boulevard and Rosecrans Avenue. On and off-ramp connectors to the Century Freeway are provided at Imperial Highway, Sepulveda Boulevard, Hughes Way, Atwood Way and a westbound off ramp at Nash Street. Other roadways which carry significant amounts of regional traffic are Aviation Boulevard, Sepulveda Boulevard, Imperial Highway and Rosecrans Avenue. The regional roadway network is shown in Exhibit 2 of the Technical Report.

The characteristics of key arterial roadways in the City of El Segundo are shown in Exhibit 3 of the Technical Report, including the present number of roadway lanes. Exhibit 3 also presents the number of roadway lanes designated in the City's 1992 adopted General Plan Circulation Element

for each roadway upon buildout of the General Plan, including those roadways not yet constructed.

Analysis of Daily Operating Conditions on Existing Street Network

Exhibits 4 and 5 of the Technical Report illustrate daily traffic volume on the roadway system. Existing daily traffic volumes were collected by the City of El Segundo as part of the City's traffic count program. The counts were collected in May 1998.

Traffic operating conditions were analyzed on each of the arterials designated on the City's Master Plan of Roadways. This was done by comparing the average daily traffic volume for each arterial segment to the estimated daily capacity. A volume to capacity ratio (V/C) was determined for each roadway segment. The daily roadway capacity for each roadway was estimated by considering the existing number and type of roadway lanes (shown in Exhibit 3). Table 2 of the Technical Report lists the estimated roadway capacities by type of roadway and number of lanes.

Arterial Level of Service Concept

The concept of arterial level of service is typically defined in terms of average travel speed of all vehicles on the arterial. Average travel speed is strongly influenced by the density of signalized intersections per mile and average intersection delay. In some cases, such as the City of El Segundo, the volume-to-capacity ratio definition of arterial level of service is more appropriate due to the variations of signalized intersection densities within the city (i.e., the portion of the city west of Sepulveda Boulevard is more residential in nature with fewer traffic signals per mile versus the portion of the city east of Sepulveda Boulevard which is more commercial/business oriented and has more signals). Exhibit 6 of the Technical Report shows a graphical representation of level of service (LOS), traffic flow conditions and average travel speed ranges for arterial roadway segments.

Levels of Service range from LOS A to LOS F. Level of Service A indicates excellent operating conditions and little motorist delay. Level of Service F represents congested conditions with excessive vehicle delay. The analysis of the daily arterial operating conditions was conducted by comparing the daily traffic volume and estimated daily capacity for each roadway defined in Table 2. A review of Table 3 and Exhibit 7 reveals that the majority of roadways in the City of Segundo operate at LOS D or better. The following roadway segments currently operate at LOS E or F:

- Imperial Highway from Main Street to Center Street (LOS E);
- Rosecrans Avenue from Nash Street to Douglas Street (LOS E);
- Sepulveda Boulevard from Imperial Highway to Mariposa Avenue (LOS E);
- Imperial Highway from Center Street to Sepulveda Boulevard (LOS F);

- Rosecrans Avenue from Douglas Street to Aviation Boulevard (LOS F); and
- Sepulveda Boulevard from El Segundo Boulevard to Rosecrans Avenue (LOS F).

Analysis of Peak Hourly Operating Conditions on Existing Street Network

Intersections are the locations where most arterial roadway network congestion usually occurs since the available roadway capacity must be shared by two intersecting streets. Therefore, in addition to the analysis of roadway segments, existing peak hour traffic conditions at intersections have been assessed. A computer traffic model (TRAFFIX) has been used to assess traffic operating conditions at 34 key intersections.

Consistent with City of El Segundo guidelines for traffic impact analyses, traffic operating conditions were analyzed using standard intersection capacity analysis techniques known as Intersection Capacity Utilization (which is referred to hereinafter as "ICU"). The ICU methodology was used to analyze signalized intersections, and is further described in the Technical Report.

Four of the study intersections are not signalized, but instead are controlled by stop signs on some or all approaches. Since they are stop sign controlled, those intersections operate differently than signalized intersections and are analyzed using an average delay methodological approach. Two study intersections (Center St./Grand Ave. and Main St./El Segundo Blvd.) are all-way stop sign controlled, meaning all four approaches are stop-controlled. Two study intersections (Douglas St./Utah Ave. and Center St./El Segundo Blvd.) are stop/uncontrolled meaning only the minor street approaches are stopped while the major street approaches are uncontrolled. The specific average vehicle delay ranges relating to level of service for all-way stop controlled locations are described further in the Technical Report.

Review of Table 5 and Exhibit 8 shows that seven intersections within the City currently operate at LOS E or F during either or both the AM and/or PM peak hours, as follows:

- Aviation Boulevard/El Segundo Boulevard (AM);
- Aviation Boulevard/Rosecrans Avenue (AM, PM);
- Sepulveda Boulevard/Imperial Highway (AM, PM);
- Sepulveda Boulevard/Grand Avenue (AM, PM);
- Sepulveda Boulevard/El Segundo Boulevard (AM, PM);
- Sepulveda Boulevard/Rosecrans Avenue (AM, PM); and
- Main Street/Imperial Highway (AM).

Current Master Plans of Streets

The current El Segundo Master Plan of Streets was adopted in 1992 as part of the City's General Plan and is shown on Exhibit 9 of the Technical Report. The current street classification standards for each of the non-freeway roads are shown on Exhibit 10 of the Technical Report. The function and brief description of each classification is provided in the Technical Report. The City's Master Plan of Streets designates roadways as one of the five street classifications according to function. The five classifications are:

- Local Streets;
- Collector Streets;
- Secondary Arterials;
- Major Arterials; and
- Freeways.

Bicycle Routes

The existing system of bicycle facilities in El Segundo are classified separately, per State Department of Transportation standards into three classes. Characteristics of these classes are discussed in the Technical Report. Essentially, bicycle facilities in El Segundo include bicycle paths (Class I), bicycle lanes (Class II) and bicycle route markings (Class III) along Imperial Highway, as well as bicycle paths (Class I) along the beach (Los Angeles County) and portions of Grand Avenue approaching the beach. Exhibit 11 of the Technical Report illustrates existing and planned bicycle routes in the City. All routes shown on the exhibit are future planned routes unless specifically indicated as existing on the map.

Public Transportation

The current transit service in El Segundo is provided by fixed bus routes operated by the Los Angeles County Metropolitan Authority (LACMTA), Torrance Transit system, Santa Monica Municipal Bus Line, Municipal Area Express, Westchester Shuttle system, and light rail. A description of each of the 12 lines that operates in or around the City is shown graphically in Exhibit 11 of the Technical Report.

Demand-responsive transit service (Dial-a-Ride) in El Segundo is provided by one fourteen-passenger van, and has been in operation since 1975. Residents phone for appointments and a door-to-door response time of approximately 10 minutes is provided. During the summer months, the City of El Segundo Department of Parks and Recreation operates a beach shuttle service, serving El

Segundo and Manhattan Beach.

The 2.9 mile Green Line Extension running from the Century Freeway south through El Segundo provides access to the regional rail rapid transit system via rail stations at four locations in El Segundo. The four Metro Stations are located at Aviation/I-105, Mariposa/Nash, El Segundo/Nash, and Douglas/Rosecrans. See Exhibit 12 in Appendix C for the rail alignment route and station locations.

Truck Routes

The El Segundo Municipal Code officially authorizes the City Council, by resolution, to designate truck routes on streets where vehicles in excess of three tons may travel. Existing truck routes are provided with appropriate sign posting to guide truck traffic through the City. These routes are shown in Exhibit 13 of the Technical Report.

Freight Railroad Facilities

The City of El Segundo has several railroad lines that are actively used for freight transport. Most prominently located in the southeast portion of the City are the Burlington Northern/Santa Fe (BNSF) Railroad and the Southern Pacific Railroad. These rail lines do not provide public transportation service. The crossing of freight trains occasionally disrupts vehicular traffic on the City's streets. This contributes to the existing delay and congestion in the vicinity of the crossings. The Alameda Corridor Project, scheduled to be completed by 2003, will provide additional north/south railway capacity. This will result in an overall reduction in train activity in the South Bay, including the City of El Segundo.

Pedestrian Circulation

The majority of streets in El Segundo have been developed with sidewalks on both sides of the right-of-way. These sidewalks provide pedestrian access throughout the City. Furthermore, the relatively high percentage of elderly residential population in El Segundo, school children and mid-day walkers for shopping trips and jogging, necessitate the establishment of a pedestrian circulation system that will support and encourage walking as a mode of transportation, particularly in the residential areas within walking distance to commercial areas. The City continues to install corner curb ramps to facilitate movement for people using wheelchairs at all newly reconstructed intersections and retrofit existing intersections to the extent feasible.

Future Travel Forecasts

According to the Technical Report, traffic forecasts were developed for anticipated growth under the City's Land Use Plan as presented in the General Plan Land Use Element. The traffic forecasts incorporated the type and density of future land uses within the City, the location and potential interaction of various land use types, as well as the characteristics and capacity of each of the City's roadways. The following types of development activity in the City have been considered:

- Approved Projects (i.e., those projects which have already received discretionary approval or are being considered, including the pending Rockwell and Media Center projects);
- Vacant Parcels (i.e. vacant parcels with potential for development, assuming appropriate zoning categories and floor-area-ratios); and
- Recyclable Parcels (i.e., parcels which currently have buildings, but which are likely to be recycled within the time frame of the Circulation Element.)

Approved and active projects in El Segundo considered as part of future travel forecasts are listed in the Technical Report. The approved projects would generate approximately 5,209 new AM peak hour and 5,107 new PM peak hour trips which account for approximately 65 to 53 percent, respectively, of all added trips to and from the City (see Table 6 in Appendix C).

Total buildout to maximum allowed densities of all vacant and recyclable parcels in the City is not likely within the 10-year horizon of the Circulation Element. Therefore, City planning staff have estimated the likely market buildout throughout the City. Based on historic trends and patterns, it is assumed that 20 percent (2 percent annually) of total potential buildout will occur within the horizon of the Circulation Element. Table 6 in the Technical Report illustrates growth projections that have been assumed for purposes of the future traffic forecasts. As indicated, there is the potential for development of 12.5 million square feet on the vacant and recyclable parcels, with 2.5 million or 20 percent occurring within the 10-year time horizon of the Circulation Element.

Trip generation rates from the Institute of Transportation Engineers were applied to the forecast land use growth to determine the estimated future increase in trip generation to and from vacant and recyclable parcels in the City. As shown in Table 6, the greatest number of new trips would occur due to development in the Urban Mixed Use-North (MU-N) zone, which accounts for approximately 40 to 50 percent of all new trips, followed by development in the Corporate Office (CO) and General Commercial (C-3) zones. The traffic forecasts indicate that development will add approximately 8,060 new AM peak hour, 9,573 new PM peak hour and 95,700 daily trips to the City's roadway system.

Projected Traffic Volumes on El Segundo Arterial Roadways

Future conditions were assessed in terms of growth in El Segundo and with additional consideration of regional through trip growth related to LAX. The additional traffic forecast in each traffic analysis zone is shown in Exhibits 14 and 15 of the Technical Report, indicating that the greatest traffic volume increases would occur in the area between Douglas Street and Continental Boulevard north of Grand Avenue, and also between Nash Street and Aviation Boulevard south of Imperial Highway. Streets with the highest anticipated traffic volume increases include Aviation Boulevard, Sepulveda Boulevard, Nash Street, Douglas Street, Imperial Highway and El Segundo Boulevard. These streets are expected to experience significant increases in traffic as well as degradation in level of service due to the large concentration of development and new tripmaking which will occur adjacent to them. Table 7 of the Technical Report describes future traffic conditions due to growth in El Segundo, indicating that the following locations are forecast to worsen from LOS D or better, to LOS E or F:

- Aviation Boulevard/Imperial Highway (LOS F during PM peak hour);
- Aviation Boulevard/El Segundo Boulevard (LOS F during AM and PM peak hour);
- Douglas Street/Imperial Highway (LOS F during PM peak hour);
- Douglas Street/El Segundo Boulevard (LOS E during PM peak hour);
- Nash Street/Imperial Highway (LOS F during AM peak hour);
- Nash Street/Maple Avenue (LOS F during AM peak hour);
- Nash Street/El Segundo Boulevard (LOS E during AM peak hour, LOS F during PM peak hour); and
- Continental Boulevard/El Segundo Boulevard (LOS E during AM peak hour.)

In addition, service levels at the intersections listed below are currently at LOS E or F would further worsen due to growth within the City.

- Aviation Boulevard/Rosecrans Boulevard (AM and PM peak hour.)
- Sepulveda Boulevard/Imperial Highway (AM and PM peak hour.)
- Sepulveda Boulevard/Grand Avenue (AM and PM peak hour.)
- Sepulveda Boulevard/El Segundo Boulevard (AM and PM peak hour.)
- Sepulveda Boulevard/Rosecrans Boulevard (AM and PM peak hour.)

In addition to growth in the City, LAX is expected to contribute through trips to the City's major arterial facilities. Those trips will be non-local through trips which pass through the City without stopping. The anticipated effects of LAX growth on City roadways is incorporated into the analysis. According to the Technical Report, 700 PM peak trips on Sepulveda Boulevard, 400 PM peak trips

on Aviation Boulevard and 100 PM peak trips added on El Segundo Boulevard are due to the growth of LAX. These assumptions are consistent with recent figures found in traffic studies for development projects in the City. Table 7 of the Technical Report also presents the results of the analysis considering growth in El Segundo as well as growth associated with LAX. The results of the analysis indicate that LAX through trip growth will not result in new LOS E or F intersections, however it will push three intersections into LOS D operations and also worsen several others already forecast to operate at LOS E or LOS F. More detailed impact information on the impact of LAX on the City of El Segundo will become available with the release of the LAX Master Plan environmental study. Table 8 of the Technical Report compares future intersection operating conditions under each analysis scenario. Exhibit 16 of the Technical Report illustrates additional forecast PM peak hour trips. The results of the future conditions analysis are shown graphically in Exhibit 17 of the Technical Report.

Planned/Funded Roadway Improvements

A series of roadway improvements are planned, funded or currently under construction. The traffic model forecasts have included these roadway improvements since they will be completed prior to buildout of the Land Use Element. These roadway improvements are illustrated in Exhibit 18 of the Technical Report and listed below. A more detailed discussion of these improvements is provided in the Technical Report.

- Widening of Aviation Boulevard from Rosecrans Boulevard to Imperial Highway;
- Widening of Sepulveda Boulevard from Rosecrans Boulevard to Grand Avenue;
- Construction of a left-turn pocket for northbound Continental Boulevard at Grand Avenue; and
- Extension of Douglas Street from Park Place to Alaska Avenue.

Analysis of Current Master Plan of Streets

The current Master Plan of Streets (adopted in 1992) was developed to serve the future traffic needs based upon the anticipated level of development in the General Plan. Exhibit 9 of the Technical Report illustrates the current Master Plan of Streets.

The current Master Plan of Streets has designated a preferred number of traffic lanes to support buildout of the General Plan land use element. That master plan has been re-evaluated to determine if it will adequately handle forecast future traffic volumes. The traffic model has been run assuming full implementation of the current Master Plan of streets (excluding street extensions). This means

that the full cross section of lanes for each street designation is assumed as shown in Exhibit 9. Therefore, all streets designated as 6D, or six lane divided, are assumed to have three through lanes in each direction (six through lanes total) in the future. All streets designated as 8D are assumed to have four through lanes in each direction.

The current Master Plan of Streets, if implemented, would reduce several forecasted level of service E or F conditions. Even with the master plan fully implemented, however, several intersection deficiencies would still occur due to local growth and increases in regional traffic. Intersection deficiencies that would remain with the master plan fully built are described in the next section of the report. Table 9 of the Technical Report displays intersection deficiencies with the buildout of the current Master Plan of Streets (excluding unconstructed segments which are considered separately as described in the following section). The analysis has been conducted separately for consideration of growth in the City of El Segundo, and also for growth due to LAX.

Furthermore, there are a number of streets on the City's current Master Plan of Streets that are unconstructed. None of the street extensions would be expected to relieve through traffic, since none would provide continuous travel routes for regional through trips. Therefore, the main purpose of each street extension is to serve local parcels of land as they are developed and provide access to each parcel.

These streets include:

- Nash Street;
- Lairport Street;
- Grand Avenue;
- Mariposa Avenue; and
- Hughes Way.

To predict the operational conditions of these unconstructed streets, the future Land Use Element buildout traffic conditions were forecasted for each street segment. According to the Technical Report, each street segment was considered individually in terms of the necessity to keep it in the Master Plan of Streets or the feasibility of deleting it from the Master Plan of Streets. Details of the evaluation process are described in the Technical Report. The results of the analysis for each potential street extension are described in Table 10 of the Technical Report. Exhibit 19 of the Technical Report illustrates the recommendations for deleting or maintaining unconstructed street extensions in the Master Plan of Streets. In summary, these recommendations are as follows:

- Delete Nash Street extension (replaced generically by the Future Transportation Corridor);
- Maintain Lairport Street extension;
- Maintain Grand Avenue extension to Douglas Street, but delete segment from Douglas to Aviation;
- Delete Mariposa Avenue extension; and
- Delete Hughes Way extension (replaced generically by Future Transportation Corridor).

Nash/Douglas Couplet

Nash and Douglas Streets currently operate as one-way streets from El Segundo Boulevard to Imperial Highway. The change to one-way operation was completed in response to the opening of the I-105 Freeway and concerns associated with freeway access and related congestion. In 1996 when the streets were converted from two-way to one-way, the construction cost was \$612,000 (not including design and engineering) and the conversion took 9 to 12 months to complete after approval. Since the conversion to one-way operation, there have been concerns related to the circuitous travel paths created for some businesses, and driver confusion navigating the one-way couplet. The traffic analysis indicated that conversion to two-way flow, with appropriate mitigation measures would provide acceptable traffic operating conditions. Conversion to two-way traffic flow was indicated as a high priority by the City Council. Based on the technical findings and the City's strong desire to return to two-way flow, this change has been incorporated into the proposed project, and the remainder of the Circulation Element assumes two-way flow as a baseline condition.

Main Street/Downtown Commercial District

The downtown Main Street corridor was studied as part of a specific planning study. As part of that effort, the Technical Report has analyzed various development scenarios and roadway configurations for Main Street. The roadway analysis includes Main Street assumed as a two-lane facility (one lane in each direction) or a three-lane facility (one lane in each direction, plus a center two-way left turn lane). In conjunction with this analysis is the consideration of reclassification of Main Street, currently designated as a secondary arterial, to a designated Downtown collector street. This is a special designation that applies only to Main Street in the Downtown area. Exhibit 22 of the Technical Report illustrates the alternative roadway configurations. As adopted as part of in the Downtown Specific Plan, the proposed configuration for Main Street was for a two-lane roadway with either a continuous left turn median or left turn pockets. These two configurations were determined to be functionally equivalent because of the limited number of mid-block driveways along Main Street in the Downtown area.

Smoky Hollow Specific Plan Area Land Use

The Technical Report includes analysis of two land use growth alternatives for the Smoky Hollow Specific Plan Area, based on the proposed development of Small Business (SB) and Medium Manufacturing (MM) land uses. Currently there are no proposed or approved development projects within the Specific Plan Area. The focus of the analysis is the potential net change of the proposed SB and MM land uses over the existing conditions at FAR 1:1 and FAR 1.3:1. Both are currently zoned at 0.6:1 floor area ratio (FAR) but they are built out to 0.8:1 FAR.

Future Redevelopment of the Chevron Oil Refinery

The current land uses and activities on the Chevron Oil Refinery site are expected to remain throughout the life of this General Plan and Circulation Element. However, potential redevelopment of this site would have a significant impact on circulation, and is discussed below, in Section 3.1.5 (Impacts.)

Residential Neighborhood Issues

Specific residential neighborhood circulation issues were raised as part of the scoping process for the Circulation Element Update, including:

- The narrow cross section of Mariposa Avenue
- Peak period congestion around schools during pick-up and drop-off

These issues are discussed further in the Technical Report.

Congestion Management Program

The 1997 Congestion Management Program (CMP) for Los Angeles County and the 1999 CMP report describe the statutory requirements for local jurisdictions as part of the CMP. Statute requires that the CMP analyze the impacts of land use decisions on the regional transportation system. All development projects that are required by a local jurisdiction to prepare an Environmental Impact Report are subject to the CMP Land Use Analysis Program and must include a CMP Transportation Impact Analysis (TIA). The Circulation Element of the City of El Segundo is intended to support the Land Use Element of the City's General Plan. A TIA is required when the following thresholds are met:

- For CMP monitoring intersections, including monitored freeway on-ramps or off-ramps, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours.
- Mainline freeway monitoring locations where the project will add 150 or more trips in either direction, during either the AM or PM weekday peak hours.

If, based on these criteria, no CMP facilities are identified for study, no further highway or freeway system analysis need be conducted. The Circulation Element itself is not a development project and does not result in any development activity nor will it add any trips on the regional transportation system. In fact, adoption and implementation of the Circulation Element as proposed will provide mitigation measures for some of the already approved development activity in the City. None of the proposed CMP elements would result in the addition of trips to the CMP system. Although a few future unconstructed roadway links are proposed for deletion from the City's Master Plan, it is not expected that those deletions would add trips to CMP monitoring stations since those roadways were intended to serve mostly local traffic. Individual developments in the City will continue to be required to provide CMP Transportation Impact Analysis according to CMP guidelines. In addition, several policies within the Circulation Element (Objective C4-1, Policies C4-1.1 through C4-1.3) encourage and require compliance with state, county and regional planning including the Congestion Management Program.

It should be noted that there is one CMP arterial monitoring station in El Segundo; the intersection of Sepulveda Boulevard and El Segundo Boulevard. That location is analyzed as part of the Circulation Element analysis in this EIR.

Relationship to Regional Transportation Plan Policies

The Southern California Association of Government's Regional Comprehensive Plan and Guide and Regional Transportation Plan contain a group of core policies. The Circulation Element of the City of El Segundo supports and is consistent with the applicable core policies of the Regional Transportation Plan, as described below.

Core Transportation Plan Policies - The Circulation Element supports the need for improved access, and for safe, comfortable, convenient and economical movement of goods and people through the buildout of the City's Master Plan of streets to increase capacity, the use of Intelligent Transportation Systems technologies to reduce delays, and adoption of numerous Goals, Objectives and Policies that support and promote alternative means of transportation and also to reduce tripmaking through transportation demand management. Please refer to Circulation Element Policies C1-1.1 through C1-2.1 which support a safe, convenient and cost effective transportation system, Policies C1-3 through C1-3.5 which support goods movement via designated truck route and off-street commercial loading areas, Policies C2-1.1 through C2-3.11 which promote alternative

modes of transportation including bicycle, pedestrian, and transit modes, Policies C2-5 through C2-5.3 which promote transportation demand management measures and trip reduction, and Policies C4-1 through C4-2.4 which promote compliance with all federal, state and regional regulation.

The table below illustrates the applicable City circulation goals, objectives, and policies, which support the core regional transportation plan policies (see Appendix C).

**Policies in Support of SCAG's
Regional Transportation Plan Core Policies**

Regional Transportation Plan Core Policies	Supporting City of El Segundo Circulation Element Goals, Objectives and Policies
4.02 - Transportation Mitigation	C3-1.1
4.03 - Freight Movement	C1-3 to C1-3.5
4.04 - Transportation Control Measures	C4-1.1 to C4-1.3
4.05 - RTIP	N/A
4.06 - Transit, Freight, ITS	C2-3.2, C2-4.2
4.07 - RTIP Phasing	N/A
4.08 - Transit Accessibility	C2-3.6
4.10 - Transit Accessibility	Objective C2-3
4.11 - Transit Privatization	N/A
4.15 - Arterial HOV	C2-3.2, C2-3.2
4.16 - TSM on Existing System	C2-4.2
4.17 - HOV	N/A
4.20 - TSM	C2-4.2
4.21 - TSM	C2-4.2
4.22 - ITS	C2-4.2, C2-3.11
4.23 - TSM Coordination	Objective C4-2, C4-2.4
4.24 - Regional Safety	N/A
4.25 - Non-motorized	Goal C2, Objective C2-1, Policies C2-1.1 to C2-3.11
4.28 - Goods Movement	C1-3 to C1-3.5
4.36 - Goods Movement	C1-3 to C1-3.5
4.38 - Goods Movement	C1-3 to C1-3.5
4.39 - Goods Movement	C1-3 to C1-3.5

Relationship to City of Los Angeles General Plan

None of the proposed changes to the proposed future arterial system network in the City of El Segundo would provide any new connections to the City of Los Angeles, nor would they eliminate existing connections. The changes are primarily oriented to streets, which would serve local traffic, and none of the changes will have any potential for redistribution of traffic within the City of Los Angeles. The City of Los Angeles General Plan designated roadways that connect to El Segundo

include Sepulveda Boulevard, Imperial Highway, Vista Del Mar and Aviation Boulevard. No changes are proposed to any of the City of El Segundo General Plan designations to those roadways and no impacts are expected to City of Los Angeles roadways as a result of the Circulation Element. Sepulveda Boulevard and Aviation Boulevard will remain designated as Major Arterials, while Imperial Highway and Vista Del Mar will remain designated Secondary Arterials in the City of El Segundo General Plan. The changes proposed to those facilities are improvements, which will help to reduce vehicle delay and enhance traffic flow for motorists within El Segundo and also for motorists that are passing through the City or have one trip end in Los Angeles or other jurisdictions.

3.1.3 Regulatory Framework

California Government Code

The City of El Segundo adopted a General Plan in 1992 and is now undertaking a revision of the Circulation Element of the Plan. The pertinent government code sections relating to the Circulation Element are as follows:

Government Code Section 65302(b): (The general plan shall include) a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan.

Government Code Section 95303: The general plan may . . . address any other subjects which, in the judgement of the legislative body, relate to the physical development of the county or city.

3.1.4 Thresholds of Significance

Goals, Objectives and Policies of the General Plan

Goals, objectives and policies of the Circulation Element of the General Plan, as well as recommended revisions to selected policies, are included in the Technical Report. The purpose of the Circulation Element is to guide policy makers and City staff in the planning and provision of the City's circulation system. The goals, objectives, and policies were developed through consideration of existing circulation issues, projected circulation needs associated with the Land Use Element, growth outside of the City, and the interests of the residents and businesses of El Segundo. Each of the goals identifies the general direction for the City's circulation system. The objectives outline

more specific circulation guidelines for the City's decision makers and staff to work toward. The implementation policies are recommended actions or policies that will assist the City in achieving the identified goals and objectives. The updated goals, objectives and policies of the Circulation Element provide significance thresholds for transportation and circulation within the City to maintain adequate levels of service (LOS D or better) to the extent feasible.

Adoption of the Circulation Element as a policy document will establish significance thresholds for the City. Future development projects will conform to these standards. If the City determines that a goal, objective, or policy of the Circulation Element is no longer in the best interest of the City, a General Plan Amendment would have to be adopted to change the Circulation Element.

Proposed New Policy on Thresholds of Significance for Development Projects

The following proposed policy will define the resulting level of traffic generation a future development project will have to generate to be considered a significant impact. This policy (C3-1.2) will be adopted as part of the proposed Circulation Element:

The minimum acceptable level of service (LOS) at an intersection is LOS "D". Intersections operating at LOS "E" or "F" shall be considered deficient. If traffic caused by a development project is forecast to result in an intersection level of service change from LOS "D" or better to LOS "E" or "F", then the development impact shall be considered significant. If a development project is forecast to result in the increase of intersection volume/capacity ratio (V/C) of 0.02 or greater at any intersection that is forecast to operate at LOS "E" or "F", the impact shall be considered significant.

3.1.5 Impacts

Construction Activities

Certain components of the Circulation Element Update would have minimal or no construction associated with their implementation. For example, implementation of a residential neighborhood circulation program would be largely procedural, changes to transportation and circulation only occurring during operation of the program. However, several improvements recommended as part of the Circulation Element Update would add lanes, traffic signals, and/or Intelligent Transportation System (ITS) technologies. These components of the project would temporarily disrupt circulation patterns within the City. Diversion plans and other measures to minimize disruption would be implemented. Due to the short-term nature of these impacts, however, they

would be less than significant.

Operational Impacts

Unconstructed Master Plan of Streets Extensions

The Technical Report describes a number of unconstructed roadway sections that are included in the current Master Plan of Streets. There is concern that some of those segments, if constructed, could cause adverse secondary traffic impacts such as increases in traffic flow in the western portion of the City. Also, some of the segments may not be feasible to implement due to right-of-way constraints and other issues. Due to these concerns, each of the unconstructed segments was analyzed to determine if deleting that segment would result in significant circulation system impacts. In most cases, it has been determined that deletion of the roadway segment would not result in serious transportation system deficiencies in the future. Recommendations are made in the Technical Report that revisions to extensions specified in the current Master Plan of Streets be made on a case-by-case basis, depending upon the future development scenario within the City. Therefore, consideration of the analysis presented in Table 10 of the Technical Report, in conjunction with consideration of future development projects, would reduce impacts associated with revisions to unconstructed Master Plan of Streets extensions to less-than-significant levels.

Nash/Douglas One-Way Couplet Conversion

Two-way traffic flow with anticipated future growth in traffic was considered in earlier versions of the Technical Report prior to the two-way conversion being incorporated into the proposed project. The results of that analysis indicate that two-way traffic flow would serve future traffic demand less efficiently due to the loss of capacity associated with two-way operations. At several intersections it is anticipated that the level of service would be one or two grades worse with two-way flow compared to one-way flow. This is primarily due to the loss of capacity that results from an increased number of conflicting traffic movements with two-way streets. It is anticipated that other roadway and intersection improvements could be implemented to mitigate the impacts of the two-way operations. With those improvements, traffic operating conditions with two-way flow would generally match those of the one-way couplet system. These recommended improvements are considered part of the proposed project assumed in Table 11 of the Technical Report. Therefore, construction and long-term operational traffic impacts associated with conversion of the Nash/Douglas couplet back to a two-way system would be less than significant.

Recommended Improvements Beyond the Current Master Plan of Streets

The analysis in the Technical Report demonstrates that several intersections are forecast to experience congestion and level of service E or F conditions even with the completion of the Master Plan of Streets. Note that the Master Plan of Street analysis does not assume conversion of the one-way couplet nor build-out of the unconstructed street segments, both of which are assessed separately. Therefore, further transportation system enhancements are warranted to maintain adequate service levels. Recommended improvements to the transportation system are summarized in Table 11 of the Technical Report. These improvements include various intersection capacity enhancements, including implementation of Intelligent Transportation Systems (ITS) technologies.

Nearly every jurisdiction in southern California has experienced roadway congestion problems that cannot be solved simply by adding roadway capacity. This is for several reasons including the lack of right-of-way to accomplish various widening projects as well as the environmental impacts associated with major roadway enhancements. As an alternative and supplemental improvement, many local agencies are implementing Intelligent Transportation Systems projects using advanced computer and communication technologies. The ITS projects that are being implemented provide improved traveler information, manage the flow of traffic, and utilize existing transportation systems more efficiently.

The goals of ITS are to reduce travel times, provide more reliable travel times, improve safety, reduce delay and reduce congestion. The high concentration of employment in the northeast quadrant of El Segundo makes it an area that is perfectly suited for application of advanced technology to accomplish the goals of ITS. This is because of the high density of employment, the large number of peak hour trips, the potentially high growth rate and the constraints on physical improvements. Examples of ITS system components include a centralized computer transportation management center, advanced transportation monitoring systems such as closed circuit TV (CCTV), transit traveler information, dynamic information displays at activity centers, bus priority treatment, real-time traffic management, coordination of local circulators, corporate Intranet information and other elements.

In other jurisdictions, these types of improvements have resulted in significant savings in vehicle and motorist delay, significant travel time reductions and significant environmental benefits all without major roadway widening or reconstruction projects. Recent deployment of ITS technologies has occurred throughout Los Angeles (ATSAC and other systems), Orange County (SMART STREETS), the South Bay, Santa Monica and many other agencies. Due to its many benefits and cost effectiveness, ITS could be considered as an integral part of the future transportation system of El Segundo. Similar to the City of Los Angeles methodology, a seven percent enhancement in

capacity has been incorporated into the analysis to represent the savings in vehicle stops and delays that would occur as a result of an ITS system in the City.

Even with the Master Plan of Streets fully built out there would still be some intersections operating at level of service E or F, (considered to be deficient). In those cases, additional intersection enhancements beyond the Master Plan have been investigated. The types of improvements that have been investigated include the following:

- ITS signal system and real time monitoring system;
- Dual left turn lanes;
- Exclusive right turn lanes and right turn overlap phases; and
- Additional through lanes beyond those specified in the Master Plan of Streets.

Additional improvements have been identified for each location that is predicted to be at LOS E or F with the Master Plan of Streets fully implemented. Table 11 describes the type of additional intersection improvement that is recommended for each location. For the majority of the study intersections, with the implementation of recommended improvements described in Table 11, impacts associated with transportation and circulation would be less than significant. Five intersections within the City, however, are expected to experience degraded traffic flow.

Impact 3.1-1: Impacted Study Intersections. According to Table 11 of the Technical Report, the following five intersections are unable to achieve LOS D due to unavailability of feasible traffic improvements:

- Aviation Boulevard/Imperial Highway (PM peak hour—unable to achieve LOS D without 4 eastbound through lanes)
- Aviation Boulevard/El Segundo Boulevard (AM and PM peak hours— unable to achieve LOS D without additional eastbound and westbound through lanes)
- Aviation Boulevard/Rosecrans Boulevard (AM peak hour— unable to achieve LOS D due to railroad overcrossing)
- Sepulveda Boulevard/Grand Avenue (AM peak hour— unable to achieve LOS D without a total of five through lanes in each direction on Sepulveda Boulevard); and
- Sepulveda Boulevard/El Segundo Boulevard (PM peak hour peak hour— unable to achieve LOS D without a total of five through lanes in each direction on Sepulveda Boulevard).

In these instances, a review of plans indicates that the necessary capacity is constrained by right of way issues, or the potential for secondary impacts. For example, to maintain Level of Service D along Sepulveda Boulevard, five through lanes in each direction would be required. This is not a recommended improvement, as it would result in severe secondary economic and environmental impacts associated with land use. Similar impacts would result from the widenings required for other roadways and intersections listed above to maintain LOS D. Therefore, traffic impacts at these intersections would remain significant and unavoidable.

Main Street Configuration

The results of the Main Street roadway alternative analysis are presented in the Technical Report. In summary, a two-lane facility would significantly affect traffic flow (see Table 14 and Exhibit 23 of the Technical Report provided in Appendix C). However, either a three-lane facility (providing a continuous left turn lane with one through lane in each direction), or a two-through lane with left turn pockets at intersections, is expected to adequately handle anticipated traffic volumes along Main Street. The third lane or left-turn pockets are functionally equivalent because of the limited number of mid-block driveways in the Downtown area. These two configurations could both be implemented along the length of Main Street, depending on other improvements and the resulting pavement width along blocks in the central Downtown area. Table 15 and Exhibit 24 of the Technical Report show results of the three-lane Main Street facility analysis. Therefore, assuming implementation of the three-lane or left-turn pocket alternative as approved as part of the Downtown Specific Plan, transportation impacts associated with roadway reconfiguration would be less than significant. If a two-lane with no separate left turn accommodation is ultimately developed despite the recent approval, significant impacts due to delay of through trips would be anticipated.

In addition to the future General Plan buildout conditions, an analysis of traffic impacts on Main Street associated with increased Downtown density was conducted assuming Main Street as a two-lane facility (one lane in each direction) or a three-lane facility (one-lane in each direction plus a center two-way left turn lane). Assumptions regarding the increased Downtown density and levels of development are presented in the Technical Report.

The results of the Main Street roadway alternative analysis with increased Downtown density conditions are presented in the Technical Report. In summary, both two-lane and three-lane facilities would significantly affect traffic flow. This is expected due to the increase in Downtown development density which will require additional roadway capacity to handle forecast traffic volumes along Main Street. However, a three lane Main Street facility, or one with or left-turn pockets, in addition to intersection improvements at Imperial Highway and El Segundo Boulevard

are anticipated to adequately handle traffic volumes associated with the increase in Downtown density conditions. Therefore, with implementation of either the three-lane or left-turn pocket alternative configurations and the addition of intersection improvements at Imperial Highway and El Segundo Boulevard, transportation impacts associated with increased Downtown density would be less than significant.

Reclassification of Main Street as a Downtown Collector Street

The Technical Report considers reclassification of Main Street, currently a secondary arterial, to a Downtown collector street. Further discussion of these classifications is included in the Technical Report. Essentially, given planned growth in the downtown district, reclassification of Main Street from Mariposa Avenue to El Segundo Boulevard would be appropriate. However, a new classification such as Downtown collector with a 56 foot section curb-to-curb would be necessary, and would require evaluation as part of the adoption of the Circulation Element, to accommodate higher growth expected from the recently adopted Downtown Specific Plan. The Downtown collector designation would apply only to Main Street in the Downtown area and is intended to implement the goals of the Downtown Specific Plan to create a pedestrian-oriented environment. Therefore, impacts associated with reclassification of Main Street would be less than significant.

Smoky Hollow Specific Plan Area Land Use

The analysis presented in the Technical Report for implementation of the Smoky Hollow Specific Plan assesses changes to traffic conditions based on changes from the current 0.8:1 FAR buildout to a maximum 1.0:1 FAR, and from 0.8:1 to 1.3:1 FAR. The General Plan currently allows a 0.6 FAR in the Smokey Hollow Mixed-Use land use designation, but the area is currently built out to a 0.8 FAR. FAR, or floor to area ratio, is a measure of development intensity and is defined as the amount of development, in square feet, that can occur on a site, also measured in square feet. For analysis purposes, 20 percent of the net land use change over existing FAR was used to evaluate the two Smoky Hollow land use alternatives. Tables 16 and 17 of the Technical Report show the forecast Alternative 1 (1.0:1 FAR) and Alternative 2 (1.3:1 FAR) level of service conditions as compared to the General Plan buildout conditions. In summary, the future traffic forecast under both 1.0:1 and 1.3:1 FAR alternatives of the Smoky Hollow Specific Plan Area reflect small to moderate increases in tripmaking and minor increases in intersection volume-to-capacity ratio as compared to General Plan buildout conditions. The 1.3:1 FAR alternative would result in one additional intersection (i.e., Sepulveda Boulevard/El Segundo Boulevard during the AM peak hour, and Center Street/El Segundo Boulevard during the PM peak hour) at LOS F compared to existing development. Assuming build-out under the 1.0:1 FAR alternative as specified by Mitigation Measure 3.3-3 (see Section 3.3, Air Quality), traffic impacts associated with implementation of the Smoky Hollow

Specific Plan would be less than significant.

Future Redevelopment of the Chevron Oil Refinery

Redevelopment of the Chevron site would require substantial re-evaluation and an update of the entire General Plan. The potential redevelopment of this site may require significant roadway system improvements beyond those identified in the Master Plan of Streets, and therefore be inconsistent with goals and policies of the City. However, according to recommendation of the Technical Report, all future roadways within the Chevron site shall be planned and constructed according to City's Master Plan of Streets to ensure system continuity and use of appropriate standards.

Truck Routes

No changes to the adopted Master Plan of Truck Routes are proposed except those that would be affected by potential changes to the Master Plan of Streets. Future truck routes in the Master Plan include Nash and Douglas Streets between El Segundo Boulevard and Rosecrans Avenue. The deletion of either of those connections from the Master Plan of Streets would, of course, also result in the deletion of the truck routes. As the Nash Street extension is proposed to be deleted from the Master Plan of Streets, it should also be deleted from the proposed Master Plan of Truck Routes. No impact would then arise due to inconsistency between revisions to the Master Plan of Streets and the Master Plan of Truck Routes.

In addition, there are presently narrow streets and alleys within some of the industrial areas of the City that serve as impediments to truck operation. Current land uses and future development require truck access in many of these areas. The City needs to work toward widening the streets and alleys, eliminating the impediments for truck operation from the City's street system. Revisions to appropriate policies of the Circulation Element are listed in the Technical Report, and are intended to minimize the truck access impediments wherever street widening is not feasible.

Bicycle Facilities

Because no changes to the current Bicycle Master Plan, as presented in Exhibit 11 of the Technical Report, are proposed, no impacts are associated with implementation of the proposed project.

Residential Neighborhood Circulation Issues

In determining the scope for the update of the Circulation Element, specific concerns were raised with regard to residential neighborhood circulation issues. These issues include: the narrow cross section of Mariposa Avenue west of Main Street, and peak period congestion around schools during pick-up and drop-off. These issues are discussed more fully in the Technical Report.

With regard to circulation issues on Mariposa Avenue, there is are no feasible physical improvements available for Mariposa Avenue west of Main Street due to the residential character of the neighborhood. Operational changes (e.g., one-way couplets with Pine Avenue or Palm Avenue) could be considered to provide more roadway capacity for moving vehicles. However, those changes would generate secondary impacts such as higher speeds and loss of parking. Since Mariposa Avenue is not proposed to be modified at this time, no impacts would occur due to implementation of the proposed project.

With regard to circulation issues around school sites, major physical changes to the local circulation system at school sites are not proposed as part of the proposed Circulation Element. It is anticipated that at each school site, the City, school officials and police will continue to monitor traffic patterns and pedestrian circulation. Localized school circulation issues will continue to be dealt with by proper planning of the pick-up and drop-off patterns and timing, education of parents and staff, and proper traffic control personnel as needed. Because no changes are proposed, no impacts would occur due to implementation of the proposed project.

As described in the Technical Report, circulation issues within the City could be addressed by implementation of a neighborhood traffic control program. This program is further described in the Technical Report and is proposed as part of the project. In summary, the program includes a nine-step process to identify and evaluate streets for possible mitigation, and includes demonstration and monitoring of improvements to ensure that the desired outcome is achieved.

Implementation of neighborhood traffic problems are usually designed to minimize impacts to local streets without creating adverse impacts in other locations. However, when traffic is diverted, the potential for increases in traffic volumes along adjacent parallel routes is possible. Given the testing protocol provided in the Technical Report before permanently implemented neighborhood traffic control measures, this secondary impact will be considered. Therefore, no significant impacts are anticipated to result from residential traffic calming programs.

Cumulative Impacts

As part of the greater Los Angeles metropolitan area, the City of El Segundo contributes to, and is impacted by regional traffic. In particular, the City experiences substantial north-south through traffic related to LAX and as a linkage from the South Bay to the Westside due to its geographic location. This situation is addressed by the proposed revisions to the Circulation Element. No additional impacts are anticipated.

3.1.6 Mitigation

No feasible mitigation measures are available beyond what has been incorporated into the proposed Circulation Element or recommended in the Technical Background Report. Significant unavoidable adverse impacts are anticipated.

3.2 Noise

3.2.1 Introduction

The Initial Study stated that implementation of the Circulation Element Update (proposed project) could have potentially significant short-term and long-term effects resulting from construction and operation of the recommended components of the element. This section provides a description of general noise principles and provides an overview of noise sources, sensitive receptors, and noise levels within the City. An evaluation of the noise consequences resulting from implementation of the proposed project is provided, and where necessary, mitigation measures are recommended. The Circulation Element Update Technical Report (Technical Report), prepared by Meyer, Mohaddes Associates (MMA 2000), is attached as Appendix C of this document. Other references are found in Section 7.0 (References.)

3.2.2 Existing Conditions

Fundamentals of Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). Decibels are logarithmic units that conveniently compare the wide range of sound intensities to which the human ear is sensitive. However, since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Table 3.2-1 lists dBA noise levels for common noise events in the environment and industry.

A noise environment consists of a base of steady "background" noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual nearby sources. These can vary from an aircraft or train passing by to virtually continuous noise from, for example, traffic on city streets.

TABLE 3.2-1
TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND INDUSTRY

Noise Source (Distance)	A-Weighted Sound Level in Decibels (dBA)	Subjective Impression
Civil Defense Siren (100')	130	Pain Threshold
Jet Takeoff (200')	120	
Rock Music Concert (50')	110	
Pile Driver (50')	100	Very Loud
Ambulance Siren (100')	90	
Pneumatic Drill (50')	80	
Freeway (100')	70	Moderately Loud
Vacuum Cleaner (10')	60	
Light Traffic (100')	50	
Large Transformer (200')	40	Quiet
Soft Whisper (5')	30-0	Threshold of Hearing

Source: Peterson & Gross 1963

Several rating scales allow analysis of the effect of community noise on people. L_{eq} , L_{dn} and CNEL, as defined below, symbolize noise measurements according to these rating scales. Development of these scales has considered that the potential effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs.

- L_{eq} , the equivalent energy noise level, is the average acoustic energy content of noise during the time it occurs. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same amount of acoustic energy to the ear during exposure, no matter when they occur.
- L_{dn} , the day-night average noise level, and CNEL, the community noise equivalent level, both measure the 24-hour average L_{eq} , with a 10 dBA "penalty" added to noise during the hours of 10:00 p.m. to 7:00 a.m. This penalty accounts for the greater sensitivity of people to nocturnal noise. CNEL values include an additional penalty of 5 dBA for noise occurring during the hours of 7:00 p.m. and 10:00 p.m.

Other noise measures give information on the range of instantaneous noise levels experienced over time. Examples include:

- L_{max} describes the maximum instantaneous noise level experienced during a given period of time.
- L_{min} describes the minimum instantaneous noise level experienced during a given period of time.
- L_n values indicate noise levels that were exceeded "n" percent of the time. For instance, L_{50} is the noise level that was exceeded 50 percent of the time during a measurement period (e.g., 30 minutes in an hour measurement period).
- Sound exposure level or single event level (SEL) is a noise level equivalent to the L_{eq} that would be measured over one second if the entire acoustic energy during a particular time period or specific noise event were "compressed" into that one second. This measure directly assesses the total acoustical energy of an event in a manner that is independent of the duration of that event.

Environmental noise in a community is most commonly represented by measures of L_{dn} or CNEL. Community noise levels are generally considered low when they are below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss. Examples of low levels are isolated natural settings (about 20 dBA) or quiet suburban residential streets (about 40 dBA). Examples of moderate level noise environments are urban residential or semi-commercial areas (55 dBA) and commercial locations (65 dBA). People often accept the higher levels associated with more noisy urban residential and residential-commercial zones (between 60 and 70 dBA), as well as industrial areas (between 65 and 80 dBA), although these noise levels may be considered adverse for some activities.

Daytime ambient levels in urban environments are usually about seven decibels higher than the corresponding average nighttime levels. The day-to-night difference can be smaller in rural areas that are away from roads and other human activity. In general, a difference of more than 3 dBA is a perceptible change in environmental noise, while a 5 dBA difference typically causes a change in community reaction. An increase of 10 dBA would be perceived by people as a doubling of loudness (FTA 1995.)

Noise levels from a source naturally decline as distance to the receptor increases. Other factors such as the weather and reflecting or shielding also help intensify or reduce noise levels at any given location. Noise levels may also be reduced by intervening structures generally, a single row of

buildings between the receptor and the noise source reduces the noise level by about 5 dBA.

A commonly used rule of thumb for traffic is that for every doubling of distance from the road, the noise level is reduced by about 3 dBA, and for a single source of noise, the noise is reduced by about 6 dBA for each doubling of distance. Further, a doubling of traffic on any given roadway would cause a noise increase of approximately 3 dBA.

Existing Noise Levels

The City of El Segundo is located immediately south of the Los Angeles International Airport (LAX), and the I-105 and I-405 freeways are near the City's northern and eastern boundaries. Takeoffs from LAX to the west generate substantial noise in El Segundo as aircraft turn to the south over the ocean, and landings from flight paths over Inglewood and Los Angeles contribute to noise in the eastern part of the City. In recent years, passenger volume at LAX has expanded from 45.8 million annual passengers (MAP) to 61.2 MAP in 1998. Over the same period the number of aircraft operations has expanded from about 680,000 per year to nearly 774,000 (LAWA 2000.) Although aircraft engines are generally quieter than in the past, the improvements in engine noise are offset by increases in air traffic and early turn movements that occur to the south. Most of the northwestern portion of El Segundo (north of El Segundo Boulevard and west of Sepulveda Boulevard) experiences noise from aircraft above 60 CNEL (City 1991.)

The noise from surface traffic throughout the City is also a concern. Due to the combined effects of aircraft noise and street traffic noise, portions of Center Street, Grand Avenue, Main Street, and Mariposa Avenue experience noise above 65 CNEL. Along Aviation Boulevard, Rosecrans Avenue, El Segundo Boulevard, and Sepulveda Boulevard street traffic also causes noise above 65 CNEL. Railroad traffic and the industries in El Segundo also affect noise levels, primarily in the southeastern portion of the City, and the elevated trains along the Los Angeles Metro Rail System Green Line affect noise levels along its alignment near Nash Street and Douglas Street.

Within the community, certain land uses are considered noise-sensitive and may warrant unique measures for protection from intruding noise. Those land uses where substantial numbers of the public are grouped together for recreation or relaxation, or uses which are particularly sensitive to noise disturbances (e.g. residences, schools, hospitals, etc.) are considered by the City as sensitive.

3.2.3 Regulatory Framework

City Noise Ordinance and Noise Element

Chapter 9.06 of the El Segundo Municipal Code includes exterior and interior noise standards for various land uses. In order to protect sensitive land uses, construction activities are specifically restricted between the hours of 6:00 p.m. and 7:00 a.m. on weekdays and at any time on Sundays (Section 9.06.080(4)). During the remaining weekday day-time hours, construction noise must meet the noise standards described in Section 9.06.040(c). These standards prohibit peak noise levels exceeding 20 dBA over the goal of 65 dBA for residential properties. Some specific sources of noise are also regulated; however, noise from motor vehicles that are in compliance with State or Federal noise standards is exempt from the ordinance.

The Noise Element of the City of El Segundo General Plan (City 1992) provides guidelines and decision-making framework for noise-generating activities or noise compatibility issues. The goal of the Noise Element is to provide a noise-safe environment, where the public's health, safety, and welfare are not adversely affected by excessive noise. The policies of the noise element provide for mitigation of exterior noise levels for all new residences located in areas with noise at 60 CNEL or higher. The following objectives, policies, and programs from the General Plan are relevant to traffic-related noise issues in the City.

Objective N1-1: It is the objective of the City of El Segundo to ensure that City residents are not exposed to mobile noise levels in excess of the interior and exterior noise standards or the single event noise standards specified in the El Segundo Municipal Code.

Policy N1-1.4: Consider noise impacts from traffic arterials and railroads, as well as aircraft, when identifying potential new areas for residential land use.

Policy N1-1.6: Encourage the State Department of Transportation (DOT) to conduct an active highway noise abatement program with scenic/aesthetic consideration for Sepulveda Boulevard (State Route 1).

Program N1-1.6A: To the degree feasible, the City shall participate with DOT in the development of a highway noise abatement program for Sepulveda Boulevard (State Route 1).

Policy N1-1.7: Monitor California Department of Transportation and Los Angeles County

Transportation Commission noise abatement measures aimed at minimizing noise impacts associated with the I-105 Freeway and the Metro Rail Green Line.

Program N1-1.7A: Existing and projected noise environments shall be evaluated when considering alterations to the City circulation system

Program N1-1.7B: Where feasible, the City shall provide adequate setbacks or require noise abatement barriers along the I-105 Freeway in order to protect new development from noise levels above exterior standards.

Program N1-1.7C: All new roadways shall incorporate the following noise mitigation measures into their design: alignment, barriers, vertical profile, and lateral separation

3.2.4 Thresholds of Significance

For the purposes of this EIR, noise impacts are considered significant if implementation of the Circulation Element Update would cause any of the following.

- Generate noise levels that would violate the El Segundo Municipal Code or be incompatible with objectives, policies or programs of the El Segundo General Plan Noise Element.
- Cause the L_{dn} or CNEL at an existing sensitive receptor to increase by 5 dBA or more over the existing ambient levels at residential areas or 8 dBA or more at commercial and industrial areas. Adverse impacts would result if increases in noise levels are audible (i.e. greater than 3 dBA), however a significant change to the noise environment would occur if noise levels exceed the 5 or 8 dBA threshold.

3.2.5 Impacts

Noise impacts associated with the proposed project are analyzed below with respect to existing conditions, and thresholds of significance. Impacts are grouped by type: construction activities, operational impacts and cumulative impacts.

Construction Activities

Certain components of the Circulation Element Update would have minimal or no construction

associated with their implementation. For example, implementation of a residential neighborhood circulation program would be largely procedural, with noise changes only occurring during operation of the program. However, several improvements recommended as part of the Circulation Element Update would add lanes, traffic signals, and/or Intelligent Transportation System (ITS) technologies. Construction noise associated with these improvements is analyzed below.

Impact 3.2-1: Construction noise. Construction activities associated with recommended improvements of the proposed project could result in increased noise in the vicinity of the construction. Some foreseeable construction activities could include road grading or signal location, removal or installation of curbing and sidewalks, and asphalt paving. Such activities likely would require use of heavy trucks, excavating equipment, concrete mixers, and jack hammers for pavement breaking. In order to accommodate traffic on critical routes, some roadway construction could be expected to occur at off-peak times, including nights and weekends.

Noise levels from typical construction equipment are shown in Table 3.2-2. As described in Section 3.2.2 (Regulatory Framework) above, the City's noise ordinance prohibits peaks of day-time construction noise that are more than 20 dBA over the 65 dBA goal at any residential property line. At residences nearest to construction activities, operation of construction equipment could result in peak noise levels exceeding 85 dBA standard of the noise ordinance (Sections 9.06.040(1)(c) and 9.06.080(4)). While noise from construction activities would be temporary, because it could cause a localized violation of the noise ordinance, it would be considered a short-term but potentially significant impact. Incorporation of Mitigation Measure 3.2-1 would reduce the construction effects of the improvement recommendations to a less-than-significant level.

TABLE 3.2-2
CONSTRUCTION EQUIPMENT NOISE LEVELS BEFORE AND AFTER MITIGATION

Equipment Type	Noise Level at 50 Feet	Noise Level at 50 Feet	Reduction (dBA)
	Without Noise Control(dBA)	With Feasible Noise Control ^a (dBA)	
Earthmoving			
Front Loaders	79	75	4
Backhoes	85	75	10
Dozers	80	75	5
Tractors	80	75	5
Scrapers	88	80	8
Graders	85	75	10
Trucks	91	75	16
Pavers	89	80	9
Materials Handling			
Concrete Mixers	85	75	10
Concrete Pumps	82	75	7
Cranes	83	75	8
Derricks	88	75	13
Stationary			
Pumps	76	75	1
Generators	78	75	3
Compressors	81	75	6
Impact			
Pile Drivers	101	95	6
Jack Hammers	88	75	13
Rock Drills	98	80	18
Pneumatic Tools	86	80	6
Other			
Saws	78	75	3
Vibrators	76	75	1

^a These levels are obtainable by selecting quieter procedures or machines, requiring no major redesign or extreme cost.
Source: EPA 1971

Operational Impacts

The Technical Report (MMA 2000, attached as Appendix C of this document), reviews the ability of the Master Plan of Streets in the City's current Circulation Element of the City's General Plan (City 1992) to accommodate the anticipated future traffic, and provides recommendations for improvements. Other issues addressed in the Technical Report include: removal of unconstructed streets from the Master Plan, conversion of Nash/Douglas Street to two-way operation, removal of travel lanes on Main Street, and a residential street traffic intrusion plan. The Circulation Element Update would not result in new or increased operation of any stationary sources of noise.

Traffic noise varies according to vehicle speeds, traffic volumes, and distances to receptors. Implementing the Circulation Element Update would cause changes in the way traffic moves in El Segundo. Changes to transportation and circulation as a result of implementation of the proposed project could result in adverse noise impacts if vehicle speeds were increased, additional traffic volumes were added to the roadways, or if the alignment of any roadway were to change to more severely impact sensitive receptors. In each of these cases, the impacts would be localized to areas nearest the improvements. The various recommendations and components of the Circulation Element Update, as described in the Technical Report, that could affect traffic noise are analyzed below.

Unconstructed Master Plan Street Extensions.

The Circulation Element Update contemplates removing unconstructed roadway segments from the current Master Plan of Streets. Removing streets that are not yet built from the current Master Plan of Streets would not substantially change vehicle speeds on any other existing or to-be-constructed roadway segment. Similarly, the exposure of sensitive receptors to traffic noise would not change. Additional traffic volumes would continue to be rerouted to the remaining streets. A doubling of traffic on any of the remaining roadways would need to occur before the associated noise increase would exceed the significance threshold of 3 dBA. However, the increased traffic on the remaining roadways resulting from removing the unconstructed streets would not be expected to exceed this threshold. As such, no significant noise impact would occur due to removal of unconstructed Master Plan of Streets extensions.

Main Street Configuration.

The Technical Report (see Tables 12 and 13 of the Technical Report) considers a new configuration of Main Street that would improve the pedestrian environment. Because this recommendation

would reduce the operating capacity of Main Street, reducing the number of travel lanes could cause a reduction in average vehicle speeds over the length of the modifications. This could cause a decrease in traffic noise commensurate with a pedestrian-oriented area. Therefore, no significant noise impacts associated with increase traffic volumes, or to sensitive receptors, is anticipated.

Smoky Hollow Specific Plan Area Land Use

The Technical Report considers the traffic generation of new development in the Smoky Hollow Specific Plan Area at a density of 1.3:1 floor area ratio (FAR). This density exceeds current zoning standards (0.6:1 FAR) and the current existing conditions (0.8:1 FAR). The increased density would cause approximately 400 additional peak hour vehicle trips above the existing conditions. The additional vehicles would be distributed throughout the streets that presently serve the planning area and the existing traffic in the planning area. The increased traffic volumes would cause increased traffic noise. However, a doubling of traffic on the affected roadways would need to occur before the associated noise increase exceeds the significance threshold of 3 dBA. The addition of 400 peak hour trips to the planning area would not cause a doubling of traffic on any of the affected roadways, and as such would not cause more than a 3 dBA increase along the affected roads. Additionally, the exposure circumstances of sensitive receptors would not be affected by the proposal. Therefore, no significant noise impacts associated with implementation of the Smoky Hollow Specific Plan would occur.

Residential Neighborhood Circulation Issues

The Technical Report identifies a process that would allow the City to improve the residential environment of neighborhood streets. The program would aim to reduce cut-through traffic and reduce speeds on neighborhood streets. This program could also have the indirect effect of increasing traffic on collector or arterial streets. Because rerouted traffic from neighborhood streets would be minimal, the increased traffic on the collector and arterial streets that would result from implementation of this program, along with any indirect increases in noise from this traffic, would not be significant. In fact, the program likely would reduce traffic and reduce traffic speeds on streets where sensitive receptors are most likely to be located.

Impact 3.2-2: Recommended Improvements Beyond the Current Master Plan of Streets. The Technical Report recommends Intelligent Transportation Systems (ITS) and intersection capacity enhancements for improving the performance of intersections (see Table 11 of the Technical Report.) The goals of ITS are to reduce travel times, reduce delay, and reduce congestion through signal timing coordination and other

similar measures. Intersection improvements identified in the Technical Report would allow numerous intersections to upgrade their level of service when compared to the conditions occurring without the improvements. Along with the intersection improvements, implementation of ITS technologies for the roadways would also be expected to improve operating conditions. Therefore, these improvements could cause increased vehicle speeds between the intersections. Associated with this increased speed would be increased traffic noise. Noise-sensitive receptors (e.g., residences, schools, hospitals, etc.) may be located along roadway segments where ITS and intersection capacity enhancements are recommended.

The relationship between vehicle speeds and noise levels is complicated, depending on the traffic mix, the orientation of receptors and traffic lanes, the intervening terrain or structures, and the range of traffic speeds anticipated. If other variables were held constant, an increase in vehicle speeds would cause an increase the noise caused by those vehicles. For example, an arterial segment operating at LOS E could have average travel speeds around 13 mph, and improvements resulting in operation at LOS C could cause average travel speeds to increase to around 22 mph. This speed increase would result in an approximately 3 dBA increase in noise levels, approaching the significance threshold assuming that the route does not receive additional trips from other adjacent routes due to the improved operating conditions. Intersection capacity improvements recommended for locations along Douglas Street, Nash Street, and Sepulveda Boulevard would provide operating improvements of this magnitude. However, the effectiveness of the improvements to upgrade operating conditions along the intermediate roadway segments between the intersections cannot be characterized until specific ITS technologies are identified. Improving operating conditions by one LOS rating (for example, from E to D) would not be expected to substantially change roadway segment speeds, however improvements of two LOS ratings or more could substantially increase roadway segment speeds. The conclusion is that the recommended intersection capacity improvements combined with implementation of presently unidentified ITS technologies could cause speed increases resulting in significant noise increases on road segments near sensitive receptors. This would be a potentially significant impact. Incorporation of the Mitigation Measure 3.2-2 would reduce the noise effects of the improvements to a less-than-significant level. Implementation of this mitigation measure would be consistent with the General Plan Noise Element (Programs N1-1.7A and C), described in Section 3.2.3 (Regulatory Framework), above.

Cumulative Impacts

Impact 3.2-3: Cumulative Impacts. Implementation of the recommendations of the Circulation Element Update Technical Report would enable the transportation system to accommodate future growth in traffic. Traffic forecasts indicate that development within the ten-year horizon of the Circulation Element will add approximately 98,000 daily trips to the City's roads. Noise increases associated with this growth would occur with or without implementation of the Circulation Element Update. Implementation of ITS technologies and intersection capacity enhancements beyond the current Master Plan of Streets (see Impact 3.2-2, above) would have the potential to individually cause significantly increased noise levels associated with road segments experiencing improved operating conditions. Furthermore, noise conditions along the segments identified for recommended improvements are expected to worsen with future development anticipated within the ten-year horizon of the Circulation Element, due to increased traffic. Because the anticipated traffic growth would be concurrent with implementation of the Circulation Element Update, the impacts associated with the presently recommended improvements would be cumulatively considerable. However, these impacts would be reduced to less-than-significant levels by Mitigation Measures 3.1-1 and 3.1-2.

3.2.6 Mitigation

Mitigation Measure 3.2-1: To minimize construction noise, construction activities shall be conducted in a manner consistent with the El Segundo Noise Ordinance (Chapter 9.06 of the El Segundo Municipal Code). Contractors shall use mufflers on construction vehicles; place stationary construction equipment, such as compressors, concrete pumps, etc., as far as possible from existing residential areas; and select quiet construction equipment whenever possible, particularly regarding pavement breaking or jack hammers. These actions shall be particularly important for nighttime construction along major corridors.

Mitigation Measure 3.2-2: To minimize the noise consequences caused by increased vehicle speeds on roadways with intersection capacity improvements and ITS

technologies, noise impacts to sensitive receptors should be analyzed during the design phase of any improvements causing adjacent roadway segments to upgrade more than one LOS rating. If the analysis shows noise impacts could be significant, mitigation measures (including possibly noise barriers or sound walls) shall be identified for inclusion in the Capital Improvement Plan or other implementation program.

3.3 Air Quality

3.3.1 Introduction

This section addresses the environmental setting and impacts related to the implementation of the Circulation Element Update (proposed project.) The section provides descriptions of air pollutants, and an overview of the region's air quality characteristics, the climate and topography, existing air quality in the area of the City, primary air pollutants within the region, and the region's attainment/non-attainment status. Federal, State, regional, and local air quality regulations are also described. The air quality effects associated with implementation of the Circulation Element Update are analyzed and, where necessary, mitigation measures are recommended. The Circulation Element Update Technical Report (Technical Report), prepared by Meyer, Mohaddes Associates (MMA 2000), is attached as Appendix C of this document. Other references are found in Section 7.0 (References.)

3.3.2 Existing Conditions

Air quality can be described by the concentration of various pollutants in the atmosphere, which are generally expressed in units of parts per million (ppm) or micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Important factors affecting air quality are: the size and topography of the air basin; the prevailing meteorological conditions; and the type and amount of pollutants emitted into the atmosphere.

Project Site Location

The proposed project would be implemented within the City of El Segundo, which lies within the South Coast Air Basin. The South Coast Air Basin is a 6,600-square-mile area encompassing Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties.

Climate and Topography

Abundant sunshine and temperature inversions, combined with high levels of human activity, cause the South Coast Air Basin to be naturally conducive to the formation of air pollution. Prevailing daytime winds come into Los Angeles County from the west via the Pacific Ocean. Because the

daytime air provided to much of the basin originates over the Pacific Ocean, coastal air quality is relatively good. Because of the proximity of the ocean, the persistent onshore flow normally has very low pollution levels unless the marine air has previously spent time over land. However, as the air moves over the urban areas to the east of El Segundo, it tends to become more laden with pollutants that deteriorate the inland air quality. At night and during Santa Ana conditions, winds reverse direction, and blow from the inland areas toward the ocean. Coastal fog frequently covers El Segundo at night, but generally disappears during the morning hours.

Southern California weather generally is characterized by mild winters, when most rainfall occurs, and warm, dry summers. Average daytime temperatures range from highs of about 90 degrees (F) in July, August, and September, to highs around 60 degrees in January and February. Rainfall typically averages around 13 inches per year. Warm conditions and high wind speeds are typically associated with Santa Ana conditions. These winds tend to carry dust and particulate matter from the inland desert areas to the air basin.

Ozone formation depends on slow photochemical reactions. For this reason, the prevailing ocean breezes tend to cause high ozone concentrations east of El Segundo as the pollutant is transported toward the inland communities. As the pollutants travel away from the City, sunlight and more stable atmospheric conditions encourage formation of high levels of ozone. Carbon monoxide, particularly from automobile emissions, is also a concern. Highest pollution potential occurs in the winter when thermal inversions are strong and winds are light. During these conditions, localized concentrations of CO can become elevated near areas of heavy traffic congestion because the pollutant is not transported away from the sources.

Existing Air Quality Conditions

Pollutants for which ambient air quality standards are established are known as criteria pollutants. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are standards expressed as the upper limits on airborne concentrations of these pollutants. The standards are designed to protect all aspects of the public health and welfare, with a reasonable margin of safety. At the national level, the federal Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to establish NAAQS and designate areas that are either attaining or violating the standards. In California, the task of air quality management and regulation has been legislatively granted to the California Air Resources Board (CARB) and to local regional districts or counties. The CARB establishes CAAQS and designates the attainment status of each area in California with the standards. The South Coast Air Quality Management District (SCAQMD)

coordinates the efforts to comply with these standards. The NAAQS and the CAAQS are summarized in Table 3.3-1.

Ambient air quality standards exist for ozone (O_3), carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM_{10}), sulfur dioxide (SO_2), and lead. The presence of reactive organic compounds (ROC) is not governed by ambient standards, but emissions of ROC are regulated because ROC and NO_x photochemically react in the atmosphere to form ozone. Ozone is a primary component of smog. These pollutants and their presence in the air of El Segundo are explained in further detail below and summarized in Table 3.3-2.

Ozone (O_3): Ozone is a pungent, colorless toxic gas. The most common effects of ozone are damage to vegetation and cracking of untreated rubber. Ozone in high concentrations can also directly affect the lungs, causing respiratory irritation and possible changes in lung functions. Ozone tends to be regionally distributed because precursor pollutants (ROC and NO_x) require time to react in the atmosphere.

Between 1995 and 1997, the O_3 NAAQS was exceeded on 9 days at the Hawthorne monitoring station, which is the nearest monitoring station to El Segundo. The more stringent CAAQS for O_3 was exceeded on 52 days during this period. Table 3.3-2 summarizes these results.

Oxides of Nitrogen (NO_x): NO_x includes: nitric oxide (NO), a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure; and nitrogen dioxide (NO_2), a reddish-brown irritating gas formed by the combination of nitric oxide with oxygen.

The highest recorded concentration of nitrogen dioxide at the Hawthorne station between 1995 and 1997 was 0.18 parts per billion (ppb), as indicated in Table 3.3-2.

Particulate Matter (PM_{10}): Atmospheric particulates are made up of finely divided solids or liquids such as soot, dust, aerosols, and mists. Aerosols formed in the atmosphere, primarily sulfate and nitrate, are usually smaller than 1 micron (one millionth of a meter). In the respiratory tract, small particles (e.g., less than 10 microns in diameter, termed " PM_{10} ") may produce injury by themselves or may contain absorbed gases that are injurious. Suspended in the air, particulates of aerosol size can both scatter and absorb sunlight, producing haze and reducing visibility.

The 24-hour CAAQS of $50 \mu\text{g}/\text{m}^3$ was exceeded on 8 days in 1995, 5 days in 1996, and 4 days in 1997 at the Hawthorne monitoring station. The PM_{10} levels during the three-year period are summarized in Table 3.3-2.

Carbon Monoxide (CO): Carbon monoxide is a colorless, odorless, toxic gas produced by incomplete combustion of carbon-containing substances. Carbon monoxide does not participate in any photochemical pollutant reactions, and is therefore considered inert. Maximum inert pollutant concentrations are usually found near an emission source. The main sources of CO are motor vehicles, and, therefore, the highest ambient CO concentrations are found near congested transportation arteries and intersections. Carbon monoxide does not irritate the respiratory tract, but passes through the lungs directly into the blood stream and, by interfering with the transfer of fresh oxygen to the blood, deprives sensitive tissues of oxygen.

Neither the NAAQS or CAAQS for CO have been exceeded at the Hawthorne monitoring station. The monitoring results for CO concentrations at the Hawthorne station are included in Table 3.3-2.

Sulfur Dioxide (SO₂): SO₂ is a colorless, pungent, irritating gas formed primarily by the combustion of sulfur-containing fossil fuels. Under humid atmospheric conditions, some SO₂ may be converted to sulfur trioxide and sulfuric acid mist, with some of the latter eventually reacting with other materials to produce sulfate particulates. At sufficiently high concentrations, sulfur dioxide irritates the upper respiratory tract. At lower concentrations, when in combination with particulates, SO₂ appears able to do still greater harm by injuring lung tissues. Sulfur oxides, in combination with moisture and oxygen, can yellow the leaves of plants, dissolve marble and eat away iron and steel. Sulfur oxides can also react to form sulfates, which reduce visibility and light from the sun. The CAAQS and NAAQS for SO₂ have not been exceeded between 1995 and 1997.

Lead (Pb): Lead is emitted to the air primarily as a constituent of leaded gasoline. Lead concentrations have been reduced dramatically, due to restrictions on leaded fuel that have been implemented in the past decades. Lead is a cumulative poison that can enter the body through inhalation or ingestion. Increasing amounts build up in the body and eventually reach a point where symptoms and disability occur. Lead produces a brittleness of the red blood cells and produces a damaging effect on the organs or tissues with which it comes in contact. Lead concentrations in El Segundo are well below both CAAQS and NAAQS.

TABLE 3.3-1
STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standard ^{1,3}	National Standard ²	
			Primary ^{3,4}	Secondary ^{3,5}
Ozone (O ₃)	1-hour	0.09 ppm (180 µg/m ³)	0.12 ppm (235 µg/m ³)	Same as Primary
	8-hour	---	0.08 ppm (160 µg/m ³)	Same as Primary
Carbon Monoxide (CO) (CO)	1-hour	20.0 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	---
	8-hour	9.0 ppm (10 mg/m ³)	9.0 ppm (10 mg/m ³)	---
Nitrogen Dioxide (NO ₂)	1-hour	0.25 ppm (470 µg/m ³)	---	---
	Annual Avg	---	0.053 ppm (100 µg/m ³)	0.053 ppm (100 µg/m ³)
Respirable Particulate Matter (PM ₁₀)	24-hour	50 µg/m ³	150 µg/m ³	Same as Primary
	Ann Geo Mn	30 µg/m ³	---	---
	Ann Arith Mn	---	50 µg/m ³	Same as Primary
Fine Particulate Matter (PM _{2.5})	24-hour	---	65 µg/m ³	Same as Primary
	Ann Arith Mn	---	15 µg/m ³	Same as Primary
Sulfur Dioxide (SO ₂)	1-hour	0.25 ppm (655 µg/m ³)	---	---
	3-hour	---	---	0.5 ppm (1,300 µg/m ³)
	24-hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)	---
	Ann Arith Mn	---	0.03 ppm (80 µg/m ³)	---
Sulfates (SO ₄)	24-hour	25 µg/m ³	---	---
Lead (Pb)	30-day Avg	1.5 µg/m ³	---	---
	Calendar Qtr	---	1.5 µg/m ³	Same as Primary
Hydrogen Sulfide (H ₂ S)	1-hour	0.03 ppm (42 µg/m ³)	---	---
Visibility Reducing Particles	8-hour observation	Extinction coefficient of 0.23 per kilometer ⁶	---	---

--- no standard; ppm = parts per million; µg/m³ = microgram per cubic meter; mg/m³ = milligrams per cubic meter

¹ California standards for O₃, CO, SO₂, NO₂, and PM₁₀ and visibility reducing particles are values that are not to be exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations. In addition, Section 70200.5 lists vinyl chloride under standards for hazardous substances.

² The form of the national standards (i.e., how the standard is applied) varies from pollutant to pollutant. For further information, 40 CFR Part 50 includes the relevant form for each federal standard.

³ Concentration expressed first in units in which it is promulgated. Equivalent units given in parenthesis are based upon reference temperature of 25°C and a reference pressure of 760 mm of mercury. All measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume or micromoles of pollutant per mole of gas.

⁴ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health. Each state must attain the primary standards no later than three years after that state's implementation plan is approved by the U.S. EPA.

⁵ National Secondary Standards: The levels of air quality necessary, to protect the public welfare from any known or anticipated adverse effects of a pollutant. Each state must attain the secondary standards within a "reasonable time" after the implementation plan is approved by U.S. EPA.

⁶ Prevailing visibility is defined as the greatest visibility which is attained or surpassed around at least half of the horizon circle, but not necessarily in continuous sectors. Visibility standard expressed in terms of extinction due to particles when the relative humidity is less than 70 percent.

TABLE 3.3-2
 SUMMARY OF AIR POLLUTANT DATA (HAWTHORNE MONITORING STATION)
 COMPARED TO RELEVANT FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS 1995-1998

Pollutant	1995	1996	1997	1998
Ozone (O₃)				
Highest 1-hour	0.17	0.13	0.11	0.09
Days >0.12 ppm (exceeds NAAQS)	5	1	None	None
Days >0.09 ppm (exceeds CAAQS)	38	8	6	None
Carbon Monoxide (CO)				
Highest 1-hour	10	13	12	11
Days >35 ppm (exceeds NAAQS)	None	None	None	None
Days >20 ppm (exceeds CAAQS)	None	None	None	None
Highest 8-hour	8.4	11.5	10.3	9.5
Days >= 9.5 ppm (exceeds NAAQS)	None	5	1	1
Days >= 9.1 ppm (exceeds CAAQS)	None	6	1	1
Particulates (PM₁₀)				
Highest 24-hour	136	107	79	66
Days >50 ug/m ³ (exceeds CAAQS)	8/58 days	5/60 days	4/55 days	7/59 days
Nitrogen Dioxide (NO_x)				
Highest ppm hour	0.18	0.15	0.16	0.15
Days >0.25 ppm (exceeds CAAQS)	None	None	None	None
Sulfur Dioxide (SO₂)				
Highest ppm hour	0.06	0.06	0.10	0.03
1 hr >0.25 ppm (exceeds CAAQS)	None	None	None	None

Source: CARB 1999

Toxic air contaminants (TACs): Toxic air contaminants are a category of air pollutants that pose a present or potential hazard to human health, but which tend to be emitted on a localized basis and, therefore, cause impacts that are typically more localized than those created by criteria air pollutants. Toxic air contaminant sources are regulated with emission- and risk-based requirements at the federal, State, and local levels. There are more than 700 toxic air contaminants recognized by different regulatory agencies. Ambient air quality standards do not exist for these pollutants. Title III of the federal Clean Air Act Amendments of 1990 specifies performance-based standards for federally-regulated sources of hazardous pollutants, and Regulation XIV of the South Coast Air Quality Management District rules contains review programs and control requirements for new sources of TACs.

Emissions Sources

On-road motor vehicles represent only one of many categories of emissions sources within the air basin. However, this basin-wide category accounts for the majority of total CO and NOx emissions and represents the most substantial emissions category for ROC. Furthermore, large proportions of PM₁₀ emissions result from dust made airborne from travel on paved and unpaved roads. Thus, control of motor vehicle emissions is a major component of air quality attainment planning process. Other notable sources of air pollution in the vicinity include stationary sources such as the Hyperion Treatment Plant, the Chevron Refinery, and other major stationary sources. The Los Angeles International Airport is itself a significant stationary source because it includes a wide range of on-ground activity, and the aircraft traffic operating there also contributes to regional emissions.

Attainment/Non Attainment Status

The EPA designates areas as having air quality better than (attainment) or worse than (nonattainment) the NAAQS. Presently, South Coast Air Basin is in attainment with the NAAQS for SO₂, and NO₂. The South Coast Air Basin is a federal non-attainment area and for O₃, CO, and PM₁₀. Table 3.3-3 summarizes the NAAQS attainment status.

The California Air Resources Board (CARB) also designated areas either in attainment or not in attainment with the CAAQS. Presently, the South Coast Air Basin is a state-level nonattainment area for O₃ and PM₁₀, and Los Angeles County is a State-level nonattainment area for CO. Table 3.3-3 also summarizes the CAAQS attainment status.

TABLE 3.3-3
SOUTH COAST AIR BASIN (SCAB) ATTAINMENT STATUS

Pollutant	Ambient Air Quality Standards	
	CAAQS	NAAQS
O ₃	N	N
CO	N	N
NO ₂	A	A
SO ₂	A	A
PM ₁₀	N	N

CAAQS: California Ambient Air Quality Standards

NAAQS: National Ambient Air Quality Standards

N: Not in Attainment

N^L: Not in Attainment, Los Angeles County only.

A: In Attainment

3.3.3 Regulatory Framework

The South Coast Air Basin is an area where both State and federal air quality standards are exceeded. Because the region is not in attainment with federal standards, the federal Clean Air Act requires maintenance of a state implementation plan (SIP) that demonstrates the means to attain the NAAQS. Because the region is also not in attainment with State standards, the California Clean Air Act requires triennial preparation of an Air Quality Management Plan (AQMP).

State Implementation Plan and Air Quality Management Plan

The air quality management plans are prepared by the SCAQMD with technical and policy inputs from the EPA, the CARB, and the Southern California Association of Governments (SCAG.) SCAG provides growth forecasts that are used in development of land use and transportation control strategies by the SCAQMD. Based on SCAG's growth forecasts, the SCAQMD has the responsibility of preparing the air quality management plans that outline region-wide control strategies and programs designed to bring the areas of the air basin into attainment with the standards. The 1997 AQMP (the most recent AQMP, approved by the SCAQMD November 1996, including 1999 amendments) outlines emission control strategies and programs that are designed to bring the SCAB into attainment or maintain existing attainment with the State and federal standards. Because the State standards are more stringent than the federal standards, the AQMP provides the

foundation for the federally-required SIP components. The 1997 AQMP control strategies assume implementation of the 1994 Regional Transportation Plan and the 1995 Regional Comprehensive Plan and Guide. Components of the 1997 AQMP include:

- Demonstration of attainment plan for ozone, CO, and PM₁₀;
- Updated emissions inventories (1993 base year) of VOC, NO_x, CO, SO_x, and PM₁₀;
- Emissions budgets of the inventoried compounds for future years;
- An updated pollution control strategy; and
- Contingency measures if the plan, as presently proposed, fails to meet stated timetables.

According to the 1997 AQMP, attainment of all federal health standards would occur no later than the year 2000 for CO, the year 2006 for PM₁₀, and the year 2010 for ozone. Compliance with State standards for ozone and PM₁₀ would not be achieved until after the year 2010. Both the federal and State standards for nitrogen dioxide were met before publication of the 1997 AQMP.

Air Quality Element of the General Plan

The Air Quality Element of the City of El Segundo General Plan (City 1992) also provides guidelines for actions of the City of El Segundo. The following air quality goals, objectives, and policies from the General Plan are relevant to traffic circulation in the City.

Goal AQ3: Vehicle Work Trip Reduction for Private Employees

Objective AQ3-1: Increase the proportion of work trips made by transit.

Policy AQ3-1.1: It is the policy of the City of El Segundo that the City continue to require employers in existing congested areas of the City and developers of large new developments to adopt Transportation System Management (TSM) plans and provide incentives for the provision of transit support facilities.

Policy AQ3-1.2: It is the policy of the City of El Segundo that it continue to require developer TSM plans to encourage trip reduction programs and development of transit and ridesharing facilities over highway capacity expansion in order to achieve and maintain mobility and air quality.

Policy A Q3-1.3: It is the policy of the City of El Segundo to cooperate with efforts to expand bus, rail, and other forms of transit within the Los Angeles region.

Goal A Q4: Reduce Motorized Transportation

Objective A Q4-1: Promote non-motorized transportation.

Policy A Q4-1.1: It is the policy of the City of El Segundo that the City actively encourage the development and maintenance of a high quality network of pedestrian and bicycle routes, linked to key locations, in order to promote non-motorized transportation.

Goal A Q5: Vehicle Work and Non-Work Trip Reduction

Objective A Q5-1: Improve transit systems serving the City and implement parking control methods to reduce work and non-work trips.

Policy A Q5-1.1: It is the policy of the City of El Segundo that the City discourage the use of single-occupant vehicles in congested areas of the City by changing or modifying the availability and cost of parking.

Policy A Q5-1.2: It is the policy of the City of El Segundo that the City actively encourage the enhancement of transit performance and availability and establish developer fees to offset the costs of transit improvements required as a result of new developments.

Goal A Q6: Reduction in Peak-period Truck Travel and Number and Severity of Truck-involved Accidents

Objective A Q6-1: Pass the necessary ordinances and memorandums of understanding to divert truck traffic during peak traffic periods.

Policy A Q6-1.1: It is the policy of the City of El Segundo that commercial truck emissions be reduced by restricting delivery schedules to off-peak traffic periods, and by creating alternate routes that would increase the efficiency of the City's roadway system.

Goal A Q7: Reduce Vehicle Emissions Through Traffic Flow Improvements

Objective AQ7-1: Set annual objectives for the continued improvement of interconnected traffic signal control systems or appropriate non-interconnected synchronization methods on all streets where traffic volume and delay time is significant.

Policy AQ7-1.1: It is the policy of the City of El Segundo that a high priority be given to improve the flow of traffic through synchronization of signalized intersections, as this is among the most cost-effective means of reducing congestion, conserving energy, and improving air quality.

Objective AQ7-2: Set annual objectives for improved channelization at high-volume intersections identified with assistance from Southern California Association of Governments (SCAG).

Policy AQ7-2.1: It is the policy of the City of El Segundo to improve channelization at high-volume intersections identified with assistance from SCAG.

3.3.4 Thresholds of Significance

The South Coast Air Quality Management District recommends evaluating projects in terms of the following air pollution thresholds (SCAQMD, 1993). The air quality consequences of implementing the Circulation Element Update would be considered significant if the project would cause:

- Daily or quarterly construction-related emissions exceeding any of the thresholds in Table 3.3-4.
- Daily operation-related emissions exceeding any of the thresholds in Table 3.3-4.
- Inconsistency with the SCAQMD's *screening criteria*. The screening criteria identify projects that would be inconsistent with regional growth projections or air quality plans, cause odor, dust, or other nuisance emissions, or cause emissions of toxic air contaminants or hazardous accidental emissions.

Furthermore, the following will be used in conjunction with the above thresholds to determine if the proposed project would have a significant air quality impact:

- The proposed project would interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.
- The proposed project would cause a CO hot spot. Roadway segments and intersections operating at a level of service (LOS) of E or F have the potential to cause localized violations

of the CO ambient air quality standards; operating conditions of LOS D or better would not typically result in a CO hot spot.

TABLE 3.3-4
SCAQMD THRESHOLDS OF SIGNIFICANCE

	Pollutant				
	ROC	NO _x	CO	PM ₁₀	SO _x
Construction Emissions (lb/day)	75	100	550	150	150
Operational Emissions (lb/day)	55	55	550	150	150

Source: SCAQMD 1993

3.3.5 Impacts

Air quality impacts associated with the proposed project are analyzed below with respect to existing conditions, and thresholds of significance. Impacts are grouped by type: construction activities, operational impacts and localized CO hot-spots, consistency with local and regional air quality management plans, and cumulative impacts.

Construction Activities

Certain components of the Circulation Element Update would have minimal or no construction associated with their implementation. For example, implementation of a residential neighborhood circulation program would be largely procedural, with air quality changes only occurring during operation of the program. However, several improvements recommended as part of the Circulation Element Update would add lanes, traffic signals, and/or Intelligent Transportation System (ITS) technologies. Construction emissions associated with these improvements are analyzed below.

Impact 3.3-1 Construction emissions. The Circulation Element Update includes improvements beyond those identified in the current Master Plan of Streets. These improvements would add lanes, traffic signals, or Intelligent Transportation Systems at select locations experiencing the most severe traffic congestion. These physical changes to the roadway network would require on-the-ground construction. These construction activities have the potential to cause pollutant emissions. Construction or installation of recommended improvements to the transportation system could require use of

diesel-powered construction equipment, minor excavation and earthwork for road grading or signal location, and removal or installation of curbing and sidewalks, and asphalt paving. Operation of construction equipment would cause emissions of diesel exhaust, which includes ROC, NO_x, CO, PM₁₀, and SO_x. Paving and other earthwork would also cause emissions of ROC and dust (PM₁₀). Also, during the construction phases of any component of the Circulation Element Update, short-term traffic delays could occur which would temporarily reduce travel speeds in the area and cause a corresponding increase in motor vehicle emissions.

Because construction activities would be narrowly focused at only the most congested locations of the roadway network, none of the components of the Circulation Element Update would be expected to cause construction emissions exceeding the thresholds of Table 3.3-4. Near residential areas and recreational land uses, however, emissions from construction activities related to the improvement recommendations could be a temporary nuisance. This would be a short-term but potentially significant impact. Incorporation of Mitigation Measure 3.3-1 (see Section 3.3.6, Mitigation) would reduce the construction effects of the improvement recommendations to a less-than-significant level.

Operational Emissions and Localized Carbon Monoxide Hot-Spots

The Technical Report, reviews the ability of the Master Plan of Streets in the City's current Circulation Element of the City's General Plan to accommodate the anticipated future traffic, and provides recommendations for improvements. Other issues addressed in the Technical Report include: removal of unconstructed streets from the Master Plan, removal of travel lanes on Main Street, and a residential street traffic intrusion plan. The Circulation Element Update would not result in new or increased operation of any stationary sources of air pollutants.

In general, emissions from motor vehicles vary according to vehicle speeds, length of vehicle trips, and number or frequency of vehicle trips. Implementing the Circulation Element Update would cause changes in the trips occurring in El Segundo. The Circulation Element Update could cause an increase in emissions from motor vehicles operating in El Segundo if any of the following would occur: decrease travel speeds, increase the length of vehicle trips, or increase the number or frequency of vehicle trips. Trip length and frequency is determined primarily by the type, size, and location of land uses within the region. Because the Circulation Element Update would not change land uses, the length, number, and frequency of vehicle trips in El Segundo would not change with its implementation. Changes of vehicle speeds would change operational emissions, however, with

decreased average vehicle speed generally leading to increased city-wide emissions. The various recommendations and components of the Circulation Element Update that could affect city-wide operational emissions are analyzed below.

Unconstructed Master Plan Street Extensions.

The Circulation Element Update contemplates removing unconstructed roadway segments from the current Master Plan of Streets. The unconstructed street extensions in the adopted Master Plan of Streets would generally relieve traffic demands on parallel routes, and if constructed, could potentially increase speeds on the primary routes by providing an alternative route for some traffic. However, none of the unconstructed street extensions in the adopted Master Plan would serve regional "through" traffic, and the main purpose of the extensions would be to serve local parcels as they are developed. The Technical Report concludes that deletion of some or parts of these streets from the Master Plan of Streets would not result in serious transportation deficiencies for the remaining routes. Based on this information, substantial vehicle speed reductions on the primary routes, and any corresponding emissions increases, would not be significant. Furthermore, no significant increases in localized carbon monoxide concentrations would occur.

Recommended Improvements Beyond the Current Master Plan of Streets.

Intelligent Transportation Systems (ITS) and intersection capacity enhancements are recommended in the Technical Report (see Table 11 of the Technical Report) for improving the performance of intersections. The goals of ITS are to reduce travel times, reduce delay, and reduce congestion. The air quality consequences of implementing ITS projects or intersection capacity enhancements would be beneficial because vehicle speeds would generally be increased and idling times would be minimized. With the improvements, some intersections would continue to operate at conditions worse than LOS D. However, these conditions would occur, and would be more severe, without implementation of the recommended improvements. This component of the Circulation Element Update reduces the air quality effects of the existing and anticipated congestion. Therefore, air quality impacts associated with emission increases due to recommended implementation of ITS projects and localized carbon monoxide concentrations would be less than significant.

Nash/Douglas One-Way Couplet Conversion.

Conversion of Nash Street and Douglas Street to a two-way system would serve future traffic demand less efficiently due to a loss in capacity associated with two-way operations on each street. However, improvements are recommended in the Technical Report that would allow the two-way

operations to generally match those of the one-way couplet system. With the recommended improvements, the intersections affected by the two-way conversion would remain at a level of service of D or better. Because the intersections would remain at LOS D or better, substantial vehicle speed reductions and corresponding emissions increases would not be anticipated, and no violation of the CO standards would occur. Therefore, operational impacts and CO concentrations associated with conversion of the Nash/Douglas one-way couplet to a two-way system would be less than significant.

Residential Neighborhood Circulation Issues.

The Technical Report does not recommend changes to resolve circulation issues for Mariposa Avenue or near schools. A process is identified that would allow the City to improve the residential environment of neighborhood streets. The program would aim to reduce cut-through traffic and reduce speeds on neighborhood streets. This program could also have the secondary effects of increasing congestion and possibly contributing to reduced travel speeds on collector or arterial streets. This means that rerouted residential traffic could increase congestion on the collector or arterial streets above the levels anticipated to occur without the neighborhood traffic control program. This could cause adverse secondary air quality impacts if the operating conditions of any roadway segment or intersection would deteriorate to LOS E or F. However, because rerouted volumes from neighborhood streets would be anticipated to be very small in comparison to the heavy volumes operating on collector or arterial streets, and the capacity of the region-serving streets would not be expected to be substantially affected, implementation of this program would result in less than significant air quality consequences.

Impact 3.3-2: Main Street Configuration. The Technical Report (see Table 12 of the Technical Report) considers a new configuration of Main Street that would improve the pedestrian environment. A two-lane Main Street is analyzed, one lane in each direction was considered, but not approved. This configuration would have resulted in two intersections operating at LOS E or F in future peak hour conditions (Main Street/Imperial Highway and Main Street/Mariposa Avenue). Because of the congestion at these intersections, localized carbon monoxide concentrations could exceed the ambient air quality standards in the immediate vicinity of the intersection. During periods of heavy congestion (peak traffic hours) that coincide with extremely stable meteorological conditions (calm winds and cool temperatures), intersections operating at LOS E or F can cause violations of the CO standards within about seven to ten meters of the edge of traveled roadway. This would be a potentially significant impact if implemented.

Because this would also represent a significant impact to transportation and circulation, the Circulation Element Update Technical Report (Table 13) identifies and analyzes an alternate configuration of Main Street that would avoid future operation at LOS E or F. The potentially significant air quality impact of the two-lane Main Street could be avoided with implementation of a three-lane facility providing a continuous left turn lane, or by provision of left-turn pockets at intersections. In contrast to the two-lane Main Street, either of these configurations would add left-turn capacity and allow through traffic to continue reducing congestion and resulting in future operating conditions similar to those under existing conditions. The level of service ratings of the intersections would not change from those anticipated to occur in future conditions without the recommended changes. Because operating performance of the intersections would not deteriorate, substantial vehicle speed reductions and associated emissions increases would not be anticipated, and no violation of the CO standards would occur as a result of implementation of this configuration. Therefore, the three-lane or left-turn pocket configurations are considered mitigation for the potentially significant air quality impacts associated with implementation of the two-lane configuration. Implementation of Main Street improvements as approved in the Downtown Specific Plan will result in less than significant impacts.

Impact 3.3-3: Smoky Hollow Specific Plan Area Land Use. The Technical Report considers that new development in the Smoky Hollow Specific Plan Area could occur at a density of 1.3:1 floor area ratio (FAR.) This would exceed the current zoning density (0.6:1 FAR) and the density under existing conditions (0.8:1 FAR.) The increased density would cause approximately 1,700 additional daily vehicle trips above the existing conditions, assuming average daily trip generation rates of approximately 4.7 trips per 1,000 square feet of developed space (MMA 2000.) These vehicles would add to congestion and would cause the intersection of Center Street and El Segundo Boulevard to operate at LOS F during the PM peak hour. This is worse than the LOS E anticipated for this intersection anticipated in the future without the 1.3:1 FAR alternative. Operational emissions of ROC, NO_x, CO, and PM₁₀ associated with the new vehicle trips would contribute to the deterioration of regional air quality, and as a general rule-of-thumb, new office-type uses generating more than approximately 1,700 daily vehicle trips could cause operational emissions above the thresholds of Table 3.3-4. Because this number of vehicle trips would be generated by the 1.3:1 FAR development, implementation of this land use option could cause

significant regional emissions. Additionally, deterioration of one intersection to LOS F could cause potentially significant air quality impacts due to increased localized concentrations of carbon monoxide. The regional emissions and elevated localized CO concentrations would be considered potentially significant air quality impacts.

Because traffic congestion causing operation of an intersection at LOS F would be considered a significant impact to transportation and circulation, the Technical Report identifies and analyzes an alternate, less-dense, development option for the Smoky Hollow Specific Plan Area. Implementation of a 1:1 FAR development would cause approximately 700 additional daily vehicle trips above the existing conditions. These new vehicles would also cause increases in intersection congestion, but would not change the future level of service ratings for any intersection from that anticipated without the 1:1 FAR alternative. Because only a fraction of 1,700 daily trips would be generated, the emissions from the new trips likely would not exceed the thresholds in Table 3.3-4. Because the emissions would be less than the significance thresholds, and no change in intersection performance is anticipated, the 1:1 FAR development considered for Smoky Hollow would not cause any significant new emissions from motor vehicle trips, and no localized violations of carbon monoxide standards would be anticipated. The 1:1 FAR development is thus identified as a mitigation option for the potentially significant air quality impacts that could be caused by 1.3:1 FAR development alternative. Another mitigation option for the potentially significant impacts associated with the 1.3:1 FAR development would be incorporation of trip reduction strategies to minimize the new trips induced by the development to levels that would cause air quality impacts below the thresholds. Mitigation Measure 3.3-3 (see Section 3.3.6, Mitigation) shows these options. With implementation of Mitigation Measure 3.3-3, air quality impacts associated with implementation of the Smoky Hollow Specific Plan would be less than significant.

Consistency with Local and Regional Air Quality Management Plans

The Circulation Element Update would include revisions to the policies of the current Circulation Element. In order for the City to achieve its air quality goals (provided in the Air Quality Element of the City of El Segundo General Plan and the Regulatory Framework above) the recommended policy changes recommended for the Circulation Element be consistent with the City's air quality goals. The basin-wide Air Quality Management Plan (1997 AQMP) developed from the Regional

Transportation Plan and the Regional Comprehensive Plan and Guide published by SCAG should be considered.

A review of the policy changes recommended for the Circulation Element has been conducted. None of the proposed policy changes of the Circulation Element Update would affect regional facilities, and none of the proposed policy changes would conflict with current regional or City air quality goals. Proposed Circulation Element policies related to expanding and improving public transit service (Policy C2-3.1), improving bicycle facilities (Policy C2-3.10 and C3-1.6), and offering electric vehicle charging stations (Policy C2-3.11) would be directly responsive to the City's air quality goals to reduce the use of motorized transportation (Goal AQ4), and many other components of the Circulation Element Update would be responsive to the City's goal of reducing vehicle emissions by providing traffic flow improvements (Goal AQ7). The proposed policy changes would have no adverse impact to air quality.

Cumulative Impacts

Impact 3.3-4: Cumulative Impacts. Significant future traffic growth is anticipated to occur in El Segundo if build-out of the City's Land Use Plan and regional growth projections are realized. This growth would occur independent of implementation of the Circulation Element Update. However, implementation of the Circulation Element Update would affect traffic operation on the roadways of El Segundo. Implementation of the recommendations of the Technical Report would enable the transportation system to accommodate future growth in traffic, which according to traffic forecasts within the ten-year horizon of the Circulation Element will add approximately 98,000 daily trips to the City's roads. However, two components of the Circulation Element Update would have the potential to individually cause significant air quality impacts: implementation of a two-lane Main Street configuration could cause localized elevated CO concentrations, and the 1.3:1 FAR land use alternative for the Smoky Hollow Specific Plan Area could add as many as 1,700 daily trips, causing significant regional emissions. In combination with other projects in the region, these two components of the proposed project could cause cumulatively significant air quality impacts.

The 1997 Air Quality Management Plan for the South Coast Air Basin accommodates growth in its means of attaining and maintaining the air quality standards. The Air Quality Management Plan establishes strategies to offset

pollution increases and attain air quality standards. However, the adverse air quality effects of the two-lane Main Street configuration and the 1.3:1 FAR for the Smoky Hollow Specific Plan Area, would combine with pollution increases from other development in the air basin and increase the load of contaminants within the air basin. Because these project-related emissions would individually be significant, and the emissions would add to an air contaminant load that currently violates the ambient air quality standards, the effect of the project emissions is expected to be cumulatively considerable. However, these impacts would be reduced to less-than-significant levels by Mitigation Measures 3.3-2 and 3.3-3.

3.3.6 Mitigation

Mitigation Measure 3.3-1: To minimize dust and equipment exhaust emissions during construction of the improvement recommendations identified in the Circulation Element Update, construction activities shall be conducted in a manner consistent with SCAQMD Rule 403 for fugitive dust, unnecessary idling of equipment shall be minimized, and diesel equipment shall be located as far away as possible from existing residential uses.

Mitigation Measure 3.3-2: To minimize the potential for elevated air pollutant concentrations to occur along Main Street, a three-lane or left-turn pocket configuration (one travel lane in each direction, plus left turn lane or pockets) shall be implemented in lieu of a two-lane configuration.

Mitigation Measure 3.3-3: Potential significant air quality impacts associated with new vehicle trips generated by 1.3:1 FAR development in the Smoky Hollow Specific Plan area without mitigation would be significant and unavoidable and require a Statement of Overriding Considerations. To avoid such significant impacts, a 1.1:1 FAR could be implemented. As an alternative mitigation to this, trip reduction strategies that would minimize the new trips induced by the development to levels that would cause air quality impacts below the significance thresholds shall be implemented to the extent feasible for the Smoky Hollow Specific Plan area, including increased transit service to the area.

4.0 Alternatives To The Proposed Project

4.1 INTRODUCTION

Alternatives to the proposed Circulation Element Update (proposed project) are described below, and summarized in Table 4-1. For comparison, recall that the proposed project assumes implementation of the current Master Plan of Streets, as adopted in the Circulation Element of the City's 1992 General Plan (Circulation Element), and illustrated in Figures ES-1 and ES-2 of the Circulation Element Update Technical Report (Appendix C), including conversion of the Nash/Douglas one-way couplet system back to a two-way system. The proposed project also includes a number of additional improvements, as recommended in the Technical Report. These improvements include additional roadway and intersection improvements, implementation of intelligent traffic system (ITS) technology, deletion of some unconstructed Master Plan of Streets roadway segments, and amendments to currently adopted goals and policies of the Circulation Element.

CEQA requires that an EIR describe a range of reasonable alternatives to the project, or to the location of the project, that could feasibly attain the basic objectives of the project. An EIR should also evaluate the comparative merits of the alternatives. This chapter sets forth potential alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines relating to the alternatives analysis are summarized below:

- The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- The "no project" alternative shall be evaluated along with its impact. The "no project" analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved.
- The range of alternatives required in an EIR is governed by a "rule of reason"; therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The

alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.

- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

Rationale for Selecting Potentially Feasible Alternatives

Since the CEQA Guidelines require that an EIR state why an alternative is being rejected, a preliminary rationale for rejecting an alternative is presented, where applicable, in this EIR. If the City ultimately rejects any, or all alternatives, the rationale for the rejection will be presented in the findings that are required to be made before the City certifies the EIR and takes action on the project, in this case adoption of a new Circulation Element for the City of El Segundo General Plan.

The alternatives may include no project, a different type of project, modification of the proposed project, or suitable alternative project sites. However, the range of alternatives discussed in an EIR is governed by a "rule of reason" which CEQA Guidelines Section 15126(d)(5) defined as:

Setting forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic vitality, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the project proponent could reasonably acquire, control, or otherwise have access to an alternative site. An EIR need not consider an alternative whose effects could not be reasonably identified, and whose implementation is remote or speculative. Those alternatives found to be infeasible are described in Section 4.4.

For purposes of this analysis, the project alternatives are evaluated to determine the extent to which they attain the basic project objectives, while significantly lessening any significant effects of the project. The objectives are described in Section 2.0 (Project Description.)

The EIR has found several potential adverse effects associated with traffic, air quality and noise of the proposed project to be insignificant or could be mitigated to a level of insignificance (see Section 3.0, Environmental Analysis.) However, significant unavoidable impacts associated with traffic along Sepulveda Boulevard (i.e., at intersections with Grand Avenue during the AM peak hour, and El Segundo Boulevard during the PM peak hour) would remain with implementation of the proposed project.

The alternatives below were selected for a variety of reasons; however, the goal for evaluating each of these alternatives is to identify ways to mitigate or avoid the significant environmental effects identified above resulting from the proposed project. The following feasible alternatives have been analyzed:

- No Project Alternative; and
- Reduced Project Alternative.

In summary, the purpose of this section is to discuss feasible alternatives and to evaluate the ability of each alternative to reduce or avoid significant or adverse impacts. The reader is referred to Section 3.0 (Environmental Analysis) of the EIR for detailed discussions of the levels of significance in each issue area for the proposed project. The Summary and Project Description sections provide a brief overview of the proposed project. Table 4-1 provides a summary description of the project alternatives.

TABLE 4-1
EL SEGUNDO CIRCULATION ELEMENT UPDATE ALTERNATIVES SUMMARY

Project Component	The Project	Alternative 1: No Project	Alternative 2: Reduced Project
Master Plan of Streets	Full implementation of the current Circulation Element Master Plan of Streets	Existing Master Plan of Streets implemented	Full implementation of the proposed Circulation Element Master Plan of Streets, including deletion of certain planned roadway improvements. Conversion back to a two-way system
Nash/Douglas Couplet	Conversion back to a two-way system	One-way couplet maintained	
Roadway/Intersection Improvements	Additional improvements beyond existing Master Plan of Streets included	No additional improvements included	No additional improvements included
Intelligent Traffic System Technologies (ITS)	ITS systems implemented	None included	None included
Circulation Element Goals and Policies	Currently adopted goals and policies included with recommended amendments	None included	Currently adopted goals and policies included with recommended amendments

4.2 NO PROJECT ALTERNATIVE

Description

Section 15126 of the CEQA Guidelines requires the analyses of a “no project” alternative. This “no project” analysis must discuss the existing condition, as well as what would be reasonably expected to occur in the foreseeable future if the project were not to be approved.

This alternative includes no alterations intended to improve circulation beyond existing conditions within the City. Under this alternative, the current Master Plan of Streets would be implemented. The Nash/Douglas one-way couplet would remain. No additional roadway improvements or extensions, nor any intersection improvements would be constructed, and ITS technology would not be employed. Finally, no amendment to the goals and policies of the Circulation Element would be made.

Attainment of Project Objectives

The No Project Alternative would not meet the basic project objectives outlined in Section 2.0, as this alternative does not pursue implementation of all Circulation Element policies such that all Master Plan of Streets roadways are upgraded and maintained at acceptable levels of service.

The analysis presented Table 4-2 concludes that 14 intersections are forecast to operate poorly (i.e., at a level of service [LOS] of E or F) during AM and/or PM peak hours, compared to five for the proposed project. For the No Project Alternative, these intersections include:

- Aviation Boulevard/Imperial Highway (PM);
- Aviation Boulevard/El Segundo Boulevard (AM, PM);
- Aviation Boulevard/Rosecrans Avenue (AM, PM);
- Douglas Avenue/Imperial Highway (PM);
- Douglas Avenue/El Segundo Boulevard (PM);
- Nash Street/Imperial Highway (AM);
- Nash Street/El Segundo Boulevard (AM, PM);
- Continental Avenue/El Segundo Boulevard (AM);
- Sepulveda Boulevard/Imperial Highway (AM, PM);
- Sepulveda Boulevard/Grand Avenue (AM, PM);

- Sepulveda Boulevard/El Segundo Boulevard (AM, PM);
- Sepulveda Boulevard/Rosecrans Avenue (AM, PM);
- Center Street/El Segundo Boulevard (PM); and
- Main Street/Imperial Highway (AM).

Presumably, traffic conditions would continue to worsen at these and other intersections, with growth anticipated by the Land Use Element of the General Plan. Furthermore, this alternative would create potentially significant air and noise impacts, greater than those anticipated by the proposed project.

The implementation of the existing Master Plan of Streets would create more significant impacted intersections than the proposed project and would not provide other physical and operational improvements.

4.3 REDUCED PROJECT ALTERNATIVE

Description

This alternative would include the new proposed Master Plan of Streets, including deletion of certain planned roadway improvements. The Master Plan of Streets is illustrated in Figures ES-1 and ES-2 of the Technical Report. Under this alternative the Nash/Douglas one-way coupler would be converted as part of the project. Amendment to the goals and policies of the Circulation Element would be made as recommended. However, ITS technology would not be employed, and additional recommended intersection capacity enhancements would not be implemented.

Attainment of Project Objectives

This alternative would not meet all of the basic project objectives outlined in Section 2.0, as this alternative does not pursue implementation of all Circulation Element intersection improvements. Certain roadway segments and intersections would not be upgraded, resulting in less than acceptable levels of service.

The analysis presented in the Table 4-3 concludes that 12 intersections would operate poorly (i.e., at a level of service [LOS] of E or F) with build-out of the Reduced Project, compared with 5 for the proposed project. For the Reduced Project Alternative, these intersections include:

- Aviation Boulevard/Imperial Highway;
- Aviation Boulevard/El Segundo Boulevard;
- Aviation Boulevard/Rosecrans Avenue;
- Douglas Street/Imperial Highway;
- Douglas Street/El Segundo Boulevard;
- Douglas Street/Utah Avenue;
- Nash Street/Imperial Highway;
- Sepulveda Boulevard/Imperial Highway;
- Sepulveda Boulevard/Grand Avenue;
- Sepulveda Boulevard/El Segundo Boulevard;
- Sepulveda Boulevard/Rosecrans Avenue; and
- Center Street/El Segundo Boulevard.

Based on the calculations provided in Table 4-3, LOS would not be acceptable with build-out of the Reduced Project Alternative at seven more intersections than with the proposed project. This is due to the elimination of additional physical improvements and operational enhancements resulting from ITS implementation.

Furthermore, this alternative would create potentially significant air and noise impacts, greater than those anticipated by the proposed project in general and particularly at the additional impacted intersections anticipated under this alternative.

**TABLE 4-2
PROPOSED PROJECT AND FUTURE NO PROJECT ALTERNATIVE
INTERSECTION OPERATING CONDITIONS**

Intersection	Proposed Project (Master Plan Plus Improvements)				No Project Alternative			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Aviation Boulevard / Imperial Highway	C	0.788	F	1.286	C	0.799	F	1.469
Aviation Boulevard / 120th Street	B	0.688	B	0.614	C	0.768	B	0.699
Aviation Boulevard / El Segundo Boulevard	F	1.441	F	1.391	F	1.792	F	1.566
Aviation Boulevard / Utah-135th Street	B	0.698	B	0.697	D	0.868	D	0.899
Aviation Boulevard / Rosecrans Avenue	F	1.450	F	1.346	F	1.599	F	1.362
Douglas Street / Imperial Highway	B	0.675	D	0.981	C	0.731	F	1.347
Douglas Street / Mariposa Avenue	C	0.784	D	0.843	A	0.599	D	0.801
Douglas Street / El Segundo Boulevard	B	0.663	D	0.847	C	0.797	F	1.008
Douglas Street / Utah Avenue [1]	A	0.556	A	0.433	C	[1]	A	[1]
Douglas Street / Rosecrans Avenue	B	0.674	C	0.733	C	0.790	C	0.787
Nash Street / Imperial Highway	D	0.843	C	0.752	F	1.318	B	0.627
Nash Street / Maple Avenue	A	0.553	A	0.339	A	0.546	A	0.348
Nash Street / Mariposa Avenue	A	0.540	A	0.524	C	0.788	C	0.796
Nash Street / Grand Avenue	A	0.591	A	0.572	A	0.584	B	0.658
Nash Street / El Segundo Boulevard	D	0.805	C	0.731	E	0.944	F	1.129
Nash Street / Rosecrans Avenue	A	0.438	B	0.652	A	0.482	B	0.670
Continental Boulevard / Mariposa Avenue	A	0.517	A	0.308	B	0.661	A	0.399
Continental Boulevard / Grand Avenue	A	0.457	A	0.521	A	0.512	A	0.588
Continental Boulevard / El Segundo Boulevard	D	0.859	B	0.622	E	0.905	C	0.709
Sepulveda Boulevard / Imperial Highway	C	0.733	C	0.799	F	1.134	F	1.532
Sepulveda Boulevard / Maple Avenue	D	0.835	D	0.845	D	0.849	D	0.875
Sepulveda Boulevard / Mariposa Avenue	C	0.794	D	0.818	D	0.847	D	0.900
Sepulveda Boulevard / Grand Avenue	F	1.108	F	1.171	F	1.089	F	1.531
Sepulveda Boulevard / El Segundo Boulevard	E	0.947	E	0.997	F	1.018	F	1.167
Sepulveda Boulevard / Hughes Way	C	0.753	C	0.735	C	0.769	C	0.751

**TABLE 4-2
PROPOSED PROJECT AND FUTURE NO PROJECT ALTERNATIVE
INTERSECTION OPERATING CONDITIONS**

Intersection	Proposed Project (Master Plan Plus Improvements)				No Project Alternative			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Sepulveda Boulevard / Rosecrans Avenue	D	0.900	D	0.805	F	1.054	F	1.215
California Street / Imperial Highway	B	0.643	A	0.556	B	0.643	A	0.556
Center Street / Grand Avenue [2]	B	0.636	B	0.549	B	0.636	B	0.549
Center Street / El Segundo Boulevard [1]	A	0.289	A	0.382	C	[1]	E	[1]
Main Street / Imperial Highway	C	0.797	C	0.783	E	0.921	D	0.860
Main Street / Mariposa Avenue	B	0.648	C	0.700	B	0.648	C	0.700
Main Street / Grand Avenue	A	0.405	A	0.490	A	0.446	A	0.523
Main Street / El Segundo Boulevard [2]	A	0.537	B	1.150	A	0.410	B	0.764
Vista Del Mar Boulevard / Grand Avenue	A	0.600	A	0.474	D	0.830	B	0.613

Notes:
 1) Intersection has stop signs on one cross street - no V/C analysis possible
 2) Intersection has stop signs on all approaches (all-way stop control)

General Notes:
 Level of Service estimates based on traffic counts conducted in 1998
 Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc.), but are included in analysis since they are important traffic control locations
 Assesses conversion to two-way flow for Nash/Douglas couplet.

Bold and shade indicate Level of Service E or F intersection conditions

TABLE 4-3
PROPOSED PROJECT AND FUTURE REDUCED PROJECT ALTERNATIVE
INTERSECTION OPERATING CONDITIONS

Intersection	Proposed Project (Master Plan Plus Improvements)				Reduced Project Alternative			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Aviation Boulevard / Imperial Highway	C	0.788	F	1.286	C	0.788	F	1.286
Aviation Boulevard / 120th Street	B	0.688	B	0.614	B	0.688	B	0.614
Aviation Boulevard / El Segundo Boulevard	F	1.441	F	1.391	F	1.441	F	1.391
Aviation Boulevard / Utah-135th Street	B	0.698	B	0.697	B	0.698	B	0.697
Aviation Boulevard / Rosecrans Avenue	F	1.450	F	1.346	F	1.450	F	1.346
Douglas Street / Imperial Highway	B	0.675	D	0.981	D	0.824	F	1.283
Douglas Street / Mariposa Avenue	C	0.784	D	0.843	C	0.784	D	0.843
Douglas Street / El Segundo Boulevard	B	0.663	D	0.847	D	0.825	F	1.229
Douglas Street / Utah Avenue [1]	A	0.556	A	0.433	C	[1]	E	[1]
Douglas Street / Rosecrans Avenue	B	0.674	C	0.733	B	0.674	C	0.733
Nash Street / Imperial Highway	D	0.843	C	0.752	F	1.097	D	0.850
Nash Street / Maple Avenue	A	0.553	A	0.339	A	0.553	A	0.339
Nash Street / Mariposa Avenue	A	0.540	A	0.524	A	0.540	A	0.524
Nash Street / Grand Avenue	A	0.591	A	0.572	A	0.591	A	0.572
Nash Street / El Segundo Boulevard	D	0.805	C	0.731	D	0.805	C	0.731
Nash Street / Rosecrans Avenue	A	0.438	B	0.652	A	0.438	B	0.652
Continental Boulevard / Mariposa Avenue	A	0.517	A	0.308	A	0.517	A	0.308
Continental Boulevard / Grand Avenue	A	0.457	A	0.521	A	0.457	A	0.521
Continental Boulevard / El Segundo Boulevard	D	0.859	B	0.622	D	0.859	B	0.622
Sepulveda Boulevard / Imperial Highway	C	0.733	C	0.799	F	1.107	F	1.482
Sepulveda Boulevard / Maple Avenue	D	0.835	D	0.845	D	0.835	D	0.845
Sepulveda Boulevard / Mariposa Avenue	C	0.794	D	0.818	C	0.794	D	0.818
Sepulveda Boulevard / Grand Avenue	F	1.108	F	1.171	F	1.108	F	1.171

TABLE 4-3
 PROPOSED PROJECT AND FUTURE REDUCED PROJECT ALTERNATIVE
 INTERSECTION OPERATING CONDITIONS

Intersection	Proposed Project (Master Plan Plus Improvements)				Reduced Project Alternative			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Sepulveda Boulevard / El Segundo Boulevard	E	0.947	E	0.997	E	0.947	E	0.997
Sepulveda Boulevard / Hughes Way	C	0.753	C	0.735	C	0.753	C	0.735
Sepulveda Boulevard / Rosecrans Avenue	D	0.900	D	0.805	F	1.037	F	1.020
California Street / Imperial Highway	B	0.643	A	0.556	B	0.643	A	0.556
Center Street / Grand Avenue [2]	B	0.636	B	0.549	B	0.636	B	0.549
Center Street / El Segundo Boulevard [1]	A	0.289	A	0.382	C	[1]	E	[1]
Main Street / Imperial Highway	C	0.797	C	0.783	C	0.797	C	0.783
Main Street / Mariposa Avenue	B	0.648	C	0.700	B	0.648	C	0.700
Main Street / Grand Avenue	A	0.405	A	0.490	A	0.405	A	0.490
Main Street / El Segundo Boulevard [2]	A	0.537	B	1.150	A	0.537	B	1.150
Vista Del Mar Boulevard / Grand Avenue	A	0.600	A	0.474	A	0.600	A	0.474

Notes: 1) Intersection has stop signs on one cross street - no V/C analysis possible
 2) Intersection has stop signs on all approaches (all-way stop control)

General Notes: Level of Service estimates based on traffic counts conducted in 1998
 Some intersections are partially or wholly under the control of other jurisdictions (City and County of Los Angeles, Manhattan Beach, Caltrans, etc), but are included in analysis since they are important traffic control locations
 Assumes conversion to two-way flow for Nash/Douglas complex.

Bold and shade indicate Level of Service E or F intersection conditions

4.4 ALTERNATIVES FOUND TO BE INFEASIBLE

Alternative Site

According to the CEQA Guidelines, two major provisions are necessary for an adequate alternative site analysis—feasibility and location. The EIR should consider alternate project locations if a significant project impact could be avoided or substantially lessened by moving the project to an alternate site. Presumably, significant air and noise impacts in the City of El Segundo associated with implementation of the Circulation Update would occur if the project were implemented outside of El Segundo. However, these are specific to the City of El Segundo, its geographic location, regional context, local jurisdiction, and existing land use development pattern. Therefore, an alternative site for project would not be practical or feasible, nor would it meet the “rule of reason” under CEQA. This alternative is eliminated from further consideration in this EIR.

Enhanced Project Alternative

This alternative assumes full implementation of the current Master Plan of Streets, as illustrated in Figures ES-1 and ES-2 of the Technical Report, as well as implementation of intelligent traffic system (ITS) technology, conversion of the Nash/Douglas one-way couplet system back to a two-way system, and amendments to currently adopted goals and policies of the Circulation Element. Further, this alternative includes a larger set of additional roadway and intersection improvements beyond those described as part of the proposed project. These additional improvements seek to maximize transportation efficiency within the City, reducing congestion and meeting the levels of service thresholds for all roadway segments. Additional improvements beyond those included in the proposed project are included in Table 4-4.

TABLE 4-4
 SUMMARY OF CONCEPTUAL IMPROVEMENTS TO ACHIEVE LOS D CONDITIONS
 BEYOND MASTER PLAN OF STREETS AND ADDITIONAL CAPACITY IMPROVEMENTS

Intersection	Level of Service with Master Plan of Streets and Additional Capacity Improvements	Conceptual Improvements	Level of Service with Conceptual Improvements Beyond Master Plan of Streets and Additional Capacity Improvements
	AM Peak Hour	PM Peak Hour	AM Peak Hour
Aviation Boulevard/ Imperial Highway	LOS B	LOS F	LOS B
		<ul style="list-style-type: none"> • 4 through lanes eastbound and westbound; • Dual right turn lane northbound. 	LOS D
Aviation Boulevard/ El Segundo Boulevard	LOS F	LOS F	LOS D
		<ul style="list-style-type: none"> • through lanes eastbound and westbound; • Dual right turn lane northbound. 	LOS D
Aviation Boulevard/ Rosecrans Avenue	LOS F	LOS F	LOS D
		<ul style="list-style-type: none"> • Dual right turn lanes northbound, southbound, and westbound; • 1 right turn lane eastbound; • 5 through lanes eastbound and westbound; • Triple left turn lanes southbound and westbound. 	LOS D
Sepulveda Boulevard/ Grand Avenue	LOS F	LOS F	LOS C
		<ul style="list-style-type: none"> • through lanes northbound and southbound; • Westbound right turn overlap; • Dual left turn lanes northbound and southbound; • 1 right turn lane eastbound with overlap. 	LOS D
Sepulveda Boulevard/ El Segundo Boulevard	LOS D	LOS F	LOS C
		<ul style="list-style-type: none"> • 5 through lanes northbound and southbound 	LOS D

Source: MMA 2000

While implementation of these improvements would achieve LOS D conditions (or better) throughout the City, achieving LOS D along major thoroughfares such as Sepulveda Boulevard would require additional through lanes in each direction. Widening for Sepulveda Boulevard is under construction for the segment between Rosecrans and El Segundo boulevards. However, widening to create five through lanes further north is not feasible due to the acquisition of necessary right-of-way that would result in severe economic and environmental impacts. The resulting rights-of-way would not only consume existing roadway and sidewalk, but would, in some cases, require the demolition or major modification of street-facing buildings and other improvements on private property. Similar significant impacts would result along through streets and at intersections if additional capacity enhancements were to be provided to provide an acceptable level of service in all locations throughout the City. These impacts would themselves require substantial additional mitigation, if possible, and would result in significant environmental effects not associated with the proposed project. Therefore, this alternative is found to be infeasible, and is eliminated from further consideration in this EIR.

4.5 COMPARISON OF PROJECT ALTERNATIVES

A summary of the proposed project and the alternatives analyzed and a comparison of environmental impacts relative to the proposed project, is presented in Table 4-5.

TABLE 4-5
COMPARISON OF PROJECT ALTERNATIVES (RELATIVE TO THE PROPOSED PROJECT)

Issue Area	No Project	Reduced Project
Traffic	Greater Than	Greater Than
Noise	Greater Than	Greater Than
Air Quality	Greater Than	Greater Than
TOTAL	Greater Than	Greater Than

4.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

According to the above analysis, the project itself is the environmentally superior alternative, as significant traffic, noise and air quality impacts of each feasible alternative would exceed those of the proposed project and create additional impacts or require additional mitigation measures. This makes sense because the proposed project was created through an evaluation process that considered improvements to the circulation system along with other important aspects of community development to create a reasonable set of improvements that would be acceptable to the City of El Segundo.

5.0 Long-Term Implications

5.1 GROWTH-INDUCING IMPACTS

Section 15126 of the State CEQA Guidelines requires that an EIR discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment. Inducements to growth include the generation of construction and permanent employment opportunities in the support sector of the economy.

Short-Term Employment Generation

Development of the proposed project would generate some short-term, construction-related employment opportunities associated with certain components of the Circulation Element Update. For example, the construction phases of the project would require a labor force, though limited to the relatively short-term nature of construction employment. Some of this work may be completed by existing City public works staff. Given the supply of construction workers in the local work force, it is likely that these workers would come from within and around the El Segundo area. Therefore, given the availability of local workers, the proposed project would not be considered growth-inducing from a short-term employment perspective.

Long-Term Employment Generation

Adoption of the Circulation Element update and implementation of the specific roadway improvements proposed as part of the Circulation Element update are not expected to create long-term employment opportunities. The Circulation Element provides the means to reduce congestion and improve traffic flow, but does not create an inducement to growth by providing substantial unused capacity on El Segundo roadways. In addition, the policies of the Circulation Element are not intended to be a deterrent to sensible land use development within the City. Development of additional commercial and industrial areas, such as the Smokey Hollow area, will create long-term employment opportunities, but are not a primary or secondary result of this project.

Population Generation and Housing

Since the proposed project is a not a residential development, it will not directly result in growth in the number of people who reside in the City of El Segundo.

Visitor Generation

Since the proposed project would not result in land uses targeted at generating visitors, it will not directly result in growth in the number of people who come to the City of El Segundo for business or vacation.

5.2 SUMMARY OF CUMULATIVE IMPACTS

According to Section 3.0 (Environmental Analysis) of this EIR, no cumulative regional impacts are anticipated as a result of implementing the Circulation Element update. Cumulative impacts within the City of El Segundo have been included in the growth projection forecasts of the proposed project.

5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126 of the State CEQA Guidelines requires a discussion of any significant irreversible environmental changes which would be involved in a proposed action should it be implemented. The CEQA Guidelines states that,

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse there after unlikely. Primary impacts, and particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified. Section 15126.3(c).

The construction and implementation of the proposed project would entail the commitment of energy and human resources. This commitment of energy, personnel, and building materials would be commensurate with that of other projects of similar magnitude. Manpower would also be committed for the construction of public facilities necessary to support the new development.

Furthermore, on-going maintenance of the project would entail a substantial long-term commitment of energy. The development of new roadways planned for in the Master Plan of Streets will use construction materials, although some of those materials may be recycled. However, commitment of resources would be a long-term obligation, as it would be impossible to return them to their original condition, once they have been developed. Finally, long-term impacts would result from an increase in vehicular traffic, and the associated air pollutant and noise emissions as discussed in Section 3.0 (Environmental Analysis.)

5.4 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

According to Section 3.0 (Environmental Analysis), traffic impacts at five intersections of major arterial streets in the City would be significant and unavoidable. The potential mitigation measures to reduce these impacts (widening the roadway for additional through and turn lanes) is not feasible, and is therefore not recommended as part of the proposed project. Therefore, this impact is found to be significant and unavoidable. There are no significant and unavoidable noise or air quality impacts.

6.0 Organizations and Persons Consulted/List of EIR Preparers

6.1 ORGANIZATIONS AND PERSONS CONSULTED

Organizations and persons contacted for information during the preparation of this EIR are listed in Section 7.0 (References).

6.2 LIST OF EIR PREPARERS

This EIR was prepared by EIP Associates, a subconsultant to Meyer Mohaddes Associates under contract to the City of El Segundo. Assisting EIP Associates in this task were the City of El Segundo staff members, and public service providers.

It is recognized that no one individual can be an expert in all of the environmental analysis presented in this EIR. Consequently, an interdisciplinary team, consisting of technicians and experts in various issue areas, was required to prepare and complete this study, and is listed in Table 6.2-1 below.

TABLE 6.2-1
LIST OF EIR PREPARERS

Name	Project Role
Lead Agency: City of El Segundo	
Chris Metz, Planning Manager	City Planner
Paul Garry, Associate Planner	Project Manager
EIR Consultant: EIP Associates	
Steve Gerhardt	Project Management, Principal Analyst
Susan ZagRodny, Mark Hanson (formerly of EIP)	Environmental Analysis, Alternatives
Brewster Birdsall	Air Quality, Noise

Traffic Consultant: Meyer, Mohaddes Associates

Gary Hamrick

Transportation and Circulation

Noel Casil

Transportation and Circulation

7.0 References

- California Air Resources Board (CARB.) 1999. *California Ambient Air Quality Standards*. December.
- City of El Segundo. 1991. *General Plan Draft Noise Element Existing Conditions Report*.
- City of El Segundo. 1992. *General Plan*.
- Federal Interagency Committee on Urban Noise (FICUN.) 1980. *Guidelines for Considering Noise in Land Use Planning and Control*. Washington, D.C.
- Los Angeles World Airports (LAWA.) 2000. *LAX Passenger and Operation Statistics*. April.
- Peterson, A. and E. Gross. 1963.
- South Coast Air Quality Management District (SCAQMD.) 1991. *Air Quality Attainment Plan (AQAP)*.
- South Coast Air Quality Management District (SCAQMD.) 1993-1996. *Air Quality Reports and Historical Summaries*.
- South Coast Air Quality Management District (SCAQMD.) 1994. *1994 Clean Air Plan*. November.
- South Coast Air Quality Management District (SCAQMD.) 1994. *CEQA Air Quality Handbook*.
- State of California. n.d. *Clean Air Act*.
- U.S. Department of Transportation, Federal Transit Administration (FTA.) 1995. *Transit Noise and Vibration Impact Assessment*. April.
- United States Environmental Protection Agency (EPA.) 1994. *National Ambient Air Quality Standards (NAAQS)*
- United States Environmental Protection Agency (EPA.) 1971. *Noise from Construction Equipment and Operation of Building Equipment, and Home Appliances*. Prepared by Bolt, Baranek and Newman. December 31.

Appendix A

Initial Study/Notice of Preparation



DEPARTMENT OF PLANNING
AND BUILDING SAFETY

350 Main Street
El Segundo, CA 90245
(310) 322-4670
FAX (310) 322-4167

Project # EA-454, GPA 98-4

NOTICE OF PREPARATION

The City of El Segundo will be the lead agency and will prepare an Environmental Impact Report (EIR) for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

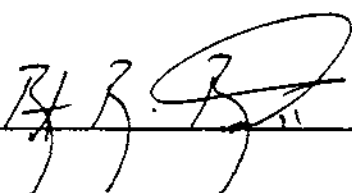
The project description, location, and the probable environmental effects are contained in the attached materials. A copy of the Initial Study is attached.

Please send your response to Emmanuel Ursu at the above address by September 20, 1999. We would appreciate the name of a contact person in your agency.

Project Title: City of El Segundo General Plan Circulation Element Update

Project Applicant: City of El Segundo

Date: August 19, 1999

Signature: 

Title: Director, Planning and Building Safety

Reference: California Administrative Code, Title 14, Sections 15082(a), 15103, 15375

AR00006



DEPARTMENT OF PLANNING
AND BUILDING SAFETY

350 Main Street
El Segundo, CA 90245
(310) 322-4670
FAX (310) 322-4167

Project: EA-454, GPA 98-4

ENVIRONMENTAL CHECKLIST FORM

I. BACKGROUND

1. Project Title:

City of El Segundo General Plan Circulation Element Update Focused EIR

2. Lead Agency Name and Address:

City of El Segundo
350 Main Street
El Segundo, CA 90245

3. Contact Person and Phone Number:

Emmanuel Ursu, (310) 322-4670 x 405

4. Project Location:

City of El Segundo (Citywide)

5. Project Sponsor's Name and Address:

City of El Segundo Department of Planning and Building Safety
350 Main Street
El Segundo, CA 90245

6. General Plan Designation:

The City of El Segundo (City) is served by a network of roadways designated as major arterials (8 lanes divided), secondary arterials (6 lanes divided), collector 4-lane (4 lanes undivided), collector 2-lane (2 lanes undivided), and local (2 lanes undivided).

7. Zoning:

Within the City, land is zoned for use as open space, automobile parking, single-family residential, planned residential, two-family residential, multi-family residential, public facilities, downtown commercial, neighborhood commercial, general commercial, corporate office, urban mixed-use north, urban mixed-use south, light industrial, heavy industrial, small business, medium manufacturing, grand avenue commercial, medium density residential, and multi-media.

8. **Description of Project:** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation)

The City adopted a General Plan in 1992 and seeks to revise the Circulation Element of the Plan. The objective of the Circulation Element update is to maintain consistency with State and local congestion and transportation policies and practices. Pertinent California Government Code (CGC) sections are as follows:

CGC Section 65302(b): "[The general plan shall include] a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public facilities, all correlated with the land use element of plan."

CGC Section 95303: "The general plan may... address any other subjects which, in the judgement of the legislative body, relates to the physical development of the county or city."

Therefore, the project is the Circulation Element update of the City's General Plan, and any implementation actions associated with this update.

9. **Surrounding Land Uses and Setting:** (Briefly describe the project's surroundings.)

The City of El Segundo is a coastal town located immediately south of Los Angeles International Airport, north of Manhattan Beach, and west of the communities of Del Aire and Hawthorne, in the County of Los Angeles, California.

According to the USGS topographic map of the Venice, California quadrangle (1964, photorevised in 1981), the City covers an area of gently rolling terrain that varies in elevation from approximately 100 to 200 feet above mean sea level. To the west of the City are steep coastal bluffs, exceeding 30% slope, descending to a coastal beach area.

In general, the City is set in an urban environment with a variety of surrounding commercial, residential and industrial land uses. Across Imperial Highway to the north is Los Angeles International Airport. The Hyperion Sewage Treatment Plant occupies the land area beyond north-western city limits. The south-western portion of the City is occupied by the Chevron Oil Refinery and the City of Los Angeles Scattergood Energy Plant. A number of parks and schools are scattered throughout the City's residential neighborhoods. To the east of the City is the unincorporated community of Del Aire in Los Angeles County and the City of Hawthorne.

10. **Other Agencies Whose Approval is Required:** (e.g., permits, financing approval, or participation agreements)

None.

II. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

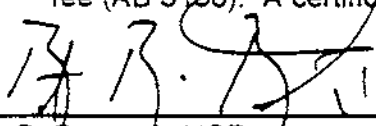
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Population/Housing |
| <input checked="" type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation/Traffic |
| | <input type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

III. DETERMINATION (To be completed by the Lead Agency.)

On the basis of this Initial Study of Environmental Impact, the Planning Commission of the City of El Segundo finds the following:

- That the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- That although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because mitigation measures, as described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.
- That the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- That the proposed project MAY have significant effect(s) on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the impact is "potentially significant impact" or "potentially significant unless mitigated". An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- That although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.
- That the proposed project will not have an impact on fish and wildlife resources or habitat upon which fish and wildlife depend, and that this project is exempt from the Fish and Game fee (AB 3158). A certificate of Fee Exemption will be prepared by staff.



Bret B. Bernard, AICP
Director of Planning and Building Safety
Secretary of the Planning Commission
City of El Segundo

August 19, 1999

IV. ENVIRONMENTAL IMPACTS

1. Aesthetics

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	[]	[]	[]	[X]
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	[]	[]	[]	[X]
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	[]	[]	[]	[X]
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	[]	[]	[]	[X]

Comments:

The proposed project involves an update of the Circulation Element of the City's General Plan, its scope being restricted to traffic related impacts associated with future traffic demand and operations. No impacts to scenic vistas, or other visual resources are anticipated, nor are new sources of substantial light or glare expected by this update. Therefore, the proposed project is not expected to alter the aesthetic environment of the City, as no substantial land use changes are proposed. No further analysis of aesthetic impacts is necessary in an EIR.

2. Agriculture Resources

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments:

The City of El Segundo is an urbanized coastal town with no existing farmland and no designated agricultural land uses. Therefore less than significant impacts due to conversion of agricultural resources are anticipated by the proposed project, nor do they need to be discussed in an EIR.

3. Air Quality

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	[X]	[]	[]	[]
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	[X]	[]	[]	[]
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	[X]	[]	[]	[]
d) Expose sensitive receptors to substantial pollutant concentrations?	[X]	[]	[]	[]
e) Create objectionable odors affecting a substantial number of people?	[X]	[]	[]	[]

Comments:

Both the federal Clean Air Act (1970) and California Clean Air Act (1977) set standards for criteria pollutants. An area is considered to be in non-attainment if applicable standards have been exceeded more than once in three years. Currently, the City of El Segundo (and other cities of the South Coast Air Basin) are in non-attainment for ozone (O₃) and particulate matter (PM₁₀). Furthermore, a number of sensitive receptors (e.g., health care facilities, schools, childcare centers, playgrounds and athletic facilities) occur within the City. A significant adverse impact may occur if reconfiguration of the street network either individually or cumulatively interferes with progress towards an attainment goal, exposes sensitive receptors to substantial pollutant concentrations, or creates objectionable odors affecting a substantial number of people. These potential project-related impacts to air quality need to be addressed in an EIR.

4. Biological Resources

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	[]	[]	[]	[X]
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	[]	[]	[]	[X]
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	[]	[]	[]	[X]
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	[]	[]	[]	[X]
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	[]	[]	[]	[X]
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or	[]	[]	[]	[X]

state habitat conservation plan?

Comments:

The scope of the project is restricted to traffic-related impacts associated with future traffic demand and operations in an urbanized area. The project is not expected to result in any disturbance to, or removal of, significant biological resources (e.g., endangered, threatened, rare, or locally designated species, communities or habitats). No riparian habitat, wetland, or other sensitive natural community occurs within City limits that will be effected, either directly or indirectly, by the proposed project. The proposed project is not anticipated to interfere with movement of migratory fish or other wildlife species, or conflict with local or regional policies protecting biological resources. Therefore, no further analysis of potential impacts to biological resources is necessary in an EIR.

5. Cultural Resources

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in State Code Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to State Code Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

The proposed project involves an update of the Circulation Element of the City's General Plan, its scope being restricted to traffic related impacts associated with future traffic demand and operations. Reconfiguration of the existing traffic network is not expected to disturb, change or destroy any known historic, archaeological or paleontological resource within the City. However, construction activities (e.g., those associated with street extension) have the potential to uncover unforeseen cultural resources, and are subject to applicable state law. These regulations may require further site evaluation and possible mitigation, and are intended to reduce impacts to cultural resources to less than significant levels. As such, further analysis of potential impacts to cultural resources is not necessary in an EIR.

6. Geology and Soils

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

for the disposal of wastewater?

Comments:

In general, southern California is a seismically active region. While no active fault traces occur within City limits, strong ground shaking can be expected to occur, based on regional faulting and historic seismic activity. Strong ground shaking during a seismic event can cause damage to structures and utilities, depending upon such factors as earthquake magnitude, distance from earthquake rupture zone, soil conditions and structural design. The American Public Works Standards and CalTrans Highway Design Manual are used by the City as engineering design manuals and are intended to reduce the risk of injury and property loss to less than significant levels through proper construction techniques and public facility design. Note, too, that the project scope is restricted to traffic-related impacts associated with future traffic demand and operations. The proposed project is not expected to change geologic conditions within the City, nor is it expected to increase exposure of people or property to geologic hazards by an intensification of development. Therefore, no further analysis of project-related impacts associated with geologic resources is necessary in an EIR.

7. Hazards and Hazardous Materials

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

plan?

- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Comments:

The scope of the proposed project is restricted to traffic-related impacts associated with future traffic demand and operations, and is intended to be consistent with the Land Use Element of the City's General Plan. The proposed project is not expected to create, or expose people or property to health hazards, such as hazardous substances, electrical transmission lines, gas lines or oil pipelines. Therefore, no further analysis of impacts due to hazards associated with the project is necessary in an EIR.

8. Hydrology/Water Quality

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments:

- a-d) The proposed project is not expected to result in significant discharge of materials into surface waters, nor would it significantly change the quantity, quality, direction or rate of flow of groundwater. Therefore, no further analysis is necessary in an EIR.
- e) The project scope is restricted to traffic-related impacts associated with future traffic demand and operations. While the proposed project may result in the creation and expansion of impermeable surfaces (e.g., parking lots, roadways, walkways and other hardscape improvements) which could lead to an increase in the amount of surface runoff, impacts due to increased runoff are not expected to be significant. Therefore, no further analysis of impacts associated with surface water absorption, drainage or amount is necessary in an EIR.
- f) The proposed project is not expected to result in significant discharge of materials into surface waters, nor would it significantly change the quantity, quality, direction or rate of flow of groundwater. Therefore, no further analysis is necessary in an EIR.
- g-j) According to FEMA (personal communication), the City of El Segundo is located in Zone C and is not prone to flooding. Therefore, no significant water hazards, such as flooding, are expected to occur within project boundaries, and no further analysis of these impacts is necessary in an EIR.

9. Land Use and Planning

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	[]	[]	[]	[X]
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	[]	[]	[]	[X]
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	[]	[]	[]	[X]

Comments:

- a) The proposed project is intended to be consistent with the Land Use Element of the City's General Plan, and would not disrupt established communities by altering land use designations within the City. Therefore, no further analysis of land use and planning is necessary in an EIR.
- b-c) The proposed project involves an update of the Circulation Element of the City's General Plan, its scope being restricted to traffic-related impacts associated with future traffic demand and operations. The proposed project is intended to be consistent with the Land Use, Open Space and Conservation Elements of the City's General Plan, and therefore will not result in any conflicts with General Plan, Zoning, and Local Coastal Program designations within the City. Therefore, no further analysis of general plan or zoning ordinance consistency is necessary in an EIR.

10. Mineral Resources

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

The scope of the proposed project is restricted to traffic-related impacts associated with future traffic demand and operations. The proposed project will not result in increased extraction or loss of availability of mineral resources. No further analysis of impacts to mineral resources is necessary in an EIR.

11. Noise

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

Noise guidelines are specified in the Noise Element of the City's General Plan for considerations of noise levels associated with proposed transportation systems and facilities. The potential noise impacts to sensitive receptors (particularly in residential areas), considering the proposed alterations or improvements to the City's circulation system, proximity to Los Angeles International Airport, and impacts associated with construction and operation noise, need to be considered in an EIR.

12. Population/Housing

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

- | | | | | |
|--|-----|-----|-----|-----|
| a) Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | [] | [] | [X] | [] |
| b) Displace substantial numbers of people and/or housing, necessitating the construction of replacement housing elsewhere? | [] | [] | [] | [X] |

Comments:

- a) According to City Interdepartmental Correspondence (City, 1999, attached), development of vacant land in El Segundo is not expected to contribute to an exceedance of regional and local projections of annual growth (2 percent). Furthermore, vacancy rates for industrial and retail space do not exceed 4 percent, a rate considered to describe normal turnover only, while vacancy rates for commercial office space is currently recognized as 4.28 percent (after vacancy rate of normal turnover is considered). Residential parcels are currently built-out with respect to their zoning designations but not to their maximum density; however, further development is not expected to be significant. Furthermore, potential roadway extensions to undeveloped lands are generally impeded by existing development; roadway extensions may provide access to only about 30 acres of property that is currently not readily accessible. Therefore, the potential for the project to induce substantial growth within the City is low, and further analysis of growth-inducing impacts due to the project in an EIR is not necessary.
- b) According to the City (1999), no intensification of development is expected to occur. Therefore, the proposed project is not expected to displace existing housing, and no further analysis of housing displacement is necessary in an EIR.

13. Public Services

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</p>				
a) Fire protection?	[]	[X]	[]	[]
b) Police protection?	[]	[X]	[]	[]
c) Schools?	[]	[]	[]	[X]
d) Parks?	[]	[]	[]	[X]
e) Other public facilities?	[]	[]	[]	[X]

Comments:

The proposed project is not expected to result in increased demand for school or park services. However, the reconfiguration of the City's transportation network may create a potentially significant impact to fire and police services, particularly if the project creates intersections that operate at LOS F and occur along emergency access routes. These impacts would be potentially significant unless mitigation is incorporated into transportation design, and will be analyzed further in the transportation/circulation section of the EIR.

14. Recreation

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which may have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

The scope of the project is restricted to traffic related impacts associated with future traffic demand and operations. The project is not expected to result in any disturbance to, nor does it include construction of, recreational facilities. Therefore, no further analysis is necessary in an EIR.

15. Transportation/Traffic

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	[X]	[]	[]	[]
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	[X]	[]	[]	[]
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	[X]	[]	[]	[]
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	[X]	[]	[]	[]
e) Result in inadequate emergency access?	[X]	[]	[]	[]
f) Result in inadequate parking capacity?	[X]	[]	[]	[]
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	[X]	[]	[]	[]

Comments:

The proposed project involves an update to the Circulation Element of the City's General Plan. Its scope encompasses traffic-related impacts associated with future traffic demand and operations. Analysis in an EIR needs to address increased vehicle trips, potential hazards due to project design,

emergency access, parking, impacts to pedestrians and bicyclists, potential conflicts with adopted policies and regional transportation plans, as well as rail, waterborne, and air traffic impacts.

16. Utilities/Service Systems

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	[]	[]	[]	[X]
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	[]	[]	[]	[X]
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	[]	[]	[]	[X]
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	[]	[]	[]	[X]
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?	[]	[]	[]	[X]
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	[]	[]	[]	[X]
g) Comply with federal, state, and local statutes and regulations related to solid waste?	[]	[]	[]	[X]

Comments:

The proposed project involves an update to the Circulation Element of the City's General Plan. The scope of the project is restricted to traffic related impacts associated with future traffic demand and

operations. The proposed project is not expected to change supply of, or demand for, utilities or services such as electrical power, gas, water treatment, sewer, water distribution and solid waste disposal. Therefore, no further analysis of potential impacts to utilities is necessary in an EIR.

17. Mandatory Findings of Significance

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	[]	[]	[]	[X]
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	[X]	[]	[]	[]
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	[X]	[]	[]	[]

Comments:

- a) The scope of the project is restricted to traffic related impacts associated with future traffic demand and operations in an urbanized area. The project is not expected to result in any disturbance to, or removal of, biological resources (e.g., endangered, threatened, rare, or locally designated species, communities or habitats). Therefore, no further analysis of potential impacts to biological resources is necessary in an EIR.
- b-c) Potential project-related impacts, both individual and cumulative, to air quality, noise, population/housing, transportation/circulation and public services will be addressed in an EIR.

Appendix B

Initial Study/Notice of Preparation
Comment Letters



Governor's Office of Planning and Research
State Clearinghouse



Gray Davis
GOVERNOR

STREET ADDRESS: 1400 TENTH STREET ROOM 222 SACRAMENTO, CALIFORNIA 95814
MAILING ADDRESS: P.O. BOX 3044 SACRAMENTO, CA 95812-3044
916-445-0613 FAX 916-323-3018 www.opr.ca.gov/clearinghouse.html

Loretta Lynch
DIRECTOR

Notice of Preparation

August 25, 1999

EL SEGUNDO
SEP 1 1999

To: Reviewing Agencies
Re: El Segundo Circulation Element Update
SCH# 99081120

Attached for your review and comment is the Notice of Preparation (NOP) for the El Segundo Circulation Element Update draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Emmanuel Ursu
City of El Segundo
350 Main St
El Segundo, CA 90245

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Mosie Boyd
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

NOP Distribution List

- Resources Agency**
Nedell Gayou
Resources Agency
1020 Ninth Street, Third Floor
Sacramento, CA 95814
916/327-1722 Fax 916/327-1648
- Wild Curry**
Dept. of Hunting & Waterways
2000 Evergreen Street
Sacramento, CA 95815-3896
916/263-4326 Fax 916/263-0648
- Elizabeth A. Fuchs**
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94103-2219
415/904-5200 Fax 415/904-5400
- William Ahern**
State Coastal Conservancy
3330 Broadway, Suite 100
Oakland, CA 94612
510/286-1015 Fax 510/286-0470
- Ken Troll**
Dept. of Conservation
801 K Street, MS-24-02
Sacramento, CA 95814
916/445-8733 Fax 916/324-0948
- Allen Robertson**
Dept. of Forestry & Fire Protection
1416 Ninth Street, Room 1516-24
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916/637-0300 Fax 916/633-8957
- Hans Kresutberg**
Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296-0001
916/633-6624 Fax 916/633-9824
- Beth Walls**
Resource Management Division
Dept. of Parks and Recreation
P.O. Box 942896
Sacramento, CA 94296-0001
916/633-6725 Fax 916/637-3355
- Pam Bruner**
Reclamation Board
1416 Ninth Street, Room 1601
Sacramento, CA 95814
916/633-5434 Fax 916/633-5805
- Steve McAdam**
S.F. Boy Conservation & Dev't. Comm.
30 Van Ness Avenue, Room 2011
San Francisco, CA 94102
415/557-3666 Fax 415/557-3767
- Nedell Gayou**
Department of Water Resources
1020 Ninth Street, Third Floor
Sacramento, CA 95814
916/327-1722 Fax 916/327-1648
- Health & Welfare**
Wayne Hubbard
Dept. of Health/Drinking Water
601 N. 7th Street, PO Box 942712
Sacramento, CA 94234-7320
916/445-2519 Fax 916/327-6092
- Food & Agriculture**
Dad Bell
Dept. of Food and Agriculture
1220 N Street, Room 409
Sacramento, CA 95814
916/633-7643 Fax 916/633-4723

- Fish and Game**
Department of Fish and Game
Environmental Services Division
1416 Ninth Street, 15th Floor
Sacramento, CA 95814
916/633-1070 Fax 916/633-2388
- Donald Koch (Region 1)**
Department of Fish and Game
601 Locust Street
Redding, CA 96001
530/223-2363 Fax 530/225-2381
- Banky Curtis (Region 2)**
Department of Fish & Game
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670
916/336-2898 Fax 916/358-2912
- Brian Hunter (Region 3)**
Department of Fish and Game
P.O. Box 47
Yountville, CA 94599
707/944-5518 Fax 707/944-5563
- William Laudermark (Region 4)**
Department of Fish and Game
1234 East State Avenue
Fresno, CA 95710
559/243-4005 Fax 559/243-4022
- Sandy Peterson (Region 5)**
Department of Fish and Game
Habitat Conservation Program
4949 Viewridge Avenue
San Diego, CA 92123
619/467-4234 Fax 619/467-4299
- Cheryl Avents (Region 6)**
Department of Fish and Game
Habitat Conservation Program
330 Golden Shore, Suite 50
Long Beach, CA 90802
562/590-5159 Fax 562/590-1192
- Alan Pickard (Inyo & Mono)**
Department of Fish and Game
Habitat Conservation Program
407 West Line Street, Room 8
Bishop, CA 93514
760/872-1129
- Independent Commissions/Agencies**
Greg Newhouse
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814
916/654-5000 Fax 916/654-3882
- Dabbie Treadway**
Native American Herring Comm.
915 Capitol Mall, Room 364
Sacramento, CA 95814
916/653-4082 Fax 916/657-5390
- Andrew Barmadale**
Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
415/703-3231 Fax 415/703-1184
- Betty Silva**
State Lands Commission
100 Howe Avenue, Suite 100-S
Sacramento, CA 95825
916/574-1872 Fax 916/574-1885
- Gerald R. Zimmerman**
Colorado River Board
770 Fairmont Avenue, Suite 100
Glendale, CA 91203-1035
818/543-4676 Fax 818/543-4685

- Lyn Barnett**
Talbot Regional Planning
P.O. Box 1038
Zephyr Cove, NV 89448
775/588-4547 Fax 775/588-4527
- John Rowden, Manager**
Office of Emergency Services
11030 White Rock Road, Ste. 110
Rancho Cordova, CA 95670
916/464-1014 Fax 916/464-1019
- Debby Eddy**
Delta Protection Commission
P.O. Box 530
Walnut Grove, CA 95690
916/776-2290 Fax 916/776-2293
- Paul Edelman**
Santa Monica Mountains Conservancy
5750 Ramirez Canyon Road
Malibu, CA 90265
310/589-3200 Fax 310/589-3207
- Department of Transportation**
District Contacts
ICRP/Planning
Caltrans, District 1
P.O. Box 3700
Eureka, CA 95502-3700
707/441-5812 Fax 707/441-5869
- Vicki Roe**
Local Development Review
Caltrans, District 2
P.O. Box 496073
Redding, CA 96049-6073
530/225-3089 Fax 530/225-3271
- Jeff Puterman**
Caltrans, District 3
P.O. Box 942874 MS-41
Sacramento, CA 94274-0001
916/327-3859 Fax 916/323-7669
- Jean Finney**
Caltrans, District 4
P.O. Box 23660
Oakland, CA 94623-0660
510/286-5572 Fax 510/286-5513
- Lawrence Newland**
Caltrans, District 5
50 Higuera Street
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805/549-3683 Fax 805/549-3077
- Marc Birnbaum**
Caltrans, District 6
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559/488-4260 Fax 559/488-4088
- Stephen J. Buewell**
Caltrans, District 7
120 South Spring Street, 1-10C
Los Angeles, CA 90012
213/897-4429 Fax 213/897-9210
- Mike Sim**
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- Robert Rebnke**
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- Chris Szyra**
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209/948-7142 Fax 209/948-7906

- Low Salazar**
Caltrans, District 11
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2829 Juan Street
San Diego, CA 92186-5406
619/688-3140 Fax 619/688-4299
- Aileen Kennedy**
Caltrans, District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612-0661
949/724-2239 Fax 949/724-2592
- Business, Transportation, & Housing**
Cathy Creswell
Housing & Community Development
1800 Third Street, Room 430
Sacramento, CA 95814
916/323-3176 Fax 916/327-2643
- Sandy Hensard**
Caltrans - Division of Aeronautics
P.O. Box 942874 MS-40
Sacramento, CA 94274-0001
916/654-5314 Fax 916/653-9531
- L.A. Dennis Branette**
California Highway Patrol
Office of Special Projects
2555 1st Ave.
Sacramento, CA 95818
916/657-7222 Fax 916/452-3151
- Ron Helgeson**
Caltrans - Planning
P.O. Box 942874
Sacramento, CA 94274-0001
916/653-9966 Fax 916/653-0001
- Robert Sleppy**
Dept. of General Services
Environmental Services Section
400 R Street, Suite 3100
Sacramento, CA 95814
916/324-0214 Fax 916/445-3556
- Phil Shaner**
Office of Public Schools Construction
1130 K Street, Suite 400
Sacramento, CA 95814
916/445-2704 Fax 916/324-0623
- California Environmental Protection Agency**
Kim Heroy-Rogataki
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Sacramento, CA 95814 (958) 4-2815
916/327-2260 Fax 916/322-3646
- Jeanie Blakeslee**
Integrated Waste Management Board
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916/255-4708 Fax 916/255-4216
- Diane Edwards**
State Water Resources Control Board
Division of Clean Water Programs
P.O. Box 944212
Sacramento, CA 94244-2120
916/227-4572 Fax 916/227-4349
- Phil Zentner**
State Water Resources Control Board
Division of Water Quality
P.O. Box 944213
Sacramento, CA 94244-2130
916/257-0912 Fax 916/657-2188

- Mike Falkenstein**
State Water Resources Control Board
Division of Water Rights
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916/637-1377 Fax 916/637-1465
- Vicky Whitley**
State Water Resources Control Board
Bay-Delta Unit
901 P Street, Third Floor
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916/633-2516 Fax 916/637-1485
- Dept. of Toxic Substances Control**
CEQA Tracking Center
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916/324-3119 Fax 916/324-1788
- Regional Water Quality Control Board**
North Coast Region (1)
Cathy Goodwin
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- San Francisco Bay Region (2)**
Environmental Document Coordinator
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- Central Coast Region (3)**
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San Luis Obispo, CA 93401-5437
805/549-3147 Fax 805/543-0397
- Los Angeles Region (4)**
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- Central Valley Region (5)**
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Sacramento, CA 95837-3003
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- Fresno Branch Office**
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559/445-5116 Fax 559/445-5910
- Redding Branch Office**
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Redding, CA 96002
530/222-4845 Fax 530/224-4857
- Lahontan Region (6)**
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South Lake Tahoe, CA 96150
530/542-5400 Fax 530/544-2271
- Victorville Branch Office**
15428 Civic Drive, Suite 100
Victorville, CA 92392-2339
760/241-6383 Fax 760/241-7308
- Colorado River Basin Region (7)**
73720 Front Working Drive, #100
Palm Desert, CA 92260-2364
760/346-7491 Fax 760/341-6809
- Santa Ana Region (8)**
5737 Main Street, Suite 300
Riverside, CA 92501-3339
909/782-4130 Fax 909/781-6288
- San Diego Region (9)**
9771 Chattram Mesa Blvd., Suite B
San Diego, CA 92124-1324
619/467-2953 Fax 619/571-4972

STATE OF CALIFORNIA—BUSINESS AND TRANSPORTATION AGENCY
GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, ADVANCE PLANNING
IGR OFFICE 1-10C
120 SO. SPRING ST.
LOS ANGELES, CA 90012
TEL: (213) 897-6536 ATSS: 8- 647-6536
FAX: (213) 897-8906



September 1, 1999

Mr. Bret B. Bernard, AICP
Director of Planning and Building Safety
City of El Segundo
350 Main Street
El Segundo, Calif. 90245

RE: IGR/CEQA 990851JM
Notice of Preparation
General Plan Circulation Element Amended EIR
within the City of El Segundo
LA / 1 / 23.924 - 25.924, LA / 105 / 0.00 - 1.524

Dear Mr. Bernard:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the proposed City of El Segundo General Plan Circulation Element Update Focused EIR. This project is to take place throughout the City of El Segundo.

Based on the information received, and to assist us in our efforts to completely evaluate and assess the impacts of this project on the State Transportation System, the DEIR should be prepared to analyze the following information:

1. Assumptions and methods used to develop trip generation/distribution, percentages and assignments.
2. An analysis of ADT, AM, and PM peak-hour volumes for both the existing and future (year 2015) conditions. This should include State Route 1 and Interstate 105 and affected ramps, streets, crossroads, and controlling intersections.
3. This analysis should include project traffic, cumulative traffic generated for all approved developments in the area, Interchange Utilization (I.C.U.) and Level of Service (LOS) of affected freeway ramp intersections on the State highway indicating existing + project(s) + other projects LOS (existing and future).
4. Discussion of mitigation measures appropriate to alleviate anticipated traffic impacts. These mitigation discussions should include, but not be

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limited to, the following:

- o financing
- o scheduling considerations
- o implementation responsibilities
- o monitoring plan

5. Developer's percent share of the cost, as well as a plan of realistic mitigation measures under the control of the developer should be addressed. Any assessment fees for mitigation should be of such proportion as to cover mainline highway deficiencies that occur as a result of the additional traffic generated by the project.

We look forward to reviewing the DEIR. We expect to receive a copy from the State Clearinghouse. However, to expedite the review process, you may send two copies in advance to the undersigned at the following address:

Stephen Buswell
IGR/CEQA Program Manager
Caltrans District 07
Transportation Planning Office, 1-10C
120 S. Spring St., Los Angeles, CA 90012

If you have any questions, please call me at (213) 897-4429 and refer to IGR/CEQA 990851JM.

Sincerely,



for
STEPHEN J. BUSWELL
IGR/CEQA Program Manager
Transportation Planning Office

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RECEIVED
SEP 20 1999

SOUTHERN CALIFORNIA



ASSOCIATION OF GOVERNMENTS

Main Office

818 West Seventh Street
12th Floor
Los Angeles, California
90017-3435

t (213) 236-1800
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www.scag.ca.gov

Officers: President: Supervisor Zev Yaroslavsky, Los Angeles County • First Vice President: Mayor Ron Bates, City of Los Alamitos • Second Vice President: Supervisor Kathy Davis, San Bernardino County • Immediate Past President: Mayor Bob Bartlett, City of Monrovia

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Orange County: Charles Smith, Orange County • Ron Bates, Los Alamitos • Art Brown, Buena Park • Elisabeth Cowan, Costa Mesa • Jan Deby, Newport Beach • Cathryn DeYoung, Laguna Niguel • Richard Dixon, Lake Forest • Alta Duke, La Palma • Shirely McCracken, Anaheim • Bev Perry, Brea

Riverside County: James Venable, Riverside County • Dick Kelly, Palm Desert • Jan Leja, Beaumont • Ron Lowridge, Riverside • Andrea Puga, Corona • Ron Roberts, Temecula

San Bernardino County: Kathy Davis, San Bernardino County • Bill Alexander, Rancho Cucamonga • Jim Bagley, Twentynine Palms • David Esklerman, Fontana • Lee Ann Garcia, Grand Terrace • Glenn Norson-Perry, Chino Hills • Ray Rucker, Highland

Ventura County: Judy Mikels, Ventura County • Donna De Piro, San Buenaventura • Andrew Fox, Thousand Oaks • Tom Young, Port Huemene

Riverside County Transportation Commission: Robyn Lowe, Hemet

Ventura County Transportation Commission: Bill Davis, Sun Valley

Printed on Recycled Paper: 559-8724/99

September 14, 1999

Mr. Emmanuel Ursu
Department of Planning and Building and Safety
City of El Segundo
350 Main Street
El Segundo, CA 90245

RE: Comments on the Notice of Preparation of the Draft Environmental Impact Report for the General Plan Circulation Element Update - SCAG No. I19990408

Dear Mr. Ursu:

Thank you for submitting the above referenced project to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG assists cities, counties and other agencies in reviewing projects and plans for consistency with regional plans.

In addition, The California Environmental Quality Act requires that EIRs discuss any inconsistencies between the proposed project and the applicable general plans and regional plans (Section 15125 [d]). If there are inconsistencies, an explanation and rationalization for such inconsistencies should be provided.

Policies of SCAG's Regional Comprehensive Plan and Guide and Regional Transportation Plan which may be applicable to your project are outlined in the attachment. We expect the DEIR to specifically cite the appropriate SCAG policies and address the manner in which the Project is consistent with applicable core policies or supportive of applicable ancillary policies. Please use our policy numbers to refer to them in your DEIR. Also, we would encourage you to use a side-by-side comparison of SCAG policies with a discussion of the consistency or support of the policy with the Proposed Project.

Please provide a minimum of 45 days for SCAG to review the DEIR when this document is available. If you have any questions regarding the attached comments, please contact me at (213) 236-1917.

Sincerely,

J. DAVID STEIN
Manager, Performance Assessment and Implementation

AR00006

**COMMENTS ON THE NOTICE OF PREPARATION OF THE DRAFT ENVIRONMENTAL
 IMPACT REPORT FOR THE GENERAL PLAN CIRCULATION ELEMENT UPDATE - SCAG
 NO. I19990408**

PROJECT DESCRIPTION

The project consists of the update of the Circulation Element of the General Plan for the City of El Segundo to maintain consistency with State and local congestion and transportation policies and practices.

CONSISTENCY WITH REGIONAL COMPREHENSIVE PLAN AND GUIDE POLICIES

The Growth Management Chapter (GMC) of the Regional Comprehensive Plan and Guide (RCPG) contains the following policies that are particularly applicable and should be addressed in the Draft EIR for the Project.

3.01 The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.

SCAG South Bay Cities Assn. Subregion Forecasts	2000	2005	2010	2015	2020
Population	857,700	872,200	884,600	902,900	925,600
Households	300,000	304,200	310,800	317,100	328,200
Employment	450,200	478,300	500,500	524,800	554,400
 SCAG El Segundo Forecasts	 2000	 2005	 2010	 2015	 2020
Population	16,400	16,700	16,900	17,300	17,700
Households	7,300	7,400	7,500	7,600	7,800
Employment	66,500	74,300	80,400	87,000	95,300

3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.

3.09 Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.

REGIONAL TRANSPORTATION PLAN

The Regional Transportation Plan (RTP) also has goals, objectives, policies and actions pertinent to this proposed project. This RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. Among the relevant goals, objectives, policies and actions of the RTP are the following:

Core Regional Transportation Plan Goals

1. *Meet the need for mobility and access to transportation of an increased employment and population base in the subregions and region, reduce congestion to 1990 or better levels of performance and enhance the movement of goods.*
2. *Ensure that transportation investments are cost-effective, protect the environment, promote energy efficiency and enhance the quality of life.*
3. *Serve everyone's transportation needs in a safe, reliable and economical way, including those who depend on public transit, such as the elderly, handicapped and disadvantaged.*
4. *Develop regional transportation solutions that complement subregional transportation systems and the needs of cities, communities and subregions.*
5. *Promote transportation strategies that are innovative and market-based, encourage new technologies and support the Southern California economy.*

Core Regional Transportation Plan Policies

- 4.01 *Transportation investments shall be based on SCAG's adopted Regional performance Indicators:*
- Mobility - Transportation Systems should meet the public need for improved access, and for safe, comfortable, convenient and economical movements of people and goods.*
- *Average Work Trip Travel Time in Minutes - 22 minutes*
 - *PM Peak Highway Speed - 33 mph*
 - *Percent of PM Peak Travel in Delay (All Trips) - 33%*
- Accessibility - Transportation Systems should ensure the ease with which opportunities are reached. Transportation and land use measures should be employed to ensure minimal time and cost.*
- *Work Opportunities within 25 Minutes - 88%*

Environment - Transportation Systems should sustain development and preservation of the existing system and the environment. (All Trips)

- Meeting Federal and State Standards - Meet Air Plan Emission Budgets

Reliability - Reasonable and dependable levels of service by mode. (All Trips)

- Transit - 63%
- Highway - 76%

Safety - Transportation Systems should provide minimal, risk, accident, death and injury. (All Trips)

- Fatalities Per Million Passenger Miles - 0.008
- Injury Accidents - 0.929

Livable Communities - Transportation Systems should facilitate Livable Communities in which all residents have access to all opportunities with minimal travel time. (All Trips)

- Vehicle Trip Reduction - 1.5%
- Vehicle Miles Traveled Reduction - 10.0%

Equity - The benefits of transportation investments should be equitably distributed among all ethnic, age and income groups. (All trips)

- Low-Income (Household Income \$12,000) Share of Net Benefits - Equitable Distribution of Benefits

Cost-Effectiveness - Maximize return on transportation investment. (All Trips)

- Net Present Value - Maximum Return on Transportation Investment
- Value of a Dollar Invested - Maximum Return on Transportation Investment

SCAG staff comment. The DEIR acknowledges on page 3-6 that the proposed project will improve traffic flow, provide relief for existing and anticipated future congestion, and provide more efficient access consistent with this core policy.

- 4.02 Transportation investments shall mitigate environmental impacts to an acceptable level.
- 4.03 Major Investment Studies and other studies of regional transportation facilities shall include consideration of freight movement.
- 4.04 Transportation Control Measures shall be a priority.
- 4.05 The Regional Transportation Improvement Program (RTIP) shall be developed using the RTP as guidance, and approval shall be based on its implementation of the RTP.

- 4.06 *Implementing transit restructuring, including Smart Shuttles, freight improvements, advanced transportation technologies, airport ground access and traveler information services are RTP priorities.*
- 4.07 *Projects proposed for the Regional Transportation Improvement Program (RTIP) that do not indicate a reasonable phasing of construction between segments will not be approved.*
- 4.08 *All existing and new public transit services, facilities and/or systems shall be fully accessible to persons with disabilities as required by applicable sections of the 1990 Americans with Disabilities Act.*
- 4.10 *All existing and new public transit services shall be provided in a manner consistent with Title VI of the 1964 Civil Rights Act, prohibiting intentional discrimination and adverse disparate impact with regard to race, ethnicity, or national origin.*
- 4.11 *All existing and new public transit services, facilities and/or systems shall evaluate the potential for private sector participation through the use of competitive procurement.*
- 4.15 *Arterial HOV facilities to support transit and rideshare will be supported and encouraged.*
- 4.16 *Maintaining and operating the existing transportation system will be a priority over expanding capacity.*
- 17 *Alternatives to highway expansion must be evaluated before giving regional approval to expand single occupancy lanes.*
- 4.20 *Expanded transportation management by local jurisdictions will be encouraged.*
- 4.21 *The development and application of management systems by local jurisdictions as a means of optimizing expenditure of scarce maintenance, operating, and capital funds should be supported.*
- 4.22 *New transportation infrastructure will incorporate advanced system technologies, where appropriate.*
- 4.23 *TSM activities throughout the region shall be coordinated among jurisdictions.*
- 4.24 *Methods to improve safety and reduce incidents on the regional transportation system will be considered.*
- 4.25 *The development of the regional transportation system should include a non-motorized system that provides an effective alternative to auto travel for appropriate trips. The planning and development of transportation projects and systems should incorporate the following:*

- a. *Provision of safe, convenient, and continuous bicycle and pedestrian infrastructure to and throughout areas with existing and potential demand such as activity areas, schools, recreational areas (including those areas served by trails), which will ultimately offer the same or better accessibility provided to the motorized vehicle.*
 - b. *Accessibility to and on transit (bus terminals, rail stations, Park-and-Ride lots), where there is demand and where transit boarding time will not be significantly delayed.*
 - c. *Maintenance of safe, convenient, and continuous non-motorized travel during and after the construction of transportation and general development projects. Existing bikeways and pedestrian walkways should not be removed without mitigation that is as effective as the original facility.*
- 4.28 *Growth in the demand for goods movements will be accommodated through the provision of adequate multi-modal and intermodal infrastructure that is consistent with overall regional goals, objectives, and policies.*
- 4.31 *Demand for increased goods movement will be given consideration where system connectivity and gap closure projects are being planned.*
- 4.36 *Arterial truck access routes will be coordinated for the purpose of improving system connectivity, eliminating circuitous routings, and reducing delays.*
- 4.38 *Planning to accommodate multi-modal and intermodal goods movement shall be an integral part of the land use and circulation elements of local government general plans and specific plans.*
- 4.39 *Local governments shall consider requiring off-street dock facilities for all new buildings and for existing buildings that are approved for extensive renovation; the facilities should be sufficient to accommodate the shipping and receiving needs of such buildings.*

Core Regional Transportation Plan Actions

Livable Communities

1. *Study the impact of the Livable Community strategy on VMT and Vehicle Trip Reductions.*
2. *Continue public dialogue and education on the benefits of Livable Communities.*

Non-Motorized

3. *Improve or construct priority bicycle and pedestrian facilities identified in county and subregional Non-Motorized Plans.*

Location Efficient Mortgage

4. *Support continuing efforts by the Center for Neighborhood Technology and Surface Transportation Policy Project to develop and promote LEMs and obtain participation agreements by lending institutions.*
5. *Develop methodologies to evaluate mobility and air quality impacts.*
6. *Work with housing industry, financial institutions, affordable housing interests and agencies to promote the LEM strategy.*

Intelligent Transportation Systems

11. *Refine Priority Corridor institutional relationships to focus on development and deployment of ITS projects consistent with the ITS Strategic Plan, national architecture, and regional performance.*
12. *Develop policies and guidance to incorporate ITS projects in the development, design, and funding of regional projects.*
13. *Work with US Department of Transportation, Caltrans, CTCs, Subregions, local governments and the private sector to identify public and private funding for implementation of ITS projects in the Region.*
14. *Expect emphasis of ITS to occur at subregional level.*

Advanced Traveler Information

15. *All transportation agencies to pursue their participation in developing ATIS components.*
160. *The Southern California Economic Partnership to develop and implement a deployment plan for ATIS.*

Commuter Information and Marketing Services

17. *Program funds in the RTIP to maintain the existing carpool market share and increase the number of car-poolers by 8,000 per year, with each county contributing its fair share according to an agreed-upon formula.*

Transit Restructuring

18. *Work with transit operators and transportation commissions to evaluate restructuring existing services away from least performing lines towards more efficient transit services that meet the regional performance goal by the year 2010.*
19. *Work with County Transportation Commissions to document and monitor transit restructuring through the Short Range Transit Plan (S RTP) process.*

Smart Shuttles

20. *Develop a system of demand responsive transit to be implemented at major centers in the Region, providing multi-modal linkages, access within centers, and connections between centers.*

Transit Corridors

21. *Support an Orange County 15-mile light rail line within the Central Corridor with a feeder system that meets performance objectives and is financially feasible.*
22. *Support preliminary engineering studies for the Orange County 28 mile light rail line within the Central Corridor. The target ridership goal is 83,000 per day. Ridership will be reevaluated in concert with appropriate County Transportation Commission's staff.*
23. *Construct exclusive transit corridors to minimize travel time and achieve the ridership in Table 3 of the Regional Transportation Plan.*
24. *Perform Major Investment Studies on transit corridors.*
25. *Coordinate with San Bernardino County to review transit corridor serving Redlands and develop recommendations for same.*

Transit Centers/Park-n-Ride Facilities

- 260_ *Develop a subregionally focused public education and training program through a regional Livable Places Initiative that promotes successful local urban design examples*

of land use related transportation planning, that reduces reliance on auto travel and improves community livability, and economic vitality

27. *Continue to refine methodologies to evaluate transit center mobility and air quality impacts.*
28. *Enhance transit centers, constructing new centers and providing additional park-n-ride facilities to encourage alternatives to single occupant automobiles.*

Commuter Rail

29. *Increase Metrolink service on all commuter rail lines.*

High-Occupancy Vehicle Lanes

31. *Close HOV system gaps.*
32. *Construct High Occupancy Vehicle lane in each direction on SR-22 provided that it will be paid for by savings from Measure M funds.*

HOV Connectors

33. *Construct freeway-to-freeway connectors.*

Mixed Flow

34. *Add a number of mixed flow lanes to the freeway system to increase capacity, to provide gap closures and for connectivity.*

Roadways

43. *Improve arterials that serve regional needs for freight movement or provide capacity within commute sheds. The Plan proposes \$1 billion in addition to funds already identified by Transportation Commissions and Subregions. The \$1 billion dollars for arterial projects is not sufficient to meet regional needs and requires further research and funding.*
44. *Each County Transportation Commission and IVAG allocates its fair share of funding for arterials to the Subregions within the boundaries of the respective commission and IVAG based upon identified regional mobility needs and SCAG's Performance Indicators.*

Rail Grade Crossings

53. *Support Subregions in obtaining funding for grade crossing studies.*
54. *Construct grade separations at rail lines. Study the funding mechanisms for grade crossing projects to meet the needs of the entire Region.*
55. *Recognize the need for additional funding for grade crossing projects to relieve truck congestion because current program funding needs exceed available public and private funding.*

Vanpooling

61. *Continue to support private provision of vanpool programs.*
62. *Create a strong public-private partnership to increase the number of commuter vanpools from 2,000 to 5,000 through more effective marketing, and through the provision of non-monetary public sector incentives.*
63. *Develop and implement pilot projects to test the concept of replacing low-performing express bus services with non-subsidized vanpools.*
64. *Work with private and public organizations to develop programs that qualify for federal, Environmental Protection Agency's implementation strategies.*

Telecommunications

65. *Support policies and programs that facilitate individuals and business employees working at home.*
66. *Support public policies, programs, legislation, ordinances, housing designs and building permits that enable and support self-employed and other private sector employees working at home.*
67. *The Southern California Economic Partnership should pursue partnerships, agreements and marketing techniques that promote work at home and implementation of telecommunications opportunities that help to reduce travel demand.*

Voluntary Implementation (Non-Regulatory) of Emission Reduction Strategies

68. *SCAG and the Southern California Economic Partnership work together with public and private organizations to develop approaches, agreements and institutional arrangements*

for implementation of the SCAG Telecommunications Strategy, smart shuttles, livable communities, ATIS and alternative fuels as well as for possible inclusion in future SIPs for attainment demonstration.

Ground Access

73. *Construct improvements on arterials, highway and rail lines to accommodate added freight and passenger movements to and from airports.*
74. *Support subregions in obtaining funding for ground access studies.*

Alternative Fuels and Clean Cities

77. *Support permitting of alternative and zero emission vehicle infrastructure and charging stations.*
78. *The Southern California Economic Partnership to work with public and private organizations to form partnerships, agreements and marketing techniques to accelerate the deployment of zero emission and alternative fuels vehicles.*

Welfare to Work

80. *Provide one-stop information centers for welfare recipients entering the work force by linking Advanced Transportation Information Systems directly to job placement/referral and job training centers.*
81. *Develop and implement programs to utilize lower-cost, non-traditional transportation systems (such as shared-ride taxi services, jitneys, etc.) to supplement existing transit services to provide access to employment opportunities for welfare recipients.*
82. *Work with employers, job placement/referral and job training centers to integrate new workers entering the work force into existing employer-based commuter assistance programs.*
83. *Incorporate equity objectives into the RTPs transportation strategy.*

Major Investment Studies (MISs) Corridor Studies, Project Study Reports ND Environmental Documents

84. *Complete the current Major Investment Studies, initiate the proposed/future investment studies, and consider incorporating completed MIS preferred alternatives into the RTP, based on performance indicators and funding availability.*

85. *Complete current corridor studies on projects, corridors and subareas included in the constrained (first priority) and in the unconstrained project list (second priority).*
86. *Complete project study reports, or their equivalent, on projects, corridors, and subareas included in the constrained funding (first priority) and in the unconstrained project list (second priority).*
87. *Complete environmental documents started under option 2 for doing concurrent MISS and Environmental Impact Statements (EIS) or Environmental Assessments (EA) in the constrained part of the RTP.*

AIR QUALITY CHAPTER CORE ACTIONS

The Air Quality Chapter core actions related to the proposed project include:

- 5.07 *Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community based shuttle services, provision of demand management based programs, or vehicle-miles-traveled/emission fees) so that options to command and control regulations can be assessed.*
- 5.11 *Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.*

WATER QUALITY CHAPTER RECOMMENDATIONS AND POLICY OPTIONS

The Water Quality Chapter core recommendations and policy options relate to the two water quality goals: to restore and maintain the chemical, physical and biological integrity of the nation's water; and, to achieve and maintain water quality objectives that are necessary to protect all beneficial uses of all waters.

- 11.02 *Encourage "watershed management" programs and strategies, recognizing the primary role of local governments in such efforts.*
- 11.07 *Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.*

CONCLUSIONS

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA.

ENDNOTE

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Roles and Authorities

SCAG is a *Joint Powers Agency* established under California Government Code Section 6502 et seq. Under federal and state law, SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). SCAG's mandated roles and responsibilities include the following:

SCAG is designated by the federal government as the Region's *Metropolitan Planning Organization* and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program pursuant to 23 U.S.C. §134(g)-(h), 49 U.S.C. §1607(f)-(g) et seq., 23 C.F.R. §450, and 49 C.F.R. §613. SCAG is also the designated *Regional Transportation Planning Agency*, and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080.

SCAG is responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the *South Coast Air Quality Management Plan*, pursuant to California Health and Safety Code Section 40460(b)-(c). SCAG is also designated under 42 U.S.C. §7504(a) as a *Co-Lead Agency* for air quality planning for the Central Coast and Southeast Desert Air Basin District.

SCAG is responsible under the Federal Clean Air Act for determining *Conformity* of Projects, Plans and Programs to the Air Plan, pursuant to 42 U.S.C. §7506.

Pursuant to California Government Code Section 65089.2, SCAG is responsible for *reviewing all Congestion Management Plans (CMPs) for consistency with regional transportation plans* required by Section 65080 of the Government Code. SCAG must also evaluate the consistency and compatibility of such programs within the region.

SCAG is the authorized regional agency for *Inter-Governmental Review* of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).

SCAG reviews, pursuant to Public Resources Code Sections 21083 and 21087, *Environmental Impact Reports* of projects of regional significance for consistency with regional plans [California Environmental Quality Act Guidelines Sections 15206 and 15125(b)].

Pursuant to 33 U.S.C. §1288(a)(2) (Section 208 of the Federal Water Pollution Control Act), SCAG is the authorized *Area-wide Waste Treatment Management Planning Agency*.

SCAG is responsible for preparation of the *Regional Housing Needs Assessment*, pursuant to California Government Code Section 65584(a).

SCAG is responsible (with the San Diego Association of Governments and the Santa Barbara County/Cities Area Planning Council) for preparing the *Southern California Hazardous Waste Management Plan* pursuant to California Health and Safety Code Section 25135.3



COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100

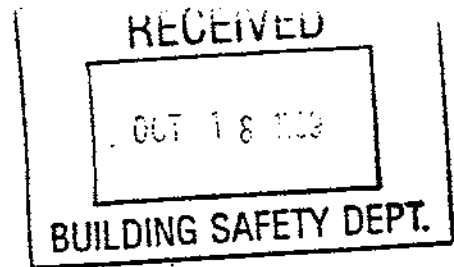
HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

October 12, 1999

IN REPLY PLEASE
REFER TO FILE: P-2

Ms. Laurie Jester, Senior Planner
City of El Segundo
Department of Planning and Building Safety
350 Main Street
El Segundo, CA 90245



Dear Ms. Jester:

**RESPONSE TO A NOTICE OF PREPARATION (NOP) -
GENERAL PLAN CIRCULATION ELEMENT UPDATE**

Thank you for the opportunity to provide comments on the NOP for the proposed General Plan Circulation Element Update. We have reviewed the NOP and offer the following comments:

Environmental Programs

As projected in the Los Angeles County Countywide Siting Element, which was approved by a majority of the cities in Los Angeles County in late 1997 and by the County Board of Supervisors in January 1998, a shortfall in permitted daily landfill capacity may be experienced in the County within the next few years. The construction activities associated with the proposed project will increase the generation of solid waste and will negatively impact solid waste management infrastructure in the County. Therefore, the proposed Environmental Impact Report (EIR) must identify what measures the project proponent will implement to mitigate the impact. Mitigation measures may include, but are not limited to, implementation of waste reduction and recycling programs to divert the construction waste from landfills.

The EIR needs to fully assess the impact of this project on the quality of stormwater runoff. The municipal stormwater National Pollutant Discharge Elimination System (NPDES) Permit (Permit) issued to Los Angeles County and 85 cities (Permittees) by the Los Angeles Regional Water Quality Control Board (Regional Board) on July 15, 1996, required the development and implementation of a program addressing stormwater pollution issues

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Ms. Laurie Jester
October 12, 1999
Page 2

in development planning for private projects. Part of the resulting program to address these stormwater pollution issues are Standard Urban Stormwater Mitigation Plans (SUSMPs). The SUSMPs to be used by the Permittees and the City of El Segundo (City) are expected to be approved by the end of the year.

The appropriate post construction Best Management Practices (BMPs) selected and incorporated into the project plans should be in compliance with the local jurisdiction's Development Planning Program SUSMPs.

The City has various County drains which discharge into the Santa Monica Bay. If any connections are made to these County storm drains, a permit is required from this Department's Construction Division.

Should any operation within the subject project include the construction/installation, modification, or removal of industrial waste control or disposal facilities, this Department's Environmental Programs Division must be contacted for the required approvals and operating permits.

If you have any questions regarding the above comments, please contact Mr. Chuk Agu at (626) 458-2188.

Traffic and Lighting Division

We would like to have the opportunity to review the necessary environmental impact report on a project-by-project basis for any potential traffic impacts on County roadways and intersections in the unincorporated area. The significant traffic impact criteria contained in the enclosed County of Los Angeles Traffic Impact Analysis Report Guidelines should be used when evaluating roads and intersections within the County.

We recommend the State of California Department of Transportation and adjoining cities review this document for significant impacts/mitigation within their jurisdictions.

If you have any questions, please contact Mr. Scott Angus of our Traffic Studies Section at (626) 458-5909.

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Ms. Laurie Jester
October 12, 1999
Page 3

If you have any questions regarding the environmental reviewing process of this Department, please contact Mr. Scott Schales at the address on the first page or at (626) 458-4119.

Very truly yours,

HARRY W. STONE
Director of Public Works

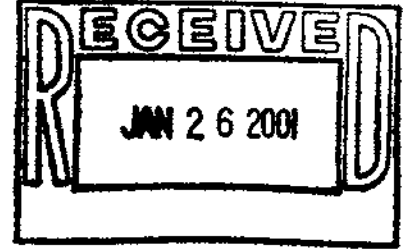


For: DAVID YAMAHARA
Assistant Deputy Director
Planning Division

YC:ro/dbm
A:\YC268.WPD

Enc.

AR00006

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

January 22, 2001

TO: Los Angeles World Airports
Jane Benefield
One World Way
Los Angeles, CA 90045

FROM: Fire Department

SUBJECT: **LOS ANGELES INTERNATIONAL AIRPORT
PROPOSED MASTER PLAN IMPROVEMENTS**

PROJECT DESCRIPTION

This proposed master plan improvements including potential construction of one runway on either the north or south side of the airport; relocation of runways; construction of new taxiways and runway extensions; construction of new terminal buildings and parking garages and a rental-car consolidated facility west of the existing Central Terminal Area; construction of a ring road and connection to I-405; construction of new and relocated air cargo and maintenance facilities and roads; extension of the Metro Green Line into the airport; and land acquisition.

The following comments are furnished in response to your request for this Department to review the proposed development:

A. Fire Flow

The adequacy of fire protection for a given area is based on required fire-flow, response distance from existing fire stations, and this Department's judgment for needs in the area. In general, the required fire-flow is closely related to land use. The quantity of water necessary for fire protection varies with the type of development, life hazard, occupancy, and the degree of fire hazard.

Fire-flow requirements vary from 2,000 gallons per minute (G.P.M.) in Los Density Residential areas to 12,000 G.P.M. in high-density commercial or industrial areas. A minimum residual water pressure of 20 pounds per square inch (P.S.I.) is to remain in the water system, with the required gallons per minute flowing. The required fire-flow for this project has been set at 6-9 G.P.M. from 4 fire hydrants flowing simultaneously.

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B. Response Distance

The Fire Department has existing fire stations at the following locations for initial response into the area of the proposed development:

Fire Station No. 80
6911 World Way West
Los Angeles, CA 90045
Crash Unit

Fire Station No. 51
10435 Sepulveda Boulevard
Los Angeles, CA 90045
Single Engine Company

Fire Station No. 5
6621 W. Manchester Avenue
Los Angeles, CA 90045
Task Force Truck and Engine Company
Paramedic Rescue Ambulance
Battalion 4 Headquarters

C. Firefighting Access, Apparatus, and Personnel.

At least two different ingress/egress roads for each area, which will accommodate major fire apparatus and provide for major evacuation during emergency situations, shall be required.

Adequate off-site public and on-site private fire hydrants may be required. Their number and location to be determined after the Fire Department's review of the plot plan.

Private streets and entry gates will be built to City standards to the satisfaction of the City Engineer and the Fire Department.

Businesses that intend to handle hazardous materials may have to participate in the Unified Hazardous Waste and Hazardous Materials Management Program (Unified Program). Businesses are required to register with the Fire Department and complete a hazardous materials inventory if they handle hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases; or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR parts 30, 40 or 70. Businesses that operate underground storage tanks must apply for permits to install, modify, abandon or

operate those tanks. Businesses that generate, treat, recycle or otherwise handle hazardous waste must register with the Unified Program Agency and receive a permit for these activities.

Submit plot plans indicating access road and turning area for Fire Department approval.

During demolition, the Fire Department access will remain clear and unobstructed.

Fire lanes, where required and dead ending streets shall terminate in a cul-de-sac or other approved turning area. No dead ending street or fire lane shall be greater than 700 feet in length or secondary access shall be required.

CONCLUSION

The proposed project shall comply with all applicable State and local codes and ordinances, and the guidelines found in the Fire Protection and Fire Prevention Plan, as well as the Safety Plan, both of which are elements of the General Plan of the City of Los Angeles C.P.C. 19708).

For additional information, please contact Inspector Kevin Hamilton of the Construction Services Unit at (213) 485-5964.

WILLIAM R. BAMATTRE
Fire Chief



Richard A. Warford, Assistant Fire Marshal
Bureau of Fire Prevention and Public Safety

RAW:KH:gm
c:LA World Airport Master Plan



City of Fontana

C A L I F O R N I A

April 27, 2001

Mr. David Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Worldway Postal Center
Los Angeles, California 90009-2007

RE: Joint Draft Environmental Impact Statement/Environmental Impact Report for the Los Angeles International Airport located in the western portion of the City of Los Angeles and generally bounded by Westchester Parkway and Arbor Vitae on the north; La Cienega Boulevard on the east; Imperial Highway on the south and Pershing Drive on the west.

Dear Mr. Kessler:

Thank you for the opportunity to review and comment on the above referenced Joint Draft Environmental Impact Statement/Environmental Impact Report for the Los Angeles International Airport.

The City of Fontana has no comment(s) to make concerning this project. The City would appreciate receiving the Final Joint Environmental Impact Statement/ Environmental Impact Report on this project. Kindly direct all submittals to the undersigned.

Sincerely,

COMMUNITY DEVELOPMENT DEPARTMENT
Planning Division

Debbie M. Brazill
Planning Manager

DMB:MN/cye

cc: Mr. Jim Ritchie – City of Los Angeles

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STORMWATER MANAGEMENT DIVISION
650 SOUTH SPRING ST., SUITE 700
LOS ANGELES, CA 90014
(213) 847-6350
FAX (213) 847-5443

May 21, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan Office, Room 218
P.O. Box 92216
Los Angeles, CA 90009-2116

Dear Mr. Ritchie:

LAX MASTER PLAN DRAFT EIS/EIR

The Department of Public Works, Bureau of Sanitation, Stormwater Management Division (SMD) has reviewed the draft Environmental Impact Statement/Environmental Impact Report of the above mentioned Master Plan and offers the following comments:

- The draft EIS/EIR referenced the Hydrology and Water Quality-Master Plan Commitments (HWQ-1) as the master plan for stormwater mitigation measures. The HWQ-1 shall include, at a minimum, detailed drawings of the various proposed land use developments such as the terminal complex, LAX Expressway, midfield concourses, air cargo facilities, Westchester Southside project, and their associated support facilities such as parking lots, loading docks, etc. In addition, the HWQ-1 shall clearly indicate the type and location of structural BMPs to be installed for each respective element of the project. The following table summarizes some suggested BMP categories that can be used for each pollutant identified in the draft EIS/EIR:

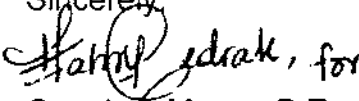
BMP Categories	Pollutants					
	Total Suspended Solids	Phosphorus	Total Kjeldahl Nitrogen	Heavy Metals	BOD/COD	Oil & Grease
Vegetative Systems						X
Infiltration/Retention	X					X
Porous Pavements						X
Catch Basin Filter Inserts	X	X	X	X	X	X
Vortex/Hydrodynamic Systems	X	X	X	X	X	X
Clarifiers	X				X	X
Media Filtration	X	X	X	X	X	X
End-of-Pipe Systems	X	X	X	X	X	X

Jim Ritchie
May 21, 2001
Page 2

The above table lists structural BMPs that are applicable to various pollutants identified. However, appropriate BMPs should be selected for each specific land use development. For example, although a vegetative system can be used to remove oil and grease, an installation of this BMP in the middle of a new runway is obviously not appropriate. More detailed information on specific BMPs covered under the above listed categories and their associated costs can be found in the *Reference Guide For Stormwater Best Management Practices* at www.lastormwater.org.

- A Wet Weather Erosion Control Plan (WWECP) must be prepared if construction is to be done during the rainy season between October 1 and April 14. For guidance on the preparation of the WWECP, please refer to *Development Best Management Practice Handbook, Part A - Construction Activities* at www.lastormwater.org. The WWECP must be posted at the project site and is subject to review by the Department of Public Works, Bureau of Contract Administration inspectors during their routine jobsite inspections.

Should you have any questions, please call Wing Tam at (213) 847-5225 or Peter Tonthat at (213) 847-4843, respectively.

Sincerely,

Gary Lee Moore, P.E.
Program Manager

GLM/MFS/WKT/PT:dm
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cc: James F. Langley, Assistant Director, BOS
Ara Kasparian, Environmental Management Group, BOE

AL00003



June 9, 2001

Mr. David Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Worldway Postal Center
Los Angeles, CA 90009-2007

Dear Mr. Kessler:

It would be hard to imagine another school district in the Los Angeles metropolitan area that has its children exposed to greater levels of noise and air pollution than the children of Lennox.

The impact of pollution on the health and academic achievement of Lennox students is only now coming into clear focus. For the past eight years, the UCLA School of Medicine has conducted Health Fairs at the six Lennox schools. During this time, medical professionals have screened more than 3,500 students and adults. One consistent finding has been a high incidence of children demonstrating asthma and allergy symptoms.

The medical evidence clearly suggests aberrations in the immune system that are directly linked to increased levels of air pollution which are the result of the district's location directly adjacent to LAX and two major freeways—the 105 and the 405.

The AQMD has also tested air quality at one of our schools, Felton, and the amount of particulate matter in the air was higher there than in any of the other testing locations.

The issue of noise pollution is of equal concern to us in the Lennox School District. Almost the entire community falls within the Community Noise Equivalent Level (CNEL) of 65 decibels or greater. The 65 CNEL is considered an unhealthy noise level for many land uses that include residential dwellings, schools, and outdoor recreation.

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ADMINISTRATION

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Tom Johnstone, Asst. Supt. of Personnel

SCHOOLS

Butard
 Felton
 Jefferson
 Moffett
 Whelan
 Lennox Middle

AL00004

Mr. David Kessler, AICP
Page 2
June 9, 2001

The Executive Summary of the Draft EIR, on page ES-28, recognizes the necessity to have the impact of Environmental Justice adequately addressed. The report indicates that the FAA will make the final determination as to whether the Master Plan has a disproportionately high and adverse human health or environmental effect on minority or low-income populations. This is abundantly obvious in Lennox in that we are the most affected, due to our location; and, our community is the poorest in the area and has a minority population in the schools of 99%. However, in contradiction, on page 4-67 the report indicates that one of the schools in Lennox would be exposed to outdoor noise levels that would remain significant after mitigation; yet, no mitigation measures are required since "enrollment impacts are considered less than significant." This analysis is logically flawed and totally unacceptable.

The expansion of LAX will have a disproportionate negative impact on the Lennox community, which is not adequately addressed in this document. The requirement to mitigate against environmental injustice has not been met.

Sincerely,

Ms. Tamara Hill
Board President
Lennox School District Board of Trustees

AL00004



City of
Santa Monica

Mayor **Michael Feinstein**
Mayor Pro Tempore **Richard Bloom**

Councilmembers

Ken Genser
Robert Holbrook
Herb Katz
Kevin McKeown
Pam O'Connor

August 1, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan / Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216

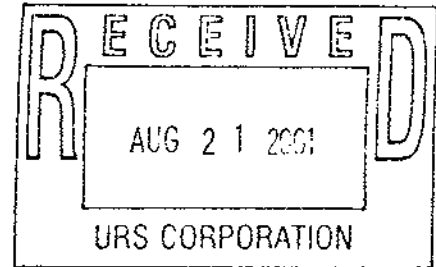
Mr. David B. Kessler, AICP
US Department of Transportation
Federal Aviation Administration
PO Box 92007, Worldway Postal Center
Los Angeles, CA 90009-2007

RE: LAX Master Plan and Environmental Impact Report / Environmental
Impact Statement

Dear Mr. Ritchie and Mr. Kessler:

Thank you for the opportunity to review the Draft Environmental Impact Report / Environmental Impact Statement ("DEIR") for the Los Angeles International Airport Master Plan Improvements ("Master Plan"). The Master Plan presents significant environmental consequences for Santa Monica and the entire region.

On July 10, 2001, the Santa Monica City Council adopted a formal position in opposition to the LAX Master Plan due to the significant and unavoidable environmental impacts associated therewith. The DEIR does not fully analyze the environmental consequences of the Master Plan, nor does it provide acceptable mitigation for impacts on Santa Monica. The Master Plan does not provide for guaranteed infrastructure, facilities, and airside acreage to fully support transient business aircraft and fixed-base business operations, which should include a minimum of three fixed-base operations for business jets and an exclusive runway for small to mid-size jets; nor does it provide for appropriate phasing of surface transportation enhancements relative to air transportation enhancements; nor does it include the relocation and expansion of the LAX Transit Center as a Master Plan commitment at a location that will promote the use of transit.



The Westside Cities have sent a joint comment letter regarding the inadequacy of the Master Plan environmental documents. The following provides additional information regarding critical Master Plan and DEIR issues for the City of Santa Monica.

GENERAL ISSUES

Overall, the DEIR provides insufficient analysis of the environmental impacts of the proposed project. On July 25, 1997, the City of Santa Monica submitted comments regarding the Notice of Preparation of the DEIR ("NOP letter"). Several critical issues that we requested be analyzed in the DEIR have not been analyzed, in spite of obvious environmental impacts on Santa Monica. In order to fully understand the environmental impacts of the Master Plan, it is imperative that these issues are adequately analyzed.

SURFACE TRANSPORTATION

Environmental Impacts and Analysis

Figure 4.3.2-4 of the DEIR identifies street segments that will experience more airport traffic with implementation of the LAWA staff-recommended Alternative C. Several street segments in Santa Monica are identified to receive more airport traffic. However, the DEIR fails to analyze any traffic intersections in Santa Monica, in spite of our NOP letter's identification of 22 intersections in Santa Monica for analysis. The DEIR is clearly flawed in this analysis of the surface transportation impacts of the Master Plan.

The DEIR analysis relies upon several Master Plan transportation improvements, including the LAX Expressway, people mover, and Green Line transit extension, to help mitigate the Master Plan surface transportation impacts. However, the creation of new on-site airport facilities, including new terminal facilities, is proposed to occur during Phase 1 of the Master Plan, while the aforementioned transportation improvements occur after Phase 1. This phasing creates a multi-year period where surface transportation impacts will be severely exacerbated prior to implementation of improvements that help mitigate those impacts.

Appropriate Mitigation Measures

The DEIR must fully evaluate the surface transportation impacts associated with the Master Plan, and provide mitigation measure to minimize those impacts. For any Santa Monica intersections that are negatively impacted, mitigation measures that are acceptable to the City of Santa Monica must be proposed.

Any Master Plan improvements that help mitigate the surface transportation impacts of increased passengers and cargo must be implemented prior to development of new terminal facilities.

The DEIR forecasts a 50 percent increase in transit usage as a result of implementation of Phase I, which includes an improved location for the transit center and additional fly-away locations. In order to ensure the maximization of transit possibilities, the siting and development of a new transit center must be identified and approved by bus services providers, including the Santa Monica Big Blue Bus.

GENERAL AVIATION

Environmental Impacts and Analysis

A critical concern for Santa Monica is the impact of any Master Plan changes on the general aviation (GA) facilities and operations at LAX. Reduction of LAX facilities and/or displacement of operations, particularly business jet operations, create a substantial impact on other airports in the basin. This is already a problem that has created significant and unmitigated impacts on Santa Monica because of the congestion and lack of adequate business jet facilities at LAX.

Santa Monica Airport (SMO) has been subjected to increases in transient business jets using our air field due to inadequate air side and landside facilities at LAX. Additionally these aircraft using Santa Monica Airport are also increasingly of a size that appear inappropriate in scale and character for both the airport facility and the surrounding West Los Angeles and Santa Monica community ---- which is tightly situated in densely populated residential areas. This represents a very substantial concern and problem which requires any developments at LAX to not only stop the displacement of business jet aircraft but to, in fact, return this previously displaced traffic to its proper setting.

As the proposed LAX Master Plan repeatedly states, LAX is the "gateway" facility for the region and the hub of economic activity. The re-positioning of LAX as the center of business jet aircraft activity will allow better integration of connections and coordination of business travel and meeting. LAX is the most appropriate setting for business jet aircraft accessing the Southern California area, particularly the westside of the region.

Business jet aircraft are more appropriately served at LAX as it can provide for a higher margin of safety with longer runway surfaces and safety areas, more high speed turn outs and taxiways, dedicated airspace, continuous tower support and a full complement of emergency facilities and services. The re-focusing of

business jet aircraft activity to LAX will provide opportunities for better integration with commercial air operations, rental cars, customs and better maintenance and support services for such aircraft.

The DEIR states that under all the development alternatives, including the LAWA staff-recommended Alternative C, the total acreage committed to GA will be reduced from 14 acres to between 5 and 6 acres. A stunning 62% reduction can only further displace GA operations. Sharing any space with air carrier maintenance activity would likely diminish or overwhelm less financially lucrative GA jet service. The continued displacement of GA operations from LAX has had, and will continue to have, significant environmental consequences for the Santa Monica Airport and the City of Santa Monica. The DEIR must evaluate these environmental impacts, especially in the areas of noise, surface transportation, airspace safety and air quality.

GA has always been a vital part of LAX history and should remain so, particularly the business jet aircraft, which are becoming a significant part of the GA fleet. In all of the alternatives presented in the draft LAX Master Plan, the plan indicates an expansion in GA facilities by increasing total square footage from 144,000 square feet to 244,000 square feet with the addition of a new 100,000 square foot hangar facility at Sepulveda and Century. However this is not analyzed in the DEIR, nor reconciled with the intended reduction of acreage for GA use.

Appropriate Mitigation Measures

The DEIR must fully evaluate the environmental impacts associated with decreased GA facilities, and provide mitigation measure to minimize those impacts. In order to provide adequate opportunities for the basing of business aircraft, as well as to adequately handle transient business, larger areas of unimpaired space are needed for vehicle parking and servicing. We recommend that no reduction in GA-committed acreage be made. LAWA should provide a covenant or land restriction to the permanence of dedicated acreage, expanded facilities and perpetual operating Fixed Base Operations (FBOs) for business jets. LAX should provide for three FBOs, which would truly allow a full range of services and healthy competition.

The proposed airside improvements with additional taxiways and aircraft movement areas are of significant importance to improving GA-business jet services. An existing and rapidly growing problem at LAX is the airfield congestion and related delays resulting in uncertain scheduling. The proposed extensive aircraft taxiway and other movement area improvements could provide readier access to and from runways for GA-business jet aircraft. The improved separation of runways could increase the number of aircraft that can takeoff and land in tandem, allowing for better interposition of GA business jet aircraft ---- if

the additional capacity isn't consumed by "sharing" facilities with air carrier or cargo uses.

The dedication of one runway, exclusive of air carrier service, for small to mid-size jets (small to mid-size in terms of LAX but unquestionably too large for adjacent GA airports) has great potential to not only stem the rate of displacement of GA jet aircraft, but also to be an affirmative support for the operations of GA jet aircraft and to provide a positive basis for the return of those previously displaced to SMO. In order for the business community to make appropriate decisions and investments, such as basing jet aircraft operations, the plan needs to formally dedicate a runway to use by GA jet aircraft in perpetuity, otherwise air carrier and cargo demand will overwhelm the less financially lucrative business jet users.

The provision of a dedicated runway for business aircraft would also enhance operations and safety in the region surrounding LAX. Instrument departures from Santa Monica must be integrated with LAX departures as their pathways intersect. This requires intense coordination between the two air traffic control towers and the region and often results in aircraft having to sit idling for extended periods of time at Santa Monica waiting clearance at LAX. These aircraft should all be operating under the control and guidance of a single tower, which has the essential benefit of direct visual contact and a single voice. In addition, the establishment of a primary business operations center at LAX will also allow for the development of more efficient air space planning and procedures for both departures and arrivals. A dedicated GA runway must also have full operational support services such as a dedicated instrument landing system, approach lights and air traffic control tower.

Total airside acreage committed to general aviation support facilities must expand beyond the current 14 acres in order to fully support general aviation, including business jet operations, with a full compliment of both based aircraft and transit parking spaces, executive terminal facilities, vehicle parking and pick-up/drop facilities and transport to rental vehicle sites and local hotels.

The Master Plan must provide for, at minimum, three full-service fixed-base operators specifically for general aviation. The Master Plan must include expanded and enhanced general aviation capacity, services, and facilities, particularly for jet aircraft. An increase in facility space to at least 244,000 square feet should be accomplished as soon as possible. Enhanced, fully incorporated and dedicated ground transportation improvements, particularly access roadways and services, to and from general aviation facilities, including general aviation / business user exclusive access roadways and entries, should be incorporated in the Master Plan. Parking improvement plans must include enhanced vehicular

Mr. Jim Ritchie
Page 6 of 6
August 1, 2001

parking, as well as dedicated drop off/pick up accommodations at all general aviation facilities.

The development of an operational and business plan is essential for the maintenance and enhancement of general aviation, particularly with regard to GA jet aircraft operations at LAX, including appropriate long-range feasibility and trend studies. A business plan and aggressive marketing program is necessary to attract and recapture general aviation jet aircraft activity at the earliest possible date.

INDUCED SOCIO-ECONOMIC IMPACTS

Environmental Impacts and Analysis

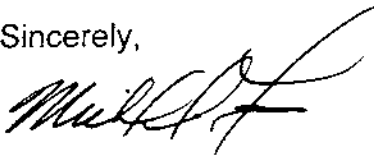
The DEIR finds that the Master Plan alternatives will induce between 13,000 and 30,000 new households in the region, including between 2,600 and 4,800 new households in a 10-mile radius. A significant proportion of these new households are expected to be in need of affordable housing. The DEIR concludes that this is a small amount in comparison to expected total growth in the region. However, given the high cost of housing in the region, and particularly in the Westside areas near LAX, providing affordable housing for these new households will be a critical local and regional impact.

Appropriate Mitigation Measures

The DEIR must identify measures to ensure the creation of affordable housing for new household growth that will be induced by the Master Plan.

Thank you again for the opportunity to review these draft documents. We look forward to your response to our comments.

Sincerely,



Michael Feinstein
Mayor

cc: City Councilmembers, City of Santa Monica



June 9, 2001

Mr. David Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Worldway Postal Center
Los Angeles, CA 90009-2007

Dear Mr. Kessler:

The following information is provided on behalf of the Lennox School District relative to input for the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the LAX Master Plan Project. While the Lennox School District is cognizant of the financial benefits of increasing the capacity of Los Angeles International Airport, it does not believe that this should occur at the expense of our students or staff.

A recent noise contour map reflects that five of the six schools in the Lennox School District are in the state-defined airport noise impact area (the area exposed to 65 decibels or more as measured on the community noise equivalent noise level scale). It is our belief that these existing noise levels are already higher than appropriate and should be brought down to approved levels at the schools, as well as for the neighborhoods surrounding them.

Although the District has implemented a sound attenuation program of its school buildings that process does not fully mitigate against the negative impacts which are continuing to be felt in the school district. Students residing in this area are compelled to attend our schools and spend approximately one and a quarter to one and a half hours per day, while at school, outside of these buildings. Clearly, the nature of the normal school day requires students to have physical education activities, recess, classroom passing periods, and a number of other activities outside of the protection of sound-proof buildings. It is clearly evident that overflights interrupt instruction and activities. In a recent study published in the *Journal of Environment and Behavior*, Gary W. Evans and Lorraine Maxwell, Cornell University, found that children who attend schools that are beset by frequent airport noise do not learn to read as well as children who attend quiet schools.

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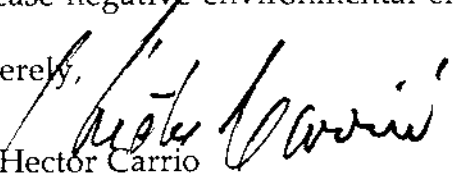
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Mr. David Kessler, AICP
Page 2
June 9, 2001

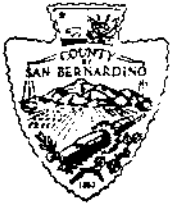
Some district staff members, such as physical education teachers and gardeners, literally spend their entire work day outside of buildings. These employees are exposed to noise beyond acceptable levels on a continuous day-long basis.

In summary, the Lennox School District is opposed to airport expansion, which will increase negative environmental effects on our students and staff.

Sincerely,


Mr. Hector Carrio
Board Member
Lennox School District Board of Trustees

AL00006



COUNTY OF SAN BERNARDINO

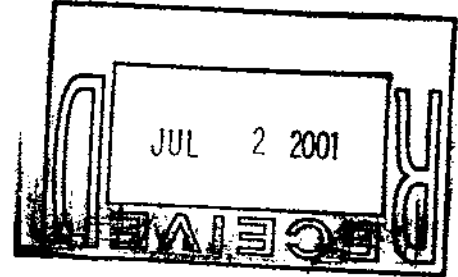
County Administrative Office

County Government Center
385 North Arrowhead Avenue, Fifth Floor
San Bernardino, CA 92415-0120
(909) 387-5418 Fax (909) 387-5430

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WILLIAM H. RANDOLPH
County Administrative Officer



June 26, 2001

Mr. David B. Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Worldway Postal Center
Los Angeles, CA 90009-2007

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan/Rm.218
P.O. Box 92216
Los Angeles, CA 90009-2216

Dear Sirs:

The County of San Bernardino has considered the proposed LAX Master Plan Draft EIS/EIR. We noted with interest that LAWA has emphasized the regional setting in its brief Statement of the Purpose and Objectives of the proposed expansion plan. Indeed, the regional significance of the proposed project was central to not only the general goal statement, but also the component elements as restated below:

"The purpose and objectives of the Master Plan are to provide, in an environmentally sound manner that is compatible with surrounding land uses, sufficient airport capacity for passengers and freight in the Los Angeles region to sustain and advance the economic growth and vitality of the Los Angeles region. In particular, the proposed project intends to achieve these objectives:

- *To respond to local and regional demand for air transportation during the period 2000 to 2015, taking into consideration the amount, type, location, and timing of such demand.*
- *To ensure that new investments in airport capacity are efficient and cost effective, maximizing the return on existing infrastructure capital.*
- *To sustain and advance the international trade component of the regional economy and the international commercial gateway role of the City of Los Angeles."*

Messrs. Kessler and Ritchie
June 26, 2001
Page 2

Appropriately, the EIS/EIR defines the "region" as encompassing a five-county area that includes the counties of Los Angeles, Orange, Ventura, Riverside, and San Bernardino.

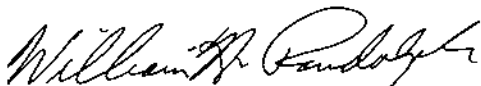
In this context, the County of San Bernardino is concerned that LAWA made no effort to include our agency in the Scoping Outreach effort, as documented in Appendix A, Scoping Coordination Letter Mailing List. Nor did LAWA outreach to any of the municipalities or non-LAWA owned the airport facilities located within our boundaries.

The County of San Bernardino has a vital interest in this project proposal. Our interest stems in large measure from our support for a regional system of airports as well as our understanding of the significance of LAX to the highly interconnected, five-county economy that comprises Southern California – a key factor that is documented in the EIS/EIR. Our interest is equally an outgrowth of our strong desire to see San Bernardino County's Ontario International, San Bernardino International and Southern California Logistics Airports reach their full potential as an element of a regional airport and transportation system that supports the entire Southern California regional economy.

For these reasons, the County of San Bernardino would have taken very seriously its obligation to work closely with LAWA during the scoping process to identify key issues and to develop an appropriate range of alternatives for study in this EIS/EIR. Unfortunately, LAWA did not permit such an opportunity to occur.

The omission of San Bernardino County from the scoping process represents more than a lost opportunity. We view this as an abridgement of the requirements of NEPA and CEQA. The outcome is an inadequate EIS/EIR that is based on project alternatives that entirely fail to meet LAWA's own Statement of Purpose and Objectives. The County of San Bernardino requests that LAWA remedy this omission with a fresh effort at meeting the statutory requirements embodied in CEQA and NEPA. We request that this effort begin with a scoping process that allows for the full participation of all relevant agencies. The County of San Bernardino looks forward to fulfilling its role in this effort and will work diligently to that end.

Sincerely,



William H. Randolph
County Administrative Officer

WHR:va

cc: Members, Board of Supervisors

AL00007



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print:

Name (First MI Last, or Organization): Barry Kurtz Date: 6/9/01

Address: 1000 South Fremont Ave

City: Alhambra State: CA Zip Code: 91803

Telephone (Optional): (626) 300 4724 E-Mail (Optional): bkurtz@dpw.co.la.ca.us

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: _____ Title: Traffic + Transportation

Comments:

See attached comments and questions

Comments from Mr. Barry Kurtz representing the Los Angeles County Board of Supervisors and Los Angeles County Department of Public Works.

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

**LAX EXPANSION PROJECT
BOARD OF SUPERVISORS PRESENTATION
LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
TRAFFIC COMMENTS
JUNE 5, 2001**

General Comment on the Project and Proposed Transportation Improvements

- LAX expansion project comes with a comprehensive package of transportation improvements.
- We generally support a new transportation system that provides direct access from the freeway system to the airport, similar to other airports in many major cities.
- Currently motorists enroute to the airport must get off the freeway system and use several routes. La Tijera, Century, Sepulveda...etc.
- The map shows the planned transportation system.
- The main access routes in connection with the project are:

- ✓ The new LAX Expressway from s/o Route 90 to the proposed Ring Road shown in orange.
- ✓ Ring Road to the north, west, and south sides of the airport.

The Ring Road would follow like a freeway without any interruption because of grade separations or bridges over Lincoln, Aviation and Sepulveda.

- The traffic analysis for the airport expansion generally shows better traffic conditions with project and with transportation improvements than the No Project traffic conditions.

Traffic Study Document

- We have several major concerns that have not been addressed.
- Traffic study is inadequate and incomplete.
 - ✓ County's traffic impact analysis guidelines were not used for County

intersections and roadways.

- ✓ The study needs to be expanded to analyze the impact on all nearby unincorporated areas including Athens, Baldwin Hills, Del Aire, El Camino Village, Ladera Heights, Lennox, and Marina del Rey.
- ✓ Transportation model based on outdated data (1996) and partially validated.
- ✓ How will the LAX Expressway and realignment of Route 1 be funded? Are they feasible?
- ✓ We're concerned about overloading the 405 north of LAX Expressway and spillover traffic onto congested north/south arterials such as La Cienega, Lincoln, and Sepulveda.

Note: South Bay Cities Council of Governments expressed same concern south of the airport. Independent study showed approximately 30% using the surface streets to and from the airport.

- ✓ Impact on the 405 south of airport and impact of spillover onto those arterials.
- ✓ The study should consider extending the LAX Expressway further north to the 10 Freeway.
- ✓ What will be the impact if the south Arbor Vitae ramps are not built?
- ✓ We would like more information on how Imperial Highway will look.
- ✓ How will it provide access to Main Street in the City of El Segundo? They indicate a grade separation from the Ring Road to Main Street.
- ✓ Why was the HOV 405/105 car pool ramp dropped? How will this affect the traffic study?

Conclusion

- We have not received all the information needed to complete our reviews. However, the limited information provided indicates better traffic conditions with the package than without the project and without the transportation improvements.
- That's because today we do not have direct, easy access from the freeway

system to the airport.

The airport now has 68 million annual passengers (MAP).

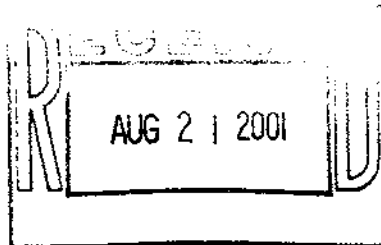
LAWA claims it will grow to 79 MAP without the project and without the transportation improvements and 89 MAP with the project and transportation improvements.

- We have difficult access to the airport today.
- Any of us that drive the San Diego Freeway know it's congested between the airport and Route 90 almost any time - weekdays and weekends, unless it's 2:00 in the morning.
- The transportation improvements, the Ring Road, LAX Expressway and Arbor Vitae ramps are needed for today's traffic demand.
- So the \$64.000 question is, will we get the much needed transportation improvements as the demand at LAX increases?
- Will future traffic conditions with airport expansion and transportation improvements be better than no airport expansion and no transportation improvements?
- We do not have all the traffic data yet to answer those questions.
- Another concern we have is if the expansion project is approved, what is to prevent the growth from increasing far beyond the 89 MAP the same as the airport usage increased from its design of 40 MAP to the actual 68 MAP and projected 79 MAP?



July 24, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
Master Plan Office
P.O. Box 92216
Los Angeles, CA 90009-2216



RE: Comments on the Environmental Impact Statement / Environmental Impact Report for the LAX Master Plan

Dear Mr. Ritchie:

The Westside Cities, consisting of the cities of Beverly Hills, Culver City, Santa Monica, and West Hollywood jointly submit this letter regarding the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) prepared for the proposed LAX Master Plan.

While the Westside Cities recognize the importance of airports in supporting economic development in Southern California, we are deeply concerned about the negative and unmitigated impacts the proposed LAX expansion will have on the Westside Cities.

Overall, we believe the Draft EIS/EIR fails to adequately analyze and address potential significant impacts to the Westside Cities caused by the proposed expansion of LAX. The Draft EIS/EIR is inadequate because it does not contain adequate information regarding clear environmental impacts to the Westside Cities, despite our close proximity to the airport. The Draft EIS/EIR and associated documents primarily focus on an analysis of impacts and proposed mitigation measures for only the immediate area of the airport.


Traffic accessing and leaving LAX on already congested roadways and freeways serving the Westside is a primary concern. Pass-through traffic from Downtown, the Wilshire corridor, and other areas north of the airport on its way to LAX creates impacts to our residents and businesses. The Master Plan does not appropriately phase surface transportation enhancements to precede air transportation enhancements. Further, the relocation and expansion of the LAX

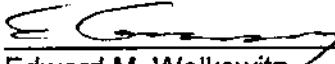
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Transit Center is not included as a Master Plan commitment at a location that will promote the use of transit. Other common areas of concern that have been expressed by the communities in the Westside include, but are not limited to, impacts of increased aircraft overflight noise and air pollution resulting from both increased air traffic at LAX as well as the diversion of business aircraft to other municipal airports. Since these significant impacts are not addressed in the Draft EIS/EIR, not only is it impossible to assess the levels of impact, no mitigation measures are proposed.


This letter communicates our shared positions on the LAX Draft EIS/EIR, and is not intended to replace and/or supercede any individual City's comments on the Draft EIS/EIR.

On behalf of the Westside Cities, thank you for the opportunity to provide our comments regarding the LAX Draft EIS/EIR. We appreciate the complexity of this project and look forward to receiving a response to our comments, which better reflects the concerns of the Westside Cities over unmitigated impacts from the proposed LAX Master Plan.

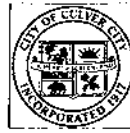

Mark Egerman
Mayor, City of Beverly Hills


Edward M. Wolkowitz
Mayor, City of Culver City


Michael Feinsten
Mayor, City of Santa Monica

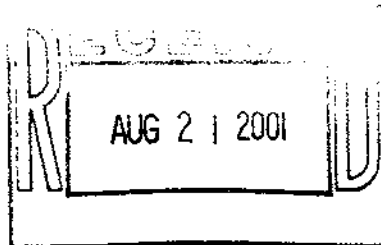

John Heilman
Mayor, City of West Hollywood

cc: U.S. Congresswoman, Diane Watson, 32nd Congressional District
Honorable Kevin Murray, Senator, 26th Senatorial District
Honorable Herb Wesson, Assembly Member, 47th Assembly District
Supervisor Yvonne Braithwaite Burke, LA County, 2nd District
Supervisor Don Knabe, LA County, 4th District
Honorable James Hahn, Mayor City of Los Angeles
Honorable Ruth Galanter, Los Angeles Council Member, Council District 6
David Kessler, Federal Aviation Administration



July 24, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
Master Plan Office
P.O. Box 92216
Los Angeles, CA 90009-2216



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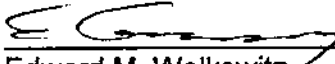
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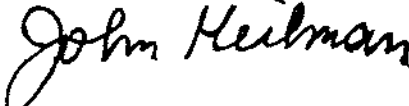
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Mayor, City of Beverly Hills


Edward M. Wolkowitz
Mayor, City of Culver City


Michael Feinsten
Mayor, City of Santa Monica

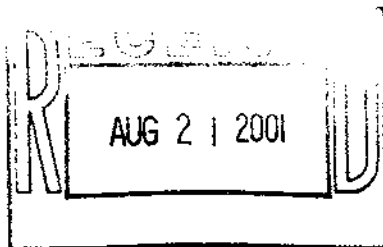

John Heilman
Mayor, City of West Hollywood

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Honorable James Hahn, Mayor City of Los Angeles
Honorable Ruth Galanter, Los Angeles Council Member, Council District 6
David Kessler, Federal Aviation Administration



July 24, 2001

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City of Los Angeles
Los Angeles World Airports
Master Plan Office
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RE: Comments on the Environmental Impact Statement / Environmental Impact Report for the LAX Master Plan

Dear Mr. Ritchie:

The Westside Cities, consisting of the cities of Beverly Hills, Culver City, Santa Monica, and West Hollywood jointly submit this letter regarding the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) prepared for the proposed LAX Master Plan.

While the Westside Cities recognize the importance of airports in supporting economic development in Southern California, we are deeply concerned about the negative and unmitigated impacts the proposed LAX expansion will have on the Westside Cities.

Overall, we believe the Draft EIS/EIR fails to adequately analyze and address potential significant impacts to the Westside Cities caused by the proposed expansion of LAX. The Draft EIS/EIR is inadequate because it does not contain adequate information regarding clear environmental impacts to the Westside Cities, despite our close proximity to the airport. The Draft EIS/EIR and associated documents primarily focus on an analysis of impacts and proposed mitigation measures for only the immediate area of the airport.


Traffic accessing and leaving LAX on already congested roadways and freeways serving the Westside is a primary concern. Pass-through traffic from Downtown, the Wilshire corridor, and other areas north of the airport on its way to LAX creates impacts to our residents and businesses. The Master Plan does not appropriately phase surface transportation enhancements to precede air transportation enhancements. Further, the relocation and expansion of the LAX

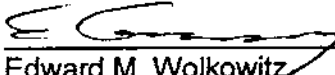
AL00011


Transit Center is not included as a Master Plan commitment at a location that will promote the use of transit. Other common areas of concern that have been expressed by the communities in the Westside include, but are not limited to, impacts of increased aircraft overflight noise and air pollution resulting from both increased air traffic at LAX as well as the diversion of business aircraft to other municipal airports. Since these significant impacts are not addressed in the Draft EIS/EIR, not only is it impossible to assess the levels of impact, no mitigation measures are proposed.


This letter communicates our shared positions on the LAX Draft EIS/EIR, and is not intended to replace and/or supercede any individual City's comments on the Draft EIS/EIR.

On behalf of the Westside Cities, thank you for the opportunity to provide our comments regarding the LAX Draft EIS/EIR. We appreciate the complexity of this project and look forward to receiving a response to our comments, which better reflects the concerns of the Westside Cities over unmitigated impacts from the proposed LAX Master Plan.


Mark Egerman
Mayor, City of Beverly Hills


Edward M. Wolkowitz
Mayor, City of Culver City


Michael Feinsten
Mayor, City of Santa Monica

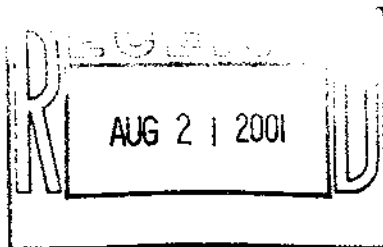

John Heilman
Mayor, City of West Hollywood

cc: U.S. Congresswoman, Diane Watson, 32nd Congressional District
Honorable Kevin Murray, Senator, 26th Senatorial District
Honorable Herb Wesson, Assembly Member, 47th Assembly District
Supervisor Yvonne Braithwaite Burke, LA County, 2nd District
Supervisor Don Knabe, LA County, 4th District
Honorable James Hahn, Mayor City of Los Angeles
Honorable Ruth Galanter, Los Angeles Council Member, Council District 6
David Kessler, Federal Aviation Administration



July 24, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
Master Plan Office
P.O. Box 92216
Los Angeles, CA 90009-2216



RE: Comments on the Environmental Impact Statement / Environmental Impact Report for the LAX Master Plan

Dear Mr. Ritchie:

The Westside Cities, consisting of the cities of Beverly Hills, Culver City, Santa Monica, and West Hollywood jointly submit this letter regarding the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) prepared for the proposed LAX Master Plan.

While the Westside Cities recognize the importance of airports in supporting economic development in Southern California, we are deeply concerned about the negative and unmitigated impacts the proposed LAX expansion will have on the Westside Cities.

Overall, we believe the Draft EIS/EIR fails to adequately analyze and address potential significant impacts to the Westside Cities caused by the proposed expansion of LAX. The Draft EIS/EIR is inadequate because it does not contain adequate information regarding clear environmental impacts to the Westside Cities, despite our close proximity to the airport. The Draft EIS/EIR and associated documents primarily focus on an analysis of impacts and proposed mitigation measures for only the immediate area of the airport.


Traffic accessing and leaving LAX on already congested roadways and freeways serving the Westside is a primary concern. Pass-through traffic from Downtown, the Wilshire corridor, and other areas north of the airport on its way to LAX creates impacts to our residents and businesses. The Master Plan does not appropriately phase surface transportation enhancements to precede air transportation enhancements. Further, the relocation and expansion of the LAX

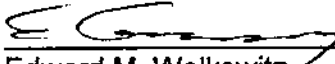
AL00012


Transit Center is not included as a Master Plan commitment at a location that will promote the use of transit. Other common areas of concern that have been expressed by the communities in the Westside include, but are not limited to, impacts of increased aircraft overflight noise and air pollution resulting from both increased air traffic at LAX as well as the diversion of business aircraft to other municipal airports. Since these significant impacts are not addressed in the Draft EIS/EIR, not only is it impossible to assess the levels of impact, no mitigation measures are proposed.

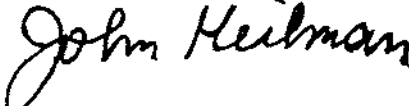
This letter communicates our shared positions on the LAX Draft EIS/EIR, and is not intended to replace and/or supercede any individual City's comments on the Draft EIS/EIR.

On behalf of the Westside Cities, thank you for the opportunity to provide our comments regarding the LAX Draft EIS/EIR. We appreciate the complexity of this project and look forward to receiving a response to our comments, which better reflects the concerns of the Westside Cities over unmitigated impacts from the proposed LAX Master Plan.


Mark Egerman
Mayor, City of Beverly Hills


Edward M. Wolkowitz
Mayor, City of Culver City


Michael Feinsten
Mayor, City of Santa Monica


John Heilman
Mayor, City of West Hollywood

cc: U.S. Congresswoman, Diane Watson, 32nd Congressional District
Honorable Kevin Murray, Senator, 26th Senatorial District
Honorable Herb Wesson, Assembly Member, 47th Assembly District
Supervisor Yvonne Braithwaite Burke, LA County, 2nd District
Supervisor Don Knabe, LA County, 4th District
Honorable James Hahn, Mayor City of Los Angeles
Honorable Ruth Galanter, Los Angeles Council Member, Council District 6
David Kessler, Federal Aviation Administration



July 19, 2001

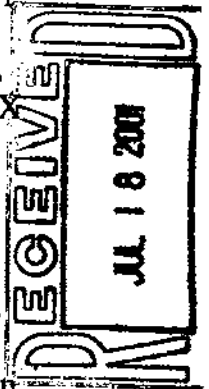
Mr. Jim Ritchie
City of Los Angeles
Los Angeles Worlds Airport
P.O. Box 92216
Los Angeles, California 90009-2216

Re: Environment Impact Statement/Environmental Impact Report Re
Proposed Future Development of Los Angeles International Airport

Dear Mr. Ritchie:

This letter constitutes the Burbank-Glendale-Pasadena Airport Authority's ("Authority") written comments on the City of Los Angeles' ("City") Environmental Impact Statement/Environmental Impact Report ("EIS/EIR") evaluating the various development alternatives set forth in the City's Master Plan ("Master Plan") for Los Angeles International Airport ("LAX"). The Authority's concern is that the City's EIS/EIR fails to analyze whether the City's proposed development alternatives will cause significant environmental impacts on regional airports such as the Burbank-Glendale-Pasadena Airport ("Burbank-Airport") and their surrounding environment. Specifically, the City's Master Plan makes clear that the City does not intend to develop LAX to meet all the demands for aviation services which exists for LAX. Moreover, each of the City's alternatives, with the arguable exception of the no action alternative, implements to varying degrees the City's announced goal of increasingly focusing LAX on international and air cargo operations. The Authority's question is where will the unmet demand for non-international, non-cargo flights go. Will it shift to the region's secondary airports, such as the Burbank Airport?

On August 22, 2000, Mr. Maury Laham, the Environmental Manager for LAX, pointed out the interrelationship between the two airports while publicly commenting on the possibility that the Authority would seek federal approval to impose a curfew on



the Burbank Airport to combat nighttime noise. Mr. Laham expressly requested of the Authority that "when doing its study and considering alternatives, compute in both the costs and consequences to LAX." Similarly the City acknowledged the interrelationship between the two airports in a City study, published on February 28, 2000, entitled "Air Transportation in the Los Angeles Region" ("February Document"). The February Document asserted, *inter alia*, that while LAX is the primary airport for the Los Angeles region the Burbank Airport is a secondary airport which augments the air service provided by LAX. The City's February Document further asserted that: (1) the passenger service areas (from which an airport draws its passengers) overlap for LAX and Burbank Airport; (2) air travel demand will increase for both LAX and Burbank Airports; (3) LAX will increasingly handle a higher proportion of international flights and air cargo; and (4) thus, secondary airports, such as Burbank Airport, must increase their capacity to handle non-cargo, non-international flights. The City's February Document also asserted that the City fully expects LAX's focus on international and air freight flights to shift commuter passenger flights to so called secondary airports, potentially including Burbank Airport. The City's April 25, 2000 news release announcing the February Document summarized it as follows:

The inescapable conclusion of this study is that all the region's airports must grow for the region to continue to prosper. LAX cannot and should not capture all of the new demand for air transportation. LAX's unique role in the future should be to focus on handling most of the international component of the region's air service needs.

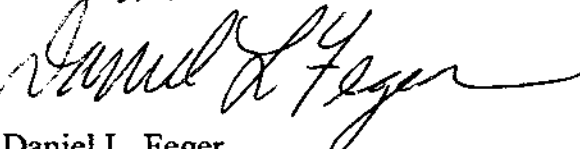
On July 28, 2000, the City also sent to the Authority (which it identified as an "LAX Stakeholder") a brochure ("July Document") detailing the City's plans for modernizing LAX. The City's cover letter to the July Document described LAX as the "West Coast's leading international gateway for both passengers and air freight." The Cover letter further stated that the City continues "to encourage growth at other airports on the basis that they must share responsibility for accommodating air traffic demand." Consistent with the February Document, the City's July Document made two key points: (1) air transportation is a regional issue, thus what happens at one of the region's airports impacts the other airports; and (2) LAX expects to "redistribute" passenger demand over the next two decades to prevent "LAX from shouldering a disproportionate percentage of that new demand, and allowing the airport to focus more on handling international travel and transport."

Given the City's acknowledged interrelationship between LAX and regional airports such as Burbank Airport, the Authority believes the City's current EIS/EIR

Mr. Jim Ritchie
July 19, 2001
Page 3

failure to study whether the City's project will shift demand to the region's other airports renders the EIS/EIR inadequate. The City should include such analysis in its EIS/EIR. Just as the City's Mr. Laham requested that the Authority "when doing its study and considering alternatives, compute in both the costs and consequences to LAX," LAX now must examine any possible consequences to regional airports, including Burbank Airport, of the development alternatives for LAX under consideration by the City.

Sincerely,



Daniel L. Feger

DLF/jp



El Segundo Unified School District

641 SHELDON STREET • EL SEGUNDO, CALIFORNIA 90245

(310) 615-2650 • FAX (310) 640-8272

SUPERINTENDENT

WENDY DOTY, Ed.D.

BOARD OF EDUCATION

CHRIS J. POWELL

MICHAEL D. BRINEY

KATHLEEN A. WILEY

JO ANN E. EDLEFSEN

CHRISTINE M. SHERRILL

July 11, 2001

The Honorable Jane Harmon
House of Representatives
512 Cannon Building
Washington, D. C. 20515



Dear Ms. Harmon:

The El Segundo Unified School District is asking for your support for a regional approach to resolving the air traffic needs of the Southern California region. The current airport was designed to handle 40 million passengers per year and now serves 67 million. The proposed expansion of LAX will likely generate far more than the 89 to 98 million passengers projected by the LAX Master Plan.

The region's heavy dependence on LAX has increased traffic congestion, added to air pollution and greatly increased airport noise. LAX is already the region's largest single source of smog-forming NOx emissions. It is expected that the expansion plan will triple the NOx emissions. Approximately 31,000 homes and 36 schools near LAX currently suffer from noise exceeding the 65 decibel noise level. We are also concerned about public safety. Over the past three years, LAX has averaged 11 near misses a year. The number of near misses considered acceptable by the FAA is four. More flights would further endanger safety.

I have enclosed a copy of the resolution calling for a Regional Airport Plan for Southern California, which was adopted by the El Segundo Unified School District Board of Education on December 8, 1998. We urge you to take our concerns to the Leadership of Congress and the Administration to ensure that a Regional Airport System is implemented for the Southern California area.

Sincerely,

Wendy Doty, Ed.D.
Superintendent

WD:np

cc: Mr. Don Knabe, Board of Supervisors, County of Los Angeles
Mayor Mike Gordon, City of El Segundo
Jim Ritchie, Los Angeles World Airports ✓

*Dedicated to providing students and the community
with an optimum learning environment that prepares educated, productive,
compassionate citizens to meet the challenges of a global society in the 21st Century.*

AL00014

RESOLUTION

No. 15 1998-99

RESOLUTION CALLING FOR A REGIONAL AIRPORT PLAN FOR SOUTHERN CALIFORNIA

WHEREAS, The Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and,

WHEREAS, Expanding its passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and,

WHEREAS, School Districts and communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the airport; and,

WHEREAS, There are many other commercial airports in Southern California, some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and,

WHEREAS, Several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and,

WHEREAS, Developing airport capacity near high growth communities rather than concentrating airport development at LAX may be an environmentally superior, lower-cost and more equitable strategy for serving future growth in air commerce in Southern California; and,

WHEREAS, The development of these regional airport resources will help spread jobs and economic development opportunities more equitably throughout the region, and reduce the public health and environmental burdens on communities near LAX.

AL00014

NOW, THEREFORE, BE IT RESOLVED, THAT the Board of Education of the El Segundo Unified School District calls upon the communities of Southern California, including the City of Los Angeles; the Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura; the State of California; and our congressional representatives to join together in developing the Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and develops the capacity of the many other commercial airports in Southern California to serve the expanding air commerce marketplace.

**BOARD OF EDUCATION
EL SEGUNDO UNIFIED SCHOOL DISTRICT**

William D. ...
President

Michael ...
Member

Frank ...
Vice-President

[Signature]
Member

[Signature]
Clerk

December 8, 1998
Date



DEE HARDISON
MAYOR

CITY OF
TORRANCE

July 17, 2001

Mr. Jim Ritchie
City of Los Angeles
LOS ANGELES WORLD AIRPORTS
LAX Master Plan Office
P.O. Box 92216
Los Angeles, CA 90009-2216

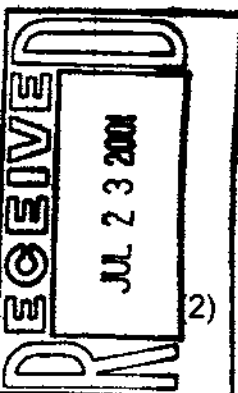
Subject: Comments from the City of Torrance on the Draft Environmental Impact Statement/Environmental Impact Report (EIR/EIS) on the Los Angeles International Airport (LAX) Proposed Master Plan Improvements

Dear Mr. Ritchie:

The City of Torrance appreciates the opportunity to comment on the Draft EIS/EIR on the proposed Master Plan for LAX. As a member of the South Bay Cities Council of Governments (SBCCOG), Torrance concurs with the comments submitted by the SBCCOG with respect to the adequacy of the Draft EIS/EIR. We find that the Draft EIS/EIR fails to adequately address many potential environmental impacts on the cities to the south of the airport as a result of expanded airport operations, as identified in detail in the comments submitted by the SBCCOG.

Moreover, this letter constitutes comments from the City of Torrance on five issues of particular concern to the City. Our comments with regard to these issues are as follows:

- (1) **NOISE:** The Draft EIS/EIR understates potential noise impacts from expanded airport operations. It fails to address both existing problems with overflight noise resulting from the re-routing of over congested airport traffic and potential increases in such flight diversions associated with increased operations. Nor is there any address of impacts resulting from greater lateral dispersion over the coastal waters that could lead to premature easterly turns over Torrance and consequent increases in overflight noise. In addition, although the Draft EIS/EIR depicts additional new routes over noise-sensitive areas, including coastal areas within the South Bay and Torrance, it fails to analyze the noise effects of these new routes. Finally, as is set forth in some detail in the comments submitted by the SBCCOG, the Draft EIS/EIR utilizes faulty base line assumptions and modeling parameters, particularly in regard to the South Bay.
- (2) **TRAFFIC:** The Draft EIS/EIR does not provide a complete analysis of off-airport surface traffic impacts. There is a disproportionate assumption of trip distribution to north of the airport that results in the inadequate analysis of airport related traffic impacts on local streets south of the airport. At a minimum this issue must adequately be addressed, as must include the impacts on local streets resulting from trips coming off the freeway south of the airport and onto local streets to avoid freeway congestion. Further, additional analysis is warranted on the southerly freeway offramps and surrounding intersections.

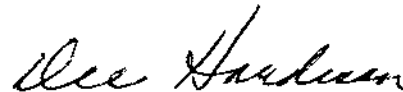


- (3) **MITIGATION MONITORING PROGRAM:** The Draft EIS/EIR fails to adequately specify mitigation measures or methods to enforce them.
- (4) **COMMUTER AIRPORTS:** The Draft EIS/EIR fails to address the potential cumulative impacts on surrounding commuter airports resulting from the possible displacement of commuter flights at LAX as result of increased commercial traffic. This situation has the potential to significantly alter existing flights volumes at nearby community airports such as at Torrance Airport.
- (5) **RELOCATION OF ENDANGERED SPECIES:** The Draft EIS/EIR identifies as a mitigation to the loss of on-site vernal pools the relocation of a population of Riverside Fairy Shrimp, a federally listed endangered species. The mitigation identified is the relocation of this entire shrimp population to an off-site vernal pool in the surrounding area. Although not specifically identified in the Draft EIS/EIR, the consultant who prepared the Draft EIS/EIR has been in contact with the City of Torrance regarding the possible relocation of the Riverside Fairy Shrimp to the Madrona Marsh. The City is concerned with the ramifications of becoming home to a federally listed endangered species, and feels that this issue needs to be addressed in some detail.

In conclusion, the proposed expansion of LAX has significant environmental implications. Those communities closest to the airport facility will undoubtedly bear the brunt of those impacts. The California Environmental Quality Act requires at a minimum the full disclosure of all potential environmental impacts resulting from a project. The comments provided herein, in conjunction with those provided by the SBCCOG indicate there is significant work ahead in the preparation of the required environmental analysis. We thank you for your consideration in this matter and look forward to the opportunity of reviewing a revised Draft EIS/EIR that addresses all of our comments.

Sincerely,

CITY OF TORRANCE



DEE HARDISON
Mayor

PT:DH:maw

AL00015

STEVEN ZUCKERMAN
Mayor

SUSAN SEAMANS
Mayor Pro Tem

JOHN C. ADDLEMAN
Council Member

JUDY MITCHELL
Council Member

BARBARA RAUCH
Council Member

DOUGLAS R. PRICHARD
City Manager



THE CITY OF

ROLLING HILLS ESTATES

4045 PALOS VERDES DRIVE NORTH • ROLLING HILLS ESTATES, CA 90274
TELEPHONE---(310) 377-1577 FAX (310) 377-4468

July 16, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports (LAWA)
LAX Master Plan/Room 218
PO Box 92216
Los Angeles, CA 90009-2216

RE: Comments on the Draft EIR/EIS for the proposed LAX Master Plan Improvements

Dear Mr. Ritchie:

The purpose of this letter is to provide written comment (due by July 25, 2001) on the Draft EIR/EIS Documents for the proposed LAX Master Plan Improvements. The City of Rolling Hills Estates has been working with the South Bay Cities Council of Governments (SBCCOG) for the past several months to identify the South Bay region's concerns on the LAX Master Plan. As you may be aware, the SBCCOG has retained legal counsel and a team of consultants to review and comment on several sections of the Draft EIS/EIR Documents.

Attached, please find a copy of a letter from the SBCCOG addressed to LAWA, which explains in detail areas of the Draft EIS/EIR Documents that should be further clarified, expanded, and/or made consistent with other sections of the Document(s).

On July 10, 2001, the Rolling Hills Estates City Council reviewed and concurred with the comments from the SBCCOG on the Draft EIS/EIR Documents. Therefore, the City of Rolling Hills Estates is requesting a formal written response to the issues raised in the attached letter.

Should you have any questions, please do not hesitate to contact David Wahba, Senior Planner or myself at City Hall.

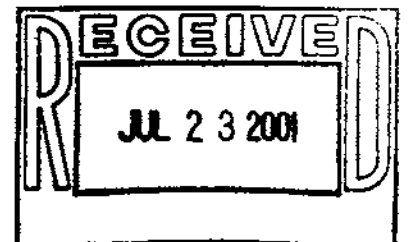
Sincerely,

Douglas R. Prichard
City Manager

cc: City Council

Enclosures

LAWA II:2



AL00016

June 28, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan/Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216

Re: Draft Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements - Comments of the South Bay Cities Council of Governments

Dear Mr. Ritchie:

The following constitutes the comments of the South Bay Cities Council of Governments (ASBCCOG@), pursuant to the requirements of the California Environmental Quality Act, Public Resources Code ' 21000, et seq., (ACEQA@) and the National Environmental Policy Act, 42 U.S.C. ' 4321, et seq., (ANEP@), concerning the Draft Environmental Impact Statement/Environmental Impact Report (ADraft EIS/EIR@) for the Los Angeles International Airport (AAirport@) Proposed Master Plan Improvements (AProject@), prepared jointly by the Federal Aviation Administration (AFAA@) and the City of Los Angeles (ALos Angeles@).¹ The issues raised by these comments fall into six general categories, although they are by no means limited only to those categories: (1) the baseline used in the Draft EIS/EIR, against which the various environmental impacts of the Project are compared, is not properly designated; (2) the noise impacts of the Project are inadequately addressed; (3) the potential air quality impacts of the Project are not fully disclosed; (4) the discussion of the Project=s surface traffic impacts is misleading; (5) the Draft EIS/EIR does not explore all reasonable alternatives, and, thus, paves the way for its ultimate conclusion that expansion of the Airport=s airside and groundside facilities are the sole way to meet future demand; and (6) the Draft EIS/EIR fails to adequately specify mitigation measures or methods to enforce them.

¹ The FAA and Los Angeles shall, for the remainder of this letter, be referred to collectively as AProject Proponents@.

AL00016

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
June 28, 2001
Page 2

I. THE DRAFT EIS/EIR DOES NOT PROPERLY DESIGNATE THE BASELINE FOR ANALYSIS.²

The specification of a baseline for comparison with Project impacts is a critical component of analysis under CEQA, because without an accurate specification of the baseline, analysis of impacts, mitigation measures and project alternatives becomes impossible. @ County of Amador v. El Dorado County Water Agency, 76 Cal.App.4th 931, 953 (1999). A central concept of CEQA is that a baseline figure must represent an environmental condition existing on the property prior to the project. @ Save Our Peninsula Committee, et al. v. Monterey County Board of Supervisors, et al., 87 Cal.App.4th 99, 124 (2001). The regulations implementing CEQA, 14 Cal. Code Regs. ' 15000, et seq., (ACEQA Guidelines@) are specific as to the definition of a baseline prior to the project@:

An environmental impact report must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or, if no Notice of Preparation is published, at the time the environmental analysis is commenced . . . This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. @ CEQA Guidelines ' 15125(a).

While the courts have taken the position that the date for establishing a baseline cannot be a rigid one@, Save Our Peninsula Committee, supra, 87 Cal.App.4th at 125, they have also held unequivocally that an EIR must focus on impacts to the existing environment, not hypothetical situations@, County of Amador, supra, 76 Cal.App.4th at 955. The baseline for analysis in the Draft EIS/EIR does not meet these tests.

² Later sections more fully discuss the pitfalls arising out of the use of the three separate and distinct baseline assumptions used in that analysis; Environmental Baseline, Adjusted Environmental Baseline, No-Project/No-Action.

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
June 28, 2001
Page 3

A. The Draft EIS/EIR=s Base Year Does Not Reflect the Physical Conditions on the Project at the Time of the Publication of its Notice of Preparation.

The Airport Master Plan, November, 2000, Technical Analysis (AMaster Plan@) is the basis of the analysis contained in the Draft EIS/EIR (Master Plan, Preface, page i). The analyses contained in Master Plan, Chapter II, Existing Conditions Working Paper, 4/19/96, use data from the base year 1994 (see, e.g., ' 2.3.1, page II-2.1, re: Annual Weather Conditions; Figure II-2.17, page II-2.53, re: Design Day Hourly Distribution of Operations and Tables following). The Notice of Preparation, however, was published in July, 1997 (Draft EIS/EIR, page ES-2), almost three years after the conditions reflected in the original Master Plan data and analysis. Courts have consistently taken the position that a baseline should not Abc set a number of years earlier than the commencement of the current project@. Save Our Peninsula Committee, supra, 87 Cal.App.4th at 127.

Moreover, the Master Plan and Draft EIS/EIR contain a plethora of base years such that it is impossible for the public to ascertain which base year is used for a given purpose. On the one hand, the Draft EIS/EIR (page ES-2) states that the environmental analysis normally describes existing conditions as of the July, 1997 date on which the Notice of Preparation was published (even though none of the data in the Master Plan upon which the Draft EIS/EIR is based reflects a 1997 origin). On the other hand, the Draft EIS/EIR states that, where a full year=s worth of data is needed, data from 1996 is used (see, e.g., Draft EIS/EIR Technical Report on Surface Traffic), and sometimes earlier years [unspecified], and sometimes even data from the later years 1999 and 2000 (even though these latter are more than two years after the publication of the Notice of Preparation). Additionally, the Master Plan is unclear as to whether 1994 or 1995 data is used. Finally, different base years are used for different components of the analysis, e.g., 1996 for surface traffic and noise, 2000 for water resources.

The implications of these shifting baselines are not insignificant. For example, the use of a 1994 (or even 1996) baseline in the noise analysis artificially elevates the baseline for analysis by incorporating noise from the larger numbers of Stage 2 aircraft in the fleet in 1994/96. These aircraft were totally phased out of the United States fleet by the year 2000. Further, the use of a 1994 (or 1996) baseline year in the air quality analysis potentially overstates the baseline level of criteria pollutants in the L.A. region which has since come into attainment for all criteria pollutants except Ozone and Particulate Matter.³ In short, the nonspecificity of both the Master

³ The Draft EIS/EIR also states that its use of earlier years results in a more Aconservative@ analysis, because there were fewer passengers and operations in earlier years, and, thus, less noise and fewer emissions to compare against those generated by the Project. This claim is inaccurate at least with respect to noise and air quality analyses as set forth below.

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
June 28, 2001
Page 4

Plan and Draft EIS/EIR with respect to the base year for analysis renders the results of their analyses questionable.

B. The Master Plan and Draft EIS/EIR Baseline Analyses Are Based On Incomplete and/or Inaccurate Data.

The Master Plan defines the capacity of the Airport=s existing airside facilities as Athe number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay.@ (Master Plan, ' 2, page II-2.1) The correct determination of existing airside capacity is critical to identification of the Airport=s potential to accommodate future air traffic demand and plan future airport=s development. (Master Plan, Chapter 2, page II-2.1) Various independent variables are used in the modeling of existing airport capacity, including, but not limited to: (1) runway operating configurations; (2) noise abatement procedures; (3) airspace operating assumptions; and (4) airfield operating assumptions. (Master Plan, ' 2.3, page II-2.21) Delay is also apparently a contributing variable. The relationships within the model are such that, if the definition of a given variable, or the value assigned to it, are questionable, the capacity determination resulting from the model is prejudiced.

Here, even if, for argument=s sake, the Draft EIS/EIR had specifically and accurately designated a base year, critical data used in the Master Plan baseline demand/capacity/delay analysis is incomplete or in some cases inaccurate.

As a threshold matter, the Master Plan demand/capacity/delay analysis is predicated on Aircraft Communications, Addressing and Reporting System (AACARS@), and Official Airline Guide (AOAG@) data sources. These two data sources may exaggerate, or, inaccurately report delay. The Master Plan defines delay as Athe difference between the actual time it takes an aircraft to perform an arrival or departure and the normal time it would take to perform the same operation with no interference from other aircraft.@ (Master Plan, ' 2.1, page II-2.2) ACARS data is generated by the airlines, and is based on activities such as push back, parking at the gate, or opening or closing cabin doors. ACARS data includes data regarding on-time performance, based on the arrival and departure times developed by each airline for each segment of flight.

In any event, it does not account for the opposite effect of using later years 1999/2000 as the baseline, which would, by the logic used in the Draft EIS/EIR, artificially elevate the baseline and, consequently minimize the environmental impacts of the Project. As neither the Master Plan nor Draft EIS/EIR are specific as to the distribution of various baseline years throughout the analysis, it is impossible to ascertain the degree of distortion that may have occurred through the use of these various baselines.

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Since the data is airline generated, airline definitions of delay are automatically built into the report.⁴

Further, the OAG is published for the express purpose of identifying the arrival and departure times of various airlines. When the airlines set up their schedules, they factor in the average delay for each leg of flight between city pairs. Thus, the OAG also builds delay into the departure and arrival times based on each airline's historical data and operating experience for that segment of flight.

⁴ When an aircraft pushes back from the gate or closes the cabin door, the aircraft could be late for a variety of reasons. Many delays are due to factors that are airline controllable such as late boarding of passengers, customer service delays, maintenance delays, late arriving equipment, catering, fueling, baggage and the unavailability of crew members, to name but a few. Other types of delay would be attributable to airport, runway or taxiway design, airport acceptance rates, airport construction, noise abatement regulations, air traffic control restrictions and weather. These items are also introduced and incorporated into the ACARS report as a delay factor.

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In summary, ACARS data is not original source data but is the product of third party intervention. It is manipulated by various airline third party functionaries before a final report is released. Similarly, OAG data is manipulated to include delay not after, but before the fact. Therefore, because both sources of data already include a delay factor, their use in the Master Plan=s modeling, as set forth below, may cause a double counting of delay.⁵

Instead of ACARS or OAG data, the Master Plan should have relied on radar data. Radar data is a memorialization of the movement of arriving aircraft from a specified distance outside the terminal control area until touchdown and, conversely, for departing aircraft, from the aircraft=s lift-off from the runway to the same distance outside the airport=s control area. Every operation is tracked in real time without the intervention of third party interpretation or manipulation.

The effects of this data problem are reflected in the Master Plan=s modeling of demand/capacity/delay. The FAA=s Simulation Model (ASIMMOD@), Version 2.1, was apparently used in the Master Plan=s demand/capacity/delay analysis. SIMMOD simulates the movement of arriving and departing aircraft from their entry/exit into the Los Angeles Terminal Air Traffic Airspace through approach and landing phase, or taxi and takeoff, to their exit from the terminal air traffic airspace. The proper calibration of the SIMMOD is essential since the resulting statistics are dependent on the data used to develop the baseline assumptions and operating instructions for the model. In this case, ACARS and OAG data were used to calibrate SIMMOD. Because of the potential double counting inherent in these data sources, and the consequent exaggeration of delay in the model, the principal conclusion that is drawn from SIMMOD is that the only way to remedy delay is to build additional airport infrastructure. The primary shortcoming of such an analysis is that it eliminates, at the outset, opportunities to gain efficiency through improvements in operating practices and minor modifications to the air traffic

⁵ In addition, the Master Plan analysis relies on numerous sources other than ACARS or OAG data including personal observations, a small sampling of users and an unique determination of aircraft speeds and routes, none of which is suitable, let alone optimal, for developing baseline analyses or formulating assumptions. (See, e.g., Master Plan, ' 2.1.3, pages II-2.5 - II-2.6)

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system. Thus, what seems like a relatively minor data collection/designation problem pervades the demand/capacity/delay modeling upon which the Draft EIS/EIR's environmental analysis is based, and subtly biases the results.

C. The Draft EIS/EIR is Based on Implausible Modeling Assumptions.

The accuracy of SIMMOD's results depends on an accurate description of the airport's operating environment. (Master Plan, ' 2.1, page II-2.2) Both the Master Plan and Draft EIS/EIR acknowledge that the description is made up not merely of data purporting to represent actual current conditions, but also assumptions arising from that data (see, e.g., Master Plan, ' 2, page II-2.1). Therefore, to the extent data and assumptions are incorrect or incomplete, so too will be the results of the model. In addition to the data problems specified above, SIMMOD, as used in the Master Plan, incorporates implausible, or biased, assumptions which, in turn, call into question the integrity of its output.

1. Assumptions Concerning Aircraft Delay Are Unexplained and Unsupported.

The Master Plan's (and Draft EIS/EIR's) definition and description of the delays at the existing (pre-Project) Airport are based on consultants' opinions and not on factual data. First, while the Master Plan acknowledges that a standard definition of acceptable delay is not used in the industry (Master Plan, ' 2.1.3, page II-2.5), it then concludes that delay levels of six to ten minutes indicate the need for additional facilities; that as average aircraft delay increases above six minutes, passengers tend to perceive service reliability problems; as delay approaches ten minutes per operation, further increases in demand are limited, and, as flight cancellations were assumed when delays exceed 20 minutes per average annual aircraft operation. (Master Plan, ' 2.1.3, pages II-2.5 - II-2.6) These assumptions are apparently based on information derived from prior studies by the Master Plan consultants at airports other than Los Angeles, in years as early as 1988. In other words, the delay standards relied upon in the Master Plan are based on outdated data concerning potentially irrelevant subject airports all of which have unique characteristics that may have influenced creation or perception of delay, none of which are mentioned, let alone discussed, in the Master Plan or Draft EIS/EIR.

Further, these unsupported assumptions do not reflect an understanding of the diverse ways in which delay is determined by the airlines, Air Traffic Control and the Department of Transportation. First, a typical airline will develop performance criteria for each phase of flight based on company goals and performance percentages, including arrival and departure delay. Airlines use a zero variance as a standard for on-time performance (i.e., zero difference between arrival and/or departure times and published schedules). The percentage goal for each

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activity will be based on the level of performance the airline hopes to, or, in some cases, must attain in order to remain competitive. Some airlines track on time performance plus five minutes and most will track on time performance plus 14 minutes.

FAA Air Traffic Control, on the other hand, computes delay based on actual delay time en route. An arriving aircraft is considered delayed only if the aircraft is held en route to the destination for 15 minutes or more at any given moment during the flight. It is possible that these aircraft could be held at more than one interval during a flight. However, if each holding period does not exceed the 15 minute threshold, no delay is recorded, even though the total delay might well be in excess of 15 minutes. Further, inbound delay is kept separate from outbound delay. A departing aircraft is not counted as delayed until: (1) the average taxi time for the airport; (2) the time from the gate to the runway; and (3) 15 minutes have cumulatively elapsed. Air Traffic Control delays do not consider airline schedules or internally generated delays in their reporting system. The majority of Air Traffic Control delays are as a result of weather and not system capacity. Finally, the Department of Transportation grades airline performance on the time of arrival at the destination airport within 14 minutes of the scheduled arrival time. The Master Plan utilizes none of those benchmarks. Thus, it fails to adequately explain the basis for its demand/capacity/delay analysis.

2. The Master Plan's Assumptions Concerning Turbo Prop Operations are Manifestly Inaccurate.

Referring to its analysis of existing noise abatement procedures as they pertain to the creation or maintenance of demand/capacity/delay, the Master Plan states that based on actual information obtained by the Los Angeles Noise Management Bureau, turboprop departures were permitted to turn slightly earlier than jet departures at the Airport VOR, which is located between runways 7L and 7R, west of Pershing Drive (Master Plan, § 2.3.3, page II-2.31). In addition, Figures II-2.11 and II-2.12 indicate that, when the Airport is operating on a west flow, turbo prop aircraft turn at the VOR.

These representations are inaccurate and lead to incorrect assumptions about flight paths. In fact, if such a turn were permitted, it would occur prior to the shoreline, contrary to current noise abatement procedures. Turning the turbo props early allows faster aircraft to depart behind the turbo props at a more accelerated rate than is currently allowed, thus allowing more aircraft to depart in a given interval. The results of this inaccurate assumption is that: (1) the baseline departure capacity is artificially elevated to a level higher than would be realized had actual air traffic data been used and the noise abatement procedures modeled as they are actually used; and (2) turbo props, as depicted in the Master Plan and Draft EIS/EIR, are directed over noise sensitive areas not previously overflowed, and, as a result, elevate the baseline noise levels, thereby concomitantly reducing the apparent noise impacts of the Project.

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3. The Master Plan=s Flight Schedule Assumptions Are Outdated.

The Master Plan reports the results of a SIMMOD analysis conducted in 1994, using 1994 data and 1994 assumptions. In addition to this obsolete data, the ACARS data upon which the SIMMOD analysis is based includes only 50.81% of commercial operations and 46.3% of the total operations in the design day flight schedule. As not all of the aircraft operators were considered, operational configurations long pre-date the commencement of the environmental process, and current schedules were not used (although available), the assumptions concerning a typical day=s traffic are substantially unsupported.

4. The Master Plan=s Fleet Mix Assumptions are Inaccurate.

The Master Plan relies on a fleet mix distribution derived from AAugust 11, 1994 OAG, NMB Do Daily Operations Records and LADOA 1994 Monthly Air Traffic Volumes@ (Master Plan, Table II-2.16, page II-2.58). This 1994 fleet mix distribution is outdated and, thus, inadequate for use in SIMMOD. Specifically, it includes a large number of Stage 2 aircraft which are no longer in operation at the Airport. Not only are Stage 2 aircraft noisier, but they have different emissions characteristics (some of which are an improvement) from the newer high bypass ratio, Stage 3 aircraft. If the correct 1997 base year had been used (or better yet, an even more recent year), the proportion of Stage 2 aircraft would have been smaller, and the noise baseline lower, and, thus, more accurate.

5. The Master Plan=s Assumptions Concerning Aircraft Speed Are Inaccurate.

The Master Plan=s assumptions concerning aircraft speeds were apparently inflated to fit the underlying assumption of unconstrained aircraft flows. The Master Plan model calls for all aircraft to operate at the same constant air speed before proceeding to the Airport and landing. The model further assumes that all aircraft exit the runway at the same point and within the same amount of time in order to reach the modeled flow rate. In actual conditions, the speeds of the aircraft vary, with high airspeed greatly reduced as the aircraft approaches the airport. Nor would all aircraft exit the runway at the same location. In short, this assumption of high constant speed will have an as yet unascertained impact on the model=s results but would tend to overstate capacity of the existing facility, and, thus, the baseline for comparison with the Project=s improvements.

D. The Master Plan=s Model Omits Critical Variables.

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Another crucial issue revolves around variables the Master Plan fails to include in its model. Specifically these include: (1) the capacity of the airspace beyond the Airport Terminal Control Area (ATRACON@); and (2) gate capacity for future scenarios.

1. The Master Plan Should Have Considered Airspace Capacity Beyond The Airport=s Terminal Area Airspace.

According to the Master Plan, airspace considerations were limited to entry (and exit) from the Airport=s TRACON airspace. (Master Plan, ' 2.1.1, page II-2.3) The failure to consider airspace capacity beyond that point is a material omission from the analysis. This is because the majority of aircraft delays are absorbed in the en route environment before an aircraft arrives in TRACON airspace. By modeling only the terminal area, the results of the model are skewed for both arriving and departing aircraft. For departing aircraft, if the model does not consider the inherent constraints of the en route air traffic system, including differences in aircraft performance and the impacts of other air traffic transiting the area for other airports, the departure flow pictured in the model will remain unconstrained and aircraft can take off at a constant, predetermined rate. When reaching the boundary, the aircraft are dropped from the scenario, and the model does not further consider constraints of the en route system which naturally impact the TRACON airspace. Unfortunately, this unconstrained flow scenario is not normally possible in today=s complex air traffic control system.

Similar problems exist in modeling arrivals without consideration of airspace outside the TRACON. Inbound aircraft are assumed, in the Master Plan model, to be at the entry point of terminal airspace when required by the model. Aircraft proceed inbound at a set speed, reduce speed at a predetermined point, land and proceed unimpeded to their gate. This is not a true representation of a typical aircraft arrival. In fact, there is almost no probability that aircraft can be delivered to the terminal inbound fix at a rate consistent with the model=s assumptions.

Instead, the Master Plan=s arrival model was developed to insure that an arriving aircraft would be at the inbound fix at the specific time required in order to maximize the arrival rate for the airport. Although Air Traffic Control consistently tries to keep the aircraft sequenced as closely as possible Aen trail@, it is not possible to consistently space aircraft a set distance apart for extended periods of time. The availability of aircraft to fit into the sequence, aircraft speeds, the mix of large and small aircraft, a lack of demand, aircraft deviations due to weather, en trail restrictions though an en route sector or en trail restrictions required for an airport approach control facility and other variables cause the en trail spacing of arrival aircraft to be inconsistent. As a result of these and many other factors, there is unused capacity in each of these arrival sequences. In summary, the Master Plan=s failure to adequately consider constraining factors outside the TRACON airspace calls into question the validity of the model=s result.

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2. The Master Plan Should Have Modeled Gate Capacity.

The Master Plan did not include in its modeling aircraft gate operations for future activity levels, allegedly because of the inability of the existing gate facilities to accommodate the higher activity levels.⁶ (Master Plan, ' 2.5.3, page II-2.104) The Master Plan disclaims the importance of this omission [AThe inability to model gate operations in detail does not impact the results of the airside capacity analysis since at higher activity levels the runway system tends to be the primary constraint . . .@ Master Plan, ' 2.5.3, page II-2.110]. The Master Plan is in error.

If an aircraft cannot get to the gate unimpeded, the resulting delay must be factored into the analysis. In the Master Plan, taxi patterns are consistent and aircraft are dropped from the model when they reach the gate area. The model does not capture any delays in the gate area or any delays that might occur in reaching the gate due to congestion on the ramp. The same is true for departing aircraft. If a departing aircraft cannot leave the gate due to inbound traffic or other traffic in the gate area, the departure demand at the airport may not be as even as is assumed in the Master Plan=s model.

The importance of this omission is that it precludes development of a clear picture of the delay reduction, and consequent capacity enhancing, attributes of the Project. Without estimation of the potential groundside/terminal structure constraints on operations (capacity), the actual delay reducing, and capacity enhancing, benefits of the Project as a whole cannot be accurately ascertained.

3. The Master Plan Should Have Considered Currently Implemented Air Traffic Procedures.

⁶ Performance measures contained in the Master Plan, ' 2.5.1, include Aoutbound ground delay@ which, in turn, appear to include gate related variables such as Agate push-back delay@. This performance measure was apparently used in the modeling of existing gate operations but not future ones. (Master Plan, ' 2.5.1, page II-2.97)

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While the Master Plan acknowledges the existence of the current Dual Civet Arrival procedure, it fails to analyze its delay reducing, or consequent capacity enhancing efficiencies. The procedure is mentioned, then drops off the Aradar@ screen. The Dual Civet Arrivals, however, have so greatly reduced arrival delay at the Airport that no national delay program for the airport has been established since the procedure=s implementation. Ignoring the impacts of Dual Civet Arrivals results in an exaggeration of existing delay and a consequent exaggeration of the Project=s delay reducing, and capacity enhancing benefits.

E. Demand, as Defined in the Master Plan, is an Identity with Capacity.

Inaccurate data and assumptions are not alone in influencing the outcome of a modeling effort. Inadequate specification of a variable may also lead to an unrepresentative result. In this case, the independent variable, demand, as defined, is not independent but is an identity with, or surrogate for, the dependent variable, capacity. Thus, the demand variable has an interactive relationship with the dependent variable which influences the model=s outcome in significant ways.

For example, the Master Plan defines aircraft demand as Aa 24-hour flight schedule representative of design day activity.@ (Master Plan, ' 2.1.2, page II-2.3) The A24-hour flight schedule@ definition is almost identical to the definition of Acapacity@, Athe number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay.@ (Master Plan, ' 2, page II-2.1) The two variables, therefore, vary together, i.e., as Acapacity@ increases, Ademand@ will also increase, rendering demand useless as a predictor of capacity. The precise degree in which the interaction of the independent and dependent variables in the model affect the analysis cannot be ascertained at this point without re-running SIMMOD. Suffice it to say that a new surrogate for demand, derived, for example, from airline market surveys, or annual enplanements, is necessary to insure the integrity of the model=s results.

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II. THE DRAFT EIS/EIR DOES NOT FULLY ANALYZE THE PROJECT=S OFF-AIRPORT SURFACE TRAFFIC IMPACTS.

While the Draft EIS/EIR=s off airport surface traffic analysis adequately depicts some aspects of the Project=s surface traffic generation potential, it is notably deficient in the following ways: (1) the analysis gives little consideration to surface traffic impacts on South Bay Communities other than those directly proximate to the airport; (2) the use of the Adjusted Environmental Baseline for comparison with the Project=s surface traffic impacts creates a misleading picture of the magnitude of those impacts; (3) the Draft EIS/EIR improperly equates the direct and cumulative impacts of surface traffic; (4) the Draft EIS/EIR provides inadequate information regarding the Northside/Westchester Southside Project; (5) the Draft EIS/EIR transportation planning horizon is improperly attenuated; and (6) the Draft EIS/EIR lacks a mitigation monitoring program detailing implementation of mitigation measures for the impacts of surface traffic.

A. The Draft EIS/EIR Surface Traffic Analysis Lacks Adequate Consideration of the South Bay Communities.

The Draft EIS/EIR analyzed 61 intersections, with an additional 15 intersections selected for focused analysis. Only nine of the 76 intersections were south of the I-105 (Century) freeway. The apparent explanation for the focus on the north side of the airport is presented in the Draft EIS/EIR, pages 4-284 - 4-289:

ASouth of LAX, there is a higher percentage of LAX traffic on I-405 and a lower percentage on the arterials, indicating that airport traffic is in fact staying on the freeway system as desired. However, this is not the result of I-405 operating well, but is more a result of the layout of the roadway network south of LAX. There are no alternative arterial routes that closely parallel I-405 south. In fact, south of LAX, all major arterial routes change to a north/south orientation, while I-405 south of Rosecrans Avenue continues in a northwest/southeast direction.@

This explanation does not account, however, for at least three conditions acknowledged in the Draft EIS/EIR which exist south of the Airport: (1) airport traffic south of the airport represents a significant component of traffic on local streets; (2) interviews at freeway intersections south of the airport indicate a large percentage of airport trips; and (3) the Draft EIS/EIR claims a benefit from redistribution of traffic south of the airport off the freeway and onto local streets.

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1. Airport Traffic Represents a Significant Component of Traffic on Local Streets South of the Airport.

The Draft EIS/EIR notes that 8% of the afternoon peak on Sepulveda Boulevard south of El Segundo Boulevard is airport related, but concludes A . . . even if all the Airport bound traffic were removed, there would be little noticeable difference on most roads outside of the immediate vicinity of the airport, particularly during the morning and evening rush hours.@ (Draft EIS/EIR, page 4-289) The 8% reported in the Draft EIS/EIR is, however, more important to traffic flow than it appears. For example, the intersection of Sepulveda and El Segundo Boulevards has a reported 1996 Volume to Capacity (V/C) of .869 and a projected 2005 V/C ratio of 1.062 (Draft EIS/EIR, Table 4.3.2-23, page 4-334). Eight percent of the 1996 traffic represents an airport contribution at this intersection of .069. The benchmark of A significant impact@ is defined in the Draft EIS/EIR as a change in V/C ratio of .01 for an intersection operating at Level of Service (ALOS@) F (Draft EIS/EIR, page 4-291). Therefore, at the intersection of Sepulveda and El Segundo Boulevards, a contribution of .069 to the V/C ratio can hardly be considered as representing A . . . little noticeable difference . . . @

2. Freeway Ramp Data Shows Traffic Exiting the I-405 South of the Airport.

Master Plan, Chapter II, Section 7.3, reports the results of a survey conducted at area intersections during the a.m. and p.m. peak hours. The results of that survey call into question the assumption that traffic is not diverted off the I-405 onto local streets south of the Airport, where it demonstrates that more than 30% of the trips at northbound I-405 ramps at El Segundo were Airport related.

3. The Draft EIS/EIR Is Internally Contradictory with Respect to Use of Off-Freeway Traffic Routes South of the Airport.

The Draft EIS/EIR states, in pertinent part: AFurther, although it would be ideal for airport access to be provided directly via freeways, the dispersion of Airport traffic onto many arterial and freeway routes does have a side benefit in that its impact is minimized on any given route@ (Draft EIS/EIR, page 4-289). This statement directly contradicts the Draft EIS/EIR=s initial assumption that the roadway system is designed such that freeway traffic is not diverted to the local street system south of the airport. If, in fact, airport traffic is diverted from the freeway, as claimed for traffic to and from the north, would not a similar set of traffic solutions be applicable to the south as well?

In addition, Master Plan, Table II-7.12 also sets forth data that calls into question the assumption of the limited diversion of freeway traffic onto local streets south of the airport.

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Table II-7.12 illustrates that, by absolute volume, only 3 of 30 Akey roadway segments@ carry more Airport related morning peak hour traffic than does Sepulveda Boulevard north of Rosecrans Avenue, and in the afternoon only four key segments carry more peak hour traffic than that intersection.

In short, the failure to consider traffic impacts south of Rosecrans Avenue appears arbitrary. At a minimum, the Draft EIS/EIR and its technical appendices need to provide a much clearer statement of why the intersections evaluated were selected, and why no consideration was given to areas south of Rosecrans Avenue.

B. The Use of the Adjusted Environmental Baseline for Comparison With the Project=s Surface Traffic Impacts Leads to Misleading Results.

Three scenarios were used as baselines against which to evaluate the surface traffic effects of the proposed Master Plan improvements: (1) Environmental Baseline; (2) Adjusted Environmental Baseline; and (3) the No-Project/No-Action alternative. The Environmental Baseline is the existing condition pre-project. It includes existing roadways and land uses, and the current airport configuration. The year used in this baseline changed during the development of the Master Plan. At the initiation of the Master Plan process, the baseline year used was 1994. Information is reported in different Master Plan sections for 1994 and 1995. For the third iteration of the Master Plan, the baseline became 1996. The technical reports for the Draft EIS/EIR used 1996.

The Adjusted Environmental Baseline uses the current airport configuration but assumes that future off airport roadways and land uses already in the pipeline will be completed (see Section B.1 below). As with the Environmental Baseline, the definition of Adjusted Environmental Baseline changed with the development of the Master Plan. The existing condition section of the Master Plan (Chapter IV, Section 7) used horizon years of 2000 to 2015. The Aconstrained@ alternatives section (Chapter V, Section 3) used the years 2005 and 2015. Finally, the No-Action/No-Project Alternative is the converse of the Adjusted Environmental Baseline and assumes that off-airport development will remain constant, but currently approved airport projects will be completed.

There are at least two issues of importance raised by reliance on the Adjusted Environmental Baseline: (1) accuracy of the Adjusted Environmental Baseline and its resulting projections; and (2) applicability of the Adjusted Environmental Baseline to the environmental impact analysis.

1. The Uncertain Definition of the Adjusted Environmental Baseline Makes the Results of its Comparison With Project Impacts Questionable.

The initial question about the Adjusted Environmental Baseline is the accuracy of the definition of AExisting Condition/Environmental Baseline@ on which it is purportedly based. There are significant differences between the 1995 data concerning the AExisting Condition/Environmental Baseline@ contained in the proposed Master Plan and the 1996 data contained in the Draft EIS/EIR. A comparison of Master Plan, Table II-7.2 and Draft EIS/EIR, Table 4.3.2-24, for the a.m. peak hour, shows changes in the AExisting Conditions/Environmental Baseline@ between 1995 and 1996. As illustrated in the following Table, some intersections got significantly better and some significantly worse. In all but one case, the difference in V/C ratios between 1995 and 1996 exceeds thresholds used for determining significance in the Draft EIS/EIR.

Intersection	Master Plan Table II 7.2 1995 V/C*	EIS/EIR Table 4.3.2-24 1996 V/C	V/C Difference
Aviation/El Segundo	0.981(E)	0.835(D)	-.146
Aviation/Rosecrans	0.915(E)	1.121(F)	.206
Highland/Rosecrans	0.714(C)	1.069(F)	.335
Sepulveda/El Segundo	0.840(D)	0.869(D)	.029
Sepulveda/Mariposa	0.776(C)	0.730(C)	-.046
Sepulveda/Rosecrans	1.238(F)	1.220(F)	-.018
Vista Del Mar/Grand	0.755(C)	0.749(C)	-.006
Vista Del Mar/Imperial	0.821(D)	0.465(A)	-.356

* In Master Plan Table II 7.2 the first column heading is apparently mislabeled

Moreover, the Aadjustments@ to the AExisting Conditions/Environmental Baseline@ involved adding additional roadways and additional traffic to the system based on anticipated projects. The definitions of these Aadjustments@ is not consistent within the Draft EIS/EIR, or between it and the Master Plan. For example, the Draft EIS/EIR states that: AA list of approved development projects were developed . . . (Draft EIS/EIR, page 4-279)@ [Emphasis added.] The traffic technical report on which the Draft EIS/EIR is based states: AA list of planned development projects was developed . . .@ (Technical Report, ' 3b, page 2-3)@ [Emphasis added.] Master Plan, Table IV-8.3; Master Plan, Chapter V, Appendix L; and Technical Report, 3b, Table 2-3, present projected regional roadway improvements. Master Plan, Chapter V,

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Section 2.6 indicates that the future roadway network used in the analysis includes those projects A. . . currently funded and approved or which have a high probability for completion by 2015 Clearly, the distinction between Approved and Planned projects is critical to a functional definition of Adjusted Environmental Baseline. The baseline will be set much higher (and the consequent relationship of the Adjusted Environmental Baseline with the Project's impacts much lower) if all planned projects are included in addition to all approved projects.

Finally, Chapter IV of the Master Plan (Table VI-8.1, page IV-8.5) provides a Preliminary list of related projects that differs from the list presented in Table 2.2 of the Draft EIS/EIR Traffic Technical Report, 3b. While differences are to be expected between the 1996 version of the Master Plan and the Updated 2000 version of the Traffic Technical Report, one difference may be more crucial than others - the projected size and resulting traffic impact of the Playa Vista Project. For example, according to the Master Plan, Table IV-8.1, the Playa Vista Project will contain 13,156 single-family units and 8,262 multi-family units. Master Plan, Chapter V, Appendix L, and the Draft EIS/EIR Traffic Technical Report specifies 13,085 multi-family units and no single-family units for the same Project. There is no explanation for the change, nor any reference to the source of either number. The difference is crucial because the traffic analysis assumed three people for each single-family home, and only two for each multi-family residence. The change therefore results in a significant diminution in traffic if the latter multi-family numbers are correct. Considering the potential of over 13,000 housing units for traffic generation, a complete explanation is needed to render the Draft EIS/EIR surface traffic analysis.

2. The Applicability of the Adjusted Environmental Baseline to the Draft EIS/EIR Traffic Analysis is Questionable.

As set forth above, the off airport surface traffic analysis in the Draft EIS/EIR uses the Adjusted Environmental Baseline as the basis of comparison under CEQA for future mitigation for the three build alternatives (Draft EIS/EIR, page 4-276). The Adjusted Environmental Baseline reflects projected conditions in the years 2005 and 2015 with off airport land use activities completed and regional circulation improvements in place, but without any increased use of the airport. This approach minimizes the potential direct impact from the adoption of the proposed Master Plan because: (1) the future traffic volumes without the Project increase thereby reducing the proportional effect of the added airport traffic from the Project and (2) additional circulation system improvements provide additional capacity. While it is reasonable to assess particular impacts at the time at which they might occur, relying on this approach requires assurances that the projected circulation improvements will actually be in place. No such assurances are provided in the Draft EIS/EIR.

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The Off Airport Technical Report lists circulation system improvements that were included in the modeling process. This listing provides an indication of when certain improvements are anticipated. Without these improvements, the circulation system for the Adjusted Environmental Baseline would, apparently, be the same as for the 1996 condition, and many more intersections and roadway segments would be subject to significant adverse impacts as a result of the proposed Master Plan. It is important, therefore, that the Draft EIS/EIR traffic analysis include projected phasing of the anticipated improvements relative to the additional traffic resulting from airport use. This should include a discussion of the phasing of airport improvements as they pertain to traffic generation with respect to the circulation improvements used in the Adjusted Environmental Baseline. Limitations should be placed on airport traffic generation if anticipated circulation improvements off-airport do not occur. Once the Adjusted Environmental Baseline is accepted as accurate and the conditions to achieve it are assured, the next issue concerns the significance of surface traffic impacts and the mitigation measures needed to reduce those impacts.

C. The Direct and Cumulative Impacts of Surface Traffic Are Improperly Equated.

The surface traffic analysis uses traffic volumes from airport and non-airport projects. (See, e.g., Master Plan ' 2.6.2, page V-2.279). Therefore, it is at least partially a cumulative impact analysis.⁷ Because the surface traffic analysis is based on cumulative traffic volumes, the significance of the direct impacts and the cumulative impacts are equated. However, the use of the Adjusted Environmental Baseline makes this equation between direct and indirect effects inappropriate. While comparing the Project to the adjusted future conditions may be appropriate for assessing direct impacts, the cumulative impact is the impact of all traffic relative to the existing condition, not expected future conditions as contained in the Adjusted Environmental Baseline.

⁷ AThe cumulative impact from several projects is the change in the environment which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects.@ (CEQA Guidelines, ' 15355(b))

The result of this improper equation of direct and indirect effects is material. The following Table (derived from Draft EIS/EIR, Table 4.3.2-24) for the a.m. peak hour illustrates the problem. The reported change in congestion between the existing conditions and Alternative C, the preferred project alternative, is often significant, while the comparison of Alternative C with the Adjusted Environmental Baseline (which incorporates future conditions) is not.

Intersection	Existing V/C(LOS)	Adjusted Baseline V/C(LOS)	Alternative C (w/mit) V/C(LOS)
Aviation/El Segundo	0.835(D)	1.097(F)	0.865(F)*
Aviation/Rosecrans	1.121(F)	1.164(F)	1.171(F)
Highland/Rosecrans	1.069(F)	1.211(F)	0.947(E)
Sepulveda/El Segundo	0.869(D)	1.190(F)	1.161(F)
Sepulveda/Mariposa	0.730(C)	0.772(C)	0.803(D)
Sepulveda/Rosecrans	1.220(F)	1.275(F)	1.243(F)
Vista Del Mar/Grand	0.749(C)	0.918(E)	0.729(C)
Vista Del Mar/Imperial	0.465(A)	1.098(F)	0.903(E)

* Apparent error in Table 4.3.2-24 of the EIS/EIR (page 4-340)

Using this concept of the Adjusted Environmental Baseline, the result is that the cumulative impacts of the Project are often significant and not mitigated even when the Project=s direct effects have been.

D. The Draft EIS/EIR Inadequately Documents the Northside/Westchester Southside Project.

The Draft EIS/EIR=s impact analysis for off airport surface traffic is dependent upon the assumption that there will be a substantial reduction in the number of trips generated from the Northside Project. By Areconstituting@ the Northside Project into the Westchester Southside Project, the Draft EIS/EIR projects that there will be a significant decrease in collateral trips with the adoption of the proposed Master Plan.

The source of the collateral trip reduction is the change in the land use for the Northside Project and Continental City Project. Attachment A of Technical Report 3b provides the basis for the reduction in collateral trips.

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	AM PEAK			PM PEAK		
	Adjusted Baseline	No Project	Alternative C	Adjusted Baseline	No Project	Alternative C
Northside	0	7,217	3,922	0	7,131	4,423
Continental City	0	5,323	0	0	5,348	0
Manchester Square	0	0	212	0	0	233
Total	0	12,540	4,134	0	12,479	4,656

The issue here is the same as that concerning the Adjusted Environmental Baseline, i.e., the actions needed to insure that the reduction is achieved. The principal question is what specific discretionary actions are required to modify the allowable land uses in the Northside Project and in Continental City property, and how will compliance be assured?

The land use component of the Draft EIS/EIR and Condition LU-1 in Chapter V, Environmental Action Plan, presents a Master Plan commitment that:

To the maximum extent feasible, all [Q] conditions . . . from the City of Los Angeles Ordinance No. 159,526 that address the Northside project area will be incorporated by LAWA into the Zoning Code Amendment and LAX Master Plan Implementing Ordinance for the Westchester Southside Project. Accepting that certain conditions may be updated, revised, or determined infeasible as a result of changes to the LAX Northside project, the final [Q] conditions for the Westchester Southside Project will ensure that the level of environmental protection afforded by the full set of LAX Northside projects [Q] conditions is maintained. (Draft EIS/EIR, Chapter V, page 5-2).

Since this traffic reduction is critical to the projected Master Plan trip generation, the detail associated with this property needs to be firmly established. It is unacceptable to assume that certain conditions may be updated, revised or determined infeasible if they are necessary to bring about the decrease in collateral trips upon which the Master Plan projections are based. While there are some discussions of the Northside/Westchester Southside Project in the Draft EIS/EIR's purpose and need chapter and Master Plan, Appendix Q, these are brief, general presentations lacking in specificity as to the actions needed to commit the City to limit these uses.

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The importance of this lack of specificity in the definition of Project actions, as they relate to the Northside/Westchester Southside Project, is that there is no commitment by Los Angeles to insure that the traffic reduction represented by the changes in allowable land use will occur. The surface traffic capacity for the Project claimed through the reduction of traffic generation from the Westchester Southside Project is significant. Without a more adequate demonstration of the Master Plan's ability to achieve that reduction, and a concrete commitment to meeting those goals, the Draft EIS/EIR will remain inadequate.

E. The Transportation Planning Horizon Used in the Draft EIS/EIR is Improperly Attenuated So As To Minimize the Full Build Out Surface Traffic Impacts of the Project.

The Draft EIS/EIR modeled future conditions for the years 2005 and 2015. The current regional transportation plan, however, uses 2025 as the horizon year. The use of a later year between 2015 and 2025 for analysis is proper in light of the fact that the Project is anticipated to take 16 years to complete.⁸ If the Project commences as early as 2002, it will not be completed until 2018, three years after the 2015 horizon has expired. With the year 2013 being the second greatest peak construction year (Draft EIS/EIR, page 4-270), the proposed Master Plan improvements will not be complete by the time the present horizon year of 2015 is reached. The import of the choice of 2015 as horizon year, before the Project is completed, is that the full build-out (Aworst case@) impacts of the Project will remain unanalyzed.

Further, while the impacts resulting from the adoption of the proposed Master Plan are generally evaluated against the Adjusted Environmental Baseline, much of the Draft EIS/EIR's discussion of surface traffic is compared to the No-Project/No-Action alternative (i.e., the alternative that assumes growth in operations and passenger demand at the Airport, along with completion of improvements already planned, but no off airport traffic or other development improvements). The comparison of the Project with two separate baselines in the years 2015 presents a misleading picture. While the reconstitution of the Northside Project may provide a reduction in the traffic generated in 2015, the existing airport improvements clearly permit

⁸ The Draft EIS/EIR, Purpose and Need Section (Chapter 2, pages 2-12 through 2-13) indicates that the Project will be implemented in two phases. The first phase will last six years and the following phase 10 more years.

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growth beyond that currently possible. Therefore, the further into the future conditions are projected, the greater the effect of the proposed Master Plan improvements on traffic.

F. The Draft EIS/EIR Lacks a Mitigation Monitoring Program.

The Draft EIS/EIR, Chapter V is entitled "Environmental Action Plan". It is not specific as to whether this constitutes a Mitigation Monitoring Program required by CEQA (CEQA Guidelines § 15091(d)). If it does represent a Draft Mitigation Monitoring Program, it is inadequate. The Section lacks a clear statement of the party responsible for implementing the mitigation, the mechanism for enforcement of the mitigation and the timing of implementation. Moreover, it lacks detailed explanation of the way in which the diminution of traffic from the Northside Project, as well as other surface traffic mitigation measures will be achieved.

III. THE DRAFT EIS/EIR NOISE ANALYSIS UNDERSTATES THE PROJECT'S NOISE IMPACTS.

The Draft EIS/EIR minimizes the Project's noise impacts by artificially inflating the Environmental Baseline and by failing to disclose the Project's overflight noise impacts.⁹

A. The Draft EIS/EIR Does Not Designate the Proper Baseline for Its Noise Analysis.

As set forth in detail above, a threshold issue in environmental analysis is the establishment of a baseline. The function of a baseline is to provide a benchmark of existing conditions against which the environmental impacts of a project may be measured. If the baseline is incorrectly designated at too high a level, the impacts of the Project will be artificially minimized. In this case, the Draft EIS/EIR utilizes three separate and distinct baselines for analyzing the impacts of the Project: (1) the Environmental Baseline (1996), i.e., the purported conditions in existence before implementation of the Project; (2) a No-Project baseline for 2005 (and 2015) which includes a natural growth on the airport resulting from

⁹ Project proponents apparently did not use the most recent Integrated Noise Model (INM) Version 6.0 to calculate aircraft noise as the Draft EIS/EIR discusses INM, Version 5.1a. Draft EIS/EIR, Appendix D, page 6.

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implementation of already approved airport projects continued in the current Master Plan that purportedly would have occurred even if the Project is not implemented; and (3) Adjusted Environmental Baseline predicated on projected conditions in the years 2005 and 2015 with off-airport land use activities completed and regional circulation improvements in place, but without any improvement to airport facilities.

The Draft EIS/EIR chooses 1996 (i.e., the Environmental Baseline) as the base year for evaluation of noise impacts, and states that in 2015, the Project's horizon year, Alternative C would reduce the total number of people exposed to aircraft noise above 65 CNEL compared to current conditions as represented by the Environmental Baseline year. (Draft EIS/EIR, page 4-11) By using 1996 as the benchmark, the Draft EIS/EIR's noise analysis artificially minimizes the apparent growth in noise impacts associated with the Project. This is because, in 1996, many noisy Stage 2 aircraft remained in the fleet (which were then phased out in late 1999). When the Notice of Preparation was published in July 1997, the Project proponents knew with certainty at that time that some of the noisiest aircraft in its fleet would not operate after December 31, 1999, and that the removal of these aircraft from the fleet serving the Airport would reduce the size of the noise contours. The Draft EIS/EIR concedes that the reduction in noise exposure is the result of a federally mandated phase out of older, noisier Stage 2 jets, and not the implementation of the Project. Despite that fact, or perhaps, because of it, the Draft EIS/EIR consciously skews the analysis by using 1996 as the Base Year for its noise analysis.

The Draft EIS/EIR also reflects a cavalier disregard for the fleet mix changes brought about by the Stage 2 phase out. The Draft EIS/EIR's Average Annual Day Operations and Fleet Mix - Environmental Baseline (Draft EIS/EIR, Appendix D, page 11) includes a total of 139 noisy Stage 2 aircraft in the daily operations mix. In other words, nearly 7% of the aircraft included in the calculation of the baseline noise contour analysis are high noise producing aircraft the inclusion of which will increase the size of the baseline noise contours and, thereby minimize the apparent impacts of the Project.

Courts have displayed flexibility in dealing with cases involving complex long term environmental review. They have agreed that, for lengthy environmental review such as that at issue here, the analysis of such impacts as surface traffic (and aircraft operations) which normally fluctuate over time are properly assessed against a later baseline than the time of the publication of the Notice of Preparation. (Save our Peninsula Committee, *supra*, 87 Cal.App.4th at 125-126) Therefore, Project proponents are not tied to the 1996 baseline, the last full year of data before the year of Notice of Preparation Publication, but should, more properly, have used a year no earlier than 1999, the last full year of data available before publication of the Draft EIS/EIR. Moreover, that data should have been updated with available data from the year 2000. Absent such an update, the Draft EIS/EIR noise analysis is incomplete and, thus, inadequate.

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B. The Draft EIS/EIR Fails to Disclose the Project=s Overflight Noise Impacts.

Under FAA Rules, changes in operations above an altitude of 3,000 feet Above Ground Level (AGL) are categorically excluded from environmental review under NEPA. FAA Order 1050.1D, Appendix 3, paragraph 3.a.¹⁰ However, FAA Order 1050.1D, paragraph 32 also mandates that "extraordinary circumstances" such as actions which are likely to have a significant impact on noise levels over noise sensitive areas, or a significant impact on coastal zones, shall be the subject of an environmental assessment." (*Id.*, paragraph 32)

Here, the noise analysis in the Draft EIS/EIR narrowly focuses on cumulative aircraft noise impacts created by aircraft approaching the Airport from the east, and from start-of-takeoff roll. However, it completely dismisses the impact of single event overflight noise on the South Bay communities: (1) by failing to depict and analyze the noise impacts from additional new routes over areas not previously over-flown; (2) by failing to acknowledge a potential increase in lateral separation of aircraft which could lead to an increase in overflight noise; (3) by failing to report or study the noise impacts of increased operations over coastal zones; and (4) by using an outdated modeling system to justify the decision not to study the noise impacts to South Bay communities.

1. The Draft EIS/EIR Depicts Additional New Routes Over Noise-Sensitive Areas Within the South Bay Communities but Fails to Analyze the Noise Effects of These New Routes.

¹⁰ The Draft EIS/EIR improperly relies on *draft* FAA Order 1050.1E and the City of Los Angeles= Draft L.A. CEQA Thresholds Guide (May 14, 1998) as authority for several of its assertions.

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CEQ Guidelines ' 1502.15¹¹ state that A[t]he environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration.@ [emphasis added] The Draft EIS/EIR=s failure to comply with this mandate is two-fold. First, the Preferred Alternative includes new routes over areas not previously impacted. Second, the Draft EIS/EIR does not analyze the noise impact created by these new routes over noise sensitive areas, thereby failing to describe the environment of the areas to be affected or created.

Master Plan Maps (pages II-2.36 - II-2.37, Figures II-2.11 and II-2.12) illustrate that when the Airport is operating on a west flow, M-class or turbo-prop aircraft turn at the VOR. This is contrary to stated airport policy and noise abatement procedures which require aircraft to proceed past the shoreline before starting a turn. In fact, twelve of the departure tracks for turbo-props used to establish the baseline integrated noise monitor data are routed over residential areas not previously overflowed. (Draft EIS/EIR, Appendix D, page 7, Exhibit 2). The use of these incorrect flight tracks and early turns potentially affects the noise contour on both sides of the airport.

Moreover, if the turbo-prop aircraft turn early, the designated routes will cause them to fly over noise sensitive areas such as parts of El Segundo, thus requiring further review under the Aextraordinary circumstances@ exception of FAA Order 10501.1D, paragraph 32. In short, the development of these new routes could potentially violate Airport noise abatement policy and could create unacknowledged impacts which must be analyzed.

2. Greater Lateral Dispersion of Aircraft Will Potentially Occur to Accommodate the Increase in Operations at the Airport Which May Lead to Premature Easterly Turns Over the South Bay Communities and Consequent Increases in Overflight Noise.

Even if no new routes were contemplated, the Draft EIS/EIR states that over 90% of the operations at the Airport are in a west flow with climb out over the ocean. The aircraft then turn either south-east or north-east towards their easterly destination. The Draft EIS/EIR anticipates

¹¹ The Draft EIS/EIR is also a federal document subject to the requirements of the National Environmental Policy Act, 42 U.S.C. ' 4321, et seq., and its implementing regulations, 40 C.F.R. ' 1500, et seq. (ACEQ Guidelines@).

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that the Project will lead to an increase in operations. The Draft EIS/EIR does not, however, discuss the way in which these increased operations will be integrated into the existing Airport air traffic flows. If it did, it would also have to reveal the potential for increased overflights of South Bay communities.

In order to accommodate this increase in air traffic, greater separation between aircraft at climb out may have to occur. Air traffic controllers create this separation in two ways, laterally and vertically. Generally speaking, since heavy departing aircraft are resistant to increasing vertical separations for reasons of both cost and performance, aircraft are dispersed laterally. As lateral separation between departing aircraft must be maintained, a greater number of offshore aircraft may come closer and over the shoreline, which may also lead to premature easterly turns from the initial southerly headings of departing flights. These premature turns will potentially lead to an increase in overflight noise over South Bay Communities, noise sensitive areas not previously included in standard departure tracks. At a minimum, the Draft EIS/EIR should contain a supplementary single-event noise analysis for communities south of the airport.

3. The FAA Fails to Study the Project=s Noise Impacts over Coastal Zones.

FAA Order 1050.1D, paragraph 32, Extraordinary Circumstances, mandates that a normally categorically excluded proposed Federal action which is likely to have a significant impact on natural, ecological, cultural, or scenic resources of national, state, or local significance, including... coastal zones, (FAA Order 1050.1D, paragraph 32) shall be the subject of, at a minimum, an environmental assessment. Included in South Bay communities are the coastal zones south of the airport. As California=s coastal zones are of national, state, and local significance, they fall within the mandate contained in FAA Order 1050.1D. Nevertheless, the Draft EIS/EIR fails to acknowledge, let alone analyze, impacts on South Bay coastal zones.

4. The Draft EIS/EIR Ignores FAA Order 1050.1D, Paragraph 32 and Uses a Modeling System Which Lacks Any Legal or Scientific Basis in Order to Justify the Draft EIS/EIR=s Failure to Examine the Noise Impacts to Communities in the South Bay.

The Draft EIS/EIR noise analysis assumes that noise in the South Bay communities which lies outside the parameters established for the noise analysis, does not exist. The noise analysis is, therefore, incomplete. First, as discussed above, the turbo-prop routes and the potential for increased lateral separation of aircraft will have a material impact on noise levels of noise sensitive areas including coastal zones. Therefore, FAA Order 1050.1D, paragraph 32 calls for at least an assessment of changes in operations above 3,000 feet AGL. Nevertheless, the Draft EIS/EIR, in two paragraphs, completely dismisses this requirement and categorically states that no further noise review@ above 3,000 feet is necessary since the noise associated

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with jet aircraft weighing more than 75,000 pounds will not change more than five decibels CNEL. (Draft EIS/EIR, Appendix D, page 65)

Second, the methodology used to make this determination is unexplained and unjustified under either legal or scientific standards. The five decibel CNEL standard is not acknowledged in the procedures and policies of NEPA, FAA Order 1050.1D, or FAA Order 5050.4A. The Draft EIS/EIR's methodology is further flawed by the use of a patently erroneous measure. The FAA's benchmark for the measurement of overflight is *Above Ground Level* (AGL).¹² The measure employed in the Draft EIS/EIR is *Above the Airport*. (Draft EIS/EIR, Appendix D, page 65). The potential for mischief with the latter measure is clear. If the Project proponents analyze noise at altitudes greater than 3,000 feet above an airport's elevation, then communities in the South Bay and elsewhere which are located well above the airport's elevation would be at a severe disadvantage. For instance, Palos Verdes is at approximately 1,480 feet elevation,¹³ while the Airport is located at 126 feet.¹⁴ Due to the difference in elevation between Palos Verdes and the Airport, an aircraft may be 3,001 feet *Above the Airport*, and its noise not subject to environmental review, while it is only 1,521 feet above Palos Verdes. Thus, while the noise impact may not meet the *Above the Airport* criteria, the noise over Palos Verdes would be significantly greater but remain unaccounted for in the model.

Third, the Draft EIS/EIR claims to have relied upon the Air Traffic Noise Screening Model (ATNS), Version 2.0, to:

Assess the effects of noise level changes associated with air traffic procedure changes at altitudes greater than 3,000 feet above an *airport's elevation*. This methodology requires that changes in aircraft noise be evaluated if the noise associated with jet aircraft weighing more than 75,000 pounds changes by more than five decibels of DNL (CNEL in California) over residential areas and the aircraft is in flight at an altitude between 3,000 and 18,000 feet

¹² See, in general, FAA Order 1050.1D which uses the benchmark *Above Ground Level* as a starting point for altitude measurements.

¹³ <http://pointvicenteinterpretivecenter.com/rpv/recreationparks/content/rpvfactsheet2000.htm> (accessed June 22, 2001).

¹⁴ <http://www.airnav.com/airport/LAX> (accessed June 22, 2001).

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above the airport. (Draft EIS/EIR, Appendix D, page 65)
[Emphasis added.]

It did not. In fact, it appears that the outdated and obsolete checklist from FAA Notice 7210.360 was utilized instead. ATNS is a computerized version of the former FAA Notice 7210.360, and supercedes the checklist method. It requires actual data input, performs the calculations, and prepares written documentation on the findings. The Draft EIS/EIR contains only a checklist. After checking off five boxes from the Adeparture@ N 7210.360 checklist, (Draft EIS/EIR, Volume D, pages 79-86) the Project proponents determined that:

Asince the flight tracks of the new and relocated runways will be located within close proximity to the present flight tracks of the existing runways, and the aircraft activity on these tracks will not result in an increase of 5 decibels of DNL (CNEL) over any residential area when the aircraft are above 3,000 feet, *the checklist* indicates that no further noise review under this requirement is necessary.@ Draft EIS/EIR, Volume D, pg. 65. (Italics added for emphasis.)

The checklist itself is proof that the drafters never used the actual ATNS aircraft noise screening modeling system, but, instead, chose to work with its former outdated and obsolete checklist version. The Draft EIS/EIR misleads the public into believing that an actual, scientific analysis was conducted to determine whether noise decibels would increase above 3,000 feet.

In short, the Draft EIS/EIR does a disservice to the South Bay communities by ignoring the potential noise impacts that the new flight tracks and lateral separation of aircraft will cause to the area. Not only should the Project proponents conduct a full environmental review of the noise impacts to the area under FAA 1050.1D, paragraph 32, but a more accurate, and scientifically appropriate methodology should be used to make the determination of the significance of noise impacts over South Bay communities.

IV. THE DRAFT EIS/EIR AIR QUALITY ANALYSIS IS INADEQUATE.

The Draft EIS/EIR=s air quality analysis exhibits serious deficiencies, not the least of which is the total absence of a formal air quality conformity analysis required under federal law where, as here, the Project=s air quality impacts are not claimed to be insignificant (see 42 U.S.C. ' 7506¹⁵). The absence of a conformity analysis necessarily renders the following

¹⁵ ANo department, agency, or instrumentality of the federal government shall

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comments preliminary, and SBCCOG reserves the right to comment further upon issuance of the conformity analysis.

A. The Baseline for the Draft EIS/EIR Air Quality Analysis is Not Appropriately Estimated.

engage in, support in any way or provide financial assistance for, license, permit or approve any activity which does not conform to an implementation plan . . .@ (42 U.S.C. ' 7506(c)(1))

The Draft EIS/EIR assumes that annual aircraft operations will be essentially identical regardless of whether the Preferred Alternative is implemented. Under the No-Action/No-Project Alternative, total operations are expected to be 98 percent of operations under the expanded capacity scenario (air passenger operations activity will actually be *higher* under the No-Action/No-Project Alternative). At the same time, the Preferred Alternative moves about 15 percent more passengers through higher aircraft load factors. Basic economic theory, however, dictates that under free market conditions demand will reach equilibrium for a given level of supply at a certain market cost (including time costs associated with delays, congestion, etc.). If the supply curve (for air transportation) is then shifted, as would occur under an increased capacity situation such as that proposed,¹⁶ the supply/demand equilibrium for the same level of market cost will shift to a point of higher demand. This shift is often referred to as induced demand, and analyses which do not consider this effect (or which assume demand levels counter to market behavior as appears to be the case with the Draft EIS/EIR) are not accurate in general, or specifically with respect to future air quality conditions under any of the various alternatives. Viewed from a practical rather than theoretical perspective, the Draft EIS/EIR presumes that the Airport will support over 391,000 aircraft landing and takeoff (LTO) cycles in 2015 by doing nothing other than carrying through with those projects already adopted. Without question, however, operations without the Project would be constrained by greater delays, excessive times to reach the airport, Nevertheless, under whatever severe burdens are placed on air travelers, they and the airlines that support them are assumed to utilize the Airport for nearly 400,000 LTOs per year. Under the Preferred Alternative specifically designed to relieve these very problems by easing congestion, reducing delays, the total number of expected annual LTOs increases by less than 2 percent to 398,000 over the No-Action/No-Project Alternative. There are only two possible explanations for this relationship: (1) either usage under the No-Action/No-Project baseline is overstated; or (2) usage under the Preferred Alternative is understated. Correspondingly, either emissions for the No-Action/No-Project baseline are overstated or emissions for the Preferred Alternative are understated. The result is an artificial (and erroneous) minimization of the difference in emissions between baseline conditions and those of the Project.

This same issue affects stationary source emissions. Increased airport capacity can be expected to attract associated industrial and commercial activity into the area. This attraction would not occur without the increased capacity and, therefore, must be accounted for if a true

¹⁶ The Preferred Alternative lengthens and reconfigures runways, adds a new West Terminal, and improves traffic flow.

assessment of airport emission impacts are to be determined. Note that this commercial development is distinct from currently planned commercial development, in that it occurs due to airport capacity expansion, but outside the formal planning process of the airport. One must recognize that the estimates of reduced emissions under the action alternatives (either the preferred or alternative scenarios relative to a No-Action/No-Project scenario) are due almost entirely to Aflow@ improvements in the form of reduced taxiway congestion and improved traffic movement both on and offsite. If these congestion reductions are eliminated or reduced through increased air travel or associated demand that is not properly accounted for in the Draft EIS/EIR, the predicted emissions impacts will not be accurate.

B. Future Background Pollutant Concentrations Are Not Appropriately Estimated.

Background pollutant concentrations are required to accurately estimate the impact of the proposed Airport expansion on National Ambient Air Quality Standards/California Ambient Air Quality Standards (ANAAQS/CAAQS@) compliance. These concentrations must account for the combined impacts of the universe of emission sources not explicitly accounted for in the airport analysis. In effect, the background concentrations determine the emissions baseline upon which Airport emissions are placed. If this base is underestimated, the overall affect of airport expansion on NAAQS/CAAQS compliance could be similarly understated. Alternatively, if the base is too high, the Draft EIS/EIR analysis could be conservative. While the Draft EIS/EIR implies the latter, it contains no data to support such a conclusion and some reason to believe that the converse may be true. Current short term (sub-annual) background concentrations for the Draft EIS/EIR are based on measurements taken at an onsite monitoring station located just east of the southern runway configuration. Current annual concentrations are based on data collected at a Southern California Air Quality Management District (ASCAQMD@) monitoring facility (Hawthorne) located near, but southeast of the Airport. On the premise that measurements from these sites inherently include emissions from the Airport, the Draft EIS/EIR concludes that such emissions represent conservative background concentration baselines for air quality analysis (since Airport emissions will be added on top of a background that already includes Airport emissions). However, the prevailing wind direction for the Airport area is southwest to northeast. Therefore, there is probably little influence from the Airport on the offsite concentrations used as background, as well as only moderate influence on the onsite-based background concentrations. The bulk of airport activity, including all terminal and motor vehicle operations occur under the influence of a prevailing wind plume that is further north than the onsite monitoring station. While certain aircraft takeoff and queuing emissions are undoubtedly accounted for in the onsite baseline concentrations, these represent only a small fraction of overall airport emissions. Comparative data for concentrations from both monitoring stations could demonstrate the validity of the claim of conservatism, (i.e., do the observed concentrations for identical monitoring periods show a higher background at the onsite station?),

but the Draft EIS/EIR apparently contains no data for the offsite monitoring station (other than the specific background concentrations used in the Draft EIS/EIR and associated documents).

More importantly, the emissions inventory rollback techniques used to forecast future background concentrations are of questionable validity for the Airport area. Background concentrations as well as future emission reduction influences around the Airport are constrained by geography. Since the prevailing wind flows southwest to northeast, the Pacific Ocean represents a physical constraint that may significantly influence emission reduction impacts on background concentrations. In effect, the implemented rollback procedure to estimate future background concentrations reduces current background concentrations in proportion to expected *regional* emission inventory reductions over the same time period. Therefore, this procedure inherently assumes that inventory reductions are homogeneous throughout the region in terms of their influence on background concentrations. This is perhaps a viable assumption in instances where one part of a region has similar source characteristics with another, but the Airport region is clearly constrained to those source characteristics along the Pacific coastline to the immediate south of the Airport. It is the expected reductions from these sources in particular that should be used to adjust Airport background concentrations. Generally background concentrations for 2005 are reduced 30 to 40 percent while concentrations for 2015 are reduced 50 to 60 percent from the current measured data. Clearly this assumes significant emission reductions will affect coastal monitoring sites and provides substantial headroom for emissions increases within the confines of the NAAQS/CAAQS. These reductions probably represent the most significant influence on forecast pollutant concentrations in 2005 and 2015. It is critical that the propriety of the assumed background concentrations at least be supported by comparative analysis of current Airport and offsite monitoring data as well as analysis of emissions source classifications for the area immediately to the south of the Airport with the remainder of the air basin. This comparison will either provide the proper support for the currently implemented approach or suggest a more appropriate alternative.

C. Reverse Thrust Emissions from Aircraft Are Not Included in the Draft EIS/EIR Air Quality Analysis.

The Draft EIS/EIR makes an affirmative determination not to address emissions from aircraft reverse thrust operations, ostensibly on the basis of inadequate emission factors and short usage times. Both of these claims are misleading. First, reverse thrust is essentially a high thrust operating mode and emission factors for such modes (i.e., climbout and takeoff) are readily available. Common practice is to use takeoff emission factors. Second, it is true that the time in mode for reverse thrust operations is short, however high thrust modes produce very high unit time NO_x . For example, at a commonly utilized reverse thrust mode time of 15 seconds, overall effective takeoff time would be increased by 35 percent (0.7 minutes plus 0.25 minutes versus 0.7 minutes), which in turn increases NO_x by 35 percent relative to takeoff alone. Since takeoff accounts for about 35 percent of total aircraft NO_x (according to the Draft EIS/EIR), the overall

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aircraft NO_x inventory could increase by nearly 13 percent simply due to the inclusion of reverse thrust-related emissions. Without some affirmative determination that such operations will be prohibited under the action alternatives, reverse thrust emissions should be included in the Draft EIS/EIR air quality analysis.

D. The Applicability of the Construction Equipment NO_x Standard is Overstated.

The Draft EIS/EIR states that only construction vehicles meeting a 2.5 grams per brake horsepower-hour (g/bhp-hr) NO_x standard will be used for airport construction projects by 2005. Furthermore, this requirement will be phased in between 2001 and 2005, beginning at 20 percent of vehicles and increasing at a rate of 20 percent per year. This requirement raises several concerns as it is applied to the construction equipment emissions analysis in the Draft EIS/EIR.

First, the 3.0 g/bhp-hr NMHC+NO_x standard for construction vehicles does not take effect until 2005 for 300-750 horsepower (hp) engines, 2006 and 2007 for 100-300 hp engines, or not at all for engines of other hp. Mandating this equipment beginning in 2001 may or may not be successful and clearly requires some statement of commitment by the regulated parties. Voluntary, so-called Blue Sky Series engines can be certified by manufacturers before 2005 but there is no requirement to do so (and little incentive since these engines cannot be used in the emissions averaging programs associated with non-Blue Sky engines). In short, construction firms will only be able to provide equipment that is available on the market and it is dubious that the number of engines meeting the suggested standard in the required years will be significant.

Second, the mandatory Clean engine standards that do begin in 2001 require NO_x at levels around 4.0 g/bhp-hr (an exact value is not possible since the standard is again expressed as NMHC+NO_x, in this case 4.8 g/bhp-hr). However, these standards also only apply to 300-750 hp equipment. While a number of construction engines fall into this category, many others range from as low as 25 hp up through 300 hp. For these lower hp categories, standards do not begin until 2003 or 2004 and get progressively less stringent as engine size decreases (to 5.6 g/bhp-hr for engines below 100 hp).

Third, even if this low emissions requirement could be enforced (i.e., use of only new Blue Sky Series engines at the Airport), an assumption of 100 percent in-use compliance is overly optimistic. While it is not possible to say with certainty what fraction of equipment may operate at emissions levels above certification standards, experience has demonstrated that engines employing sophisticated engine management strategies and aftertreatment controls (as is expected for these engines) are subject to both malperformances and maintenance effects. For first generation engines, such problems are usually exacerbated. What can be stated with certainty is that construction emissions impacts will be larger than the level acknowledged in the Draft EIS/EIR.

E. General Emissions Factors for Offroad Equipment are Understated.

In general, it appears that the emission factors employed for offroad engines, even in the absence of the 2.5 g/bhp-hr issue noted above, are significantly underestimated. This underestimation affects not just construction equipment, but both baseline and ongoing Ground Support Equipment (AGSE@) operations, and results from the fact that outdated emission factor sources were utilized. The net effect is that airport emission and air quality impacts are underestimated.

Offroad engine emissions knowledge is currently in a state of rapid development and estimation techniques need to maintain currency with the latest methods. In California, this would imply use of the California Air Resources Board=s (ACARB@) OFFROAD emission factor model, while nationally a similar model termed NONROAD has been developed by the U.S. Environmental Protection Agency (AEPA@). While development continues on both, they clearly represent the most up-to-date compendiums of current offroad engine emissions estimation techniques. For example, these models employ the most recent emission factor test data, emissions deterioration test data, and equipment size and activity factors. References cited in the Draft EIS/EIR, such as the EPA=s AP-42 and Procedures for Emissions Inventory Preparation documents as well as the SCAQMD=s CEQA Handbook, employ less developed and seriously outdated data.

An example of the magnitude of the emissions underestimation can be derived by comparing emission factors across the alternative methods. The Draft EIS/EIR relies on the use of EDMS to generate GSE emission estimates. However, EDMS includes significantly outdated GSE emissions data.¹⁷ A quick comparison indicates that CARB OFFROAD model and EPA NONROAD model GSE (average) emission rates (for the same equipment activity distribution assumed in the EIS/EIR) are, for diesel equipment, from 7 to 13 times greater for VOC, 5 to 10 times greater for PM, 5 to 9 times greater for CO, 4 to 5 times greater for NO_x, and 4 to 5 times greater for SO₂. For gasoline GSE, the models produce average emission rates 10 to 20 times greater for VOC, 1 to 6 times greater for PM, 15 to 16 times greater for CO, 6 to 9 times greater for NO_x, and 2 to 4 times greater for SO₂. The impact of using outdated emission rates is clearly significant and should be reevaluated if realistic air quality impacts are to be derived.

F. Ground Support Equipment Populations Are Not Appropriately Specified.

¹⁷ This may be improved in the latest version released subsequent to the completion of the Draft EIS/EIR.

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The Draft EIS/EIR uses the FAA=s EDMS model to estimate GSE emissions. An inherent assumption within this approach is that EDMS properly estimates GSE populations. Since the current GSE population at the Airport is known, it would be appropriate to determine whether EDMS assumptions are consistent with the Airport=s actual population and use-hour statistics. This would provide support for the validity of EDMS equipment estimation algorithms and allow for a more appropriate assessment of the accuracy of the GSE emissions estimates and air quality impacts of the Draft EIS/EIR.

G. Emissions Benefits of Conversion of GSE to Electric, Hybrid, and Alternative Fuels are Overstated.

The Draft EIS/EIR contemplates a widespread GSE replacement program under all three of the action alternatives, while retaining primarily fossil fuel powered GSE for the No-Action/No-Project Alternative. While this could be construed as a mitigation measure and, in fact, is listed as the single most effective mitigation measure on the list of potential mitigation measures included in the Draft EIS/EIR, it is arbitrary to apply the measure only to the action alternatives, as there are no specific constraints to such substitution today or under the No-Action/No-Project Alternative. Electric GSE is cost effective from a market standpoint today. Therefore, whatever incentive or mandate will be offered under the action alternatives to move toward electrification could just as readily apply today. The infrastructure modifications are relatively modest and implicate no limitation of use to any of the action alternatives. But by far the most troubling issue is that the replacement program already appears to be accounted for in the Aunmitigated@ emission estimates for all three action scenarios. If this is the case, no additional emission reductions will be achieved through GSE electrification.

H. Incorrect Aircraft PM Emission Factors Are Used in the Draft EIS/EIR Air Quality Analysis.

Two issues exist with respect to the PM analysis that result in an underestimation of the Project=s potential air quality impacts. First, it appears that the Draft EIS/EIR is based on the incorrect emission factors from the analysis undertaken to develop those factors. Second, it appears that the approach used to develop PM emission factors for aircraft¹⁸ produces estimates that are not consistent with previous PM emissions testing results.¹⁹

¹⁸ The International Civil Aviation Organization emissions certification process does not include PM.

¹⁹ Adjustments not employed in the Draft EIS/EIR may compensate for most of this deficiency.

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Analysis of PM emission factor estimation reveals that the basic estimation approach used in the Draft EIS/EIR yields an emission factor that only considers the basic non-volatile portion of particulate. An adjustment factor (that varies with fuel sulfur content) exists and should be used to correct the estimate to total PM. This factor is calculated to be about 2.6 for low sulfur (about 70 ppmW) jet fuel and 14.7 for high sulfur (about 675 ppmW) jet fuel.²⁰ Since existing EPA data demonstrates that U.S. jet fuel averages about 600 ppmW sulfur, the appropriate adjustment factor for the Draft EIS/EIR would be about 13.2. However, from figures presented in the Draft EIS/EIR, it appears that the unadjusted emission factors were used for all emissions analysis. If so, PM emission impacts are significantly underestimated and should be reassessed after applying an adjustment to increase the PM emission rate by a factor of 13.

In addition there is a potential deficiency in the approach employed to estimate PM emission factor data. The underlying need for a statistical estimation technique such as that employed cannot be disputed as the available PM emissions testing database is both small and dated. However, the Draft EIS/EIR statement that the age of that data renders it valueless are questionable. Engine technology has advanced relative to the engines represented in the test database, but the fundamental combustion characteristics that give rise to PM formation have not. While advances in reducing one (or multiple) pollutant(s) have occurred, those advances do not come without penalties in regard to other pollutants. For example, several low emission combustors are marketed for aircraft and these do result in substantially reduced NO_x production relative to standard combustor engines. However, they also generate significantly increased HC and CO emissions as a tradeoff. The additional claim that the existing aircraft emission factors are not of value since they reflect total PM as opposed to PM-10 is without merit. Virtually 100 percent of combustion-related PM is PM-10, so any error resulting from the substitution of total PM for PM-10 will be insignificant. In fact, the PM emission factor estimation approach employed in the Draft EIS/EIR requires an assumption of equivalency between total PM and PM-10.

If relationships between aircraft PM and another pollutant can be developed in one or more operating modes, then values for the independent pollutant can be used to estimate PM emission rates in that mode or modes. Such a statistical approach can take advantage of the limited existing PM emissions database while at the same time recognizing the substantial progress that has been made in aircraft engine performance. It is, however, critical that such

²⁰ This calculation is based on data presented in the Draft EIS/EIR.

relationships consider possible mode-specific differences, as engine and combustion efficiency vary substantially across modes. For example, one would expect PM emission rates to be inherently low in high efficiency (high NO_x) modes of operation since the same high temperature, high pressure conditions that give rise to high NO_x also favor more complete fuel combustion. Conversely, they would be high in low efficiency combustion modes. It is not clear, however, that the significance of the inter-species relationships are invariant across the full range of operating modes.

A very strong statistical relationship between measured PM and the inverse of measured NO_x is observed in three of the four standard operating modes (approach, takeoff, and climbout), with coefficient t statistics all significant at 99-plus percent confidence. A strong coefficient can also be observed for the taxi mode, but it explains virtually none of the observed variation in PM and NO_x (whereas variance explanatory significance exceeds 99 percent confidence for the other three modes). The magnitude of the relationship coefficients varies from 28.4 in takeoff mode to 45.0 in climbout mode and 33.0 in approach mode. While all three modes exhibit significant relationships, takeoff mode serves as a good relationship basis as it statistically produces the smallest root mean square error based on regression data (an error 35 to 40 percent lower than those of climbout and approach modes). With this lynchpin to the ICAO emissions database in place, PM emission rates for the other three modes (climbout, approach, and taxi) can be developed based on observed statistical relationships with takeoff PM (i.e., PM-to-PM regressions across modes). Linear coefficients for all three modes (1.42 for climbout, 1.53 for approach, and 3.10 for taxi, all in pounds per thousand pounds fuel burned space) are significant at 99-plus percent confidence, with adjusted correlation coefficients for climbout and approach at 0.78 and 0.83 respectively. Taxi mode correlation is poor, but the PM-to-PM relation does account for the observed variance at greater than 99 percent confidence.

The net result of this calculation is a determination that this alternative approach produces PM emission rates that are 4 to 37 times higher than those used in the Draft EIS/EIR. The smallest differentials are observed at the highest thrust modes, and differentials potentially grow with reducing thrust because the Draft EIS/EIR approach does not take operating efficiency differentials between modes into consideration. Nevertheless, for a typical LTO cycle (as per Draft EIS/EIR times-in-mode), the aggregate PM emission factor will be underpredicted by a factor of 17 using the Draft EIS/EIR approach. The effect on PM air quality analyses is obvious.²¹

²¹ Interestingly, if the appropriate carbon-to-total PM emission factor correction of 13.2 is implemented as suggested in the support material for the Draft EIS/EIR, the bulk of the emission factor differentials between the two estimation approaches virtually disappear (i.e., a correction factor of 13 versus an underestimation factor of 17 for an aggregate LTO). Nevertheless, significant differences would still exist on a mode specific basis.

I. Aircraft SO₂ Emissions are Underpredicted.

The Draft EIS/EIR relies on version 3.2 of the EDMS model to predict aircraft SO₂ emissions. This model underestimates aircraft SO₂ emissions by a factor of two due to reliance on an incorrect AP-42 emission factor (the factor was developed without accounting for the factor of two ratio between SO₂ mass and fuel sulfur mass). To the extent that the Draft EIS/EIR already demonstrates potential ambient SO₂ concerns, those concerns would be exacerbated by this underprediction.

J. The Assumption of Gate-Based Power and Air for All Aircraft is Questionable.

The Draft EIS/EIR assumes that 100 percent of air carrier gate power and conditioned air needs will be satisfied by gate-based electrically powered systems as opposed to fossil fuel powered auxiliary power units (APU) or GSE. Experience has shown that even under conditions where gate-based equipment is available, not all airlines or aircraft will utilize it consistently. This seems to be especially true for quick-turnaround airlines such as Southwest. Although the assumption of 100 percent availability and usage affects the no action and action scenarios equally, it is important from an ambient air quality perspective to account for the full range of expected emissions. Without some definitive airport policy that gate-based systems (both power and air) be used and that any on-board APU be shut down until needed for main engine startup, the Draft EIS/EIR would present a more realistic assessment of aircraft emissions if it adjusted the percentage of gate-based system usage to match currently observed use rates at the Airport.

K. APU Emission Factors for SO₂ and PM Not Considered.

APU emission factors for both SO₂ and PM are assumed to be zero. This results from deficiencies in the EDMS model and should be corrected to properly estimate aircraft-related air quality impacts. SO₂ emissions are a function of fuel sulfur and emission rates can be readily calculated and applied. APU PM emission rates can be developed using the same methodology applied to main aircraft engines. The potential impacts of this deficiency would be magnified were the Draft EIS/EIR to properly attribute some fraction of gate power and air support to APU.

L. Aircraft Taxi Times are Not Included in the Draft EIS/EIR or Supporting Data.

Aircraft taxi-idle times are not included in the Draft EIS/EIR, its technical appendices or supporting documentation.²² It can be deduced from the included emissions estimates for aircraft

²² The Draft EIS/EIR contains references to the development of the taxi/idle times using SIMMOD, but no actual indications of what those times were.

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taxiing that those emissions decrease substantially under the action scenarios, but the actual times should be included to allow the public an opportunity to better evaluate their propriety. In addition, the ability of SIMMOD to accurately estimate aircraft taxi times must be demonstrated by comparing SIMMOD predictions for current conditions at the Airport to observed taxi times at the Airport. The issue of aircraft taxi times is critical. The bulk of Aircraft VOC and CO emissions are generated during taxiing. In addition, although NO_x emissions rates are low during taxiing, the amount of time spent in taxi mode results in a significant contribution to overall NO_x emissions. Clearly, it is important that taxi times be accurately modeled. However, sufficient information is not included in the Draft EIS/EIR to determine that accurate modeling occurred.

M. The Project's Conformity Cannot Be Determined from Data and Analysis Contained in the Draft EIS/EIR.

Even without consideration of the various issues noted above, the Draft EIS/EIR presents several air quality concerns relative to the NAAQS/CAAQS under the Preferred Alternative. Although a series of mitigation measures are discussed and preliminary emission reduction estimates presented, these estimates are not documented and methodologies cannot be evaluated. The Draft EIS/EIR defers formal review of potential mitigation measures until a Final EIS/EIR is developed. Similarly, the Draft EIS/EIR acknowledges the applicability of federal conformity requirements, but defers both the conformity analysis and a proposed conformity determination to the Final EIS/EIR. Unfortunately, such an approach makes it impossible to comment constructively on either potential emission mitigation measures or the conformity process, since these processes will be released for comment only after the underlying decision-making has been finalized.

V. THE DRAFT EIS/EIR'S ALTERNATIVES FAIL TO SATISFY THE APURPOSE AND NEED@ FOR THE PROJECT.

The mandate to evaluate and compare alternatives is the Aheart@ of an EIS (CEQ Quidelines, ' 1502.14). FAA Order 1050.1D, paragraph 63, implementing NEPA, mandates that an EIS Ashall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.@ The FAA Order further requires that the EIS Alternatives analysis include a rigorous exploration and objective evaluation of all reasonable alternatives. Courts have concluded that to be reasonable, the suggested alternatives must meet the goals of the proposed action.²³

²³ Sec, generally, City of Carmel-By-The-Sea v. United States DOT, 123 F.32 1142 (1997); National Wildlife Federation v. Federal Energy Regulatory Commission, 912 F.2d 1471

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The Draft EIS/EIR=s alternatives analysis fails to meet the stated goals of the Project. The Draft EIS/EIR states that the general A[p]urpose and objectives of the Master Plan are to provide... sufficient airport capacity for passengers and freight in the Los Angeles region to sustain and advance the economic growth and vitality of the Los Angeles region.@ (Draft EIS/EIR, volume 1, pg. 2-1) More specifically, the Draft EIS/EIR outlines three objectives which the Project needs to satisfy: (1) Ato respond to the local and regional demand for air transportation during the period 2000 to 2015, taking into consideration the amount, type, location, and timing of such demand@; (2) Ato ensure that new investments in airport capacity are efficient and cost-effective, maximizing the return on existing infrastructure capital@; and (3) Ato sustain and advance the international trade component of the regional economy and the international commercial gateway role of Los Angeles.@²⁴

(1990).

²⁴

Id.

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It is not clear, however, that the proposed runway improvements that form an integral part of Alternative C, the Preferred Alternative, constitute a superior, or even an efficient way to accomplish the Project=s stated purposes. For example, all three of the Project=s objectives could potentially be, at least partially, achieved through airspace/air traffic modifications, both within the terminal airspace and in the en route system. This alternative is neither acknowledged nor explored in the Draft EIS/EIR. Nevertheless, this conclusion is supported by the fact that the Dual Civet arrival configuration has reduced arrival delay for operations from the east significantly since 1998 and has resulted in an average time-savings of 4.4 minutes per Civet turbojet arrival aircraft. In fact, since the Dual Civet arrival procedures were implemented, there have been no national delay programs set up for the Airport, since delay has not been an issue. However, the Draft EIS/EIR does neither addresses nor incorporates the capacity or delay reduction efficiencies gained through this procedure in any of its modeling.²⁵

²⁵ Where the Master Plan does address air traffic procedures, it is in error. The Master Plan states that the Departure Sequencing Program (DSP), a program that provides the capability to sequence departures from Los Angeles basin airports, would enhance capacity at the Airport. (Master Plan, ' 2.6.1.3, page II-2.137) However, the DSP program has been cancelled by the FAA due to a lack of benefit. Essentially, the Southern California TRACON consolidation effort occurred many years ago and the references to it in the Master Plan and the Draft EIS/EIR are outdated. Many innovations and changes in airspace and procedures at the

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Moreover, a closer examination of the Master Plan and the Draft EIS/EIR reveals that the Draft EIS/EIR may have ignored relatively inexpensive improvements in air traffic procedures in favor of very expensive, physical changes to the airfield. This is apparently because the Project's true purpose does not include the first two claimed in the Draft EIS/EIR, i.e., the broad ones of providing sufficient airport capacity for passengers and freight in the Los Angeles region (Draft EIS/EIR, Volume 1, page 2-1), in an efficient and cost effective way (Draft EIS/EIR, page 2-1). Instead, the Project's principal purpose is the narrow and singular one of accommodating New Large Aircraft (ANLA) that, with their long haul capabilities, would potentially serve the Airport in order to sustain and advance the international trade component of the regional economy. (Draft EIS/EIR, page 2-1)²⁶

This conclusion is substantiated by the fact that the current aircraft fleet does not require 12,000 feet of runway to take off. Even today's heavy aircraft such as the B-747-400 and the B-

TRACON over the past few years have occurred, and none are referenced or adequately considered in the Draft EIS/EIR. Basically, the Draft EIS/EIR does not address the changes in airspace design or the new routes that have been developed as a result of airspace enhancements in Southern California.

²⁶ The Draft EIS/EIR comes close to admitting as much: A development of NLA aircraft is driven by increasing demand and constrained international gateway airports around the world, including LAX ... Development of the NLA will allow these airports to continue to meet the growing demand for travel between primary trading partners. As one of the three major (and busiest) gateway airports in the nation, LAX would be one of the first airports to be served by NLA. (Draft EIS/EIR, page 2-11)

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777-400 only need 8,000 - 10,000 feet of runway for take-off and landing (under the weather conditions prevailing at the Airport). The Airport's existing runways are 8,295-feet, 10,285-feet, 12,091-feet, and 11,096-feet in length. Thus, even the shortest runway at the Airport can accommodate the heaviest and largest aircraft in the fleet under prevailing circumstances today.

The result of the Draft EIS/EIR's failure to acknowledge the Project's primary purpose, i.e., to increase the proportion of super long-haul aircraft in the fleet, is a concomitant failure to analyze the full range and magnitude of environmental impacts that may arise from the desired change in fleet mix. While it is, as yet, early in the NLA development process, some technical facts about the aircraft are already known, sufficient to make at least some educated projections concerning its impact. For instance, ascertaining the projected climb rate will enable an estimate of whether the NLA can meet current airport noise abatement operational requirements; or whether those will have to be altered; or whether the NLA will, ultimately, overfly noise sensitive communities at lower (or higher) altitudes, resulting in higher (or lower) noise levels over those communities. Similarly, preliminary data concerning engine type and emissions characteristics would enable at least a preliminary analysis of the air quality impact of the NLA, as well as the GSE needed to support it, if different from those categories already in use. Finally, the Draft EIS/EIR should have included the capacity/delay impacts from the increased use of NLA. As the Draft EIS/EIR fails to model ground operations in detail, the delay impacts that may result are not considered in developing an accurate analysis of arrival and departure flows and the congestion which may ensue even after Project implementation.

In summary, because the alternatives analysis is the heart of the NEPA process; because the Draft EIS/EIR fails to consider, or analyze, the impacts of eminently reasonable alternatives such as airspace changes to meet the Project's stated purposes; because Alternative C does not alone meet the Project's stated purposes; and because the most significant result of implementing Alternative C, the increased capacity to accommodate NLAs, remains unanalyzed from an environmental perspective, the Draft EIS/EIR's alternatives analysis is seriously flawed.

VI. THE DRAFT EIS/EIR DOES NOT ADEQUATELY SPECIFY MITIGATION MEASURES OR METHODS TO ENFORCE THEM.

CEQA requires that agencies identify the environmental impacts of a project, and implement mitigation measures to lessen the adverse environmental impacts. (CEQA Guidelines § 15002 (a)(3)). However, the Draft EIS/EIR fails to comply with CEQA by (1) failing to provide a complete list of mitigation measures, and (2) failing to specify, at a minimum, a Draft Mitigation Monitoring Program to inform the public of how the project proponents intend to ensure the implementation of mitigation measures.

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A. The Draft EIS/EIR Delays Disclosure of the Full List of Mitigation Measures Until the Final EIS/EIR.

CEQA Guidelines ' 15126.4(a)(1)(B) mandates that the A[f]ormulation of mitigation measures should not be deferred until some further time.@ While the Draft EIS/EIR acknowledges the existence of significant unmitigable impacts, it also states that, AA final package of design features, Master Plan Commitments, and Mitigation Measures will be developed ... The resulting Environmental Action Plan will be published in the Final EIS/EIR.@ (Draft EIS/EIR, Executive Summary, pg. ES-30) By deferring to the Final EIS/EIR to reveal the mitigation measures, the public=s opportunity comment will have been attenuated. The SBCCOG, therefore, reserves the right to comment on items, including the Draft Conformity and Mitigation Monitoring Program that should have been included, but were omitted from the Draft EIS/EIR.

B. The Draft EIS/EIR Fails to Provide a Draft Mitigation Monitoring Program.

California Public Resources Code ' 21081.6 requires that a public agency Aadopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.@ (Cal. Pub. Resources Code ' 21081.6 (a)(1)). If an EIR Aidentifies one or more significant environmental effects of the project,@ CEQA Guidelines ' 15091(a) requires an agency to Amake one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding.@ With these findings, the CEQA Guidelines mandate that Athe agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.@ (CEQA ' 15091(d))

The Draft EIS/EIR violates CEQA Guidelines ' 1509(d) and California Public Resources Code ' 21081.6 in that it fails to set forth a program that monitors or reports on each mitigation measure. Although the Draft EIS/EIR cites some mitigation measures to combat the environmental impacts of the Project, it makes no mention of the Apermit conditions, agreements, or other measures@ (CEQA Guidelines ' 15091(d)) which would ensure compliance with mitigation measures. In other words, it does not specify the steps necessary to ensure compliance, the responsible party to ensure compliance, or the resulting consequences should compliance not occur.

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Please address the above mentioned in your response letter for the LAX Master Plan Improvements.

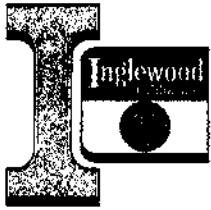
Sincerely,

SBCCOG,
City of Rolling Hills Estates

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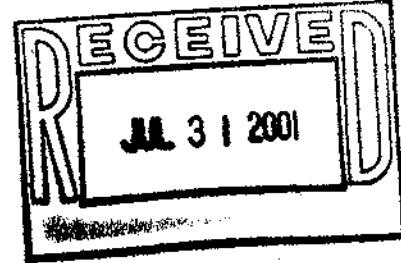


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July 10, 2001



Mr. Jim Ritchie
Deputy Executive Director – Long Range Planning
Los Angeles World Airports
LAX Master Plan Office
Post Office Box 92216
Los Angeles, California 90009-2216

Re: Comments of the City of Inglewood on the
Draft LAX Master Plan and Draft Environmental Impact
Statement/Environmental Impact Report

Dear Mr. Ritchie:

The City of Inglewood, California, submits the following comments in connection with the above-referenced matter.

INTRODUCTION

On January 18, 2001, Los Angeles World Airports ("LAWA") and the Federal Aviation Administration ("FAA") released a Draft LAX Master Plan ("Master Plan") and Draft Environmental Impact Statement/Environmental Impact Report ("EIS/EIR") that are meant to describe and analyze plans for expansion of Los Angeles International Airport ("LAX") over the next fifteen years. The Master Plan and EIS/EIR, which comprise approximately 12,000 pages including appendices and some supporting technical documents, were released pursuant to the requirements of the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"). They demonstrate that the FAA and LAWA have created a plan for massive expansion of LAX at a cost of many millions of dollars.¹

Pursuant to applicable provisions of CEQA and NEPA, interested parties are permitted to comment on the Master Plan and EIS/EIR. CEQA Guidelines § 15086 (a)(4).

¹ For ease of reference, authorship of the LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report will be attributed to LAWA herein.

OFFICE OF
CHARLES E. DICKERSON, III
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The City of Inglewood ("Inglewood") is an interested party ² and, as such, has reviewed and analyzed the Master Plan and EIS/EIR. Inglewood hereby submits its comments to the Master Plan and EIS/EIR.

In performing its review and analysis, Inglewood retained qualified experts in the areas of human health risk assessment, air emissions regulation and planning, aircraft noise assessment and mitigation, and environmental justice. These experts have submitted written reports to Inglewood, and copies of these reports are attached hereto as exhibits and made a part hereof by reference.

In sum, Inglewood respectfully submits that neither the Master Plan nor the EIS/EIR satisfies the requirements of CEQA or NEPA. As such, Inglewood respectfully suggests that both the Master Plan and EIS/EIR are insufficient and, at a minimum, must be substantially revised.

The insufficiencies in the Master Plan and the EIS/EIR, all of which are addressed in detail below, may be summarized as follows:

² Pursuant to CEQA Guidelines, the City of Inglewood constitutes an interested party herein due to its proximity to LAX and the significant environmental effects LAX causes to the City of Inglewood. CEQA Guidelines Section 15086.

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SUMMARY

- I. THE DRAFT EIS/EIR IS INSUFFICIENT AS A MATTER OF LAW BECAUSE IT DOES NOT SATISFY ENVIRONMENTAL JUSTICE REQUIREMENTS**
 - A. The Master Plan and EIS/EIR Unfairly Burden the Minority and Lower-Income Communities Surrounding LAX in Violation of Federal and California Law.
 - B. The EIS/EIR Fails to Disclose LAWA's Economic Gain from the Proposed Expansion at the Expense of Surrounding Minority and Low Income Populations
 - C. The Master Plan creates a Disproportionate and Unfair Distribution of Incremental and Total Direct Job Impacts
 - D. The Economic Benefits of the Master Plan are not Proportionate to the Environmental Burdens it imposes on Surrounding Minority and Low Income Communities

- II. THE DRAFT EIS/EIR FAILS TO SATISFY PROVISIONS OF LAW REQUIRING LAWA TO ADEQUATELY CONSIDER ALTERNATIVES TO EXPANSION AT LAX**
 - A. LAWA's Consideration of Alternatives to Expansion at LAX does not conform to CEQA
 - B. LAWA's Consideration of Alternatives to Expansion at LAX does not conform to NEPA

- III. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY MEASURES ENVIRONMENTAL IMPACTS**

- IV. THE LAX MASTER PLAN AND DRAFT EIS/EIR FAIL TO SATISFY APPLICABLE LAW BECAUSE THEY DO NOT CONFORM TO OTHER RELEVANT PLANS**
 - A. The LAX Master Plan Fails to Conform to The Air Quality Maintenance Plan

- B. The LAX Master Plan Fails to Conform to SCAG's 2001 Regional Transportation Plan

V. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT DOES NOT ADEQUATELY ADDRESS THE IMPACT OF TOXIC AIR POLLUTANTS

- A. The Draft EIS/EIR Lacks A Proper Baseline Regarding Air Toxics
- B. LAWA Failed To Properly Study Toxic Air Emissions
- C. LAWA's Health Risk Assessment Does Not Adequately Factor Time As A Variable
- D. LAWA's Study Of Air Pollutants Fails to Consider Relevant Issues

VI. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY MEASURES HUMAN HEALTH RISKS

- A. LAWA's Study Does Not Adequately Factor Time as a Variable
- B. The Draft EIS/EIR Fails to Adequately Delineate Health Risks
- C. The Draft EIS/EIR Fails to Consider Health Risks on a Regional Basis
- D. LAWA Failed to Conduct a Sensitivity Analysis of Its Human Health Risk Assessment

VII. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY ASSESSES AIR EMISSIONS

- A. The Draft EIS/EIR Does Not Adequately Assess The Impact Of Air Emissions Mitigation Measures Upon The Surrounding Environment
- B. LAWA'S Comparison To The No Action/No Project Alternative Is Flawed

VIII. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY ANALYZES TRAFFIC IMPACTS

- A. The Draft EIS/EIR Ignored Cumulative Impacts Of The Lax Master Plan By Not Analyzing The Traffic Impacts In The City Of Inglewood

- B. LAWA Did Not Fully Assess Traffic Mitigation In The Draft EIS/EIR
 - C. The Draft EIS/EIR's Traffic Congestion Relief Congestion Package Is Inadequate
 - D. The Study Of The Effects Of The Proposed Lax Expressway Is Inadequate
 - E. LAWA'S Baseline For Traffic Is Questionable
- IX. THE LAX MASTER PLAN FAILS TO SATISFY APPLICABLE LAW BECAUSE IT DOES NOT CONFORM TO LOCAL TRAFFIC PLANS**
- X. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY MEASURES NOISE INCREASES**
- A. The Draft EIS/EIR Uses An Improper Baseline For Noise Analysis
 - B. LAWA's Noise Exposure Contours Are Understated
 - C. The Draft EIS/EIR Fails To Consider The Economic Impact of The LAX Master Plan on Housing Values
 - D. LAWA'S Assertions Regarding Nighttime "Over-Ocean Operation" Are Wrong
- XI. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY ANALYZES THE HEALTH EFFECTS OF AIRCRAFT NOISE**
- A. The Draft EIS/EIR Must Consider The Health Effects Of Aircraft Noise
 - B. The Draft EIS/EIR Needs to Address Aircraft Noise Interference With Classroom Activities and Sleep
- XII. COMMENTS BY THE SOUTH BAY CITIES COUNCIL OF GOVERNMENTS ARE INCORPORATED BY REFERENCE**
- XIII. COMMENTS BY CITIZENS OF THE CITY OF INGLEWOOD ARE SUBMITTED HEREWITH**

DISCUSSION

I. THE DRAFT EIS/EIR IS INSUFFICIENT AS A MATTER OF LAW BECAUSE IT DOES NOT SATISFY ENVIRONMENTAL JUSTICE REQUIREMENTS

- A. The Master Plan and EIS/EIR Unfairly Burden the Minority and Lower-Income Communities Surrounding LAX in Violation of Federal and California Law.

Federal law requires that each federal agency "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (Executive Order 12898, February 11, 1994). Environmental Justice is also a requirement of California law. Cal. Pub. Res. Code §72000-72001. Under California law Environmental Justice means "the fair treatment of all people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies." Cal. Pub. Res. Code §72001. The California Environmental Protection Agency is charged with the responsibility to "[P]romote enforcement of all health and environmental statutes within its jurisdiction in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state." Cal. Pub. Res. Code §72000(b). These requirements imposed on LAWA the responsibility to consider the impacts of LAX expansion on lower income and minority communities.

Several of the communities surrounding LAX, and to the east of LAX, in particular, contain predominantly minority populations and lower income populations. The Draft EIS/EIR contains a demographic analysis of the communities surrounding LAX that will be impacted by the LAX Master Plan. LAWA analyzed seventy census tracts, comprising parts of the City of Los Angeles, El Segundo, Inglewood, Hawthorne, and unincorporated areas of Los Angeles County. Draft EIS/EIR, Appendix F, Environmental Justice Technical Report pp. 5-6. Fifty-four of the seventy census tracts within the study area are considered to be predominantly minority. A tract is so defined when more than fifty percent of the population is minority. *Id.* at 10.

Similarly, thirty-three of the seventy census tracts within the Impact Study Area are considered to be low-income. Low-income is defined as having more than 15% of the resident population below the poverty level. *Id.* Thirty-two of the thirty-three census tracts

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identified as low-income are predominantly minority. Id. at 15.

LAWA's analysis shows that the distribution of minority and non-minority populations may cause differential impacts between these two groups:

"This data reveals a readily discernible pattern of minority and low-income communities in the areas surrounding LAX. While the areas to the north and south of LAX are predominantly non-minority, the area east of I-405 within the study area is predominantly minority. Furthermore, within these areas east of I-405 minority populations are heavily concentrated: 39 of the 70 minority census tracts with the study area have minority percentages greater than 90 percent. The uneven distribution of minorities throughout the study area, as evidenced by the data showing that most census tracts have less than 20 percent or greater than 90 percent minorities, increases the potential for differential impacts on minorities and non-minorities."

Id.

Minority and low-income populations are and have been disproportionately burdened by the impacts of LAX long before the massive expansion planned under the LAX Master Plan:

"[M]inority and low-income residential communities within the study area are currently concentrated east of LAX, separated from the airport by predominantly commercial and industrial airport-related land uses and the I-405 freeway. In contrast, residential areas of El Segundo and Playa Del Rey/Westchester, to the immediate north and south of the airport, do not have high concentrations of minority and low-income populations. LAX has always had an east-west runway configuration to take advantage of the prevailing wind pattern and to maximize efficient use of airspace. The combination of the long-standing runway orientation and more recent changes in the demographic patterns in the area around LAX means that minority and low-income residential communities are directly under the primary arrival flight path. The primary impacts on minority and low-income communities from current airport operations are therefore mostly associated with aircraft

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noise and air emissions. While residential areas of El Segundo and Playa Del Rey/Westchester directly adjacent to the airport are also exposed to high levels of side-line noise, the areas of exposure are much smaller in comparison to the noise-impacted residential communities to the east."

Id. at 16.

Inglewood is one of the predominantly minority communities located east of LAX which receives a disproportionate share of the impacts of LAX. Inglewood's population is 46.4% African-American, 46% Hispanic, 4.1% White, 1.6% Multi-racial, 1.1% Asian, 0.3% Pacific Islander, 0.2% Native American, and 0.2% Other. California Department of Finance, Demographic Research Unit, California State Census Data Center, Census 2000, "Table Two, Population by Race/Ethnicity, Incorporated Cities by County, p. 5, attached hereto as Exhibit "A." In addition, a large percentage of the low-income census tracts in LAWA's study area are located in Inglewood. Draft EIS/EIR, Appendix F, Environmental Justice Technical Report, Figure 3, "Low-Income Census Tracts Within the Study Area."

LAWA's plan for massive expansion of LAX unfairly burdens the minority and lower-income communities surrounding LAX. LAWA failed to consider alternatives that would have shifted burdens away from minority or low-income populations, or that would at least have distributed the burdens and benefits of expansion more equitably. Instead of planning for massive expansion of LAX, LAWA should have considered alternatives to massive expansion of LAX.

LAWA admits that its Master Plan for expansion of LAX imposes a disproportionate burden of noise impacts upon persons of color and/or low income, and that it does not know if the Plan also imposes a disproportionate burden of toxic air emissions on those same groups. LAX Master Plan Draft EIS/EIR, Chapter 4.4.3 Environmental Justice, p. 4-395. As discussed in the report of Dale Hattis, PhD., attached hereto as Exhibit "B," if LAWA had chosen to seriously consider alternatives that did not include massive expansion at LAX, LAWA would have been able to consider alternatives that would reduce the human health risk overall and spread the environmental burden more equitably among the general population of Southern California. Hattis Report p. 3. Dr. Hattis observes:

"The framing of the options for analysis in the current draft is exclusively focused on engineering changes. Future "demand" for air services is estimated from a single set of assumptions about future population and economic growth in Southern California, and future national average costs of air travel in

revenue per seat-mile, and then "build" options are designed to meet this projected "demand" either in full or in part. There is no apparent recognition or analysis of the possibility that at least some of the growth in "demand" for air services could be shifted to outlying airports downwind of major population concentrations (or out of the South Coast Air Basin entirely, in the case of connecting flights) by changes in economic pricing—such as airport user fees. Such economic measures might not completely avoid the need to expand capacity at LAX, but they seem worthy of explicit consideration at least as supplements to the existing engineering options..."

Hattis Report p. 3.

For these reasons, LAWA should have considered alternatives to massive expansion of LAX. Dr. Hattis notes three specific reasons why such an analysis of alternatives should take place: (1) User fees, in addition to re-directing demand, could be used for mitigation measures; (2) This approach would allow LAWA to slow growth at LAX, which would allow expansion at a much slower pace, which, in turn, will reduce congestion and, therefore, the significant impacts on the environment from construction; and (3) without such fees the real beneficiaries could be the airlines rather than the flying public. Hattis Report p. 3. LAWA should immediately and seriously consider other alternatives and analyze them to the same degree that it analyzed Alternatives A, B, and C in its current Master Plan. Anything less fails to adequately address Environmental Justice, as required by law.

- B. The EIS/EIR Fails to Disclose LAWA's Economic Gain from the Proposed Expansion at the Expense of Surrounding Minority and Low Income Populations.

The LAX Master Plan Draft EIS/EIR fails to disclose the increased revenues that LAWA and the City of Los Angeles expect from the massive expansion plan, or that it comes at the expense of local low income and minority communities. As Dr. Hattis notes:

"[T]here are some glaring omissions of important effects from the economic impact analysis. Economic impacts are assessed in terms of changes in employment, and overall economic activity, for the South Coast as a whole, Los Angeles County, and the City of Los Angeles. Changes in on-airport employment are also described, as are the expected capital

costs of the various policy options. Unaccountably, there does not seem to be any readily locatable presentation of expected effects on operating revenues and costs for the major economic actors that are directly affected by the proposed project - LAWA itself, the City of Los Angeles as owner and taxing authority, and the airlines. Projections of these expected impacts must exist. Moreover, they are highly relevant to judgments of the equity (fairness) of the distribution of expected good and bad effects on the different policy options for different groups, including an expanded Environmental Justice analysis."

Hattis Report p. 6.

LAWA and the City of Los Angeles stand to reap tremendous financial benefits from LAX expansion. Since these benefits are not specified, the comparative benefit to local low income and minority communities--or the lack thereof--cannot be and has not been evaluated. LAWA must disclose these figures for a meaningful analysis of the relative benefits and burdens to be considered.

C. The Master Plan Creates a Disproportionate And Unfair Distribution of Incremental an Total Direct Job Impacts

The LAX Master Plan does not fairly distribute new jobs among local minority and low-income communities. According to LAWA's own economic analysis, cities in the "Primary LAX Area" (El Segundo, Hawthorne, Inglewood, Del Aire and Lennox) receive only 3.8% of the incremental "direct jobs" at LAX due to expansion. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 46, "Distribution of Incremental Direct Job Impacts of the LAX Master Plan Alternatives, By County and City, 1996-2015", p. 95. This same area also receives only 3.4% of the total direct job impacts from LAX in 2015. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 47, "Distribution of Total Direct Job Impacts of the LAX Master Plan Alternatives, By County and City, 2015," p. 96. Compared to the year 1996, the City of Inglewood shows a net increase of only 489 jobs in "LAX- Related Employment" if LAWA adopts Alternative C. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 48, "LAX-Related Employment in the South Bay and North Bay Cities and Communities For the LAX Master Plan EIS/EIR Alternatives, 1996, 2005, and 2015," p. 97. Conversely, the environmental burdens of LAX fall most directly upon those living in its immediate vicinity, like Inglewood. LAWA should make firm commitments to take all reasonably practical steps to ensure that a proportionate share of the economic benefits of LAX also reach

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those communities. Under the LAX Master Plan, according to LAWA's own jobs projections, that does not occur.

D. The Economic Benefits Of The LAX Master Plan Are Not Proportionate to the Environmental Burdens it Imposes on Surrounding Minority and Low Income Communities

LAWA should share the economic benefits that flow from LAX with the surrounding communities to the same degree that the environmental burdens are borne by those communities. Offsetting environmental burdens with economic benefits is an important part of Environmental Justice: "In making determinations regarding disproportionately high and adverse effects...mitigation and enhancement measures...and all offsetting benefits to the affected minority may be taken into account." Department of Transportation Order 5610.2 - Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, April 15, 1997. Firm commitments in this regard should be made by LAWA in the Draft EIS/EIR. For example, regarding increased cargo capacity at LAX, the Draft EIS/EIR states:

"It is possible that some of the increased demand [for cargo handling] could be met nearby in Inglewood where the City's General Plan indicates a priority for expanding existing industrial firms and providing increased employment opportunities while mitigating residential areas significantly impacted by aircraft noise."

Draft EIS/EIR "Induced Socio-Economic Impacts," Section 4.5, page 4-446.

Although it acknowledges the potential symbiosis of cargo expansion for LAWA and Inglewood, the Draft EIS/EIR fails to incorporate a reasonable and proportionate distribution of the economic benefits of LAX expansion. If the burdens of LAX expansion are to be thrust upon the City of Inglewood, fair treatment requires that efforts be made to direct potential benefits to the communities impacted by those effects--effects that are significant and cannot and will not be mitigated. The proposed redevelopment along Century Boulevard is a good first step in this direction; however, more needs to be done. LAWA should make concrete commitments to address this issue, and its failure to do so renders the EIS/EIR insufficient as a matter of law.

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II. THE DRAFT EIS/EIR FAILS TO SATISFY PROVISIONS OF LAW REQUIRING LAWA TO ADEQUATELY CONSIDER ALTERNATIVES TO EXPANSION AT LAX.

A. LAWA's Consideration of Alternatives Does Not Conform To CEQA

The LAX Master Plan and Draft EIS/EIR fail to conform to CEQA because they do not properly consider alternatives to expansion at LAX. Proposals that entail expansion at other airports instead of LAX should have been analyzed and considered. Instead of considering only three "build" alternatives, each of which called for massive expansion of LAX (in comparison to a flawed No Action/No Project Alternative), LAWA and the FAA should have considered alternatives that included expansion and/or construction at Ontario Airport, El Toro Marine Corps Air Station, Palmdale Airport and March Air Force Base.

In discussing alternative locations for a project, the CEQA Guidelines state, "The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location." CEQA Guidelines §15126.6(f)(2). The CEQA Guidelines further state:

"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project."

CEQA Guidelines §§15126.6(a), (f).

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According to LAWA, its "preferred" alternative, Alternative "C," causes fewer substantial impacts to the environment surrounding LAX than its other alternatives, "A" and "B." However, the impacts that it does cause are substantial. Moreover, the analysis does not consider whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location, as required by CEQA Guidelines, Section 15126.6(f)(2) cited above. The CEQA Guidelines state that alternatives that cause less environmental harm must be considered. Accordingly, inasmuch as the Draft EIS/EIR fails to consider another location, i.e., Ontario, Palmdale, El Toro, etc., the Draft EIS/EIR fails to follow the CEQA Guidelines.

Feasible alternatives to massive expansion of LAX do exist. The Guidelines set forth a number of factors to consider when determining whether or not an alternative is feasible.

"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)."

CEQA Guidelines section 15126.6.

Considering these feasibility factors in connection with expansion at LAX illustrates why the LAX Master Plan and the Draft EIS/EIR are not consistent with CEQA. LAX is located in the midst of a heavily populated residential area. The area is not well suited for the airport operations that currently exist, let alone massive expansion. LAX is economically viable, but expansion of LAX offers little, if any, additional economic benefit regionally when compared to other expansion scenarios considered by the planning body for Southern California, the Southern California Association of Governments ("SCAG"). "Southern California Aviation Industry Impact Analysis," CIC Research, Inc., July 11, 2000, p. v, attached hereto as Exhibit "C". The LAX Master Plan contemplates massive construction at LAX because, as it stands today, the infrastructure at LAX is not sufficient to handle the expanded operations in the plan. In reality, however, this places LAX in a similar position to that of every other airport in the area. If LAX is to expand, massive construction will have to take place. The LAX Master Plan is simply not consistent with

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other plans, in particular SCAG's 2001 Regional Transportation Plan ("RTP") (see below for further discussion) and the 1999 and 2001 Air Quality Maintenance Plan's ("AQMP's). Lastly, the LAX Master Plan virtually ignores the regional approach to airport expansion, by failing to fully analyze any alternative that does not call for massive expansion at LAX. Given the fact that LAWA owns several of the other airports in Southern California, this failure is inexplicable. The feasibility of expansion of other airports in the region meets or exceeds the feasibility of expansion of LAX, when considering the factors mandated by CEQA.

B. LAWA's Consideration of Alternatives Does Not Conform to NEPA

LAWA failed to comply with NEPA by only examining in depth alternatives that involve expansion of LAX. NEPA has twin aims. First, it places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action. Second, it ensures the agency will inform the public that it has indeed considered environmental concerns in its decision making process. Baltimore Gas and Electric Co. v. NRDC, 462 U.S. 87 (1983). An Environmental Impact Statement must discuss reasonable alternatives to the project. 42 U.S.C. §4332(2)(C)(iii); Alaska Wilderness Recreation v. Morrison, 67 F.3d 723, 729 (9th Cir. 1995). Consideration of alternatives is at the heart of the environmental impact statement. 40 C.F.R. §1502.14.

NEPA requires that a Federal agency - to the fullest extent possible - consider alternatives to its actions that would reduce environmental damage. Calvert Cliffs' Coordinated Committee v. Atomic Energy Commission, 449 F.2d 1109, 1114 (D.C. Cir. 1971), cert. denied, 404 U.S. 942 (1972). Considerations of administrative difficulty, delay or economic cost will not suffice to strip the procedural requirements of NEPA of their fundamental importance. Id. at 1115.

The Environmental Impact Statement need not consider an infinite range of alternatives, only reasonable or feasible ones. 40 C.F.R. § 1502.14(a)-(c). However, "[t]he existence of a viable but unexamined alternative renders an environmental impact statement inadequate. Alaska Wilderness Recreation v. Morrison, supra, 67 F.3d at 729. An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action, and sufficient to permit a reasoned choice. Id. The Draft EIS/EIR fails to meet these requirements.

The FAA's Airport Environmental Handbook requires detailed examination of possible alternatives where airport expansion will significantly affect the surrounding environment:

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"When section 509(b)(5) of the 1982 Airport Act is applicable, the FAA shall authorize no project under the Airport Improvement Program involving airport location, a major runway extension, or runway location found to have a significant adverse effect unless the agency shall render a finding in writing, followed by a full and complete review, that no feasible and prudent alternative to the project exists and that all possible steps have been taken to minimize such adverse effect."

FAA Airport Environmental Handbook, Chapter 8., p. 2, attached hereto as Exhibit "D." Section 4(f) of the DOT Act requires a finding that "no feasible and prudent alternative" exists. Id. The FAA's Airport Handbook also states "To comply with section 4(f), it is necessary to show that a rejected alternative to a proposed action presents unique problems or that the costs or community disruption it entails reaches extraordinary magnitudes." Id.

A reasonable alternative to massive expansion of LAX is a regional solution that looks to meeting increased airport demand by expanding other airports in Southern California. The Draft EIS/EIR does not establish that such an alternative to massive expansion at LAX presents "unique problems," or that the costs or community disruption associated with such an alternative will reach "extraordinary magnitudes." On the contrary, the alternatives are dismissed without any such consideration.

As discussed above, the Draft EIS/EIR does not adequately consider alternatives that will reduce the environmental impact upon the community surrounding LAX. Nor does the Draft EIS/EIR consider a "regional" approach that would include substantial expansion at other airports in the region instead of LAX. The Draft EIS/EIR therefore fails to conform to the requirements of NEPA regarding alternatives to the project as presented.

III. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT MEASURES ENVIRONMENTAL IMPACTS IMPROPERLY

CEQA Guidelines section 15125(a) states "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time of notice of preparation is published ... The environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." Under CEQA the impacts of the project must be measured against the real conditions on the ground. Save Our Peninsula Committee v. Monterey County Board of

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Supervisors (2001) 87 Cal.App.4th 99, 121.

The Draft EIS/EIR fails to utilize a proper baseline. LAWA utilized three different baselines when examining the environmental effects of its Master Plan for LAX. LAWA's "environmental baseline" reflects the conditions in 1996. LAWA's "adjusted environmental baseline" reflects the current use of LAX, with the addition of future road projects and certain land uses. LAWA's "No Action/No Project" Alternative reflects the future road projects and certain land uses, and projects future airport use. LAWA has failed to create a sufficient baseline from which to analyze its alternatives. LAWA's "No Action/No Project" Alternative reflects future conditions. This is inconsistent with CEQA and incorrectly minimizes the environmental effects of the other alternatives. LAWA should develop a proper baseline from which to evaluate its alternatives.

IV. THE LAX MASTER PLAN AND DRAFT EIS/EIR FAIL TO SATISFY APPLICABLE LAW BECAUSE THEY DO NOT CONFORM TO OTHER RELEVANT PLANS

Federal regulations require that all airport development conform to local plans. The FAA's Airport Environmental Handbook clearly states that any airport plan must conform to the local air emissions plans:

"Section 176(c) of the Clean Air Act Amendments of 1977 states in part that no Federal agency shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to a State Implementation Plan after it has been approved or promulgated under section 110 of that Act. It is FAA's responsibility to assure that Federal airport actions conform to state Plans for controlling area wide air pollution impacts."

Airport Environmental Handbook, Chapter 5 p. 12. In addition, the Airport Environmental Handbook states that the 1982 Airport Act requires that Airport Improvement Program applications for projects involving airport location, runway location, or a major runway extension shall not be approved unless the governor of the state in which the project is located certifies that there is a "reasonable assurance" that the project will be located, designed, constructed, and operated in compliance with applicable air and water quality standards. Airport Environmental Handbook Chapter 5 p. 14. Finally, the FAA's Airport Environmental Handbook states that all airport development must conform to local plans:

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"For all airport development there shall be evidence to support the following Airport Improvement Program grant assurances as required by the 1982 Airport Act.

- (a) The project is reasonably consistent with existing plans of public agencies for development of the area (section 509(b)(1)(A));
- (b) Fair consideration has been given to the interest of communities in or near the project location (section 509(b)(4)); ...
- (d) Appropriate air and water quality certificates have been or will be obtained for projects involving airport location, runway location, or a major runway extension (section 509(b)(7))."

Airport Environmental Handbook, Chapter 9, p. 3.

The LAX Master Plan and Draft EIS/EIR fail to conform to two key local plans. How the Master Plan and EIS/EIR fail to conform is discussed in the two paragraphs that immediately follow. However, it should be noted as an initial point that since the Master Plan and EIS/EIR fail to conform to two key local plans, they violate Section (a) referred to immediately above.

First, the LAX Master Plan fails to conform to the relevant Air Quality Maintenance Plan. Mr. David Calkins, an expert in air emissions planning and compliance issues, reviewed the LAX Master Plan and Draft EIS/EIR. His reports are attached hereto as Exhibits "E" and "F." In his report, Mr. Calkins states, "Review of Chapter 4.6 found several inconsistencies in LAWA's reference to the conformity and SIP planning process." Calkins Phase I Report, p. 11.

Second, Mr. Calkins has found that the Draft EIS/EIR fails to conform to the Regional Transportation Plan ("RTP") in at least eight different ways. These differences are discussed in detail below. In addition to the Federal law requirements discussed above, under CEQA an EIR must discuss any inconsistencies between the proposed project and applicable general plans and regional plans. CEQA Guidelines § 15125 (d). The Draft EIS/EIR fails to meet these requirements.

A. The LAX Master Plan Fails To Conform To The Air Quality Maintenance Plan

The LAX Master Plan does not conform to the local air pollution reduction plan. Southern California is designated a "non-attainment area"³ under the 1990 Clean Air Act. Therefore all major projects must be constructed with assurance to the Federal Government that the project fits into the current air pollution reduction plan, known as the Air Quality Maintenance Plan ("AQMP"). See Calkins Phase II Report pp. 11-12. Mr. Calkins has determined that the LAX Master Plan Draft EIS/EIR fails to conform to the relevant AQMP in regards to the following:

1. Emission Inventory - the 2001 AQMP, currently in development, will require changes to the Draft EIS/EIR's emission inventory.
2. Mitigation Measures - LAWA's failure to commit to specific mitigation measures in the Draft EIS/EIR inhibits development of the 2001 AQMP.
3. Baseline Issues - use of the "adjusted" environmental baseline for off-airport traffic impacts does not allow comparison of the Draft EIS/EIR alternatives with current conditions, but actually compares the alternatives to a future condition.
4. Aircraft Mix - the Draft EIS/EIR assumes a aircraft mix of mostly jumbo airliners, in conflict with the adopted 2001 RTP calculations, which will cause differences in projected emissions between the Draft EIS/EIR and the AQMP.
5. Stationary Source Emissions - LAWA's alternatives do not take into account the increase in nearby, off-airport stationary source emissions, despite LAWA's assertions to the contrary; thus, it cannot conform to the regional plan.
6. Ground Support Equipment - LAWA failed to follow the California Air Resources Board's ("CARB") latest off-road emission model when concluding that emissions for future Ground Support Equipment would be zero.

³ A "non-attainment area" has monitored air pollution levels in excess of the National Ambient Air Quality Standards ("NAAQS").

Calkins Phase II Report at 13-14. These are serious conformance problems that must be first detailed, then remedied by LAWA before any action can be taken on the LAX Master Plan or its Draft EIS/EIR.

B. The LAX Master Plan Fails To Conform To SCAG's 2001 Regional Transportation Plan

The LAX Master Plan does not conform to the local Regional Transportation Plan ("RTP"). The Southern California Association of Governments ("SCAG") is the main planning body for Southern California. At least every three years, SCAG adopts an RTP for the area, which sets forth its plan for the foreseeable future, usually 25 years. SCAG adopted a new RTP in April 2001. This RTP replaced SCAG's previous plan, which was adopted in 1998. The Final RTP has not yet been formally released, but its contents in most areas relevant to LAX are known.

As discussed in the Calkins Phase II Report, attached as Exhibit F, the LAX Master Plan Draft EIS/EIR fails to conform to the RTP as follows:

1. Projected Passenger Load - the LAX Master Plan Draft EIS/EIR projects LAX handling over 92 million annual passengers ("MAP") in 2015; the RTP limits LAX to handling what is considered to be its current physical capacity of 78 MAP.
2. On-Road Emissions Factors - The Draft EIS/EIR utilizes EMFAC2000, but the RTP uses emission factors based upon EMFAC7G. This inconsistency makes it quite difficult to compare the air quality impacts of the Draft EIS/EIR upon the RTP.
3. Different Model Years - The Draft EIS/EIR models years 2005 and 2015, but the RTP models 2025 as its model year.
4. Market Incentives - There are significant differences between the two plans in choice of market incentives, which causes potential conflicts between the two plans.
5. Aircraft and Passenger Characteristics - These differ in regards to projected aircraft types and passenger growth during the relevant periods.
6. Cargo Handling Projections - The Draft EIS/EIR projects much larger cargo handling for LAX than that planned for in the RTP.

7. High Speed Rail Projections - The Draft EIS/EIR rejects this project as too speculative, but the RTP bases projections on passenger and cargo demand in part upon the inclusion of this transportation mode.
8. Funding Projections - The RTP does not include the Ring Road, 105 Freeway extension, or 405 Freeway Connector Projects in its funding projections. The Draft EIS/EIR plans for funding for all of these projects, presumably from Federal Highway funds.

Calkins Phase II Report at pp. 9-10.

LAWA's failure to even discuss these issues is a serious deficiency in the Draft EIS/EIR. The Draft EIS/EIR cannot be acted upon until it is modified to conform to the RTP, assuming that is possible to do so without simply scratching the entire analysis and starting over. If it is possible to salvage some small part of the plan, such as the mitigation measures, then the Draft EIS/EIR must be reissued for public comment.⁴

V. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT DOES NOT ADEQUATELY ADDRESS THE IMPACT OF TOXIC AIR POLLUTANTS

A. The Draft EIS/EIR Lacks A Proper Baseline Regarding Air Toxics

The Draft EIS/EIR does not contain a proper baseline for air toxics emissions from LAX and LAX-related sources. As a result, it does not adequately address the effects of toxic air pollutants upon human health, including the health of the residents of the City of Inglewood.

CEQA requires that an EIR includes a description of the environment in and around the project at the time of the Notice of Preparation. CEQA Guidelines §15125(a). Such a description, or baseline, serves as the basis for the EIR's analysis of the environmental impacts of a project. CEQA also requires that detailed analysis of the potential environmental impacts from each of the projects contained in the aviation alternatives cannot be deferred to subsequent environmental documents. Public Resources Code § 21100; Stanislaus Natural Heritage Project v. County of Stanislaus (1996) 48 Cal.App.4th

⁴ When new significant information becomes available after the public review period, Public Resources Code Section 21092.1 and CEQA Guidelines Section 15088.5 require re-circulation of an EIR prior to certification.

182. The Draft EIS/EIR does not contain an adequate basis from which to determine the current impact on human health of air toxics emitted by LAX. "The HHRA did not evaluate impacts of toxic air pollutants associated with current airport operations." Calkins Phase I Report, p. 8. As noted by Mr. Calkins, this oversight means that LAWA does not provide a sufficient baseline from which to draw later conclusions. Without a baseline, LAWA cannot adequately assess the environmental effects of its plans to expand LAX.

B. LAWA Failed To Properly Study Toxic Air Emissions

The Draft EIS/EIR does not properly study toxic air emissions related to LAX. LAWA's Health Risk and Air Toxics evaluation is deficient due to the failure to organize and complete a study, such as the Air Quality and Source Apportionment Study, prior to the release of the Draft EIR/EIS. The Air Quality and Source Apportionment Study are not yet complete. This study will shed important information on the health impacts to the surrounding community as well as identify mitigation measures. It will also determine the contribution of various airport-related activities on selected air pollutant concentrations in relation to those pollutants caused by other, non-airport sources in the surrounding community without the Source Apportionment study. LAWA cannot assess the incremental impact of LAX operations on local air quality. Therefore, LAWA has failed to investigate this area fully before preparing the Draft EIS/EIR. A prudent course of action would be to place any LAX expansion plans on hold until completion of this study. This would allow proper consideration of the serious human health issues addressed in this study. Without this study, the Draft EIS/EIR will not withstand scrutiny under CEQA and NEPA.

C. LAWA's Health Risk Assessment Does Not Adequately Factor Time as a Variable

The Health Risk Assessment in the Draft EIS/EIR should be extended to consider a longer time period. There do not appear to be any tables or data in the Draft EIS/EIR on cancer and non-cancer health risks for any year after 2015. However, the operation of the expanded airport during those latter years may well have continuing impacts on the residents of the surrounding communities. Health impacts are often seen in the resident population over a much longer time span than the 15-20 years assessed in the Draft EIS/EIR tables. Other major planning assessments, such as the RTP (2025) and the AQMP (2030), examine impacts of their action over a much longer time frame. Calkins Phase II Report p. 22. The Health Risk Assessment in the Draft EIS/EIR should be extended to conform to this model.

D. LAWA's Study Of Air Pollutants Fails to Consider Relevant Issues

It is unclear in the Draft EIS/EIR what LAWA's criteria are for determining net change in chronic and acute hazard indices for air pollutants. LAWA does not include the criteria pollutants in this analysis, and this is a critical, indeed fatal, omission. The results of the Source Apportionment study, which was only recently initiated, would have provided valuable input to assessing criteria (NAAQS) as well as various toxic air pollutant impacts on health, if it were available to the LAWA at the time of preparation of the Draft EIS/EIR. The Draft EIS/EIR also appears to ignore the incremental cancer and non-cancer risks to people who do not "receive a certain hazard level criterion." Calkins Phase II Report p. 22. These issues must be addressed and resolved in the Draft EIS/EIR.

VI. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY MEASURES HUMAN HEALTH RISKS

A. LAWA'S Study does not Adequately Factor Time as a Variable

LAWA analyzes environmental health impacts for two years - 2005 and 2015; however, the environmental health impacts will occur over time. Accordingly, LAWA's analysis inaccurately minimizes certain risks and fails to consider numerous cumulative impacts.

Further, as noted by Dr. Hattis, "2005 does not represent even the peak year for construction-related impacts." Hattis Report p.4. In fact, emissions of particulate matter in year 2004 are expected to be more than twice those in 2005 (approximately 44,000 lbs/day versus 19,000 lbs/day). For a proper analysis, LAWA should "analyze and express impacts in terms of both peak-year and integrated bottom-line measures of effect over a reasonably foreseeable extended time over which the facilities will be built and operated." Hattis Report p. 4.

B. The Draft EIS/EIR Fails to Adequately Delineate Health Risks

The increased health risks associated with the LAX Master Plan should be set forth with more clarity and specificity in the Draft EIS/EIR. Impacts are expressed primarily in terms of "significance" of effects for the most exposed individual, or, when considering certain carcinogenic effects, in terms of the areas or numbers of people exposed to concentrations expected to exceed a 1/100,000 lifetime incremental cancer risk criterion or an unusual criterion for non-cancer effects of a hazard index of 5. Hattis Report p. 4.

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However, the usual criterion used in many impact assessments under other environmental statutes, including Superfund, is a hazard index of 1.⁵ Id. Dr. Hattis notes:

"These ways of expressing health impact results are of some relevance because they help the audience judge the fairness of the burden of extra risk imposed for residents of the areas most affected by the project options. However, exclusive definition of impacts in terms of the area or number of people who receive an increment of risk or (for non-carcinogenic agents) exposure to pollutants from LAX-related sources alone that is deemed to exceed a single bright line of 'significance' ignores the incremental cancer and non-cancer risks to people who do not happen to be moved across such a criterion level. Further, these ways of summarizing impacts can not, by themselves, give decision-makers and the public a sufficient description of the overall health impacts to arrive at a reasoned judgment of whether the mix of economic, human health, and environmental impacts of the proposed "build" option is more desirable overall than the comparable impacts of other options. The current analysis of economic activity describes projected aggregate changes in jobs and overall economic activity for the City of Los Angeles, Los Angeles County, and the whole Southern California area. To be comparable with these aggregate economic impacts, aggregate measures of health impacts must be created and the current artificial limitation of the study area for quantifying air pollution impacts must be transcended."

Hattis Report pp. 4-5.

Decision-makers and the public should be informed of the differences among options in overall cases of cancer that are expected to arise over the lifetimes of the individuals exposed over particular periods of construction and operation of the proposed facilities. This should be done for the entire geographic area of the South Coast Air Basin that receives incremental changes in exposures. Hattis Report p. 5. Human health impacts can and should be expressed in aggregate incremental cancer cases, aggregate

⁵ The difference between a hazard index of 1 and 5 is fivefold in the toxicity-weighted concentrations of the pollutants covered by the index in terms of risk. The fraction of people who suffer irritation and other non-cancer effects is likely to be larger than fivefold, depending on the shape of the dose response relationship.

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incremental deaths, aggregate incremental hospitalizations and aggregate incremental asthma effects for the entire Los Angeles basin associated with the LAX Master Plan. Hattis Report p. 5. These calculations are certainly feasible and would inform the decision makers and the public of the true human health effects of the project. Until this is done, the document is deficient in addressing this topic.

C. The Draft EIS/EIR Fails to Consider Health Risks on a Regional Basis

The Draft EIS/EIR's human health risk assessment should study risks created by the Master Plan in the entire Southern California region, not simply in those areas immediately surrounding LAX. Failure to do so conceals the advantages in terms of health risks from expanding other airports instead of LAX. As Dr. Hattis notes:

"Were the analysis expanded to include some options shifting additional air service to outlying airports (as recommended above), continued use of the more localized health impact analysis method would cause analysts to miss important benefits that would accrue from placing emissions downwind rather than upwind of the major population centers of the Los Angeles area."

Hattis Report p. 5. Restricting the environmental impact analyses to the immediate LAX area and the options considered only to expansion of LAX prevents considering the relative burdens of LAX expansion on minority and lower-income communities versus expansion of air service at other airports. The City of Inglewood appears to be substantially included in the existing boundaries of the air dispersion modeling study, but it is important to have impacts broken down by various political jurisdictions covering the most affected communities. Hattis Report pp. 5-6. LAWA's current approach on this risk assessment fails to fully capture all relevant data.

D. LAWA Failed to Conduct a Sensitivity Analysis of Its Human Health Risk Assessment

LAWA failed to conduct a sensitivity analysis of its health risk assessment. This failure means that the health risk assessment does not attempt to assess and communicate uncertainties in a quantitative way. Whether through sensitivity analysis, or use of a more sophisticated model, such analysis can be and is used to inform interested parties of the uncertainties in key results. Hattis Report p. 6. One aspect of the modeling that needs such analysis is the assumed behavior responses of airlines to increasing

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delays as the intensity of usage of airport facilities increases. Id. This variable affects "capacity" calculations, emissions estimates and economic results. LAWA should perform such sensitivity analysis of its methods and conclusions.

VII. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY ANALYZES ASSESSES AIR EMISSIONS

A. The Draft EIS/EIR Does Not Adequately Assess The Impact Of Air Emissions Mitigation Measures Upon The Surrounding Environment

The Draft EIS/EIR does not adequately assess proposed mitigation measures for increased air emissions caused by the LAX Master Plan. Federal law requires that an Environmental Impact Statement include a detailed statement concerning adverse environmental effects of the project that cannot be avoided. 42 U.S.C. § 4332(2)(C)(ii). Federal regulations require that the sponsoring agency discuss possible mitigation measures in defining the scope of the EIS, in discussing the consequences of and alternatives to the proposed action, and in explaining its ultimate decision. 40 C.F.R. §§ 1508.25(b), 1502.14(f), 1502.16(h), 1505.2(c); 40 C.F.R. § 1502.16(h); Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 351-352; 109 S.Ct. 1835, 1846-47, 104 L.Ed. 351 (1989). While a complete mitigation plan is not required, "omission of a reasonably complete discussion of possible mitigation measures would undermine the action-forcing goals of the National Environmental Policy Act." Id. Absent such discussion, neither the proponents nor the opponents of a project can properly evaluate the adverse effects that will occur. Id.

The Draft EIS/EIR does not adequately assess the impact of air emissions mitigation measures upon the surrounding environment. As stated by Mr. Calkins, "While the document conducts a fairly extensive effort to identify potential measures, the specific impacts of implementing such measures upon the surrounding county does not appear adequate." Calkins Phase I Report p.9. Mr. Calkins notes that although LAWA examined the effect of mitigation measures on seventeen intersections, all of these intersections were located west of the 405 Freeway. Further investigation is needed on this topic, in particular upon the efficacy of the mitigation measures for reducing impacts in affected areas, like the City of Inglewood. Mr. Calkins further states:

"Furthermore, emission reductions from the select measures are somewhat questionable. At a minimum, LAWA should provide some analysis of the impacts of the mitigation

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measures and roadway reconfigurations upon the City of Inglewood."

Calkins Phase I Report p. 9. This analysis is needed for decision makers and the public to be fully informed. Without it, the Draft EIS/EIR fails as an informational document and therefore does not conform to CEQA.

LAWA should expand the scope of its study of the air quality impacts of the LAX Master Plan. The Draft EIS/EIR focuses its discussion of air quality impacts upon the "immediate areas" surrounding LAX. Calkins Phase II Report at 14. These areas lie almost exclusively within the City of Los Angeles. The impact of the Master Plan upon air quality for the areas bordering upon those "immediate areas," however, which include the City of Inglewood, are not well documented. This constitutes a major deficiency of the Report. Calkins Phase II Report at 15-17, 19. Among other problems, the growth-inducing aspects of LAX expansion are not identified for Inglewood, or other specific communities in the surrounding area, due to the broad nature of the socio-economic impact analysis of the Draft EIS/EIR. Calkins Phase II Report at 16. CEQA requires analysis of economic effects that cause physical changes to the environment. This analysis must be sufficient to trace the chain of causation from the economic effect to the physical change. CEQA Guidelines §15131(a). This analysis has not been undertaken in the Draft EIS/EIR.

B. LAWA'S Comparison To The No Action/No Project Alternative Is Flawed

The comparison in the Draft EIS/EIR of the No Action/No Project alternative and the three "build" alternatives is seriously flawed. The comparison fully assigns future growth impacts, including non-Master Plan expansions and growth of LAX, to the No Action/No Project alternative. In addition, the build alternatives take credit for mitigation measures and the construction of five major arterials to ease traffic, which have no identified funding in the 2001 RTP. Calkins Phase II Report p. 18.

LAWA's approach underestimates the environmental impacts of the project. If LAWA is incorrect about the extent of growth that will occur in and around LAX absent the Master Plan, or if it is incorrect regarding its ability to conduct the currently unfunded mitigation, then the impacts of the LAX Master Plan will be much larger than LAWA currently represents. These issues must be addressed and corrected before the Draft EIS/EIR can be considered.

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VIII. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY ANALYZES TRAFFIC IMPACTS

- A. The Draft EIS/EIR Ignored Cumulative Impacts Of The Lax Master Plan By Not Analyzing The Traffic Impacts In The City Of Inglewood

LAWA improperly ignored the cumulative impacts of the LAX Master Plan by failing to analyze the impacts of the plan upon the traffic in the City of Inglewood. Under both Federal and California law the cumulative impacts of the LAX Master Plan must be analyzed in the Draft EIS/EIR. The FAA's own Airport Environmental Handbook states:

"CEQ 1508.7 states that 'Cumulative impact' is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

FAA's Airport Environmental Handbook, Chapter 3, p. 5. In addition, CEQA requires that the cumulative impacts of the project be considered and analyzed in the environmental impact report. CEQA Guidelines §15130. This was not done with respect to the impacts of the Master Plan on surface traffic in all affected areas, like the City of Inglewood.

The traffic analysis contained in the Draft EIS/EIR⁵ does not review all necessary surrounding areas. Traffic Engineer Paul Cook reviewed the traffic analysis contained in the Draft EIS/EIR. His report is attached hereto as Exhibit "G." Mr. Cook states that the Draft EIS/EIR lacks analysis on communities surrounding LAX, and that this is a deficiency of the report. Cook Report p.5. This deficiency must be remedied before there can be any further work on the LAX Master Plan. Without such analysis the Draft EIS/EIR fails to consider all of the cumulative impacts of the Master Plan, which is a fatal error under NEPA and CEQA.

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B. LAWA Did Not Fully Address Traffic Mitigation in the Draft EIS/EIR

The Draft EIS/EIR fails to properly discuss the specific impacts of implementing potential mitigation measures upon the City of Inglewood. Cook Report p.6. Mr. Cook notes:

"While most of the City of Inglewood is within the Land Use Study Area as shown in the attached Figure 4.2-1, the analysis on the impacts of the project on intersections and roadway segments east of the 405 are minimal."

Id. Analysis of additional intersections and roadway segments east of the 405 freeway is appropriate and necessary to determine the need for additional mitigation measures other than those already included in the Draft EIS/EIR. Id. LAWA must conduct this additional analysis immediately and make the results available for public review as part of the EIS/EIR analysis and process.

C. The Draft EIS/EIR's Traffic Relief Congestion Package Is Inadequate

The Draft EIS/EIR contains a "congestion relief package". This package is inadequate and should be expanded. Cook Report pp. 6-7. On preliminary review, it appears that the South Bay Cities are excluded from this relief package. Id. The source of the funding for these roadway improvements is uncertain. Id. LAWA must include the South Bay Cities in its "congestion relief package," and should take necessary steps to ensure funding of this aspect of the Plan. Identification of a certain source for the funding of these roadway improvements must be included in the Draft EIS/EIR.

D. The Study of the Effects of the Proposed LAX Expressway is Inadequate.

LAWA's review of the impact of its "LAX Expressway" must be expanded because it fails to consider impacts of this project on the City of Inglewood. Cook Report p.7. "An EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental effect of a project," CEQA Guidelines §15121. Pursuant to CEQA, the Draft EIS/EIR must consider all significant environmental effects of the LAX Expressway. The Draft EIS/EIR must also take into account traffic impacts to the City of Inglewood, in particular intersections and roadway links east of I-405 that have not been so analyzed. Cook Report p.9. Failure to analyze and comment on these vital traffic/transportation links renders the EIS/EIR inadequate.

E. LAWA'S Baseline For Traffic Is Questionable

The baseline that LAWA used to evaluate "levels of service"⁶ in the Draft EIS/EIR is dubious:

"Two baseline scenarios were used to determine the effect of the proposed Master Plan improvements on off-airport roadways. First, the environmental baseline is the surface condition existing in 1996. Second, the adjusted environmental baseline uses the current airport use, but assumes future roadways and land uses. Two issues are raised when using this approach:

1. It does not provide for a comparison of project alternatives with existing conditions. CEQA requires that the existing condition of an EIR be established at the time the Notice of Preparation (NOP) is issued. The use of so-called existing condition for the years 2005 and 2015 does not meet this requirement.
2. It minimizes the extent of change on area roads between the existing conditions and the future conditions associated with the project. It is clear that not all future roadway adverse conditions will be a result of the LAX Master Plan. However, comparing the project to a future condition seems to limit the evaluation of cumulative effects and the project's contribution to their mitigation."

Cook Report pp. 7-8. In addition the Draft EIS/EIR modeled future conditions for 2005 and 2015, but the current SCAG RTP uses 2025 as its horizon year. "The 2025 horizon year is more appropriate because "the project will take as least 16 years to complete...[so a] discussion of a longer planning horizon would be appropriate." Cook Report p. 8. Finally, the validity of LAWA's model depends on certain improvements being in place, but there is no guarantee that these improvements will be made in a timely manner. Id. Inasmuch as a proper baseline is necessary for a proper analysis, without such, the EIS/EIR is inadequate.

⁶ "Levels of service" measure the effectiveness of an intersection or roadway segment in terms of delay, fuel consumption, and lost travel time.

IX. THE DRAFT EIS/EIR IS INSUFFICIENT BECAUSE IT DOES NOT CONFORM TO LOCAL TRAFFIC PLANS

The LAX Master Plan and Draft EIS/EIR must conform to area-wide transportation plans. See Section 5, supra. There are substantial differences, however, between the Draft EIS/EIR and the RTP recently adopted by SCAG. The Draft EIS/EIR refers to the 1998 SCAG RTP and its data; however, more current information is available and should be utilized. In addition, the RTP projects 78 million annual passengers ("MAP") at LAX, not the 86 MAP projected in the Draft EIS/EIR preferred Alternative "C." "Failure to conform could lead to potential funding sanctions and other Federal restrictions that could affect the City of Inglewood." Cook Report p.9. These conformance problems jeopardize many aspects of the LAX Master Plan, including important mitigation measures.

X. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY MEASURES NOISE INCREASES

A. The Draft EIS/EIR Uses An Improper Baseline For Noise Analysis

The baseline used to analyze noise impacts in the Draft EIS/EIR is inappropriate. LAWA's baseline for its analysis of noise issues is 1996. However, as discussed in the Report of John C. Freytag ("Freytag Report"), attached as Exhibit "H," the 1996 baseline year occurred mid-way during the phase out of Stage 2 aircraft,⁷ which is now complete. According to Mr. Freytag, "the current noise exposure at LAX is below the 1996 baseline." Freytag Report at p.2. Since LAWA uses the higher baseline, it improperly minimizes the noise increases to be caused by the LAX Master Plan. LAWA easily could have utilized more recent information, and must do so to bring the EIS/EIR into conformance with law. Id.

B. LAWA's Noise Exposure Contours Are Understated

The noise exposure contours in the Draft EIS/EIR fail to capture and convey the true parameters of the noise increase that will occur under the LAX Master Plan. LAWA utilizes "simplified line drawings" for its flight tracks meant to demonstrate current conditions and future alternatives. This was most likely done in an effort to simplify modeling efforts; however, it also understates the resulting CNEL contour. Freytag Report at 3. LAWA

⁷ The Airport noise and Capacity Act required the graduated phase-out of the older and noisier Stage 2 aircraft by the year 2000.

should break down each of its flight tracks, as discussed in the Freytag Report, in order to obtain an accurate depiction of the CNEL contours that will be created under each alternative. Failure to do so will lead to inaccurate modeling and therefore decision makers and the general public will be deprived of their right to know the full extent of the environmental impact of the LAX Master Plan.

C. The Draft EIS/EIR Fails To Consider The Economic Impact of The LAX Master Plan on Housing Values

The Draft EIS/EIR fails to discuss the adverse economic effects of expansion upon housing, commercial structures, schools and other land use. Freytag Report at 4. Several studies exist which have assessed this effect, making this investigation feasible. It is important to capture all costs that will be borne by the residents of the City of Inglewood in order to adequately assess the LAX Master Plan from an Environmental Justice perspective. LAWA must examine this issue and correct this deficiency. Indeed, failure to do so renders the EIS/EIR deficient.

D. LAWA'S Assertions Regarding Nighttime "Over-Ocean Operation" Are Wrong

LAWA's discussion in the Draft EIS/EIR concerning nighttime operations at LAX raises questions **and does not provide answers**. The Master Plan Chapter II is entitled "Existing Conditions Working Paper" and it is dated April 19, 1996. Section 2.2.3 is entitled "Noise Abatement Operating Procedures." It states, "Over-Ocean Operation - Over-Ocean operation procedures shall be in effect between the hours of 24:00 and 06:30 a.m. Over-ocean operations consist of departures on Runway 24L and arrivals on Runway 7L." II-2.30. However, this analysis ignores the fact that these operation rules, which are already in effect, are suspended frequently due to weather constraints. Therefore, to the extent this condition was utilized in connection with noise or emissions calculations or modeling, the accuracy and validity of such calculations must be considered carefully.

XI. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY ANALYZES THE HEALTH EFFECTS OF AIRCRAFT NOISE

A. The Draft EIS/EIR Must Consider The Health Effects Of Aircraft Noise

The Draft EIS/EIR must fully consider all of the adverse health effects of aircraft noise. LAWA admits that its LAX Master Plan will create increased noise impacts upon the residents of the City of Inglewood. "Under Alternative C, which does not add a new runway, a decrease in noise exposure would occur in the City of El Segundo and the community of Del Aire with increases in portions of the community of Westchester and the

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City of Inglewood." Draft EIS/EIR Section 4.24.2 page 4-1040. There is strong scientific evidence of the adverse health effects of noise pollution on humans. Studies have shown clear health effects on animals, and these studies indicate the certainty of such effects on humans as well.

"A study sponsored by the EPA, constituting one of the most notable studies of animal noise exposure, examined cardiovascular effects of noise on monkeys. This research demonstrated that monkeys subjected to industrial noise at levels between 85 to 90 dba for several months developed significant elevations of systolic and diastolic blood pressure. It is particularly notable that these changes persisted long after exposure ceased, demonstrating that noise has a chronic effect on blood pressure."

Fred M. Svinth, Illingworth & Rodkin, Inc. "The Effects of LAX Aircraft Noise on Local Communities," January 2001, p. 9, attached hereto as Exhibit "I." LAWA admits that such studies exist and that noise has effects, but refuses to seriously consider such reports. Instead, LAWA simply concludes that such studies are controversial and, therefore, that no in-depth analysis is required.

"Some studies suggest that there are indicators that high noise levels, particularly from aircraft, may have a detrimental effect on the cardiovascular system, mortality rates, birth defects, achievement scores, psychiatric admissions, sleep disturbance, and overall psychological well being; others show no conclusive evidence of these effects. However, the results of such studies continue to be controversial and are not accepted by the general scientific community at this time. Specifically, the scientific community has cited methodological and epidemiological problems with the studies and none of the studies has gained the universal acceptance from researchers that would allow them to be used as a basis for impact assessment."

Draft EIS/EIR Section 4.24.2 page 4-1041.

However, LAWA argues that it is impossible to "quantify" the relationship between noise and adverse human health effects. LAWA argues that no "threshold of significance" exists:

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"Although there is consensus that noise has some health effects, there is no agreement as to the degree of the effects or the level at which they become significant. The scientific community and regulatory agencies have not developed numerical thresholds beyond which the health effects of noise are considered to be significant."

Draft EIS/EIR Section 4.24.2 page 4-1046.

In other words, LAWA takes the position that the absence of a specific threshold absolves it from having to address this issue in any meaningful way in the Draft EIS/EIR. Instead, LAWA focused on overall noise exposure caused by its expansion plan. "Since it is not possible to quantify noise health impacts for a population, such as the people who live in the vicinity of an airport, this analysis focused by necessity on quantifying overall noise exposure." Draft EIS/EIR Section 4.24.2 page 4-1039.

LAWA's admitted inability to fully analyze the Health Effects of Aircraft Noise itself renders the planned expansion violative of existing law. LAWA improperly fails to consider the admitted potentially significant adverse health effects of noise. "Significant and unavoidable impacts associated with aircraft noise are expected to occur. Such noise exposure is considered to pose a potential significant and unavoidable impact relative to health effects of noise, to the extent there is such a relationship between the two." Draft EIS/EIR Section 4.24.2 page 4-1050.

"The U.S. Environmental Protection Agency (USEPA) has taken the following position: 'Research implicates noise as one of several factors producing stress-related health effects such as heart disease, high blood pressure and stroke, ulcers and other digestive disorders. The relationship between noise and these effects has not yet been quantified.'"

Draft EIS/EIR Technical Report 14b. Health Effects of Noise Technical Report. No Master Plan Commitments for the health effects of noise are proposed. Draft EIS/EIR Section 4.24.2 page 4-1046. LAWA must fully examine the health effects of aircraft noise in order to fulfill the requirements of NEPA and CEQA.

B. The Draft EIS/EIR NEEDS TO ADDRESS Aircraft Noise Interference With Classroom Activities and Sleep

The Draft EIS/EIR fails to adequately address the interference of aircraft noise upon classroom activities and sleep. Interference with classroom activities and sleep are two of the most sensitive impacts of aircraft noise. LAWA admits the problem of interference

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with classroom activities, but fails to analyze this problem to the degree required under CEQA. According to LAWA:

"Interference with classroom activities and learning from aircraft noise has been the subject of much recent research. Several studies have been performed, including studies at LAX, London's Heathrow Airport, and Munich International Airport. These studies indicate that a relationship between aircraft-related noise and learning effects does exist, but that additional research is required to clarify how close that relationship is and at what noise levels the relationship appears. The relationship has been particularly difficult to document due to the confounding factors of background noise, school quality, and socioeconomic status. Additional research is being performed to try to account for these factors."

Draft EIS/EIR Section 4.24.2 page 4-1043. Similarly, LAWA admits but dismisses summarily the very real problem of sleep disturbance caused by aircraft noise. LAWA states:

"Generally, laboratory studies have shown considerably more disturbance than field studies, perhaps due to the subject's lack of familiarity with the location and experience. Sleep disturbance studies have also involved the collection of cumulative data from subjects.... A review of existing studies and literature indicates that additional research is required to clarify the relationships between aircraft-related noise and sleep disturbance."

Draft EIS/EIR Section 4.24.2 page 4-1044.

LAWA tries to minimize the sleep disturbance caused by aircraft operations at LAX. LAWA states, "LAX undertakes a different operational procedure for takeoffs and landings between midnight and 6:30 a.m. These 'over-ocean' procedures route both arrivals and departures over Santa Monica Bay, directing aircraft noise away from residential areas to the east of LAX during nighttime hours." Draft EIS/EIR Section 4.24.2 page 4-1045. However, due to constraints caused repeatedly by weather conditions, residents of Inglewood and other nearby communities are subjected to late night overflights. The Draft EIS/EIR fails to adequately analyze these issues.

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XII. COMMENTS BY THE SOUTH BAY CITIES COUNCIL OF GOVERNMENTS ARE INCORPORATED BY REFERENCE

Given the scope and complexity of the LAX Master Plan Draft EIS/EIR and the limited time available for their review, a collaborative analysis of the document was undertaken by the South Bay Cities Council of Governments, of which the City of Inglewood is a member.

By this letter the City of Inglewood hereby incorporates by reference, all of the comments submitted on the LAX Master Plan Draft EIS/EIR by the South Bay Cities Council of Governments as if fully set forth herein, and each comment contained therein should be considered as a separate comment from the City of Inglewood.

XIII. COMMENTS BY CITIZENS OF THE CITY OF INGLEWOOD ARE SUBMITTED HEREWITH

On June 30, Inglewood sponsored a public meeting during which Inglewood solicited both written and oral comments from citizens and residents of this City concerning the EIS/EIR. The meeting was video taped, and persons present were also encouraged to submit their comments in writing.

By this letter the City of Inglewood hereby submits all of the comments submitted on the LAX Master Plan Draft EIS/EIR by citizens and residents of the City of Inglewood at the June 30 meeting. Each comment should be considered as a separate comment from citizens and residents of the City of Inglewood.

CONCLUSION

The comments on the Draft LAX Master Plan and Draft EIS/EIR presented in this letter are the result of careful review by representatives of the City of Inglewood and expert consultants in the areas of human health risk assessment, air emissions and planning, aircraft noise impacts, traffic engineering and environmental justice. As discussed above, serious issues exist with regard to these two documents which must be addressed by LAWA and the FAA prior to any further action.

Mr. Jim Ritchie
Los Angeles World Airports
LAX Master Plan Office
July 10, 2001
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The City of Inglewood and its residents look forward to having the comments presented in this letter responded to in detail, with adequate time review time prior to any action by LAWA and/or the FAA.

Very truly yours,

CITY OF INGLEWOOD

Charles E. Dickerson III
City Attorney

cc: Roosevelt Dorn, Mayor
Curren Price, Councilmember District 1
Judy Dunlap, Councilmember District 2
Jose Fernandez, Councilmember District 3
Lawrence Kirkley, Councilmember District 4
Joseph Rouzan, City Administrator

Exhibits (incorporated by reference):

- A: California Department of Finance, Demographic Research Unit, California State Census Data Center, Census 2000, "Table Two, Population by Race/Ethnicity, Incorporated Cities by County"
- B: Dale Hattis, Ph.D., "The LAX Master Plan and Draft EIS/EIR - Needs for Improvement to Assess Available Policy Choices," May 7, 2001.
- C: CIC Research, Inc., "Southern California Aviation Industry Impact Analysis," July 11, 2000
- D: FAA Airport Environmental Handbook
- E: David L. Calkins, "Evaluation and Identification of Key Air Pollution and Related Issues in the LAX Master Plan Draft EIR/EIS"
- F: David L. Calkins, "Further Evaluation of Selected Air Pollution Related Issues in the LAX Master Plan Draft EIR/EIS"

Mr. Jim Ritchie
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Mr. Jim Ritchie
Los Angeles World Airports
LAX Master Plan Office
July 10, 2001
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- G: Paul E. Cook, "Identification and Evaluation of Key Traffic And Transportation Related Issues in the LAX Master Plan Draft EIR/EIS," May 2001
- H: John C. Freytag, C.M. Salter & Associates, "Acoustical Review of LAX Master Plan Draft EIS/EIR," May 17, 2001
- I: Fred M. Svinth, Illingworth & Rodkin, Inc., "The Effects of LAX Aircraft Noise on Local Communities," January 2001
- J: Comments of Citizens and Residents of the City of Inglewood

Exhibit A

California Department of Finance, Demographic Research Unit
 California State Census Data Center
 Census 2000 PL94-171

Table Two
 Population by Race/Ethnicity
 Incorporated Cities by County

County/City	Total Population	White	%	Hispanic	%	Black	%	American Indian	%	Asian	%	Pacific Islander	%	Other	%	Two or More Races	%
California	33,871,648	15,816,790	46.7	10,966,556	32.4	2,181,926	6.4	178,984	0.5	3,648,860	10.8	103,736	0.3	71,681	0.2	903,115	2.7
Alameda	1,443,741	591,095	40.9	273,910	19.0	211,124	14.6	5,306	0.4	292,673	20.3	8,458	0.6	4,676	0.3	56,499	3.9
Alameda	72,259	37,921	52.5	6,725	9.3	4,350	6.0	365	0.5	18,757	26.0	407	0.6	235	0.3	3,499	4.8
Albany	16,444	9,461	57.6	1,312	8.0	644	3.9	53	0.3	4,094	24.9	20	0.1	80	0.5	780	4.7
Berkeley	102,743	56,691	55.2	10,001	9.7	13,707	13.3	293	0.3	16,740	16.3	121	0.1	598	0.6	4,592	4.5
Dublin	29,973	18,669	62.3	4,059	13.5	2,995	10.0	156	0.5	3,050	10.2	85	0.3	61	0.2	898	3.0
Emeryville	6,862	2,861	41.6	616	9.0	1,304	18.9	22	0.3	1,749	25.4	17	0.2	29	0.4	284	4.1
Fremont	203,413	84,149	41.2	27,409	13.5	6,084	3.0	656	0.3	74,773	36.8	736	0.4	553	0.3	9,053	4.5
Hayward	140,030	40,896	29.2	47,850	34.2	14,846	10.6	570	0.4	26,189	18.7	2,511	1.8	652	0.5	6,476	4.6
Livermore	73,345	54,587	74.3	10,541	14.4	1,094	1.5	315	0.4	4,171	5.7	189	0.3	185	0.3	2,263	3.1
Newark	42,471	17,103	40.2	12,145	28.6	1,639	3.9	148	0.3	8,951	21.1	378	0.9	128	0.3	1,979	4.7
Oakland	399,484	93,953	23.5	87,467	21.9	140,139	35.1	1,471	0.4	60,393	15.1	1,866	0.5	1,229	0.3	12,966	3.2
Piedmont	10,952	8,408	76.7	325	3.0	134	1.2	9	0.1	1,728	15.8	4	0.0	31	0.3	313	2.9
Pleasanton	63,654	48,253	75.9	5,011	7.9	845	1.3	147	0.2	7,387	11.6	74	0.1	143	0.2	1,794	2.8
San Leandro	79,452	33,646	42.3	15,939	20.1	7,622	9.6	360	0.5	18,064	22.7	627	0.8	175	0.2	3,019	3.8
Union City	66,869	13,610	20.3	16,020	24.0	4,321	6.5	132	0.2	28,780	43.0	577	0.9	203	0.3	3,226	4.8
Alpine	1,208	867	71.7	94	7.8	7	0.6	188	15.6	4	0.3	1	0.1	6	0.5	41	3.4
Amador	35,100	28,920	82.5	3,126	8.9	1,348	3.8	538	1.5	326	0.9	29	0.1	178	0.5	635	1.8
Amador	196	168	85.7	18	9.2	0	0.0	2	1.0	0	0.0	0	0.0	0	0.0	8	4.1
lone	7,129	3,922	55.0	1,437	20.2	1,261	17.7	140	2.0	116	1.6	7	0.1	159	2.2	87	1.2
Jackson	3,989	3,572	89.4	258	6.5	20	0.5	43	1.1	23	0.6	2	0.1	4	0.1	67	1.7
Plymouth	980	865	88.3	50	5.1	2	0.2	19	1.9	6	0.6	0	0.0	0	0.0	38	3.9
Sutter Creek	2,303	2,045	88.7	134	5.8	4	0.2	25	1.1	21	0.9	6	0.3	4	0.2	64	2.8
Butte	203,171	162,564	80.0	21,339	10.5	2,699	1.3	3,295	1.6	6,676	3.3	273	0.1	435	0.2	5,890	2.9
Biggs	1,793	1,214	67.7	494	27.6	8	0.4	26	1.5	14	0.8	0	0.0	0	0.0	37	2.1
Chico	59,954	46,258	77.1	7,351	12.3	1,174	2.0	625	1.0	2,488	4.1	109	0.2	166	0.3	1,783	3.0
Gridley	5,382	2,920	54.3	2,079	38.6	16	0.3	70	1.3	183	3.4	1	0.0	3	0.1	110	2.0
Oroville	13,004	9,560	73.4	1,073	8.3	504	3.9	453	3.5	822	6.3	34	0.3	11	0.1	547	4.2
Paradise	26,408	24,080	91.2	1,127	4.3	50	0.2	248	0.9	262	1.0	29	0.1	34	0.1	578	2.2
Calaveras	40,554	35,465	87.5	2,765	6.8	300	0.7	607	1.5	322	0.8	36	0.1	40	0.1	1,019	2.5
Angels	3,004	2,635	87.7	243	8.1	6	0.2	42	1.4	14	0.5	1	0.0	3	0.1	60	2.0

County/City	Total Population	White	%	Hispanic	%	Black	%	American Indian		Asian	Pacific Islander		Other	Two or More Races	
								Indian	%		% Islander	%		%	%
Colusa	18,804	9,018	48.0	8,752	46.5	88	0.5	316	1.7	220	1.2	67	34	0.2	309
Colusa	5,402	2,854	52.9	2,253	41.7	13	0.2	55	1.0	76	1.4	41	7	0.1	103
Williams city	3,670	914	24.9	2,613	71.1	13	0.4	21	0.6	41	1.1	0	10	0.3	58
Contra Costa	948,816	549,409	57.9	167,776	17.7	86,851	9.2	3,648	0.4	102,681	10.8	3,157	2,636	0.3	32,658
Antioch	90,532	50,644	56.0	20,024	22.1	8,551	9.4	513	0.6	6,510	7.2	310	178	0.2	3,802
Brentwood	23,302	14,692	63.0	6,565	28.2	553	2.4	95	0.4	632	2.7	49	51	0.2	665
Clayton	10,762	9,000	83.7	681	6.3	113	1.0	16	0.1	577	5.4	9	30	0.3	336
Concord	121,780	74,119	60.8	26,560	21.8	3,530	2.9	580	0.5	11,264	9.2	551	319	0.3	4,857
Danville	41,715	34,618	82.9	1,945	4.7	375	0.9	66	0.2	3,722	8.9	46	68	0.2	875
El Cerrito	23,171	12,474	54.0	1,838	7.9	1,931	8.3	70	0.3	5,636	24.3	57	120	0.5	1,045
Hercules	19,488	4,624	23.7	2,106	10.9	3,571	18.3	29	0.1	8,263	42.4	89	46	0.2	760
Lafayette	23,908	20,123	84.1	945	4.0	129	0.5	39	0.2	1,957	8.2	20	33	0.1	662
Martinez	35,866	27,096	75.6	3,660	10.2	1,181	3.3	188	0.5	2,340	6.5	80	73	0.2	1,248
Moraga	16,290	12,760	78.3	775	4.7	161	1.0	10	0.1	2,010	12.3	14	41	0.3	519
Oakley	25,519	16,469	64.2	6,399	25.0	832	3.2	151	0.6	708	2.8	65	42	0.2	953
Orinda	17,599	14,857	84.4	560	3.2	79	0.4	11	0.1	1,613	9.2	7	52	0.3	420
Pinole	19,039	9,219	48.4	2,618	13.8	2,079	10.9	68	0.4	4,092	21.5	62	66	0.3	835
Pittsburg	56,769	17,697	31.2	18,287	32.2	10,457	18.4	210	0.4	7,031	12.4	464	190	0.3	2,433
Pleasant Hill	32,837	25,139	76.6	2,767	8.4	493	1.5	101	0.3	3,053	9.3	88	72	0.2	1,124
Richmond	99,216	21,081	21.2	26,319	26.5	35,279	35.6	351	0.4	12,077	12.2	476	400	0.4	3,233
San Pablo	30,215	4,886	16.1	13,490	44.6	5,403	17.9	125	0.4	4,890	16.2	146	167	0.6	1,108
San Ramon	44,722	32,356	72.3	3,238	7.2	842	1.9	142	0.3	6,629	14.8	89	131	0.3	1,295
Walnut Creek	64,296	51,834	80.6	3,851	6.0	666	1.0	148	0.2	5,968	9.3	91	148	0.2	1,590
Del Norte	27,507	19,294	70.1	3,829	14.0	1,167	4.2	1,593	5.8	619	2.3	18	39	0.1	948
Crescent City	4,006	2,947	73.6	441	11.0	19	0.5	216	5.4	182	4.5	3	12	0.3	186
El Dorado	156,299	132,725	84.9	14,566	9.3	745	0.5	1,272	0.8	3,250	2.1	169	237	0.2	3,335
Placerville	9,610	7,988	83.1	1,212	12.6	22	0.2	96	1.0	78	0.8	12	9	0.1	193
South Lake Tahoe	23,609	15,016	63.6	6,294	26.7	145	0.6	158	0.7	1,402	5.9	33	47	0.2	514
Fresno	799,407	317,522	39.7	351,636	44.0	40,291	5.0	6,223	0.8	63,029	7.9	682	1,451	0.2	18,573
Clovis	68,468	46,186	67.4	13,876	20.3	1,207	1.8	679	1.0	4,322	6.3	75	131	0.2	1,992
Coalinga	11,668	5,056	43.3	5,811	49.9	259	2.2	116	1.0	186	1.6	21	29	0.2	190
Firebaugh	5,743	565	9.8	5,026	87.5	61	1.1	17	0.3	38	0.7	0	1	0.0	35
Fowler	3,979	948	23.8	2,677	67.3	67	1.7	19	0.5	209	5.3	1	9	0.2	49
Fresno	427,652	159,473	37.3	170,520	39.9	34,357	8.0	3,259	0.8	47,136	11.0	427	728	0.2	11,752
Huron	6,306	65	1.0	6,197	98.3	5	0.1	9	0.1	23	0.4	0	0	0.0	7
Kerman	8,551	2,070	24.2	5,552	64.9	24	0.3	26	0.3	699	8.2	1	30	0.4	149
Kingsburg	9,199	5,505	59.9	3,166	34.4	25	0.3	38	0.4	246	2.7	3	20	0.2	196
Mendota	7,890	248	3.1	7,468	94.7	38	0.5	32	0.4	57	0.7	0	7	0.1	40
Orange Cove	7,722	526	6.9	6,996	90.6	15	0.2	46	0.6	103	1.3	0	10	0.1	26
Parlier	11,145	190	1.7	10,807	96.9	9	0.1	18	0.2	74	0.7	1	1	0.0	45

County/City	Total Population	White	%	Hispanic	%	Black	%	American Indian	%	Asian	%	Pacific Islander	%	Other	%	Two or More Races	%
Reedley	20,756	5,453	26.3	14,028	67.6	42	0.2	66	0.3	869	4.2	5	0.0	26	0.1	267	1.3
Sanger	18,931	3,015	16.0	15,319	80.9	28	0.1	61	0.3	334	1.8	10	0.1	9	0.0	155	0.8
San Joaquin	3,270	116	3.6	3,008	92.0	1	0.0	7	0.2	118	3.6	0	0.0	6	0.2	14	0.4
Selma	19,444	4,332	22.3	13,952	71.7	116	0.6	121	0.6	605	3.1	2	0.0	49	0.3	267	1.4
Glenn	26,453	16,548	62.5	7,840	29.6	117	0.4	439	1.7	863	3.3	22	0.1	55	0.2	569	2.2
Orland	6,281	3,603	57.4	2,340	37.3	13	0.2	67	1.1	115	1.8	9	0.1	18	0.3	116	1.8
Willows	6,220	3,795	61.0	1,446	23.2	50	0.8	104	1.7	619	10.0	10	0.2	10	0.2	186	3.0
Humboldt	126,518	103,230	81.6	8,210	6.5	1,035	0.8	6,722	5.3	2,022	1.6	219	0.2	448	0.4	4,632	3.7
Arcata	16,651	13,538	81.3	1,202	7.2	247	1.5	384	2.3	371	2.2	30	0.2	172	1.0	707	4.2
Blue Lake	1,135	985	86.8	28	2.5	3	0.3	60	5.3	15	1.3	1	0.1	13	1.1	30	2.6
Eureka	26,128	20,548	78.6	2,031	7.8	399	1.5	1,022	3.9	899	3.4	83	0.3	52	0.2	1,094	4.2
Ferndale	1,382	1,260	91.2	59	4.3	4	0.3	6	0.4	8	0.6	0	0.0	2	0.1	43	3.1
Fortuna	10,497	8,704	82.9	1,097	10.4	41	0.4	266	2.5	97	0.9	18	0.2	16	0.2	258	2.5
Rio Dell	3,174	2,601	82.0	343	10.8	4	0.1	103	3.2	12	0.4	1	0.0	5	0.2	105	3.3
Trinidad	311	290	93.2	7	2.3	5	1.6	1	0.3	2	0.6	1	0.3	0	0.0	5	1.6
Imperial	142,361	28,768	20.2	102,817	72.2	5,148	3.6	1,736	1.2	2,446	1.7	75	0.1	97	0.1	1,274	0.9
Brawley	22,052	4,780	21.7	16,280	73.8	464	2.1	90	0.4	211	1.0	24	0.1	10	0.0	193	0.9
Calexico	27,109	642	2.4	25,832	95.3	37	0.1	55	0.2	452	1.7	2	0.0	7	0.0	82	0.3
Calipatria	1,450	1,450	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
El Centro	37,889	6,837	18.1	28,219	74.5	1,042	2.8	107	0.3	1,208	3.2	24	0.1	56	0.1	342	0.9
Holtville	5,612	1,349	24.0	4,144	73.8	23	0.4	20	0.4	24	0.4	2	0.0	4	0.1	46	0.8
Imperial	7,560	2,447	32.4	4,619	61.1	181	2.4	37	0.5	173	2.3	8	0.1	1	0.0	94	1.2
Westmorland	2,131	345	16.2	1,752	82.2	12	0.6	7	0.3	0	0.0	0	0.0	0	0.0	15	0.7
Inyo	17,945	13,352	74.4	2,257	12.6	20	0.1	1,678	9.4	158	0.9	15	0.1	23	0.1	442	2.5
Bishop	3,575	2,768	77.4	621	17.4	7	0.2	58	1.6	44	1.2	1	0.0	6	0.2	70	2.0
Kern	661,645	327,190	49.5	254,036	38.4	37,845	5.7	5,885	0.9	21,177	3.2	728	0.1	989	0.1	13,795	2.1
Arvin	12,956	1,276	9.8	11,341	87.5	68	0.5	33	0.3	132	1.0	2	0.0	16	0.1	88	0.7
Bakersfield	247,057	126,183	51.1	80,170	32.5	21,987	8.9	2,053	0.8	10,239	4.1	186	0.1	335	0.1	5,902	2.4
California	8,385	5,136	61.2	1,422	17.0	1,039	12.4	100	1.2	292	3.5	25	0.3	16	0.2	355	4.2
Delano	38,824	3,556	9.2	26,584	68.5	1,997	5.1	88	0.2	5,902	15.2	12	0.0	86	0.2	599	1.5
McFarland	9,618	977	10.2	8,239	85.6	273	2.8	31	0.3	56	0.6	8	0.1	15	0.2	19	0.2
Maricopa	1,111	914	82.2	150	13.5	0	0.0	21	1.9	5	0.5	0	0.0	0	0.0	21	1.9
Ridgecrest	24,927	19,067	76.6	3,001	12.0	846	3.4	204	0.8	948	3.8	127	0.5	34	0.1	700	2.8
Shafter	12,736	3,693	29.0	8,667	68.1	181	1.4	59	0.5	38	0.3	10	0.1	6	0.0	82	0.6
Taft	6,400	5,061	79.1	995	15.5	117	1.8	47	0.7	67	1.0	27	0.4	3	0.0	83	1.3
Teachapi	10,957	5,497	50.1	3,583	32.7	1,497	13.7	112	1.0	77	0.7	9	0.1	9	0.1	173	1.6
Wasco	21,263	4,588	21.5	14,187	66.7	2,088	9.8	97	0.5	126	0.6	24	0.1	34	0.2	119	0.6
Kings	129,461	53,817	41.6	56,461	43.6	10,418	8.0	1,304	1.0	3,884	3.0	192	0.1	229	0.2	3,156	2.4
Avenal	14,674	2,923	19.9	9,667	65.9	1,808	12.3	79	0.5	54	0.4	2	0.0	26	0.2	115	0.8

County/City	Total Population	White	%	Hispanic	%	Black	%	American Indian	%	Asian	%	Pacific Islander	%	Other	%	Two or More Races	%
Corcoran	14,458	3,479	24.1	8,618	59.6	2,029	14.0	77	0.5	102	0.7	2	0.0	9	0.0	142	1.0
Hanford	41,686	20,794	49.9	16,116	38.7	1,989	4.8	305	0.7	1,164	2.8	59	0.1	55	0.1	1,204	2.9
Lemoore	19,712	9,674	49.1	6,013	30.5	1,373	7.0	217	1.1	1,607	8.2	62	0.3	35	0.2	731	3.7
Lake	58,309	46,933	80.5	6,639	11.4	1,209	2.1	1,413	2.4	468	0.8	82	0.1	52	0.1	1,513	2.6
Clearlake	13,142	10,086	76.7	1,449	11.0	670	5.1	269	2.0	145	1.1	20	0.2	22	0.2	481	3.7
Lakeport	4,820	3,966	82.3	552	11.5	36	0.7	81	1.7	69	1.4	7	0.1	4	0.1	105	2.2
Lassen	33,828	23,893	70.6	4,681	13.9	2,976	8.8	959	2.8	244	0.7	134	0.4	267	0.8	674	2.0
Susanville	13,541	8,724	64.5	2,109	15.6	1,682	12.4	367	2.7	151	1.1	111	0.8	135	1.0	262	1.9
Los Angeles	9,519,338	2,959,614	31.1	4,242,213	44.6	901,472	9.5	25,609	0.3	1,124,569	11.8	23,265	0.2	19,935	0.2	222,661	2.3
Agoura Hills	20,537	16,993	82.7	1,407	6.9	268	1.3	27	0.1	1,325	6.5	21	0.1	39	0.2	457	2.2
Alhambra	85,804	11,881	13.9	30,453	35.5	1,255	1.5	181	0.2	40,269	46.9	59	0.1	123	0.1	1,583	1.8
Arcadia	53,054	21,259	40.0	5,629	10.6	574	1.1	65	0.1	24,018	45.3	29	0.1	96	0.2	1,384	2.6
Artesia	16,380	4,463	27.2	6,272	38.3	550	3.4	62	0.4	4,460	27.2	70	0.4	33	0.2	470	2.9
Availon	3,127	1,578	50.4	1,437	46.0	12	0.4	18	0.6	19	0.6	7	0.2	4	0.1	52	1.7
Azusa	44,712	10,824	24.2	28,522	63.8	1,576	3.5	202	0.5	2,657	5.9	56	0.1	103	0.2	772	1.7
Baldwin Park	75,837	5,508	7.3	59,660	78.6	1,071	1.4	224	0.3	8,703	11.5	59	0.1	45	0.1	567	0.7
Bell	36,664	2,132	5.8	33,328	90.9	307	0.8	143	0.4	368	1.0	7	0.0	38	0.1	341	0.9
Bellflower	72,878	22,403	30.7	31,503	43.2	9,239	12.7	280	0.4	6,976	9.6	475	0.7	188	0.3	1,814	2.5
Bell Gardens	44,054	2,085	4.7	41,132	93.4	251	0.6	172	0.4	228	0.5	30	0.1	19	0.0	137	0.3
Beverly Hills	33,784	27,717	82.0	1,565	4.6	584	1.7	32	0.1	2,366	7.0	8	0.0	105	0.3	1,407	4.2
Bradbury	855	539	63.1	119	13.9	12	1.4	2	0.2	167	19.5	0	0.0	3	0.4	13	1.5
Burbank	100,316	59,590	59.4	24,953	24.9	1,915	1.9	314	0.3	9,045	9.0	121	0.1	177	0.2	4,201	4.2
Calabasas	20,033	16,799	83.8	949	4.7	222	1.1	22	0.1	1,529	7.6	7	0.0	56	0.3	459	2.3
Carson	89,730	10,767	12.0	31,332	34.9	22,485	25.1	180	0.2	19,711	22.0	2,589	2.9	171	0.2	2,495	2.8
Cermos	51,488	11,040	21.5	5,349	10.4	3,386	6.6	75	0.1	29,989	58.2	89	0.2	101	0.2	1,459	2.8
Claremont	33,998	22,098	65.0	5,221	15.4	1,642	4.8	81	0.2	3,851	11.3	44	0.1	87	0.3	974	2.9
Commerce	12,568	519	4.1	11,765	93.6	63	0.5	52	0.4	122	1.0	1	0.0	7	0.1	39	0.3
Compton	93,493	954	1.0	53,143	56.8	37,263	39.9	170	0.2	189	0.2	953	1.0	100	0.1	721	0.8
Covina	46,837	19,801	42.3	18,871	40.3	2,245	4.8	163	0.3	4,490	9.6	81	0.2	88	0.2	1,098	2.3
Cudahy	24,208	872	3.6	22,790	94.1	184	0.8	65	0.3	166	0.7	24	0.1	20	0.1	87	0.4
Culver	38,816	18,675	48.1	9,199	23.7	4,536	11.7	111	0.3	4,631	11.9	72	0.2	142	0.4	1,450	3.7
Diamond Bar	56,287	17,471	31.0	10,393	18.4	2,624	4.7	98	0.2	23,922	42.5	62	0.1	101	0.2	1,616	2.9
Downey	107,323	30,851	28.7	62,089	57.9	3,717	3.5	328	0.3	8,153	7.6	157	0.1	210	0.2	1,818	1.7
Duarte	21,486	6,895	32.1	9,326	43.4	1,894	8.8	94	0.4	2,669	12.4	18	0.1	49	0.2	541	2.5
El Monte	115,965	8,542	7.3	83,945	72.4	640	0.6	331	0.3	21,315	18.4	90	0.1	107	0.1	995	0.9
El Segundo	16,033	12,356	77.1	1,765	11.0	181	1.1	52	0.3	1,005	6.3	47	0.3	87	0.5	540	3.4
Gardena	57,746	7,064	12.2	18,372	31.8	14,701	25.5	129	0.2	15,363	26.6	381	0.7	145	0.3	1,591	2.8
Glendale	194,973	105,597	54.2	38,452	19.7	2,230	1.1	293	0.2	31,227	16.0	143	0.1	370	0.2	16,661	8.5
Glendora	49,415	33,564	67.9	10,740	21.7	704	1.4	158	0.3	3,003	6.1	26	0.1	88	0.2	1,132	2.3
Hawaiian Gardens	14,779	1,595	10.8	10,869	73.5	621	4.2	69	0.5	1,282	8.7	91	0.6	16	0.1	236	1.6
Hawthorne	84,112	10,937	13.0	37,227	44.3	27,208	32.3	199	0.2	5,567	6.6	685	0.8	256	0.3	2,033	2.4
Hermosa Beach	18,566	15,822	85.2	1,253	6.7	141	0.8	51	0.3	809	4.4	35	0.2	38	0.2	417	2.2

County/City	Total Population	White		Hispanic		Black		American Indian		Asian		Pacific Islander		Other		Two or More Races	
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Hidden Hills	1,875	1,669	89.0	125	6.7	12	0.6	6	0.3	39	2.1	0	0.0	4	0.2	20	1.1
Huntington Park	61,348	1,657	2.7	58,636	95.6	304	0.5	121	0.2	433	0.7	11	0.0	34	0.1	152	0.2
Industry	777	209	26.9	468	60.2	32	4.1	13	1.7	30	3.9	0	0.0	0	0.0	25	3.2
Inglewood	112,580	4,628	4.1	51,829	46.0	52,260	46.4	209	0.2	1,217	1.1	345	0.3	248	0.2	1,844	1.6
Inwindale	1,446	129	8.9	1,277	88.3	5	0.3	6	0.4	15	1.0	0	0.0	9	0.6	5	0.3
La Canada Flintridge	20,318	14,443	71.1	976	4.8	70	0.3	24	0.1	4,167	20.5	9	0.0	45	0.2	584	2.9
La Habra Heights	5,712	3,635	63.6	779	13.6	66	1.2	6	0.1	1,042	18.2	4	0.1	14	0.2	166	2.9
Lakewood	79,345	41,577	52.4	18,071	22.8	5,663	7.1	264	0.3	10,548	13.3	446	0.6	174	0.2	2,602	3.3
La Mirada	46,783	22,058	47.2	15,657	33.5	851	1.8	138	0.3	6,900	14.7	104	0.2	120	0.3	955	2.0
Lancaster	118,718	62,256	52.4	28,644	24.1	18,548	15.6	706	0.6	4,348	3.7	231	0.2	426	0.4	3,559	3.0
La Puente	41,063	2,749	6.7	34,122	83.1	688	1.7	139	0.3	2,865	7.0	40	0.1	48	0.1	412	1.0
La Verne	31,638	20,129	63.6	7,315	23.1	975	3.1	110	0.3	2,244	7.1	41	0.1	44	0.1	780	2.5
Lawndale	31,711	6,946	21.9	16,515	52.1	3,852	12.1	111	0.4	2,991	9.4	256	0.8	84	0.3	956	3.0
Lomita	20,046	10,735	53.5	5,252	26.2	821	4.1	92	0.5	2,241	11.2	102	0.5	44	0.2	759	3.8
Long Beach	461,522	152,899	33.1	165,092	35.8	66,836	14.5	1,772	0.4	54,937	11.9	5,392	1.2	1,013	0.2	13,581	2.9
Los Angeles	3,694,820	1,099,188	29.7	1,719,073	46.5	401,986	10.9	8,897	0.2	364,850	9.9	4,484	0.1	9,065	0.2	87,277	2.4
Lynwood	69,845	2,044	2.9	57,503	82.3	9,118	13.1	103	0.1	490	0.7	228	0.3	50	0.1	309	0.4
Malibu	12,575	11,134	88.5	689	5.5	109	0.9	20	0.2	310	2.5	11	0.1	30	0.2	272	2.2
Manhattan Beach	33,852	28,913	85.4	1,756	5.2	206	0.6	46	0.1	2,031	6.0	37	0.1	79	0.2	784	2.3
Maywood	28,083	739	2.6	27,051	96.3	43	0.2	51	0.2	85	0.3	25	0.1	27	0.1	62	0.2
Monrovia	36,929	17,211	46.6	13,012	35.2	3,074	8.3	133	0.4	2,531	6.9	34	0.1	73	0.2	861	2.3
Montebello	62,150	6,911	11.1	46,347	74.6	395	0.6	141	0.2	7,075	11.4	24	0.0	70	0.1	1,187	1.9
Monterey Park	60,051	4,362	7.2	17,359	28.9	182	0.3	98	0.2	36,912	61.5	24	0.0	61	0.1	1,053	1.8
Norwalk	103,298	19,574	19.0	64,965	62.9	4,529	4.4	483	0.4	11,724	11.3	336	0.3	138	0.1	1,569	1.5
Palmdale	116,670	47,831	41.0	43,991	37.7	16,447	14.1	622	0.5	4,327	3.7	163	0.1	265	0.2	3,024	2.6
Palos Verdes Estates	13,340	10,155	76.1	378	2.8	130	1.0	14	0.1	2,283	17.1	12	0.1	34	0.3	334	2.5
Paramount	55,266	4,982	9.0	39,945	72.3	7,184	13.0	148	0.3	1,789	3.2	432	0.8	83	0.2	703	1.3
Pasadena	133,936	52,381	39.1	44,734	33.4	18,711	14.0	324	0.2	13,253	9.9	104	0.1	302	0.2	4,127	3.1
Pico Rivera	63,428	4,914	7.7	56,000	88.3	313	0.5	193	0.3	1,539	2.4	36	0.1	46	0.1	387	0.6
Pomona	149,473	25,348	17.0	96,370	64.4	13,834	9.3	505	0.3	10,518	7.0	247	0.2	183	0.1	2,468	1.7
Rancho Palos Verdes	41,145	25,979	63.1	2,339	5.7	803	2.0	405	0.1	10,646	25.9	36	0.1	88	0.2	1,214	3.0
Redondo Beach	63,261	44,819	70.9	8,524	13.5	1,531	2.4	185	0.3	5,677	9.0	212	0.3	198	0.3	2,115	3.3
Rolling Hills	1,871	1,432	76.6	85	4.5	38	2.0	0	0.0	262	14.0	9	0.5	6	0.3	39	2.1
Rolling Hills Estates	7,676	5,418	70.6	366	4.8	88	1.1	17	0.2	1,549	20.2	6	0.1	22	0.3	210	2.7
Rosemead	53,505	4,295	8.0	22,097	41.3	262	0.5	112	0.2	25,970	48.5	18	0.0	26	0.0	725	1.4
San Dimas	34,980	21,381	61.1	8,163	23.3	1,114	3.2	117	0.3	3,216	9.2	63	0.2	53	0.2	873	2.5
San Fernando	23,564	1,855	7.9	21,038	89.3	176	0.7	122	0.5	209	0.9	7	0.0	16	0.1	141	0.6
San Gabriel	39,804	6,930	17.4	12,223	30.7	360	0.9	129	0.3	19,399	48.7	28	0.1	51	0.1	684	1.7
San Marino	12,945	5,771	44.6	571	4.4	29	0.2	0	0.0	6,271	48.4	9	0.1	24	0.2	270	2.1
Santa Clarita	151,088	104,646	69.3	30,968	20.5	2,957	2.0	528	0.3	7,758	5.1	198	0.1	337	0.2	3,696	2.4
Santa Fe Springs	17,438	3,354	19.2	12,447	71.4	645	3.7	79	0.5	652	3.7	29	0.2	15	0.1	217	1.2
Santa Monica	84,084	60,482	71.9	11,304	13.4	3,081	3.7	199	0.2	6,043	7.2	84	0.1	307	0.4	2,584	3.1
Sierra Madre	10,578	8,435	79.7	1,054	9.9	113	1.1	24	0.2	588	5.6	11	0.1	38	0.4	315	3.0
Signal Hill	9,333	3,340	35.8	2,707	29.0	1,167	12.5	23	0.2	1,515	16.2	186	2.0	31	0.3	364	3.9
South El Monte	21,144	1,005	4.8	18,190	86.0	29	0.1	49	0.2	1,749	8.3	20	0.1	13	0.1	89	0.4

County/City	Total Population	American Indian										Pacific Islander			Other		Two or More Races		%
		White	%	Hispanic	%	Black	%	Indian	%	Asian	%	% Islander	%	Other	%	%	%		
South Gate	96,375	5,755	6.0	88,669	92.0	632	0.7	157	0.2	725	0.8	51	0.1	71	0.1	315	0.3		
South Pasadena	24,292	12,344	50.8	3,903	16.1	708	2.9	31	0.1	6,424	26.4	17	0.1	86	0.4	779	3.2		
Temple City	33,377	12,589	37.7	6,836	20.5	289	0.9	47	0.1	12,894	38.6	8	0.0	41	0.1	673	2.0		
Torrance	137,946	72,234	52.3	17,637	12.8	2,911	2.1	360	0.3	39,210	28.4	434	0.3	383	0.3	4,777	3.5		
Vernon	91	9	9.9	81	89.0	0	0.0	0	0.0	1	1.1	0	0.0	0	0.0	0	0.0		
Walnut	30,004	5,463	18.2	5,803	19.3	1,237	4.1	23	0.1	16,665	55.5	22	0.1	72	0.2	719	2.4		
West Covina	105,080	24,124	22.9	48,051	45.7	6,314	6.0	304	0.3	23,543	22.4	172	0.2	196	0.2	2,376	2.3		
West Hollywood	35,716	29,064	81.4	3,142	8.8	1,033	2.9	84	0.2	1,335	3.7	36	0.1	89	0.2	933	2.6		
Westlake Village	8,368	7,248	86.6	386	4.6	68	0.8	6	0.1	498	6.0	2	0.0	17	0.2	143	1.7		
Whittier	83,680	31,475	37.6	46,765	56.0	898	1.0	341	0.4	2,628	3.1	90	0.1	113	0.1	1,430	1.7		
Madera	123,109	57,391	46.6	54,515	44.3	4,710	3.8	1,694	1.4	1,480	1.2	160	0.1	287	0.2	2,872	2.3		
Chowchilla	11,127	6,129	55.0	3,138	28.2	1,087	9.8	201	1.8	141	1.3	22	0.2	11	0.1	398	3.6		
Madera	43,207	10,859	25.1	29,274	67.8	1,426	3.3	370	0.9	582	1.3	30	0.1	51	0.1	615	1.4		
Marin	247,289	194,254	78.5	27,351	11.1	6,946	2.8	630	0.3	11,078	4.5	330	0.1	718	0.3	5,982	2.4		
Belvedere	2,125	2,019	95.0	46	2.2	2	0.1	1	0.0	38	1.8	1	0.0	7	0.3	11	0.5		
Corte Madera	9,100	7,731	85.0	436	4.8	71	0.8	13	0.1	549	6.0	14	0.2	29	0.3	257	2.8		
Fairfax	7,319	6,445	88.0	418	5.7	77	1.1	30	0.4	143	2.0	8	0.1	23	0.3	175	2.4		
Larkspur	12,014	10,623	88.4	515	4.3	91	0.8	19	0.2	466	3.9	15	0.1	22	0.2	263	2.2		
Mill Valley	13,600	12,118	89.1	472	3.4	132	1.0	26	0.2	557	4.1	24	0.2	13	0.1	258	1.9		
Novato	47,630	36,336	76.3	6,229	13.1	893	1.9	113	0.2	2,442	5.1	71	0.1	147	0.3	1,399	2.9		
Ross	2,329	2,194	94.2	54	2.3	3	0.1	1	0.0	33	1.4	2	0.1	4	0.2	38	1.6		
San Anselmo	12,378	11,011	89.0	513	4.1	128	1.0	31	0.3	359	2.9	10	0.1	27	0.2	299	2.4		
San Rafael	56,063	36,960	65.9	13,070	23.3	1,175	2.1	117	0.2	3,095	5.5	76	0.1	168	0.3	1,402	2.5		
Sausalito	7,330	6,556	89.4	244	3.3	46	0.6	20	0.3	299	4.1	16	0.2	10	0.1	139	1.9		
Tiburon	8,666	7,656	88.3	317	3.7	72	0.8	17	0.2	381	4.4	10	0.1	15	0.2	198	2.3		
Mariposa	17,130	14,539	84.9	1,329	7.8	111	0.6	530	3.1	120	0.7	17	0.1	21	0.1	463	2.7		
Mendocino	86,265	64,581	74.9	14,213	16.5	471	0.5	3,438	4.0	1,006	1.2	107	0.1	152	0.2	2,297	2.7		
Fort Bragg	7,026	4,983	70.9	1,596	22.7	68	1.0	105	1.5	59	0.8	10	0.1	15	0.2	190	2.7		
Point Arena	474	315	66.4	135	28.5	0	0.0	10	2.1	1	0.2	0	0.0	6	1.3	7	1.5		
Ukiah	15,497	11,220	72.4	2,993	19.3	138	0.9	470	3.0	254	1.6	14	0.1	10	0.1	398	2.6		
Willits	5,073	3,964	78.1	745	14.7	24	0.5	136	2.7	57	1.1	2	0.0	7	0.1	138	2.7		
Mercer	210,554	85,585	40.6	95,466	45.4	7,594	3.6	1,115	0.5	14,041	6.7	281	0.1	410	0.2	6,062	2.9		
Atwater	23,113	10,245	44.3	9,594	41.5	1,093	4.7	170	0.7	1,214	5.3	72	0.3	28	0.1	697	3.0		
Dos Palos	4,581	1,821	39.7	2,482	54.2	186	4.1	13	0.3	27	0.6	0	0.0	7	0.2	45	1.0		
Gustine	4,698	2,770	58.9	1,648	35.1	22	0.5	28	0.6	67	1.4	3	0.1	1	0.0	159	3.4		
Livingston	10,473	1,065	10.2	7,521	71.8	62	0.6	34	0.3	1,487	14.2	3	0.0	51	0.5	250	2.4		
Los Banos	25,869	10,290	39.7	13,048	50.4	1,007	3.9	121	0.5	552	2.1	72	0.3	66	0.3	713	2.8		
Mercer	63,893	24,121	37.8	26,425	41.4	3,864	6.0	368	0.6	7,182	11.2	77	0.1	124	0.2	1,732	2.7		
Modoc	9,449	7,663	81.1	1,088	11.5	59	0.6	340	3.6	58	0.6	7	0.1	26	0.3	208	2.2		

County/City	Total Population	White	% White	Hispanic	% Hispanic	Black	% Black	American Indian	% American Indian	Asian	% Asian	Pacific Islander	% Pacific Islander	Other	% Other	Two or More Races	%
Alluras	2,892	2,319	80.2	344	11.9	7	0.2	105	3.6	21	0.7	3	0.1	15	0.5	78	2.7
Mono	12,853	9,837	76.5	2,274	17.7	53	0.4	267	2.1	140	1.1	10	0.1	82	0.6	190	1.5
Mammoth Lakes	7,093	5,213	73.5	1,575	22.2	23	0.3	22	0.3	90	1.3	9	0.1	67	0.9	94	1.3
Monterey	401,762	162,045	40.3	187,969	46.8	14,085	3.5	1,782	0.4	23,203	5.8	1,543	0.4	1,190	0.3	9,945	2.5
Carmel-by-the-Sea	4,081	3,783	92.7	120	2.9	18	0.4	9	0.2	88	2.2	6	0.1	5	0.1	52	1.3
Del Rey Oaks	1,650	1,367	82.9	109	6.6	26	1.6	10	0.6	83	5.0	0	0.0	13	0.8	42	2.5
Gonzales	7,525	782	10.4	6,474	86.0	42	0.6	29	0.4	121	1.6	13	0.2	1	0.0	63	0.8
Greenfield	12,583	1,188	9.4	11,055	87.8	113	0.9	37	0.3	90	0.7	8	0.1	8	0.1	84	0.7
King	11,094	1,892	17.1	8,922	80.4	17	0.2	35	0.3	131	1.2	8	0.1	6	0.1	83	0.7
Manna	25,101	9,500	37.9	5,822	23.2	3,494	13.9	125	0.5	3,976	15.8	505	2.0	265	1.1	1,414	5.6
Monterey	29,674	22,246	75.0	3,222	10.9	716	2.4	122	0.4	2,171	7.3	83	0.3	64	0.2	1,050	3.5
Pacific Grove	15,522	12,957	83.5	1,108	7.1	170	1.1	59	0.4	690	4.4	41	0.3	40	0.3	457	2.9
Salinas	151,060	36,535	24.2	96,880	64.1	4,569	3.0	636	0.4	8,840	5.9	275	0.2	508	0.3	2,817	1.9
Sand	261	160	61.3	72	27.6	13	5.0	8	3.1	4	1.5	0	0.0	0	0.0	4	1.5
Seaside	31,696	11,526	36.4	10,929	34.5	3,836	12.1	190	0.6	3,134	9.9	387	1.2	106	0.3	1,588	5.0
Soledad	11,263	1,032	9.2	9,779	86.8	97	0.9	27	0.2	216	1.9	7	0.1	8	0.1	97	0.9
Napa	124,279	85,932	69.2	29,416	23.7	1,527	1.2	642	0.5	3,641	2.9	254	0.2	226	0.2	2,641	2.1
American Canyon	9,774	5,138	52.6	1,731	17.7	698	7.1	53	0.5	1,561	16.0	123	1.3	22	0.2	448	4.6
Calistoga	5,190	3,048	58.7	1,978	38.1	16	0.3	28	0.5	51	1.0	1	0.0	6	0.1	62	1.2
Napa	72,585	49,536	68.3	19,475	26.8	304	0.4	393	0.6	1,218	1.7	94	0.1	97	0.1	1,468	2.0
St Helena	5,950	4,110	69.1	1,691	28.4	25	0.4	13	0.2	40	0.7	7	0.1	13	0.2	51	0.9
Yountville	2,916	2,524	86.5	281	9.6	28	1.0	9	0.3	40	1.4	2	0.1	3	0.1	29	1.0
Nevada	92,033	83,098	90.3	5,201	5.6	234	0.3	663	0.7	702	0.8	70	0.1	175	0.2	1,890	2.1
Grass Valley	10,922	9,628	88.1	717	6.5	29	0.3	106	1.0	115	1.1	8	0.1	8	0.1	311	2.8
Nevada	3,001	2,748	91.6	104	3.5	12	0.4	33	1.1	22	0.7	1	0.0	13	0.4	68	2.3
Truckee	13,864	11,637	83.9	1,773	12.8	26	0.2	63	0.5	115	0.8	19	0.1	28	0.2	203	1.5
Orange	2,846,289	1,458,978	51.2	875,579	30.8	42,639	1.5	8,414	0.3	383,810	13.5	8,086	0.3	4,525	0.2	64,258	2.3
Anaheim	328,014	117,607	35.8	153,374	46.8	7,939	2.4	1,049	0.3	38,919	11.9	1,263	0.4	457	0.1	7,406	2.3
Brea	35,410	23,541	66.5	7,205	20.3	409	1.2	111	0.3	3,184	9.0	71	0.2	57	0.2	832	2.3
Buena Park	78,282	29,885	38.2	26,221	33.5	2,626	3.6	315	0.4	16,338	20.9	358	0.5	154	0.2	2,185	2.8
Costa Mesa	108,724	61,778	56.8	34,523	31.8	1,313	1.2	329	0.3	7,421	6.8	601	0.6	220	0.2	2,539	2.3
Cypress	46,229	26,400	57.0	7,235	15.7	1,251	2.7	176	0.4	9,564	20.7	164	0.4	112	0.2	1,327	2.9
Dana Point	35,110	27,658	78.7	5,440	15.5	252	0.7	123	0.4	874	2.5	31	0.1	76	0.2	656	1.9
Fountain Valley	54,978	32,144	58.5	5,870	10.7	584	1.1	171	0.3	14,100	25.6	202	0.4	129	0.2	1,778	3.2
Fullerton	126,003	61,420	48.7	38,014	30.2	2,675	2.1	404	0.3	20,130	16.0	251	0.2	237	0.2	2,872	2.3
Garden Grove	165,196	53,735	32.5	53,608	32.5	1,873	1.1	523	0.3	50,803	30.8	995	0.6	210	0.1	3,449	2.1
Huntington Beach	189,594	136,237	71.8	27,798	14.7	1,383	0.7	777	0.4	17,544	9.3	432	0.2	314	0.2	5,109	2.7
Irvine	143,072	81,613	57.0	10,539	7.4	1,977	1.4	162	0.1	42,506	29.7	180	0.1	359	0.3	5,736	4.0
Laguna Beach	23,727	20,921	88.2	1,570	6.6	183	0.8	59	0.2	486	2.0	19	0.1	36	0.2	453	1.9
Laguna Hills	31,178	21,471	68.9	5,113	16.4	404	1.3	77	0.2	3,153	10.1	45	0.1	73	0.2	842	2.7

County/City	Total Population	American Indian				Black				Hispanic				White				Asian				Pacific Islander				Other				Two or More Races			
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Laguna Niguel	61,891	47,916	77.4	6,425	10.4	723	1.2	110	0.2	4,764	7.7	62	0.1	133	0.2	1,758	2.8																
Laguna Woods	16,507	15,580	94.4	340	2.1	41	0.2	18	0.1	412	2.5	4	0.0	7	0.0	105	0.6																
La Habra	58,974	24,399	41.4	28,922	49.0	808	1.4	188	0.3	3,432	5.8	89	0.1	95	0.2	1,041	1.8																
Lake Forest	58,707	39,161	66.7	10,913	18.6	998	1.7	143	0.2	5,647	9.6	113	0.2	102	0.2	1,630	2.8																
La Palma	15,408	5,592	36.3	1,736	11.3	696	4.5	37	0.2	6,874	44.6	43	0.3	35	0.2	395	2.6																
Los Alamitos	11,536	7,836	67.9	1,848	16.0	358	3.1	31	0.3	1,090	9.4	35	0.3	18	0.2	320	2.8																
Mission Viejo	93,102	70,735	76.0	11,266	12.1	1,032	1.1	204	0.2	7,085	7.6	159	0.2	148	0.2	2,473	2.7																
Newport Beach	70,032	62,342	89.0	3,301	4.7	354	0.5	137	0.2	2,763	3.9	81	0.1	93	0.1	961	1.4																
Orange	128,821	70,292	54.6	41,434	32.2	1,798	1.4	393	0.3	11,898	9.2	268	0.2	162	0.1	2,576	2.0																
Pleacenia	46,488	24,967	53.7	14,460	31.1	746	1.6	177	0.4	5,121	11.0	65	0.1	61	0.1	891	1.9																
Rancho Santa Margarita	47,214	35,132	74.4	6,139	13.0	787	1.7	131	0.3	3,440	7.3	90	0.2	91	0.2	1,404	3.0																
San Clemente	49,936	39,155	78.5	7,933	15.9	320	0.6	167	0.3	1,293	2.6	62	0.1	58	0.1	948	1.9																
San Juan Capistrano	33,826	21,084	62.3	11,206	33.1	151	0.4	169	0.5	634	1.9	35	0.1	27	0.1	520	1.5																
Santa Ana	337,977	41,984	12.4	257,097	76.1	4,309	1.3	886	0.3	29,412	8.7	993	0.3	273	0.1	3,023	0.9																
Seal Beach	24,157	20,372	84.3	1,554	6.4	329	1.4	54	0.2	1,363	5.6	37	0.2	21	0.1	427	1.8																
Stanton	37,403	11,295	30.2	18,285	48.9	721	1.9	155	0.4	5,721	15.3	322	0.9	57	0.2	847	2.3																
Tustin	67,504	30,264	44.8	23,110	34.3	1,785	2.6	199	0.3	10,008	14.8	186	0.3	145	0.2	1,807	2.7																
Villa Park	5,999	4,691	78.2	354	5.9	41	0.7	22	0.4	769	12.8	2	0.0	4	0.1	116	1.9																
Westminster	88,207	31,962	36.3	19,138	21.7	764	0.9	293	0.3	33,511	38.0	393	0.4	101	0.1	2,045	2.3																
Yorba Linda	58,918	44,071	74.8	6,044	10.3	638	1.1	139	0.2	6,502	11.0	50	0.1	138	0.2	1,396	2.3																
Placer	248,399	207,236	83.4	24,019	9.7	1,896	0.8	1,687	0.7	7,148	2.9	324	0.1	336	0.1	5,753	2.3																
Auburn	12,462	11,155	89.5	744	6.0	56	0.4	76	0.6	164	1.3	12	0.1	19	0.2	236	1.9																
Colfax	1,496	1,323	88.4	124	8.3	9	0.6	7	0.5	0	0.0	0	0.0	2	0.1	31	2.1																
Lincoln	11,205	7,792	69.5	2,911	26.0	42	0.4	95	0.8	112	1.0	12	0.1	8	0.1	233	2.1																
Loomis	6,260	5,318	85.0	430	6.9	12	0.2	53	0.8	199	3.2	9	0.1	10	0.2	229	3.7																
Rocklin	36,330	30,315	83.5	2,874	7.9	317	0.9	233	0.6	1,467	4.0	61	0.2	46	0.1	1,017	2.8																
Roseville	79,921	63,737	79.8	9,225	11.6	992	1.2	408	0.5	3,370	4.2	135	0.2	103	0.1	1,951	2.4																
Plumas	20,824	18,473	88.7	1,177	5.7	130	0.6	444	2.1	107	0.5	19	0.1	32	0.2	442	2.1																
Portola	2,227	1,796	80.7	263	11.8	10	0.4	50	2.2	24	1.1	2	0.1	16	0.7	66	3.0																
Riverside	1,545,387	788,831	51.0	559,575	36.2	92,403	6.0	10,135	0.7	55,199	3.6	3,284	0.2	2,425	0.2	33,535	2.2																
Banning	23,562	12,354	52.5	7,119	30.2	1,915	8.1	376	1.6	1,250	5.3	18	0.1	31	0.1	499	2.1																
Beaumont	11,384	6,334	55.6	4,122	36.2	304	2.7	180	1.6	187	1.6	7	0.1	13	0.1	237	2.1																
Blythe	12,155	5,105	42.0	5,571	45.8	972	8.0	104	0.9	157	1.3	19	0.2	17	0.1	210	1.7																
Calimesa	7,139	5,845	81.9	1,008	14.1	41	0.6	32	0.4	73	1.0	7	0.1	8	0.1	125	1.8																
Canyon Lake	9,952	8,679	87.2	848	8.5	68	0.7	29	0.3	146	1.5	10	0.1	7	0.1	165	1.7																
Cathedral	42,647	17,908	42.0	21,312	50.0	1,049	2.5	231	0.5	1,502	3.5	20	0.0	39	0.1	586	1.4																
Coachella	22,724	363	1.6	22,132	97.4	61	0.3	53	0.2	35	0.2	1	0.0	31	0.1	48	0.2																
Corona	124,966	58,784	47.0	44,569	35.7	7,704	6.2	490	0.4	9,239	7.4	353	0.3	278	0.2	3,549	2.8																
Desert Hot Springs	16,582	8,040	48.5	6,699	40.4	947	5.7	120	0.7	300	1.8	9	0.1	14	0.1	453	2.7																
Hemet	58,812	41,345	70.3	13,585	23.1	1,407	2.4	447	0.8	842	1.4	64	0.1	48	0.1	1,074	1.8																
Indian Wells	3,816	3,563	93.9	113	3.0	14	0.4	8	0.2	57	1.5	3	0.1	4	0.1	34	0.9																
Indio	49,116	9,586	19.5	37,028	75.4	1,199	2.4	192	0.4	631	1.3	19	0.0	48	0.1	413	0.8																

County/City	Total Population	White	%	Hispanic	%	Black	%	American Indian	%	Asian	%	Pacific Islander	%	Other	%	Two or More Races	%
Lake Elsinore	28,928	14,877	51.4	11,007	38.0	1,434	5.0	191	0.7	571	2.0	80	0.3	44	0.2	724	2.5
La Quinta	23,694	14,893	62.9	7,584	32.0	296	1.2	95	0.4	401	1.7	19	0.1	11	0.0	395	1.7
Moreno Valley	142,381	45,881	32.2	54,689	38.4	27,536	19.3	567	0.4	8,214	5.8	650	0.5	295	0.2	4,549	3.2
Murrieta	44,282	31,811	71.8	7,739	17.5	1,401	3.2	190	0.4	1,718	3.9	92	0.2	67	0.2	1,264	2.9
Norco	24,157	16,334	67.6	5,504	22.8	1,468	6.1	112	0.5	274	1.1	23	0.1	24	0.1	418	1.7
Palm Desert	41,155	31,919	77.5	7,031	17.1	446	1.1	117	0.3	1,036	2.5	34	0.1	46	0.1	526	1.3
Palm Springs	42,807	28,474	66.5	10,155	23.7	1,621	3.8	263	0.6	1,606	3.8	44	0.1	42	0.1	602	1.4
Perris	36,189	8,243	22.8	20,322	56.1	5,574	15.4	156	0.4	940	2.6	101	0.3	60	0.2	793	2.2
Rancho Mirage	13,249	11,559	87.2	1,251	9.5	115	0.9	19	0.1	160	1.2	14	0.1	14	0.1	117	0.9
Riverside	255,166	116,254	45.6	97,315	38.1	18,051	7.1	1,415	0.6	14,233	5.6	848	0.3	492	0.2	6,558	2.6
San Jacinto	23,779	12,507	52.6	9,583	40.3	571	2.4	322	1.4	246	1.0	31	0.1	30	0.1	489	2.1
Temecula	57,716	40,007	69.3	10,974	19.0	1,874	3.2	321	0.6	2,667	4.6	152	0.3	81	0.1	1,640	2.8
Sacramento	1,223,499	706,655	57.7	195,890	16.0	118,073	9.7	9,070	0.7	132,601	10.8	6,788	0.6	3,406	0.3	51,016	4.2
Citrus Heights	85,071	67,809	79.7	8,539	10.0	2,334	2.7	678	0.8	2,344	2.8	245	0.3	158	0.2	2,984	3.5
Folsom	51,884	38,500	74.2	4,914	9.5	3,086	5.9	237	0.5	3,693	7.1	93	0.2	112	0.2	1,249	2.4
Gall	19,472	11,529	59.2	6,465	33.2	186	1.0	139	0.7	520	2.7	27	0.1	11	0.1	595	3.1
Isleton	828	465	56.2	223	26.9	12	1.4	10	1.2	69	8.3	2	0.2	1	0.1	46	5.6
Sacramento	407,018	164,974	40.5	87,974	21.6	61,136	15.0	3,149	0.8	66,598	16.4	3,637	0.9	1,494	0.4	18,056	4.4
San Benito	53,234	24,513	46.1	25,516	47.9	475	0.9	279	0.5	1,173	2.2	68	0.1	53	0.1	1,157	2.2
Hollister	34,413	13,246	38.5	18,949	55.1	387	1.1	154	0.4	897	2.6	39	0.1	38	0.1	703	2.0
San Juan Bautista	1,549	693	44.7	733	47.3	20	1.3	12	0.8	36	2.3	4	0.3	1	0.1	50	3.2
San Bernardino	1,709,434	752,222	44.0	669,387	39.1	150,201	8.8	9,804	0.6	78,154	4.6	4,387	0.3	3,039	0.2	42,240	2.5
Adelanto	18,130	6,616	36.5	8,299	45.8	2,305	12.7	124	0.7	274	1.5	27	0.1	36	0.2	449	2.5
Apple Valley	54,239	36,710	67.6	10,067	18.6	4,141	7.6	357	0.7	1,167	2.2	101	0.2	108	0.2	1,598	2.9
Barstow	21,119	9,163	43.4	7,708	36.5	2,349	11.1	369	1.7	624	3.0	186	0.9	44	0.2	676	3.2
Big Bear Lake	5,438	4,433	81.5	745	13.7	37	0.7	37	0.7	41	0.8	2	0.0	10	0.2	133	2.4
Chino	67,168	25,267	37.6	31,630	47.4	5,100	7.6	232	0.3	3,242	4.8	106	0.2	113	0.2	1,278	1.9
Chino Hills	66,787	29,247	43.8	17,151	25.7	3,573	5.3	195	0.3	14,575	21.8	72	0.1	143	0.2	1,831	2.7
Colton	47,662	9,911	20.8	28,934	60.7	5,031	10.6	224	0.5	2,474	5.2	69	0.1	69	0.1	950	2.0
Fontana	128,929	30,865	23.9	74,424	57.7	14,629	11.3	458	0.4	5,398	4.2	351	0.3	197	0.2	2,607	2.0
Grand Terrace	11,626	7,071	60.8	2,954	25.4	529	4.6	54	0.5	645	5.5	26	0.2	24	0.2	323	2.8
Hesperia	62,582	39,057	62.4	18,400	29.4	2,388	3.8	469	0.7	619	1.0	102	0.2	91	0.1	1,456	2.3
Highland	44,605	18,619	41.8	16,342	36.6	5,226	11.7	322	0.7	2,638	5.9	132	0.3	77	0.2	1,249	2.8
Loma Linda	18,681	8,799	47.1	3,050	16.3	1,300	7.0	62	0.3	4,536	24.3	33	0.2	42	0.2	859	4.6
Montclair	33,049	7,784	23.5	19,823	60.0	1,986	6.0	124	0.4	2,641	8.0	84	0.3	37	0.1	570	1.7
Needles	4,830	3,358	69.5	887	18.3	71	1.5	270	5.6	68	1.4	3	0.1	8	0.2	165	3.4
Ontario	158,007	42,048	26.6	94,610	59.9	11,317	7.2	475	0.3	5,914	3.7	519	0.3	284	0.2	2,840	1.8
Rancho Cucamonga	127,743	70,028	54.8	35,491	27.8	9,789	7.7	405	0.3	7,469	5.8	292	0.2	294	0.2	3,975	3.1
Redlands	63,591	40,265	63.3	15,304	24.1	2,625	4.1	336	0.5	3,186	5.0	118	0.2	88	0.1	1,669	2.6
Rialto	91,873	19,713	21.5	47,050	51.2	19,954	21.7	370	0.4	2,162	2.4	341	0.4	194	0.2	2,089	2.3
San Bernardino	185,401	53,630	28.9	88,022	47.5	29,654	16.0	1,129	0.6	7,594	4.1	582	0.3	288	0.2	4,502	2.4
Twentynine Palms	14,764	9,548	64.7	2,202	14.9	1,313	8.9	161	1.1	553	3.7	249	1.7	44	0.3	694	4.7

County/City	Total Population	American Indian				Asian				Pacific Islander				Other				Two or More Races			
		White	Hispanic	Black	%	Asian	%	% Islander	%	Other	%	%	%	%	%	%	%	%			
Upland	68,393	37,456	18,830	4,990	7.3	0.3	7.1	0.1	104	0.2	83	0.1	104	0.2	1,826	2.7					
Victorville	64,029	30,382	21,426	7,431	11.6	0.6	3.3	0.2	143	0.2	107	0.2	143	0.2	2,065	3.2					
Yucaipa	41,207	31,625	7,561	353	0.9	0.7	1.1	0.1	61	0.1	35	0.1	61	0.1	839	2.0					
Yucca Valley	16,865	13,829	1,922	350	2.1	0.9	1.3	0.2	18	0.1	42	0.2	18	0.1	334	2.0					
San Diego	2,813,833	1,548,833	750,965	154,487	5.5	0.5	245,297	0.4	5,822	0.2	12,164	0.4	5,822	0.2	81,012	2.9					
Carlsbad	78,247	63,013	9,170	691	0.9	0.3	3,271	0.2	116	0.1	132	0.2	116	0.1	1,653	2.1					
Chula Vista	173,556	55,042	86,073	7,517	4.3	0.3	18,410	0.5	273	0.2	883	0.5	273	0.2	4,765	2.7					
Coronado	24,100	18,937	2,369	1,213	5.0	0.5	875	0.3	43	0.2	68	0.3	43	0.2	470	2.0					
Del Mar	4,389	3,990	170	11	0.3	0.3	126	0.0	11	0.3	2	0.0	11	0.3	64	1.5					
El Cajon	94,869	61,188	21,313	4,828	5.1	0.7	2,511	0.3	181	0.2	331	0.3	181	0.2	3,856	4.1					
Encinitas	58,014	45,852	79.0	302	0.5	0.3	1,775	0.1	108	0.2	66	0.1	108	0.2	1,168	2.0					
Escondido	133,559	69,305	51.9	2,734	2.0	0.6	5,812	0.2	184	0.1	251	0.2	184	0.1	2,804	2.1					
Imperial Beach	26,992	11,737	10,818	1,343	5.0	0.7	1,677	0.6	45	0.2	153	0.6	45	0.2	1,032	3.8					
La Mesa	54,749	40,371	7,402	2,561	4.7	0.5	2,177	0.3	108	0.2	183	0.3	108	0.2	1,687	3.1					
Lemon Grove	54,260	12,017	7,107	2,874	11.5	0.7	1,391	0.8	71	0.3	189	0.8	71	0.3	1,100	4.4					
National	161,029	7,653	32,053	2,823	5.9	0.4	9,863	0.7	83	0.2	399	0.7	83	0.2	1,180	2.2					
Oceanside	48,044	37,092	4,974	752	1.6	0.3	3,530	0.3	206	0.1	1,917	1.2	206	0.1	5,096	3.2					
Poway	1,223,400	603,892	310,752	92,830	7.6	0.3	164,895	0.4	3,065	0.3	5,311	0.4	3,065	0.3	38,388	3.1					
San Diego	54,977	29,617	20,271	1,001	1.8	0.4	2,503	0.2	40	0.1	119	0.2	40	0.1	1,212	2.2					
San Marcos	52,975	42,803	6,016	751	1.4	0.6	1,307	0.3	93	0.2	183	0.3	93	0.2	1,497	2.8					
SanTEE	12,979	10,250	1,922	62	0.5	0.2	430	0.1	18	0.1	14	0.1	18	0.1	254	2.0					
Solana Beach	89,857	44,844	34,990	3,535	3.9	0.5	3,206	0.6	161	0.2	526	0.6	161	0.2	2,155	2.4					
Vista	776,733	338,909	109,504	58,791	7.6	0.3	238,173	0.5	2,580	0.3	3,602	0.5	2,580	0.3	23,154	3.0					
San Francisco	776,733	338,909	109,504	58,791	7.6	0.3	238,173	0.5	2,580	0.3	3,602	0.5	2,580	0.3	23,154	3.0					
San Joaquin	563,598	267,002	172,073	36,139	6.4	0.5	62,126	0.3	1,225	0.2	1,624	0.3	1,225	0.2	19,878	3.5					
Escalon	5,963	4,555	1,125	34	0.6	0.7	64	0.1	9	0.2	7	0.1	9	0.2	117	2.0					
Lathrop	10,445	3,989	4,031	456	4.4	0.6	1,340	0.4	22	0.2	47	0.4	22	0.2	498	4.8					
Lodi	56,999	36,200	15,464	260	0.5	0.5	2,807	0.1	179	0.3	53	0.1	179	0.3	1,727	3.0					
Manteca	49,258	31,556	12,363	1,336	2.7	0.7	1,662	0.3	76	0.2	144	0.3	76	0.2	1,756	3.6					
Ripon	10,146	7,844	1,843	25	0.2	0.4	143	0.2	13	0.1	24	0.2	13	0.1	218	2.1					
Stockton	243,771	78,539	79,217	26,359	10.8	0.5	47,093	0.3	496	0.2	810	0.3	496	0.2	9,920	4.1					
Tracy	56,929	30,723	15,765	2,976	5.2	0.5	4,481	0.5	182	0.3	275	0.5	182	0.3	2,230	3.9					
San Luis Obispo	246,681	187,840	40,196	4,743	1.9	0.6	6,342	0.1	365	0.1	227	0.1	365	0.1	5,478	2.2					
Arroyo Grande	15,851	13,109	1,770	93	0.6	0.3	467	0.2	13	0.1	28	0.2	13	0.1	316	2.0					
Atascadero	26,411	21,850	2,783	603	2.3	0.6	319	0.1	55	0.2	28	0.1	55	0.2	613	2.3					
El Paso de Robles	24,297	15,600	6,735	751	3.1	0.7	430	0.1	30	0.1	14	0.1	30	0.1	563	2.3					
Grover Beach	13,067	9,023	2,941	99	0.8	0.9	472	0.2	29	0.2	26	0.2	29	0.2	362	2.8					
Morro Bay	10,350	8,630	1,183	59	0.5	0.8	178	0.1	9	0.1	9	0.1	9	0.1	203	2.0					
Pismo Beach	8,551	7,449	589	49	0.6	0.5	244	0.1	11	0.1	5	0.1	11	0.1	163	1.9					
San Luis Obispo	44,174	34,756	5,147	594	1.3	0.4	2,286	0.4	78	0.2	49	0.1	78	0.2	1,075	2.4					

County/City	Total Population	White	%	Hispanic	%	Black	%	American Indian	%	Asian	%	Pacific Islander	%	Other	%	Two or More Races	%
San Mateo	707,161	352,355	49.8	154,708	21.9	23,778	3.4	1,546	0.2	140,313	19.8	9,112	1.3	2,217	0.3	23,132	3.3
Alhambra	7,194	6,022	83.7	200	2.8	50	0.7	10	0.1	704	9.8	30	0.4	18	0.3	160	2.2
Belmont	25,123	17,696	70.5	2,090	8.3	389	1.5	57	0.2	3,843	15.3	122	0.5	95	0.4	831	3.3
Burbane	3,597	2,329	64.7	550	15.3	35	1.0	13	0.4	507	14.1	19	0.5	20	0.6	124	3.4
Burlingame	28,158	20,063	71.3	2,995	10.6	266	0.9	39	0.1	3,841	13.6	132	0.5	68	0.2	754	2.7
Colma	1,191	330	27.7	523	43.9	11	0.9	0	0.0	280	23.5	3	0.3	1	0.1	43	3.6
Daly	103,621	18,344	17.7	23,072	22.3	4,482	4.3	199	0.2	52,154	50.3	904	0.9	414	0.4	4,052	3.9
East Palo Alto	29,506	1,930	6.6	17,346	58.8	6,641	22.5	66	0.2	621	2.1	2,223	7.5	67	0.2	612	2.1
Foster	28,803	16,090	55.9	1,531	5.3	595	2.1	29	0.1	9,339	32.4	156	0.5	69	0.2	994	3.5
Half Moon Bay	11,842	7,882	66.6	2,751	23.2	448	3.8	28	0.2	391	3.3	14	0.1	21	0.2	307	2.6
Hillsborough	10,825	7,541	69.7	304	2.8	54	0.5	4	0.0	2,600	24.0	25	0.2	27	0.2	270	2.5
Menlo Park	30,785	20,452	66.4	4,803	15.6	2,124	6.9	52	0.2	2,184	7.1	368	1.3	82	0.3	700	2.3
Millbrae	20,718	11,674	56.3	2,376	11.5	154	0.7	24	0.1	5,614	27.1	227	1.1	61	0.3	588	2.8
Pacifica	38,390	23,549	61.4	5,609	14.6	1,219	3.2	123	0.3	5,765	15.0	247	0.6	119	0.3	1,759	4.6
Portola Valley	4,462	4,053	90.8	149	3.3	18	0.4	3	0.1	178	4.0	1	0.0	7	0.2	53	1.2
Redwood	75,402	40,656	53.9	23,557	31.2	1,791	2.4	165	0.2	6,604	8.8	635	0.8	163	0.2	1,831	2.4
San Bruno	40,165	18,822	46.8	9,686	24.1	753	1.9	103	0.3	7,393	18.4	1,118	2.8	211	0.5	2,079	5.2
San Carlos	27,718	22,234	80.2	2,133	7.7	193	0.7	37	0.1	2,155	7.8	105	0.4	56	0.2	805	2.9
San Mateo	92,482	52,260	56.5	18,973	20.5	2,273	2.5	222	0.2	13,811	14.9	1,484	1.6	342	0.4	3,117	3.4
South San Francisco	60,552	18,487	30.5	19,282	31.8	1,621	2.7	197	0.3	17,312	28.6	896	1.5	264	0.4	2,493	4.1
Woodside	5,352	4,686	87.6	232	4.3	20	0.4	7	0.1	263	4.9	6	0.1	10	0.2	128	2.4
Santa Barbara	399,347	227,083	56.9	136,668	34.2	8,385	2.1	2,135	0.5	15,713	3.9	589	0.1	585	0.1	8,189	2.1
Buellton	3,828	2,670	69.8	985	25.7	12	0.3	32	0.8	42	1.1	8	0.2	3	0.1	76	2.0
Carpinteria	14,194	7,266	51.2	6,175	43.5	74	0.5	68	0.5	331	2.3	14	0.1	5	0.0	261	1.8
Guadalupe	5,659	457	8.1	4,781	84.5	20	0.4	28	0.5	268	4.7	8	0.1	4	0.1	93	1.6
Lompoc	41,103	19,696	47.9	15,337	37.3	2,887	7.0	365	0.9	1,540	3.7	119	0.3	47	0.1	1,112	2.7
Santa Barbara	92,325	53,849	58.3	32,330	35.0	1,416	1.5	405	0.4	2,467	2.7	98	0.1	180	0.2	1,578	1.7
Santa Maria	77,423	24,742	32.0	46,196	59.7	1,246	1.6	390	0.5	3,406	4.4	109	0.1	68	0.1	1,266	1.6
Solvang	5,332	4,090	76.7	1,059	19.8	16	0.3	19	0.4	52	1.0	2	0.0	0	0.0	94	1.8
Santa Clara	1,682,585	744,282	44.2	403,401	24.0	44,475	2.6	5,270	0.3	426,771	25.4	5,040	0.3	3,522	0.2	49,824	3.0
Campbell	38,138	25,168	66.0	5,083	13.3	932	2.4	151	0.4	5,348	14.0	82	0.2	60	0.2	1,314	3.4
Cupertino	50,546	24,181	47.8	2,010	4.0	319	0.6	80	0.2	22,414	44.3	58	0.1	124	0.2	1,360	2.7
Gilroy	41,464	15,767	38.0	22,298	53.8	615	1.5	193	0.5	1,658	4.0	74	0.2	58	0.1	801	1.9
Los Altos	27,693	21,656	78.2	822	3.0	127	0.5	40	0.1	4,252	15.4	45	0.2	55	0.2	686	2.5
Los Altos Hills	7,902	5,795	73.3	170	2.2	42	0.5	5	0.1	1,660	21.0	7	0.1	20	0.3	203	2.6
Los Gatos	28,592	23,821	83.3	1,491	5.2	217	0.8	53	0.2	2,160	7.6	19	0.1	54	0.2	777	2.7
Milpitas	62,698	14,917	23.8	10,417	16.6	2,187	3.5	240	0.4	32,281	51.5	347	0.6	131	0.2	2,178	3.5
Monte Sereno	3,483	2,828	81.2	125	3.6	6	0.2	2	0.1	427	12.3	1	0.0	8	0.2	86	2.5
Morgan Hill	33,556	20,583	61.3	9,229	27.5	537	1.6	179	0.5	1,966	5.9	50	0.1	68	0.2	944	2.8
Mountain View	70,708	39,029	55.2	12,911	18.3	1,674	2.4	164	0.2	14,513	20.5	160	0.2	221	0.3	2,036	2.9
Palo Alto	58,598	42,682	72.8	2,722	4.6	1,166	2.0	88	0.2	10,056	17.2	81	0.1	183	0.3	1,620	2.8
San Jose	894,943	322,534	36.0	269,989	30.2	29,495	3.3	2,959	0.3	238,378	26.6	3,093	0.4	1,699	0.2	26,796	3.0

County/City	Total Population	White	%	Hispanic	%	Black	%	American Indian	%	Asian	%	Pacific Islander	%	Other	%	More Races	Two or More Races	%	
Santa Clara	102,361	49,392	48.3	16,364	16.0	2,237	2.2	275	0.3	29,791	0.3	29.1	29.1	416	0.4	275	0.3	3,611	3.5
Saratoga	29,843	19,434	65.1	936	3.2	110	0.4	34	0.1	8,664	0.1	29.0	29.0	22	0.1	37	0.1	606	2.0
Sunnyvale	131,760	61,221	46.5	20,390	15.5	2,790	2.1	362	0.3	42,296	0.3	32.1	32.1	393	0.3	304	0.2	4,004	3.0
Santa Cruz	255,602	167,464	65.5	68,486	26.8	2,160	0.8	1,180	0.5	8,464	0.5	3.3	3.3	311	0.1	858	0.3	6,679	2.6
Capitola	10,033	7,870	78.4	1,267	12.6	109	1.1	35	0.3	387	0.3	3.9	3.9	18	0.2	30	0.3	317	3.2
Santa Cruz	54,593	39,304	72.0	9,491	17.4	871	1.6	248	0.5	2,607	0.5	4.8	4.8	60	0.1	247	0.5	1,765	3.2
Scotts Valley	11,385	9,694	85.1	729	6.4	48	0.4	33	0.3	517	0.3	4.5	4.5	19	0.2	30	0.3	315	2.8
Watsonville	44,265	8,574	19.3	33,254	75.1	206	0.5	163	0.4	1,358	0.4	3.1	3.1	28	0.1	65	0.1	617	1.4
Shasta	163,256	141,097	86.4	8,998	5.5	1,179	0.7	4,025	2.5	3,014	1.8	1.8	1.8	154	0.1	245	0.2	4,544	2.8
Anderson	9,022	7,526	83.4	659	7.3	50	0.6	306	3.4	155	1.7	1.7	1.7	11	0.1	11	0.1	304	3.4
Redding	80,865	69,293	85.7	4,393	5.4	828	1.0	1,625	2.0	2,372	2.9	2.9	2.9	79	0.1	142	0.2	2,133	2.6
Shasta Lake	9,008	7,629	84.7	557	6.2	55	0.6	354	3.9	32	0.4	0.4	0.4	6	0.1	20	0.2	355	3.9
Sierra	3,555	3,210	90.3	213	5.9	6	0.2	56	1.6	5	0.1	0.1	0.1	3	0.1	2	0.1	60	1.7
Loyalton	862	763	88.5	62	7.2	2	0.2	23	2.7	1	0.1	0.1	0.1	0	0.0	0	0.0	11	1.3
Siskiyou	44,301	36,910	83.3	3,354	7.6	556	1.3	1,605	3.6	523	1.2	1.2	1.2	49	0.1	42	0.1	1,262	2.8
Dorris	886	674	76.1	145	16.3	0	0.0	45	5.1	1	0.1	0.1	0.1	0	0.0	0	0.0	21	2.4
Dunsmuir	1,923	1,619	84.2	191	9.9	36	1.9	33	1.7	10	0.5	0.5	0.5	1	0.1	0	0.0	33	1.7
Etna	781	679	87.0	27	3.5	1	0.1	43	5.5	5	0.6	0.6	0.6	0	0.0	0	0.0	26	3.3
Fort Jones	660	560	84.9	53	8.0	0	0.0	18	2.7	0	0.0	0.0	0.0	3	0.5	0	0.0	26	3.9
Montague	1,456	1,262	86.7	79	5.4	1	0.1	70	4.8	2	0.1	0.1	0.1	1	0.1	1	0.1	40	2.7
Mount Shasta	3,621	3,209	88.6	211	5.8	55	1.5	15	0.4	59	1.6	1.6	1.6	5	0.1	3	0.1	64	1.8
Tulelake	1,020	526	51.5	462	45.3	1	0.1	12	1.2	3	0.3	0.3	0.3	0	0.0	2	0.2	14	1.4
Weed	2,978	2,013	67.6	380	12.8	273	9.2	46	1.5	135	4.5	4.5	4.5	14	0.5	1	0.0	116	3.9
Yreka	7,290	6,108	83.8	392	5.4	32	0.4	419	5.7	133	1.8	1.8	1.8	3	0.0	3	0.0	200	2.7
Solano	394,542	194,282	49.2	69,598	17.6	57,597	14.6	2,194	0.6	49,399	0.6	12.5	12.5	2,859	0.7	955	0.2	17,658	4.5
Benicia	26,865	19,653	73.9	2,424	9.0	1,253	4.7	123	0.5	1,996	0.5	7.4	7.4	74	0.3	78	0.3	1,074	4.0
Dixon	16,103	9,318	57.8	5,414	33.6	292	1.8	94	0.6	476	0.6	4.2	4.2	42	0.3	24	0.1	443	2.8
Fairfield	96,178	47,094	49.0	18,050	18.8	14,097	14.7	518	0.5	10,277	0.5	10.7	10.7	851	0.9	270	0.3	5,021	5.2
Rio Vista	4,571	3,781	82.7	522	11.4	47	1.0	37	0.8	67	0.8	1.5	1.5	1	0.0	6	0.1	110	2.4
Suisun	26,118	10,091	38.6	4,652	17.8	4,904	18.8	126	0.5	4,515	0.5	17.3	17.3	253	1.0	69	0.3	1,508	5.8
Vacaville	88,625	56,031	63.2	15,847	17.9	8,691	9.8	608	0.7	3,580	0.7	4.0	4.0	360	0.4	169	0.2	3,339	3.8
Vallejo	116,760	35,533	30.4	18,591	15.9	27,201	23.3	547	0.5	27,829	0.5	23.8	23.8	1,188	1.0	312	0.3	5,559	4.8
Sonoma	458,614	341,686	74.5	79,511	17.3	6,116	1.3	3,477	0.8	13,786	0.8	3.0	3.0	828	0.2	921	0.2	12,289	2.7
Cloverdale	6,831	4,692	68.7	1,823	26.7	9	0.1	80	1.2	59	0.9	0.9	0.9	5	0.1	15	0.2	148	2.2
Colati	6,471	4,962	76.7	810	12.5	148	2.3	42	0.6	231	0.6	3.6	3.6	13	0.2	16	0.2	249	3.8
Healdsburg	10,722	7,265	67.8	3,090	28.8	35	0.3	94	0.9	67	0.9	0.6	0.6	3	0.0	9	0.1	159	1.5
Petaluma	54,548	41,996	77.0	7,985	14.6	581	1.1	173	0.3	2,089	0.3	3.8	3.8	85	0.2	100	0.2	1,539	2.8
Rohnert Park	42,236	31,266	74.0	5,731	13.6	799	1.9	202	0.5	2,320	0.5	5.5	5.5	168	0.4	119	0.3	1,631	3.9
Santa Rosa	147,595	104,581	70.8	28,318	19.2	3,023	2.0	1,406	1.0	5,542	1.0	3.8	3.8	333	0.2	260	0.2	4,132	2.8

County/City	Total Population	White	%	Hispanic	%	Black	%	American Indian	%	Asian	%	Pacific Islander	%	Other	%	Two or More Races	%
Sebastopol	7,774	6,635	85.4	720	9.3	50	0.6	48	0.6	116	1.5	7	0.1	18	0.2	180	2.3
Sonoma	9,128	8,141	89.2	625	6.8	31	0.3	18	0.2	154	1.7	5	0.1	14	0.2	140	1.5
Windsor	22,744	15,989	70.3	5,364	23.6	150	0.7	175	0.8	503	2.2	30	0.1	24	0.1	509	2.2
Stenislus	446,997	256,001	57.3	141,871	31.7	10,621	2.4	3,483	0.8	18,234	4.1	1,354	0.3	971	0.2	14,462	3.2
Ceres	34,609	17,361	50.2	13,115	37.9	889	2.6	348	1.0	1,697	4.9	120	0.3	63	0.2	1,016	2.9
Hughson	3,980	2,244	56.4	1,545	38.8	19	0.5	31	0.8	38	1.0	5	0.1	1	0.0	97	2.4
Modesto	188,856	112,456	59.5	48,310	25.6	7,013	3.7	1,435	0.8	11,084	5.9	872	0.5	555	0.3	7,121	3.8
Newman	7,093	2,987	42.1	3,648	51.4	75	1.1	54	0.8	119	1.7	5	0.1	9	0.1	196	2.8
Oakdale	15,503	11,651	75.1	3,109	20.0	62	0.4	136	0.9	157	1.0	11	0.1	10	0.1	367	2.4
Patterson	11,606	4,189	36.1	6,611	57.0	188	1.6	86	0.7	233	2.0	35	0.3	27	0.2	237	2.0
Riverbank	15,826	7,612	48.1	7,266	45.9	200	1.3	143	0.9	187	1.2	15	0.1	12	0.1	391	2.5
Turlock	55,810	33,717	60.4	16,422	29.4	728	1.3	338	0.6	2,439	4.4	132	0.2	132	0.2	1,902	3.4
Waterford	6,924	4,155	60.0	2,454	35.5	24	0.3	72	1.0	44	0.6	11	0.2	8	0.1	156	2.3
Sutter	78,930	47,532	60.2	17,529	22.2	1,418	1.8	940	1.2	8,771	11.1	142	0.2	190	0.2	2,408	3.1
Live Oak	6,229	2,298	36.9	3,028	48.6	86	1.4	71	1.1	585	9.4	3	0.0	19	0.3	139	2.2
Yuba	36,758	21,693	59.0	9,029	24.5	976	2.7	502	1.4	3,227	8.8	94	0.3	98	0.3	1,139	3.1
Tehama	56,039	43,972	78.5	8,871	15.8	279	0.5	1,008	1.8	423	0.8	48	0.1	109	0.2	1,329	2.4
Coming	6,741	4,376	64.9	1,943	28.8	30	0.4	122	1.8	36	0.5	4	0.1	31	0.5	199	3.0
Red Bluff	13,147	10,538	80.2	1,799	13.7	74	0.6	243	1.8	207	1.6	4	0.0	7	0.1	275	2.1
Tehama	432	315	72.9	85	19.7	3	0.7	10	2.3	0	0.0	3	0.7	2	0.5	14	3.2
Trinity	13,022	11,271	86.6	517	4.0	54	0.4	583	4.5	58	0.4	15	0.1	13	0.1	511	3.9
Tulare	368,021	153,916	41.8	186,846	50.8	5,122	1.4	3,011	0.8	11,457	3.1	257	0.1	444	0.1	6,968	1.9
Dinuba	16,844	3,471	20.6	12,647	75.1	30	0.2	82	0.5	408	2.4	11	0.1	16	0.1	179	1.1
Exeter	9,168	5,266	57.4	3,507	38.3	41	0.5	83	0.9	117	1.3	2	0.0	21	0.2	131	1.4
Farmersville	8,737	2,194	25.1	6,292	72.0	21	0.2	30	0.3	90	1.0	1	0.0	4	0.0	105	1.2
Lindsay	10,297	1,956	19.0	8,029	78.0	31	0.3	59	0.6	104	1.0	7	0.1	5	0.0	106	1.0
Porterville	39,615	16,649	42.0	19,589	49.4	406	1.0	378	1.0	1,761	4.4	28	0.1	24	0.1	780	2.0
Tulare	43,994	19,276	43.8	20,058	45.6	2,051	4.7	290	0.7	830	1.9	42	0.1	88	0.2	1,359	3.1
Visalia	91,565	50,269	54.9	32,619	35.6	1,558	1.7	675	0.7	4,472	4.9	79	0.1	87	0.1	1,806	2.0
Woodlake	6,651	890	13.4	5,575	83.8	8	0.1	37	0.6	46	0.7	2	0.0	1	0.0	92	1.4
Tuolumne	54,501	46,377	85.1	4,445	8.1	1,135	2.1	864	1.6	377	0.7	81	0.1	47	0.1	1,175	2.2
Sonora	4,423	3,814	86.2	372	8.4	30	0.7	49	1.1	51	1.2	2	0.0	5	0.1	100	2.3
Ventura	753,197	427,449	56.8	251,734	33.4	13,490	1.8	3,177	0.4	39,452	5.2	1,379	0.2	1,122	0.1	15,394	2.0
Camacho	57,077	41,543	72.8	8,869	15.5	802	1.4	201	0.4	4,068	7.1	105	0.2	86	0.2	1,403	2.5
Fillmore	13,643	4,178	30.6	9,090	66.6	26	0.2	69	0.5	97	0.7	11	0.1	24	0.2	148	1.1
Moorepark	31,415	19,611	62.4	8,735	27.8	435	1.4	82	0.3	1,738	5.5	29	0.1	75	0.2	710	2.3
Ojai	7,862	6,259	79.6	1,245	15.9	46	0.6	23	0.3	124	1.6	11	0.1	9	0.1	145	1.8
Oxnard	170,358	35,049	20.6	112,807	66.2	5,923	3.5	597	0.4	12,257	7.2	562	0.3	182	0.1	2,981	1.7

County/City	Total Population	White	%	Hispanic	%	Black	%	American Indian	%	Asian	%	Pacific Islander	%	Other	%	Two or More Races	%
Port Huenehe	21,845	9,321	42.6	8,960	41.0	1,216	5.6	158	0.7	1,324	6.1	102	0.5	39	0.2	725	3.3
San Buenaventura	100,916	68,710	68.1	24,573	24.3	1,284	1.3	631	0.6	2,933	2.9	134	0.1	152	0.2	2,499	2.5
Santa Paula	28,598	7,551	26.4	20,360	71.2	69	0.2	129	0.5	180	0.6	27	0.1	39	0.1	243	0.8
Simi Valley	111,351	80,908	72.7	18,729	16.8	1,348	1.2	457	0.4	6,932	6.2	143	0.1	191	0.2	2,643	2.4
Thousand Oaks	117,005	90,862	77.7	15,328	13.1	1,162	1.0	345	0.3	6,826	5.8	108	0.1	142	0.1	2,232	1.9
Yolo	168,660	97,942	58.1	43,707	25.9	3,133	1.9	1,165	0.7	16,390	9.7	443	0.3	396	0.2	5,484	3.3
Davis	60,308	39,714	65.9	5,793	9.6	1,354	2.2	274	0.5	10,514	17.4	134	0.2	187	0.3	2,338	3.9
West Sacramento	31,615	17,271	54.6	9,470	30.0	737	2.3	337	1.1	2,222	7.0	164	0.5	94	0.3	1,320	4.2
Winters	6,125	3,119	50.9	2,720	44.4	30	0.5	32	0.5	60	1.0	10	0.2	8	0.1	146	2.4
Woodland	49,151	26,064	53.0	19,084	38.8	527	1.1	365	0.7	1,768	3.6	117	0.2	70	0.1	1,156	2.4
Yuba	60,219	39,320	65.3	10,449	17.3	1,795	3.0	1,306	2.2	4,480	7.4	98	0.2	120	0.2	2,651	4.4
Marysville	12,268	8,069	65.8	2,152	17.5	548	4.5	231	1.9	728	5.9	21	0.2	14	0.1	505	4.1
Wheatland	2,275	1,504	66.1	483	21.2	25	1.1	31	1.4	118	5.2	3	0.1	7	0.3	104	4.6

Exhibit B

The LAX Master Plan and Draft EIR/EIS—Needs for Improvement to Assess Available Policy Choices

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Introduction

This analysis was commissioned by the law firm of Radcliff, Frandsen & Dongell, Counsel for the City of Inglewood. The charge was to review various sections of the Draft LAX Master Plan and Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR), and analyze whether those documents fully, fairly and accurately assessed the impacts of the proposed project and reasonably feasible options for comparison.

The author grew up in the City of Inglewood, living there from the third grade through graduation from Morningside High School in 1964. He received a B.A. degree in Biochemistry from the University of California at Berkeley, followed by a Ph.D. in Genetics from Stanford University. He is now a Research Professor with the Center for Technology, Environment and Development (CENTED) of the George Perkins Marsh Institute at Clark University. For the past twenty-six years he has been engaged in the development and application of methodology to assess the health, ecological, and economic impacts of regulatory actions. His work has focused on the development of methodology to incorporate interindividual variability data and quantitative mechanistic information into risk assessments for both cancer and non-cancer endpoints. Current projects for the U.S. Environmental Protection Agency include quantitative assessment of the amount of variability in susceptibility to particulate air pollutants, and differences between children and adults in susceptibility of children to environmental chemical health hazards. He has been a councilor and has recently been named Fellow of the Society for Risk Analysis, and serves on the editorial board of its journal, Risk Analysis. In the past he has served on three committees of the National Academy of Sciences/National Research Council; and recently has been selected to serve on a National Academy of Sciences committee on "Estimating the Health-Risk-Reduction Benefits of Proposed Air Pollution Regulations."

Early on in the review of the draft EIR/EIS, it became apparent that there were important conceptual issues in the way the EIR/EIS study team had structured their analysis. In order to discover what might be missing, a first step was to create a basic classification system for policy analysis problems. This classification system is described in Section 3 of this report, with some illustrations from the draft EIR/EIS. Following this, a more detailed reading of sections of both the Master Plan and the draft EIR/EIS led to several conclusions on the appropriateness of the combined analysis of both documents for making public policy choices on expansion of air service in Southern California. These conclusions are summarized in Section 2 below.

Summary of Principal Conclusions

A good policy analysis for a new construction project needs to accomplish three basic tasks. The first of these is to define the full range of choices that are realistically available to address (or not to address) the perceived needs for the project. Second, the analysis team needs to fairly and comprehensively assess and compare the expected consequences of each of the choices (policy options) defined in the first task. The extent of the analysis of different outcomes should be sufficient that the all consequences are elucidated that have a reasonable chance of influencing the choices among policy options. Finally, the report of the effort should make the methods and

results of the analysis clear and accessible to all interested parties and the general public. This is important so that every citizen and group can judge the relative desirability of the various options from their own perspectives, and act to influence the policy choices through the processes of available decision making fora. The existing LAX Master Plan and Draft EIR/EIS has significant deficiencies in each of these areas that can and should be remedied.

2.1 Framing the Options for Comparison

The framing of the options for analysis in the current draft is exclusively focused on engineering changes. Future “demand” for air services is estimated from a single set of assumptions about future population and economic growth in Southern California, and future national average costs of air travel in revenue per seat-mile, and then “build” options are designed to meet this projected “demand” either in full or in part. There is no apparent recognition or analysis of the possibility that at least some of the growth in “demand” for air services could be shifted to outlying airports downwind of major population concentrations (or out of the South Coast Air Basin entirely, in the case of connecting flights) by changes in economic pricing—such as airport user fees. Such economic measures might not completely avoid the need to expand capacity at LAX, but they seem worthy of explicit consideration at least as supplements to the existing engineering options because:

- They would generate additional revenue, which could be used in part for additional impact mitigation options for both LAX’s existing and forecast expanded impacts.
- They might well be expected to change the rate of increase in demand for air services at LAX, allowing the construction of additional infrastructure on a more extended schedule. Stretching out the schedule for expansion might be beneficial both in reducing costs and allowing the use of cheaper and lower-polluting technology for construction, such as the replacement of existing diesel-powered equipment with either better-controlled diesel equipment or equipment powered by cleaner-burning natural gas or electric engines.
- If public entities do not take the opportunity to control the growth of demand with increases in revenue-generating user fees, and if a policy choice is made that does not accommodate the full projected increase in demand for air service at LAX (such as the currently preferred “Option C”), that would not necessarily mean that the passengers and freight shippers would benefit. In that case it can be expected that a substantial part of the economic benefits of access to the restricted supply will flow to the other major economic actors involved—the airlines. Differential pricing between airports with and without capacity restrictions might well be estimated by examining cases such as Dulles vs Regan airports in Washington, D.C.,* if not comparisons among airports with more- vs less-serious current capacity constraints in the Los Angeles area.

* The author does not know of systematic research on this subject. However he is a frequent traveler between Boston and Washington, D. C. and has often encountered a substantial price differential in flights available to the two Washington D.C. airports. A recent example was a purchase of a round trip ticket from Boston to Dulles for \$313, when the comparable fare to the more capacity-constrained Regan airport would have been more than \$250 greater.

2.2 Assessing and Comparing the Consequences of Different Policy Choices

The assessments of major impacts also leave much to be desired. One pervasive problem is that nearly always, the reader is shown only impacts expected for two specific years—2005 and 2015—rather than the full stream of impacts expected from the various alternatives over time. These years may have been chosen to represent conditions before and after completion of construction, however 2005 does not represent even the peak year for construction-related impacts. There is a recognition in the analysis of the “criteria” air pollutants (Section 4.6) that construction-related emissions peak in 2004** rather than 2005, but there does not seem to be a similar recognition in the toxic air pollutant analysis of cancer and non-cancer risks in Section 4.24. Rather than providing 2005 and 2015 “snapshots” of the comparative emissions, population exposures, and health effects, the final EIS/EIR should also analyze and express impacts in terms of both peak-year and integrated bottom-line measures of effect over a reasonably foreseeable extended time over which the facilities will be built and operated (such as, for example, 2002-2021 or even 2041).

Another related generic deficiency in the analyses of human health impacts is that these impacts are expressed primarily in terms of the “significance” of effects for the most exposed individual (judged by exceedance of national ambient air quality standards, in the case of Section 4.6) or, in the case of some of the carcinogenic impacts in Section 4.24, in terms of the areas or numbers of people exposed to concentrations expected to exceed a 1/100,000 lifetime incremental cancer risk criterion or an unusual criterion for non-cancer effects of a hazard index of 5 (the usual criterion used in many impact assessments under Superfund and other national legislation is a hazard index of 1).

These ways of expressing health impact results are of some relevance because they help the audience judge the fairness of the burden of extra risk imposed for residents of the areas most affected by the project options. However, exclusive definition of impacts in terms of the area or number of people who receive an increment of risk or (for non-carcinogenic agents) exposure to pollutants from LAX-related sources alone that is deemed to exceed a single bright line of “significance” ignores the incremental cancer and noncancer risks to people who do not happen to be moved across such a criterion level. Further, these ways of summarizing impacts can not, by themselves give decision-makers and the public a sufficient description of the overall health impacts to arrive at a reasoned judgment of whether the mix of economic, human health, and environmental impacts of the proposed “build” option is more desirable overall than the comparable impacts of other options. The current analysis of economic impacts describes projected aggregate changes in jobs and overall economic activity for the City of Los Angeles, Los Angeles County, and the whole Southern California area. To be comparable with these aggregate economic impacts, aggregate measures of health impacts must be created and the current artificial limitation of the study area for quantifying air pollution impacts must be

** For example in one of the final appendices on the last of 3 CD ROM disks of the EIR/EIS (“Attachment G—Construction Activities Emissions Inventories” to the annex labeled “4. Air Quality Technical Report”, one can learn that for one of the air pollutants of most concern, particulate matter, year 2004 emissions are expected to be more than twice those in 2005 (approximately 44,000 lbs/day in comparison to slightly over 19,000 lbs/day).

transcended.* For example, decision-makers and the public should be informed of the differences among options in the overall cases of cancer that are expected to arise over the lifetimes of the individuals exposed over particular periods of construction and operation of the proposed facilities and the entire geographic area of the South Coast Air Basin that receives incremental changes in exposures. For genetically-acting carcinogenic agents, which are thought to have simple straight-line dose response relationships at low doses^{1,2}, it is feasible to utilize available information on mean estimates of cancer potency^{3,4} and mean estimates of incremental exposures to calculate incremental cancer cases (although such calculations are not without their complications) and present results that depict the overall extra cancer burden that is to be expected for communities. In the non-cancer area, it is at least possible to draw on the extensive documentation of dose response relationships for particulate matter and ozone^{5,6,7} in the supporting documentation for EPA national ambient air quality studies and other data in the scientific literature for the "criteria" pollutants to create aggregate estimates of incremental deaths and hospital admissions for incremental particulate matter exposures, and incremental respiratory effects in the case of ozone. For example, calculations can now be made for PM10 and general mortality, based in part on a recent study of the effects of PM10 (airborne particulate matter less than 10 microns in diameter) on daily mortality in 90 cities across the United States, including several in Southern California.⁸ This study has confirmed relationships observed between particulate matter and morbidity and mortality in the prior literature. Overall, it appears that the mortality effect is approximately a 0.5% to 1% increase in total nonaccidental deaths per 10 $\mu\text{g}/\text{m}^3$ change in PM10. For comparison, the projected unmitigated construction-related concentrations of PM10 at the point of maximum impact for the peak construction year range from 39 to 63 $\mu\text{g}/\text{m}^3$ over the 1996 "Environmental Baseline" concentration of 36 $\mu\text{g}/\text{m}^3$ (Table 4.6-13, p. 4-500). Human health impact results therefore can and should be expressed in aggregate incremental cancer cases, aggregate incremental deaths, aggregate incremental hospitalizations, and aggregate incremental asthma effects. Comparisons among these readily understandable and relevant indices of harm for various LAX and other air service expansion options are important inputs for decision-making by decision-makers and the general public.

Were the analysis expanded to include some options shifting some additional air service to outlying airports (as recommended above), continued use of the more localized health impact analysis method would cause the analysts to miss important benefits that would accrue from placing emissions downwind rather than upwind of the major population centers of the Los Angeles area. As pointed out by another commenter, restricting the environmental impact analyses to the immediate LAX area and the options considered only to expansion of LAX also prevents the Environmental Justice analysis from considering the relative burdens on minority communities of LAX expansion vs expansion of air service at other airports. The City of Inglewood appears to be substantially included in the existing boundaries of the air dispersion modeling study area. Still, so that Inglewood would be better able to negotiate either improved

* The current area assessed for air pollution impacts is limited at a particular boundary (very roughly, about 10 miles) in the down wind direction (east) from the airport. This boundary was not selected entirely arbitrarily. Based on initial modeling, the boundary was designated to be sure to include the full area (and then some) where excess cancer risks were expected to be 10 per million (on a lifetime exposure basis) or more—the definition of a "significant" incremental impact for this study and also for other pieces of legislation in California (e.g., Proposition 65). However incremental exposures for people further removed from the airport certainly occur and should be part of the assessment of basin-wide population aggregate incremental impacts.

mitigation measures and/or compensation for residual unmitigated impacts, it is important to have impacts broken down by various political jurisdictions covering the most affected communities (e.g., Inglewood, El Segundo, etc.) in the LAX area and beyond.

Another general deficiency of the analysis is that there is no apparent attempt to assess and communicate uncertainties in a quantitative way. Two basic levels of uncertainty analysis are possible. The first is called sensitivity analysis, in which reasonably plausible ranges of key assumptions or estimated parameters are varied and the reader is shown how much the important conclusions about impacts would change as a result. A second, more sophisticated level of analysis is to specify uncertainty and variability distributions in place of the fixed point parameters used in the analysis. Such analysis is becoming increasingly used in recent years,^{9,10} principals for stochastic analyses have been widely discussed in the field, and it is very surprising that such a large study of a major project with impacts projected many years into the future makes no apparent use of these techniques to fairly inform the audience of the uncertainties in key results.

One aspect of the modeling that is particularly in need of exploration via sensitivity/uncertainty analyses is the assumed behavioral responses of airlines to increasing delays as the intensity of usage of airport facilities increases. At present "capacity" calculations seem to be based on an assumption that 10-15 minute delays are the maximum that will be tolerated. However the operation of the model seems to have yielded somewhat different results for the "average" air side delay among options. These differences directly affect estimates of the emissions from idling aircraft and could also be an important factor in economic consequences resulting from differences in both airline and consumer behavior in response to different delays in flights scheduled at high vs low usage times and at LAX vs outlying airports. The basis for the existing assumptions needs to be more transparently documented, and consequences of plausible alternative behavioral assumptions over the future years of the "No Action/No Project" and "build" options need to be assessed and disclosed.

Finally, there are some glaring omissions of important effects from the economic impact analysis. Economic impacts are assessed in terms of changes in employment, and overall economic activity, for the South Coast as a whole, Los Angeles County, and the City of Los Angeles. Changes in on-airport employment are also described, as are the expected capital costs of the various policy options. Unaccountably, there does not seem to be any readily locatable presentation of expected effects on operating revenues and costs for the major economic actors that are directly affected by the proposed project—LAWA itself, the City of Los Angeles as owner and taxing authority, and the air lines. Projections of these expected impacts must exist. Moreover, they are highly relevant to judgments of the equity (fairness) of the distribution of expected good and bad effects of the different policy options for different groups, including an expanded Environmental Justice analysis. Are residents of the City of Inglewood expected to receive incremental benefits from the project that bear a reasonable relationship to their incremental burdens, either in the form of further mitigation of the pre-existing "Environmental Baseline" impacts or other desirable projects? It seems that no judgment of this is possible unless the proponents of LAX expansion reveal the expected stream of net benefits that they expect to flow from their proposed \$10 billion or more of investments.

Communicating the Results Clearly and Coherently

To say the least, the current massive document on 5 CD-ROM disks is not very user-friendly. There is a general need for a consolidated summary description of the major impact results for various options, the methods and assumptions used to derive those results, and the vulnerability of the findings to major types of uncertainties, including projections of future “demand” for air travel.

What is true of the general impact assessment summarization is also true at the level of at least some assessments of individual types of impacts in the Draft EIR/EIS. For example, the “Air Quality” assessment presents numerical estimates of expected changes in emissions and air concentrations of “criteria” air pollutants for construction, on-airport, and off-airport sources. However it does not quantitatively summarize the total emissions or expected exposures either before or after the application of proposed mitigation measures. Thus in order to obtain consolidated overall impacts, the reader would have to do their own analysis combining the results presented in several different tables.

Survey of the Draft LAX Master Plan and EIR/EIS for Generic Types of Policy Analysis Problems

As mentioned in the introduction, this section reflects an earlier and somewhat more abstract stage of the author’s assessment of the EIR/EIS documentation. The first subsection below provides some background on the different criteria for judging what is “good” information in basic science, vs. the analysis of policy options. Based on this, an overview is provided of generic types of policy analysis problems that have been observed in the author’s prior experience, and this theoretical framework is briefly applied in a preliminary evaluation of the Draft Master Plan EIS/EIR.

3.1 Relevance and Comprehensiveness as Touchstones for Good Policy Analysis to Support Rational Decision-Making

One frequent source of confusion among technically trained people in preparing assessments for policy/decision-making purposes is that the basic rules for judging information are different in basic science from those that are appropriate in the analysis of public policy options. In basic science, one of the worst types of mistakes one can make is to make a premature conclusion of fact that later turns out to be wrong. The reason why this type of mistake is so damaging to the scientific process is that it misdirects research efforts—tending to send researchers down “blind alleys” based on incorrect premises.

Guarding against this type of error has led basic scientists to adopt “validity” and “reliability” as criteria of central importance for judging measurements and other information:

- A “valid” measurement is one that measures what it is claimed to measure. A classic example of an “invalid” measurement is a grocer weight meat with his thumb on the scale. In this case, the pressure of the grocer’s thumb is being incorrectly included

along with the weight of the meat in the assessment of how much meat the consumer is buying.

- A “reliable” measurement is one that achieves a reasonable standard of accuracy and reproducibility. Extending the previous example, we would say that a grocer would be making an “unreliable” measurement if he were to use a common bathroom scale to weigh the meat to be sold to the consumer. This is because bathroom scales are not generally equipped to measure the weight of meat for purchase to the degree of accuracy that we have become accustomed to in the supermarket.

Unfortunately, it is perfectly possible for technical specialists operating within the traditions of individual disciplines to produce valid and reliable results that are perfectly useless or even misleading for policy/decision-making purposes. Whereas the worst thing one can do in basic science (other than fudging data) is to come to a premature conclusion of fact, in policy analysis the worst thing one can do is to miss an effect that, if analyzed, would have a good chance to change the decision-makers’ evaluation of the relative desirability of available policy options. Guarding against this type of error the main objective is to produce “relevant” and “comprehensive” information that is as “valid” and “reliable” as possible.

- “Relevant” information quantifies some difference that is valued by decision-makers among the consequences of various policy options.
- “Comprehensive” information includes quantification of all the differences in the consequences of various policy options that have a reasonable chance of influencing the choices that decision-makers would want to make among the various policy options.

3.2 Overview of Generic Types of Policy Analysis Problems

3.2.1 Problems in Framing the Policy Options for Comparison

One of the easiest ways in which a policy analysis can be biased is in the construction of an inappropriate set of options for comparison. Choice of an unrealistically bad comparison case can make the proposed project options look better than they should. And failure to include potentially better project options than the ones preferred by the proponents also can bias the results. The basic criterion for evaluation of an option set is, does it include all the possible policy choices that are or (by legislative action) could be reasonably available to the decision-making actor(s)?

For example, in the current case, one type of option component that might be considered would be a system of taxes and credits designed to shift some demand from LAX to outlying airports—particularly to the East—with an expectation of lesser population aggregate air pollutant impacts per passenger accommodated. Other types of options could be variants in which the ring road to provide better access to airport terminals was put in place before the new terminal is opened up.

A related type of problem is potentially inappropriate bundling of mitigation measures with the project options to make the project options look better. In the current case one might well ask whether some of the air emission mitigation options might be considered as options in their own right, or joined with changes in user fees and perhaps a delayed schedule of roadway and terminal improvements to achieve an even more desirable basket of net revenues and environmental improvements than is presented by any of the current plan options.

Boundary Problems—Do the Boundaries of Space and Time Utilized in the Study Capture the Full Range of Project Impacts that are of Interest for the Choices Among Options?

The artificial limitation of the analysis of air emission impacts to a defined area east of the airport has already been discussed in Section 2 above. Quantitative impacts on health outcome can and should be assessed for the residents and workers in the entire South Coast Air Basin whose exposures to a variety of “criteria” pollutants and toxic air contaminants will be affected in ways that can be modeled, even if they may not be directly measurable. Accomplishing this improved basin-wide exposure modeling seems feasible on the basis of the results of the MATES-II study,¹¹ where results of basin-wide modeling of concentrations at several locations have been found to be reasonably comparable to observations for a large number of pollutants.

3.2.3 Problems in the Dependent Variables Used to Quantify and Compare Impacts Among Policy Options

As indicated in Section 3.1, a good policy analysis should include all types of impacts that have an appreciable chance to affect the choices among options by relevant decision-makers or other affected parties. In particular the current analysis does not appear to show the reader the bottom line economic costs and benefits over time to the LAX owners and to the surrounding communities. Nor does it evaluate the impacts on the economics of supplementary economic measures (e.g. user charges per flight) that could make revenue available for additional mitigation steps.

A second problem area discussed in Section 2 above is the lack of quantitative treatment of variability and uncertainty in the present analysis. Throughout, the current document presents results from one particular scenario of economic development, etc. At the very least several scenarios should explore the implications for the relative desirability of different technical options of different plausible possibilities for rate of growth in air transport demand; including possible effects of greater use of teleconferencing on growth in demand for business travel, different assumptions for the growth in population and personal income in Southern California, etc.

Finally there is a need for presentation of impacts in more- and less-aggregated forms to show benefits, costs, and changes in health impacts for various policy options for various subgroups. In particular, it is important to assess cumulative impacts—integrated over time—over the project building period and at least a couple of decades thereafter, for residents of Inglewood, the City of Los Angeles, and the total residents of the South Coast Air Quality Management District

3.2.4 Technical Problems in Assessing Impacts (e.g.—appropriate estimation of emissions, dispersion models, etc.)

The favorable comparison between the build options and the No Action/No Plan alternative may be very sensitive to the way that the analysts have modeled the responses of the airlines to increasing congestion on the air side and the responses of members of the public to increasing congestion on the terminal side. On the air side, the analysis appears to depend on assumptions that air lines will take severe steps to reduce traffic at the point when delays reach 10-15 minutes. The basis for this assumption and the basis for figuring the exact responses as a function of delay time do not appear to be fully articulated in the present report. There may well be other technical problems in the modeling of various other impacts, but these cannot be fully explored in the time frame available for this review.

4. References

¹ Hattis, D., "Pharmacokinetic Principles for Dose Rate Extrapolation of Carcinogenic Risk from Genetically Active Agents," *Risk Analysis*, Vol. 10, pp. 303-316, 1990.

² Hattis, D., and Smith, J., "What's Wrong with Quantitative Risk Assessment," in *Quantitative Risk Assessment*, J. M. Humber and R. F. Almeder, eds., Biomedical Ethics Reviews: 1986, Humana Press, Clifton, New Jersey, 1987, pp. 57-105.

³ Hattis, D., and Goble, R., "Expected Values for Projected Cancer Risks from Putative Genetically-Acting Agents," *Risk Analysis*, Vol. 11, pp. 359-363, 1991.

⁴ Hattis, D. and Barlow, K. "Human Interindividual Variability In Cancer Risks--Technical And Management Challenges" *Human and Ecological Risk Assessment*, Vol. 2, pp. 194-220, 1996.

⁵ U.S. Environmental Protection Agency. *Air Quality Criteria for Particulate Matter* Research Triangle Park, N.C. National Center for Environmental Assessment. Office of Research and Development. Final Draft. (April 12, 1996).

⁶ U.S. Environmental Protection Agency. *Review of the National Ambient Air Quality Standards for Particulate Matter: Policy Assessment of Scientific and Technical Information*. Office of Air Quality Planning and Standards. EPA-452-R-96-013. July, 1996.

⁷ R. G. Whitfield "A Probabilistic Assessment Of Health Risks Associated With Short-Term Exposure To Tropospheric Ozone: A Supplement," (Work funded by the U.S. Environmental Protection Agency under Interagency Agreement DW89935085-01-3 with the U.S. Department of Energy), *EPA Technology Transfer Network, Clean Air Act Title I* (January 1997), reviewed in Hattis, D., and Anderson, E. "What Should Be The Implications Of Uncertainty, Variability, And Inherent 'Biases'/'Conservatism' For Risk Management Decision Making?" *Risk Analysis*, Vol. 19, pp. 95-107 (1999).

⁸ Samet, J. M., Zeger, S. L., Dominici, F., Curriero, F., Coursac, I., Dockery, D. W., Schwartz, J., and Zanobetti, A. *The National Morbidity, Mortality, and Air Pollution Study Part II: Morbidity and Mortality from Air Pollution in the United States*, Health Effects Institute, Report Number 94, Part II, Final Version released and available on the Web at www.healtheffects.org/news.htm, April 18, 2001.

⁹ Hattis, D. and Burmaster, D. E. "Assessment of Variability and Uncertainty Distributions for Practical Risk Analyses" *Risk Analysis*, Vol. 14, pp. 713-730, October 1994.

¹⁰ Hattis, D. "Drawing the Line: Quantitative Criteria for Risk Management." *Environment*, Vol. 38(6), pp. 10-15, 35-39, July/Aug 1996.

¹¹ South Coast Air Quality Management District, "Multiple Air Toxics Exposure Study in the South Coast Air Basin-MATES-II Final Report," March 2000 (Including Appendices).

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Summary of Experience and Training

- Research: Methodology for quantitative health risk assessment for cancer and non-cancer health effects; Human interindividual variability in susceptibility to toxic effects; Pharmacokinetic and Monte Carlo simulation modeling; Implications of interindividual variability for population risk for both carcinogens and other toxic substances; Environmental/health, economic, and legal implications of alternative regulatory actions to control occupational exposure to noise, perchloroethylene, ethylene oxide, butadiene, glycol ethers, acrylamide, formaldehyde; setting priorities for control of toxic substances.
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Fellow, Society for Risk Analysis (awarded 12/00); Councilor, Society for Risk Analysis 12/97-12/00; Member, Editorial Board for Risk Analysis; Member, National Research Council Subcommittee on Methyl Bromide, Member, Massachusetts Department of Environmental Protection/Department of Public Health Advisory Committee on Health Effects. Past President, New England Chapter of the Society for Risk Analysis.

Teaching: Tools for Quantitative Policy Analysis (Clark University graduate course; MIT Summer Session); Quantitative Risk Assessment for Ecological Risks for Near-Shore Systems (in cooperation with the U.S. EPA's Narragansett RI Laboratory); Cancer, Science and Society (Clark University, undergraduate course).

Grants and Contracts Through Clark University

Connecticut Department of Public Health (subcontract from an original contract from EPA), Pharmacokinetic Parameters—Adult Child Comparisons and Interindividual Variability—15 months, 70K, beginning 4/99; extended 11/00-8/1/02 for an additional 175K.

U.S. Environmental Protection Agency, Interindividual Variability in Response to Particulates--3 year 190K project initiated by EPA personnel started 10/98 (Principal Investigator, with Rob Goble).

U.S. Environmental Protection Agency grant, "Human Variability in Parameters Potentially Related to Susceptibility for Noncancer Risks" 332K over 3 years, beginning 12/96.

State of California, Project on Electromagnetic Fields (Rob Goble, PI) 1 year effort beginning 12/97, 1.25 months of support.

State of Connecticut subcontract on work for the U.S. Environmental Protection Agency "Pharmacokinetic Modeling for Site-Acting Carcinogens" \$52K, 11/15/96 - 11/14/97.

U.S. Environmental Protection Agency, via subcontract to Research Triangle Institute, "Considerations for Hazardous Waste Identification Rules--Development of Toxicity Values for Chemicals that Do Not Have Official RfD's " \$10.8K, 12/96-9/97.

State of Connecticut subcontract on work for the U.S. Environmental Protection Agency "Pharmacokinetic Modeling for Site-Acting Carcinogens" \$30K, 11/15/95 - 11/14/96

Ministry of Health, Canada, (Dale Hattis, Principal Investigator) "New Estimates Of Variability In Parameters Putatively Related To Individual Cancer Risk" \$14K, 1/31 - 3/31/95

U.S. Environmental Protection Agency, Measures of Pollution Prevention (Sam Ratick, PI) 1994-95, 3 months of support.

Office of Technology Assessment (Rob Goble, PI) "Implementation of the Occupational Lead Standard the Secondary Lead Smelting Industry" 20K 7/1/94 - 9/30/94.

U. S. Environmental Protection Agency, "Principles of Ecological Risk Analysis and Management as Applied to Near-Coastal Waters" (two year project, with involvement by Halina Brown, Sam Ratick, Rob Goble, Andrea Lemerise, and Arshad Bahl) 2nd Year FY 1992 and 1993--\$230K.

U. S. Environmental Protection Agency, "Interspecies Projection of Carcinogenic Risks per Unit of Active Dose Delivered to Target Sites" (with involvement by Rob Goble, Halina Brown, and Joanne Shatkin) 3 Years in FY 1991, 1992, 1993--\$200K.

Health and Welfare Ministry, Government of Canada, "Pharmacokinetic Modeling of Lead in Primates--Parameters of Interest for Adapting Human Models and Representing the Effects of Pregnancy," (7 Month effort with involvement by Mary Ballew) \$25K, FY 1991.

Publications

1. Hattis, D., Russ, A., Goble, R., Banati, P., and Chu, M. "Human Interindividual Variability in Susceptibility to Airborne Particles," Risk Analysis, 2001, in press.
2. Hattis, D. "Draft Risk Analysis Ideals," Human and Ecological Risk Assessment, Vol. 6, pp. 913-919 (2000); also published in more extended form on the Society for Risk Analysis website, www.sra.org, 2000.
3. Hattis, D., Russ, A., Banati, P., Kozlak, M., Goble, R., and Ginsberg, G. "Development of a Comparative Child/Adult Pharmacokinetic Database Based Upon the Therapeutic Drug Literature," Report by Clark University and the Connecticut Department of Public Health to the U.S. Environmental Protection Agency under Cooperative Agreement #827195-0, October, 2000.
4. Hattis, D. "The Conception of Variability in Risk Analyses—Developments Since 1980," Presented at "Risk and Governance, An International Symposium," June 21-25, 2000, Airlee Conference Center, Warranton, Virginia, Risk Analysis, 2001, in press.
5. Hattis, D. and Swedis, S. "Uses Of Biomarkers For Genetic Susceptibility And Exposure In The Regulatory Context," Presented at the Arizona State University workshop on "Predictive Genetic Testing in Healthcare: Regulatory, Professional, and Liability Considerations," April, 7-8, 2000, Jurimetrics, Volume 41, in press, 2001.
6. Evans, J. S., Thompson, K. M., and Hattis, D. "Exposure Efficiency: Concept and Application to Perchloroethylene Exposure from Dry Cleaners," JAWMA, in press, 2000.
7. Hattis, D., Banati, P., and Goble, R. "Distributions of Individual Susceptibility Among Humans for Toxic Effects—For What Fraction of Which Kinds of Chemicals and Effects Does the Traditional 10-Fold Factor Provide How Much Protection?" Annals of the New York Academy of Sciences, Volume 895, pp. 286-316, December, 1999.
8. Anderson, E. L., Hattis, D., Kaplan, S., Kunreuther, H., and Lave, L. B. "Comprehensive Review of the Office of Risk Assessment and Cost-Benefit Analysis," Report to the United States Department of Agriculture by the Society for Risk Analysis, September, 1999.
9. Ginsberg, G. L., Chute, S. K., and Hattis, D. B. "Extrapolation of Gavage Bioassay Results to Other Dosing Methods: Case Studies with Four Carcinogens—Ethylene Dibromide, Chloroform, Vinyl Chloride, and Hydrazine," Report to the U.S. Environmental Protection Agency by the Connecticut Department of Public Health, Division of Environmental Epidemiology and Occupational Health under EPA Cooperative Assistance Agreement 824277-01-2, July, 1999.
10. Hattis, D., and Makri, A. "Expected Hearing Loss and Disability from Noise Exposures in Construction" Report to the Occupational Safety and Health Administration, May, 1999.
11. Hattis, D., Banati, P., Goble, R., and Burmaster, D. "Human Interindividual Variability in Parameters Related to Health Risks," Risk Analysis, Vol. 19, pp. 705-720, 1999.
12. Hattis, D., and Anderson, E. "What Should Be The Implications Of Uncertainty, Variability, And Inherent 'Biases'/'Conservatism' For Risk Management Decision Making?" Risk Analysis, Vol. 19, pp. 95-107 (1999).
13. Hattis, D. "Occupational Noise Sources and Exposures in Construction Industries" Human and Ecological Risk Assessment, Vol. 4, pp. 1417-1441, December 1998.
14. Hattis, D. "An Extended Probability-Tree Analysis of the Cancer Risk from Diesel Particulates" Report to the Natural Resources Defense Council, August, 1998.

15. Hattis, D. "What Can Mechanisms Tell us About Modeling Dose Time Response Relationships?" in Summary of the U. S. EPA Workshop on the Relationship Between Exposure Duration and Toxicity Office of Research and Development, U.S. Environmental Protection Agency, EPA/600/R-99/081, September 1998.
16. Hattis, D. "A Probability-Tree Interpretation of the California EPA's Analysis of the Cancer Risk from Diesel Particulates" Invited Comment submitted to the Science Advisory Panel of the California Air Resources Board, March 19, 1998.
17. Hattis, D. "Strategies For Assessing Human Variability In Susceptibility, And Using Variability To Infer Human Risks" In Human Variability in Response to Chemical Exposure: Measures, Modeling, and Risk Assessment, D. A. Neumann and C. A. Kimmel, eds., CRC Press, Boca Raton, FL, pp. 27-57, 1998.
18. Hattis, D. 1997. "Preliminary Analysis of OSHA Inspection Data for Noise Exposures in Construction." Report submitted to the Occupational Safety and Health Administration, 11/14/97.
19. Hattis, D., Banati, P., Sirovic, I., and Goble, R. "Preliminary Analysis of a Data Base of Human Interindividual Variability Observations--Implications for Generic Occupational Health Risk Assessments for Chronic Toxic Responses" Report to the Occupational Safety and Health Administration, May 27, 1997.
20. Hattis, D. "Variability in Susceptibility--How Big, How Often, For What Responses to What Agents?" Environmental Toxicology and Pharmacology, Vol. 4, pp. 195-208, 1997.
21. Hattis, D., and Minkowitz, B. "Risk Evaluation: Legal Requirements, Conceptual Foundations, And Practical Experiences In The United States," Originally presented at the International Workshop on Risk Evaluation, Schloss Haegerloch, Germany, June 20-21, 1994. Discussion paper No. 93, ISBN 3-932013-16-6, Center of Technology Assessment in Baden-Wuerttemberg, 1997.
22. Dickey, C., Santella, R. M., Hattis, D., Tang, D., Hsu, Y., Cooper, T., Young, T. L., and Perera, F. P. "Variability in PAH-DNA Adduct Measurements in Peripheral Mononuclear Cells: Implications for Quantitative Cancer Risk Assessment." Risk Analysis, Vol. 17, pp. 649-657, 1997.
23. Hattis, D. Invited Comment on Heitzman, M., and Wilson, R. "Low Dose Linearity: The Rule or the Exception." Belle Newsletter, 6:(1) pp. 21-24, March, 1997.
24. Hattis, D. "Variability in Susceptibility--How Big, How Often, For What Responses to What Agents?" Environmental Toxicology and Pharmacology, Vol. 2, pp. 135-145, 1996.
25. Hattis, D., and Minkowitz, W.S. "Risk Evaluation: Criteria Arising from Legal Traditions and Experience with Quantitative Risk Assessment in the United States." Environmental Toxicology and Pharmacology, Vol. 2, pp. 103-109, 1996.
26. Hattis, D. Review of "Cancer Wars: How Politics Shapes What We Know and Don't Know about Cancer," Robert N. Proctor American Scientist, Vol. 84, pp. 616-617, November-December, 1996.
27. Hattis, D. "Drawing the Line: Quantitative Criteria for Risk Management." Environment, Vol. 38(6), pp. 10-15, 35-39, July/Aug 1996.
28. Hattis D. "The Challenge Of Mechanism-Based Modeling In Risk Assessment For Neurobehavioral Endpoints." Environmental Health Perspectives, Vol. 104, Suppl. 2, pp. 318-390, April 1996.
29. Hattis, D., Glowa, J., Tilson, H., and Ulrich, B. "Risk Assessment for Neurobehavioral Toxicity: SGOMSEC Joint Report" Environmental Health Perspectives, Vol. 104, Suppl. 2, pp. 217-226, April 1996.
30. Hattis, D. and Barlow, K. "Human Interindividual Variability In Cancer Risks--Technical And Management Challenges" Human and Ecological Risk Assessment, Vol. 2, pp. 194-220, 1996.

31. Hattis, D., Review of "Biomarkers and Occupational Health--Progress and Perspectives, M. L. Mendelsohn, J. P. Peeters, M. J. Normandy, eds.," Science, Vol. 271, p. 770, Feb. 9, 1996.
32. Renwick, A. G., and Hattis, D. "Introduction to the Workshop on Variability in Toxic Response--Human and Environmental. Rapporteurs' Summary." Environmental Toxicology and Pharmacology, Vol. 2, pp. 79-84, (1996).
33. Ginsberg, G. L., Pepelko, W. E., Goble, R. L., and Hattis, D. B. "Comparison of Contact Site Cancer Potency Across Dose Routes: Case Study with Epichlorohydrin," Risk Analysis Vol. 16, pp. 667-681, 1996.
34. Hattis, D. "Human Interindividual Variability in Susceptibility to Toxic Effects--From Annoying Detail to a Central Determinant of Risk" Toxicology Vol. 111, pp. 5-14, 1996.
35. Hattis, D. "Radiation-Induced Cancers in DOE and Contractor Employees: Implications of Possible Alternative Workers' Compensation Settlement Policies and Assessment of the Possible Role of New Molecular Biological Techniques" Report commissioned by Ashford Associates, Cambridge MA under a contract with COMPA Industries, Inc. (Ref: DE-AC01-94EH89501) which in turn was under contract to the U.S. Department of Energy, October, 1995.
36. Hattis, D. "Suggested Distributional Assumptions for Human Physiologically-Based Modeling of Methylene Chloride," Report to the Occupational Safety and Health Administration, September, 1995.
37. Goble, R. and Hattis, D. "When the *Ceteris Aren't Paribus*--Contrasts between Prediction and Experience in the Implementation of the OSHA Lead Standard in the Secondary Lead Industry," Report to the Office of Technology Assessment, U.S. Congress, by the Center for Technology, Environment, and Development, Clark University, July, 1995.
38. Hattis, D. and Barlow, K. "New Estimates Of Variability In Parameters Putatively Related To Individual Cancer Risk" Report to the Ministry of Health, Government of Canada, by the Center for Technology, Environment, and Development, Clark University, March, 1995.
39. Hattis, D. and Crofton, K. "Use of Biological Markers of Causal Mechanisms in the Quantitative Assessment of Neurotoxic Risks" Chapter 53 in Handbook of Neurotoxicology, Vol. 3 Approaches and Methodologies Lewis Chang and William Slikker, eds., Academic Press, 1995, pp. 789-803, 1995.
40. Hattis, D. and Burmaster, D. E. "Assessment of Variability and Uncertainty Distributions for Practical Risk Analyses" Risk Analysis, Vol. 14, pp. 713-730, 1994.
41. Hattis, D., and Silver, K., "Human Interindividual Variability--a Major Source of Uncertainty in Assessing Risks for Non-Cancer Health Effects," Risk Analysis, Vol 14, pp. 421-431, 1994.
42. Hattis, D. "Saccharin Carcinogenesis--Two Approaches for Quantitative Risk Assessment Based on Observations in Two Different Kinds of Experimental Systems" Report to the California Department of Environmental Protection, June, 1994.
43. Hattis, D. "The Use of Well Defined Biomarkers (Such as Blood Lead) in Risk Assessment," Environmental Geochemistry and Health, Vol. 16, No. 3/4, pp. 223-228, December, 1994.
44. Hattis, D., Campbell, D., Dettman, E. H., Lemerise, A., Brown, W. A., and Ratick, S. J. "Expected Perturbations of Biota by Residual Chlorine and Nitrogen in Sewage Effluent Discharged into Greenwich Cove, Rhode Island--A Case Study of Quantitative Risk Assessment for Ecological Effects" Summary Report--USEPA/Clark University Cooperative Agreement No. 818679-01-3, CENTED, Clark University, May, 1994.
45. Ginsberg, G. L., Goble, R. L., and Hattis, D. B. "Slope Factor Comparison Across Dose Routes: Case Study with Epichlorohydrin," Report to the U.S. Environmental Protection Agency by TRC Environmental Corporation, April, 1994.

46. Hattis, D., and Goble, R. L. "Current Priority-Setting Methodology: Too Little Rationality or Too Much?" Chapter 7 in: Worst Things First? The Debate over Risk-Based National Environmental Priorities, A. M. Finkel and D. Golding, eds., Resources for the Future, Washington, D.C., 1994, pp. 107-131.
47. Hattis, D., White, P., and Koch, P. "Uncertainties in Pharmacokinetic Modeling for Perchloroethylene. II. Comparison of Model Predictions with Data for a Variety of Different Parameters" Risk Analysis, Vol 13, pp. 599-610, 1993.
48. Hattis, D. "The Importance of Exposure Measurements in Risk Assessment of Drugs" Archives of Toxicology, Supplement 16, pp. 201-210, 1994.
49. Rees, D. C., and Hattis, D. "Developing Quantitative Strategies for Animal to Human Extrapolation" Chapter 8 in Principles and Methods of Toxicology, 3rd Edition, A. W. Hayes, ed., Raven Press, New York, 1994, pp. 275- 315.
50. Hattis, D., and Silver, K. "Use of Mechanistic Data in Occupational Health Risk Assessment--The Example of Diesel Particulates," in Chemical Risk Assessment and Occupational Health--Current Applications, Limitations, and Future Prospects, C. Mark Smith, David C. Christiani, and Karl T. Kelsey, eds., Greenwood Publishing Group, Inc., Westport CT, 1994, pp. 167-177.
51. Hattis, D., Shatkin, J., and White, P. "Opportunities for Research into Interspecies Comparisons of Cancer Risks. Construction and Analysis of a Low Dose Potency Data Base for In Vitro Measurements of Metabolic Activation, Detoxification, and DNA Repair" Report to the U.S. Environmental Protection Agency by the Center for Technology, Environment, and Development, Clark University, November, 1994.
52. Hattis, D. "Going Beyond Uncertainty Factors--Opportunities for Quantitative Toxicology," In Beck, B. D., Conolly, R. B., Dourson, M L., Guth, D., Hattis, D., Kimmel, C., and Lewis, S. C. "Improvements in Quantitative Noncancer Risk Assessment--Symposium Overview," Fundamental and Applied Toxicology, Vol. 20, pp. 1-14 (1993).
53. Hattis, D., and Silver, K., "Use of Biological Markers in Risk Assessment," Chapter 10 in Molecular Epidemiology: Principles and Practices, P. Schulte and R. Perera, eds. Academic Press, pp. 251-273, 1993.
54. Hattis, D., "Using Indicator Information for Managing Risks," Chapter 14 in: Environmental Indicators and Shellfish Safety, C. R. Hackney and M. D. Pierson, eds., Chapman & Hall, New York, pp. 364-380, 1993.
55. Ahmed, F. E., Hattis, D., Wolke, R. E., and Steinman, D., "Human Health Risks Due to Consumption of Chemically Contaminated Fishery Products," Environ. Health Perspect., Vol. 101 (Suppl. 3), pp. 297-302, 1993.
56. Hattis, D. and Froines, J., "Uncertainties in Risk Assessment," In Conference on Chemical Risk Assessment in the DoD: Science, Policy, and Practice, Harvey J. Clewell, III, ed., American Conference of Governmental Industrial Hygienists, Inc., Cincinnati, Ohio, 1992, pp. 69-78.
57. Hattis, D., and Silver, K., "Projection of Human Lung Cancer Risks for Diesel Particulates from Animal Data--Effects of Using Measures of Internal vs. External Dose, and Possible Interactions with Smoking," report to the United Mineworkers by Ashford Associates, July, 1992.
58. Hattis, D., and Goble, R., "Expected Values for Projected Cancer Risks from Putative Genetically-Acting Agents," Risk Analysis, Vol. 11, pp. 359-363, 1991.
59. Ashford, N. A., Bregman, C., Hattis, D. B., Karmali, A., Schabacker, C., Schierow, L. J., and Whitbeck, C. Monitoring the Community for Exposure and Disease: Scientific, Legal, and Ethical Considerations, Report to the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, M. I. T. Center for Technology, Policy, and Industrial Development, November, 1991.

60. Hattis, D., "Assessment and Management of Risks from Chemical Contaminants in Seafood--Opportunities for Improvement," In "Symposium on Issues in Seafood Safety," Farid E. Ahmed, Ed., Institute of Medicine, National Academy of Sciences, Washington, D.C., pp. 74-94, October, 1991
61. Silver, K., and Hattis, D., "Methodology for Quantitative Assessment of Risks from Chronic Respiratory Damage: Lung Function Decline and Associated Mortality from Coal Dust," M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 90-9, May, 1991
62. Hattis, D., "Responsibilities of Scientists to Convey Uncertain Information of Potential Significance (And its Significant Uncertainties)," Presented at the annual meeting of the American Association for the Advancement of Science, February 18, 1991, Washington, D. C.
63. Ballew, M., and Hattis, D., "Pharmacokinetic Modeling of Lead in Primates--Parameters of Interest for Adapting Human Models and Representing the Effects of Pregnancy," Center for Technology, Environment, and Development, Clark University, March, 1991.
64. Hattis, D., "Use of Biological Markers and Pharmacokinetics in Human Health Risk Assessment," Environmental Health Perspectives, Vol. 89, pp. 230-238, 1991.
65. Goble, R. L., Hattis, D., and Socolow, R., "Uncertainties in Population Risk Estimates which Arise from Different Conditions of Exposure to Indoor Radon," Proceedings of the 29th Hanford Symposium on Health and the Environment, Indoor Radon and Lung Cancer: Reality or Myth October, 1990; 1992.
66. Silver, K., and Hattis, D. Human Interindividual Variability in Susceptibility to FEV₁ Decline from Smoking, M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 90-8, October, 1990
67. Hattis, D., Modeling the Risk of Needlestick Transmission of HIV, M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 90-7, June, 1990
68. Boswell, S. L., Finkelstein, S. N., and Hattis, D., Exposure of Health Care Workers to HIV-1--A Framework for Quantitative Analysis, M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 90-4, May, 1990
69. Hattis, D. White, P., Marmorstein, L, and Koch, P., "Uncertainties in Pharmacokinetic Modeling for Perchloroethylene. I. Comparison of Model Structure, Parameters, and Predictions for Low-Dose Metabolism Rates for Models Derived by Different Authors," Risk Analysis, Vol. 10, pp. 449-457, 1990.
70. Hattis, D., Abdollahzadeh, S., and Franklin, C. A., "Strategies for Testing the 'Irritation-Signaling' Model for Chronic Lung Effects of Fine Acid Particles," JAPCA, Vol. 40, pp. 322-330, 1990.
71. Hattis, D., and Shapiro, K., "Analysis of Dose/Time/Response Relationships for Chronic Toxic Effects--The Case of Acrylamide," NeuroToxicology, Vol. 11, pp. 219-236, 1990.
72. Hattis, D., "Pharmacokinetic Principles for Dose Rate Extrapolation of Carcinogenic Risk from Genetically Active Agents," Risk Analysis, Vol. 10, pp. 303-316, 1990.
73. Hattis, D., "Three Candidate 'Laws' of Uncertainty Analysis" Risk Analysis, Vol. 10, p. 11, 1990.
74. Ashford, N. A., Spadafor, C. J., Hattis, D. B., and Caldart, C. C., Monitoring the Worker for Exposure and Disease: Scientific, Legal and Ethical Considerations in the Use of Biomarkers, Johns Hopkins University Press, Baltimore, 1990.
75. Hattis, D., Keeler, G. J., and Schierow, L., Building Perspectives for Assessing the Risks of Acid Particulates and Ozone, M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 89-8, September, 1989

76. Hattis, D., "The Use of Pharmacokinetic Analysis in Risk Assessment--The Case of Butadiene," in *Biological Data for Pharmacokinetic Modeling and Risk Assessment--Report of a Workshop Convened by the U. S. Environmental Protection Agency and ILSI Risk Science Institute, Asheville, North Carolina, May 23-25, 1988*, U.S. Environmental Protection Agency Report No. EPA/600/3-90/019, August, 1989, pp. B-46 to B-52.
77. Ballew, M., and Hattis, D., *Reproductive Effects of Glycol Ethers in Females--A Quantitative Analysis*, M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 89-7, July, 1989
78. Twersky, F., Whitbeck, C., and Hattis, D., *Exposures of Health Care Workers to HIV--Factors Affecting Occupational Risks in San Francisco, Boston, and New York*, M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 89-6, June, 1989
79. Strauss, H., and Hattis, D., *Estimation of HIV and HBV Infectious Titers in Human Fluids and Tissues* M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 89-4, June, 1989
80. Bailar, J. C. III, Finkel, A. M., Silbergeld, E. K., and Hattis, D., "Letter to the Editor, Re: Cancer-Causing Substances in Food, Drugs, and Cosmetics," *New England Journal of Medicine*, Vol. 320, p. 935, 1989
81. Brown, H. S., and Hattis, D. "The Role of Skin Absorption as a Route of Exposure to Volatile Organic Compounds in Household Tap Water: A Simulated Kinetic Approach," *J. Am Col. Toxicol.*, Vol. 8, pp. 839-851, 1989.
82. Hattis, D., "Scientific Uncertainties and How They Affect Risk Communication," in *Effective Risk Communication: The Role and Responsibility of Government and Nongovernment Organizations*, V. T. Covello, D. B. McCallum, and M. T. Pavolova, eds., Plenum Publishing, New York, 1989.
83. Hattis, D., Welch, L. S., and Schrader, S. M., *Male Fertility Effects of Glycol Ethers--A Quantitative Analysis*, M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 88-3, December, 1988.
84. Hattis, D., "The Use of Biological Markers in Risk Assessment," *Statistical Science*, Vol. 3, pp. 358-366, 1988.
85. Gobbell, J. V., Hattis, D., and Ashford, N. A., *Possible Health Risks From Exposure to Chromium by Various Routes--Comparison of Exposures From Hazardous Waste Processing and Disposal in New Jersey with Exposures Originating from Other Sources*, Center for Technology, Policy, and Industrial Development, CTPID 88-5, December, 1988.
86. Baskir, J. N., Hattis, D. Gross, D., and Ashford, N. A., *Possible Health Risks from Exposure to Chlorinated Solvents by Various Routes--Comparison of Exposures From Hazardous Waste Processing and Disposal in New Jersey with Exposures Originating from Other Sources*, Center for Technology, Policy, and Industrial Development, CTPID 88-2, November, 1988.
87. Hattis, D. and Shapiro, K., *Analysis of Dose/Time/Response Relationships for Chronic Toxic Effects--The Case of Acrylamide*, National Technical Information Service No. NTIS/PB89-109581, M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 88-4, July, 1988.
88. Hattis, D. and Berg, R., "Pharmacokinetics of Ethoxyethanol in Humans," National Technical Information Service No. NTIS/PB88-221528, M.I.T. Center for Technology, Policy, and Industrial Development, CTPID 88-1, February, 1988.
89. Hattis, D., Erdreich, L., and Ballew, M., "Human Variability in Susceptibility to Toxic Chemicals -- A Preliminary Analysis of Pharmacokinetic Data from Normal Volunteers," *Risk Analysis*, Vol. 7, pp. 415-426, 1987.
90. Hattis, D., Bird, S., and Erdreich, L., "Human Variability in Susceptibility to Anticholinesterase Agents," M. I. T. Center for Technology, Policy and Industrial Development, CTPID 87-4, December, 1987.

91. Hattis, D. and Wasson, J., "A Pharmacokinetic/Mechanism-Based Analysis of the Carcinogenic Risk of Butadiene," National Technical Information Service No. NTIS/PB88-202817, M. I. T. Center for Technology, Policy and Industrial Development, CTPID 87-3, November, 1987.
92. Hattis, D., Wasson, J. M., Page, G. S., Stern, B., and Franklin, C., "Acid Particulates and the Tracheobronchial Region of the Lung--An 'Irritation-Signaling' Model for Possible Health Effects," Journal of the Air Pollution Control Association, Vol. 37, pp. 1060-1066, September, 1987.
93. Hattis, D., "A Pharmacokinetic/Mechanism-Based Analysis of the Carcinogenic Risk of Ethylene Oxide," National Technical Information Service Number NTIS/PB88-188784, M. I. T. Center for Technology, Policy and Industrial Development, CTPID 87-1, August, 1987.
94. Hattis, D., "The Value of Molecular Epidemiology in Quantitative Health Risk Assessment," in Environmental Impacts on Human Health--The Agenda for Long-Term Research and Development, S. Draggan, J. J. Cochrane, and R. E. Morrison, eds., Praeger Press, New York, 1987.
95. Hattis, D., and Smith, J., "What's Wrong with Quantitative Risk Assessment," in Quantitative Risk Assessment, J. M. Humber and R. F. Almeder, eds., Biomedical Ethics Reviews: 1986, Humana Press, Clifton, New Jersey, 1987, pp. 57-105.
96. Hattis, D. Book Review, of Ethnic Differences in Reactions to Drugs and Xenobiotics, W. Kalow, W. Goedde, and D. P. Agarwal, Eds., Alan R. Liss, Inc., New York 1986; Science, Vol. 234, pp. 221-222, (1986).
97. Tuler, S., and Hattis, D. "Carcinogenesis Risk Assessment of Two-Carbon Alkylating Agents Using Dynamic Simulation of Absorption and Metabolism," Presented at the Society for Risk Analysis, October, 1986.
98. Hattis, D., Tuler, S., Finkelstein, L., and Luo, Z., A Pharmacokinetic/Mechanism-Based Analysis of the Carcinogenic Risk of Perchloroethylene, National Technical Information Service, No. NTIS/PB88-163209, Report to the National Institute for Occupational Safety and Health and the National Institute for Environmental Health Sciences; M.I.T. Center for Technology, Policy and Industrial Development, Report No. CTPID 86-7, September, 1986.
99. Hattis, D. and Wasson, J., "Potential Short Term Measures of Long Term Damage From Diesel Particulates--Alkane Exhalation and Urinary Hydroxyproline to Creatinine Ratios," Report to the National Institute for Occupational Safety and Health; M.I.T. Center for Technology, Policy and Industrial Development, Report No. CTPID 86-10, September, 1986.
100. Strauss, H. S., and Hattis, D., "Constructing a Database on the Release of Microorganisms in the Environment: Preliminary Scoping of Available Data and Appropriate Categories of Information," Report to the Department of National Health and Welfare, Canada; M.I.T. Center for Technology, Policy and Industrial Development, Report No. CTPID 86-9, July, 1986.
101. Strauss, H. S., Ingram, C., and Hattis, D., "A Draft Questionnaire for Gathering Data to Assess the Risks of Releasing Microorganisms Into the Environment," Report to the Department of National Health and Welfare, Canada; M.I.T. Center for Technology, Policy and Industrial Development, Report No. CTPID 86-8, July, 1986.
102. Hattis, D., "Human Variability in Parameters that are Potentially Related to Susceptibility to Carcinogenesis -- Implications for Risk Assessment," Presented at the EPRI workshop, Investigation of New Approaches to Use of Data in Cancer Risk Assessment, March 24-25, 1986, Denver, Colorado.
103. Hattis, D. B., "The Promise of Molecular Epidemiology for Quantitative Risk Assessment," Risk Analysis, Vol. 6, No. 2, pp. 181-193, 1986.

104. Hattis, D. and Kennedy, D., "Assessing Risks from Health Hazards: An Imperfect Science," Technology Review, Vol. 89, pp. 60-71, May/June, 1986.
105. Wagner, R. M., Hattis, D., Strauss, H., and Caldart, C.C., "Development of a Quick-Screen Toxicity Scoring System to Assist in Setting Priorities Under TSCA," MIT Center for Technology, Policy and Industrial Development CTPID 86-5, June, 1986.
106. Hattis, D., Erdreich, L., and DiMauro, T., Human Variability In Parameters That are Potentially Related to Susceptibility to Carcinogenesis--I. Preliminary Observations, Report to the Environmental Criteria and Assessment Office, U.S. Environmental Protection Agency; M.I.T. Center for Technology, Policy and Industrial Development, Report No. CTPID 86-4, May, 1986.
107. Hattis, D., and Strauss, H., "Potential Indirect Mechanisms of Carcinogenesis--A Preliminary Taxonomy," National Technical Information Service No. NTIS/PB89-120513, M.I.T. Center for Technology, Policy and Industrial Development, Report No. CTPID 86-3 to the National Institute for Occupational Safety and Health, February, 1986.
108. Harrison, K., Hattis, D., and Abbat, K., Implications of Chemical Use for Exposure Assessment: Development of an Exposure-Estimation Methodology for Application in a Use-Clustered Priority Setting System, M.I.T. Center for Technology Policy and Industrial Development, Report No. CTPID 86-2 to the U. S. Environmental Protection Agency, February, 1986.
109. Hattis, D., Erdreich, L., and Ballew, M., "Human Variability in Susceptibility to Toxic Chemicals -- I. Noncarcinogens," U. S. Environmental Protection Agency, Environmental Criteria and Assessment Office, ECAO-CIN-494, National Technical Information Service No. PB 87-101 242/AS, 1987.
110. Strauss, H. S., Hattis, D. B., and Ashford, N. A., "A Critique of the Vermont Hazardous Air Contaminant Program and an Alternate Approach for the Determination of Acceptable Ambient Levels for Air Contaminants," Report to the State of Vermont by Ashford Associates, January, 1986.
111. Hattis, D., "The Route from Mickey to Walt--By Magic Carpet Through Fantasyland or Step by Step through Frontierland. Comment on 'A Statistical Model for Species Extrapolation Using Categorical Response Data', R. C. Hertzberg and M. E. Miller' Toxicology and Industrial Health, Vol. 1, pp. 61-63, December, 1985.
112. Strauss, H., Hattis, D., Page, G. S., Harrison, K., Vogel, S. R., and Caldart, C. C., "Direct Release of Genetically-Engineered Microorganisms: A Preliminary Framework for Risk Evaluation Under TSCA," MIT Center for Technology, Policy and Industrial Development CTPID 85-3, August, 1985.
113. Harrison, K. and Hattis, D., "Containment of Genetically-Engineered Microorganisms: A Comparison of Expected Releases During Greenhouse Trials with Releases in Ordinary Research and Development," M.I.T. Center for Technology, Policy and Industrial Development CTPID 85-2, July, 1985.
114. Page, G. S., Harrison, K., and Hattis, D., "Industrial Innovation Based on Undirected Mutagenesis of Microorganisms--Implications for Regulation Under TSCA," M.I.T. Center for Technology, Policy and Industrial Development, CTPID 85-1, June, 1985.
115. Hattis, D., "Alkane Exhalation--An Index of Oxidant Damage to Human Lungs from Air Pollutants?" M.I.T. Center for Policy Alternatives, CPA 85-2, May, 1985.
116. Page, G. S., Wasson, J. M., and Hattis, D. B., "Health Effects of Long-Range Transported Acid Particulates--A Preliminary Mechanism-Oriented Model," M.I.T. Center for Policy Alternatives, CPA 85-3, May, 1985.
117. Caldart, C. C., Hattis, D. B., and Wasson, J. M., "Data Management for FIFRA and TSCA Enforcement: Needs, Accomplishments, and Opportunities, or What Fate for 'FATES'?" M.I.T. Center for Policy Alternatives Report CPA 85-04, January, 1985.

118. Hattis, D., P. Dolinger, R. Wagner, and S. J. Bird, "The Potential for Mechanism-Oriented Research Projects to Help Determine the Health Effects of Airborne Pollutants--An Analysis for Research Planning," M.I.T. Center for Policy Alternatives, CPA-84-06, October 1984.
119. Hattis, Dale and Tom DiMauro, "Health Benefits and Costs of Supplementary Measures to Improve Compliance with Workplace Exposure Limits for Asbestos in the Construction Industry," M.I.T., Center for Policy Alternatives, CPA 84-03, July 1984.
120. R. Wagner, K. Abbat, D. Hattis and J. Briskin, "Epoxides and Their Derivatives: -- Survey of Potential Uses in Relation to Chemical Structure," M.I.T, Center for Policy Alternatives, CPA 84-02, April 1984.
121. R. Willmer, D. Friend, D. Hattis, D. Reed and D. Young, "Proposed Siting Criteria for Low-Level Radioactive Waste Facilities in Massachusetts. Prepared for The Executive Office of Environmental Affairs and the Massachusetts Health Research Institute," March 1984.
122. Hattis, D., "Risk Assessment for Acute Exposures to Chlorine or Ammonia -- A Theoretical Toxicological Perspective," for Environmental Resources LTD. March, 1984.
123. K. Abbat, D. Hattis, R. Wagner, and J. Briskin, "Aromatic Amines and Their Derivatives: Survey of Potential Uses in Relation to Chemical Structure," M.I.T. Center for Policy Alternatives, CPA 84-01, January 1984.
124. W. Curtiss Priest, and D. Hattis, "An Evaluation of the SPHERE Pilot Systems: Appraisal of Its Utility, Scope and Direction, Preliminary Report to the Environmental Protection Agency," Cooperative Agreement Contract No. CR807352-01-1, CPA 83/13, June 1983.
125. R. Goble, D. Hattis, M. Ballew and D. Thurston, "Implementation of the Occupational Lead Exposure Standard," Report to the Office of Technology Assessment, Contract #233-7040.0, MIT Center for Policy Alternatives, CPA 83-20, October 1983.
126. Hattis, D., Robin Wagner, Katherine Abbat, and Carolyn Atwood, "Some Considerations for Possible Significant New Use Rules for Hydrazine Derivatives -- A Survey of Potential Uses in Relation to Chemical Structure," M.I.T. Center for Policy Alternatives, CPA 82-17, November 1983.
127. Hattis, D., "The Possible Carcinogenic Risk of Formaldehyde--Recent Projections, Supporting Data and Assumptions," M.I.T. Center for Policy Alternatives, March 2, 1983.
128. Hattis, D., Nicholas A. Ashford, J. Herbert Hollomon, "Regulation of Cancer-Causing Substances: Another Point of View," Chemical and Engineering News, December 13, 1982, pp. 35-37.
129. Hattis, D., "Monohalomethanes: A Preliminary A Priori Assessment of Relative Potencies for Carcinogenesis," Report to the National Institute for Occupational Safety and Health Under Purchase Order No. 82-2837, December 1982.
130. Hattis, D., Barbara Richardson, and N.A. Ashford, "Construction of a Common-Sense, Easily-Used Priority Scoring System for Toxic Substance Integration Efforts," Report to the U.S. Environmental Protection Agency under Contract #68-01-6473, CPA 82-17, October 1982.
131. Hattis, D. "Mechanisms of Carcinogenesis: Implications for Expectations About Dose-Response Relationships," in Workshop on Problem Areas Associated with Developing Carcinogen Guidelines, Brookhaven National Laboratory Associated Universities, Inc. Publication No. BNL 51779, June 1984
132. Hattis, D. "Quantitative Risk Assessment for Carcinogens," presented at the Workshop on Carcinogen Guidelines, Brookhaven National Laboratory, Upton, New York, September 7-8, 1982.

133. Hattis, D. "Issues in Defining Baselines for Analysis," in Analyzing the Benefits of Health, Safety, and Environmental Regulation, Final Report to the Environmental Protection Agency under Contract #68-01-5838, CPA-82-16, 1982.
134. Hattis, D. "From Presence to Health Impacts," in Analyzing the Benefits of Health, Safety, and Environmental Regulation, Final Report to the Environmental Protection Agency under Contract #68-01-5838, CPA-82-16, 1982.
135. Hattis, D., Robert Goble and N.A. Ashford, "Airborne Lead: A Clearcut Case of Differential Protection," Environment, Vol. 24, no. 1, January/February 1982.
136. N.J. Gorelick, D. Hattis, and N.A. Ashford, "Alternative Methods of Toxics Control: Encouraging Voluntary Measures to Minimize Exposure to Chlorinated Hydrocarbon Solvents from the Dry-cleaning Industry and Metal Cleaning Process, CPA/WP-82-2, May 1982.
137. M. Poulsen, D. Hattis, F. Neubacher, J. Briskin, and N.A. Ashford, "Development of a Methodology for Recognizing Potential High Priority Health Hazards from Emerging Chemical Technology," CPA-82-3, May 1982.
138. N.A. Ashford, D. Hattis, E.M. Zolt, J.I. Katz, G.R. Heaton, and W.C. Priest, "Evaluating Chemical Regulations: Trade-Off Analysis and Impact Assessment for Environmental Decision-Making," Final Report to the Council on Environmental Quality under Contract No. EQ4ACA35. CPA-80-13, 1981. NTIS # PB81-195067.
139. Hattis, D., "Needs for Public Health Intervention and Needs for New Research on Vinyl Halides and Their Polymers: A Public Policy Perspective," Environmental Health Perspectives, Vol. 41, pp. 227-231, 1981.
140. Hattis, D. "Dynamics of Medical Removal Protection for Lead - A Reappraisal" MIT Center for Policy Alternatives CPA-81-25, September 1981
141. Hattis, D., C. Mitchell, J. McCleary-Jones, N. Gorelick, and N.A. Ashford, "Control of Occupational Exposures to Formaldehyde: A Case Study of Methodology for Assessing the Health and Economic Impacts of OSHA Health Standards." Report to the U.S. Department of Labor under Contract #J-9-F-0106, MIT Center for Policy Alternatives CPA-81-17, April 1981.
142. Ashford, N.A., Clarence-Smith, E.P., Hattis, D., Hill, C.T., Mendez, W.M., and Owen, S.T., "Preliminary Design of a Modular Curriculum on Toxic Substances Management," MIT Center for Policy Alternatives CPA 80-07, 1980.
143. Hattis, D., and Barbara Richardson, "Noise, General Stress Response, and Cardiovascular Disease Processes: Review and Reassessment of Hypothesized Relationships" MIT Center for Policy Alternatives CPA-80-02, Massachusetts Institute of Technology, Cambridge, Massachusetts, June 1980
144. Hattis, D., W. Mendez, and N.A. Ashford, "Discussion and Critique of the Carcinogenicity Assessment Group's Report On Population Risk Due to Atmospheric Exposure to Benzene," Report to the Office of Air Quality Planning and Standards of the U.S. Environmental Protection Agency, CPA Publication No. CPA-80-1, May 1980.
145. Hattis, D., R. Andrews, J.W. Estes and S.T. Owen, "Relationships Between Aspects of Pharmaceutical Regulation, Innovation, and Therapeutic Benefits" – Phase I Final Report, Report to the National Science Foundation under Grant No. PRA 77-22330 AOI, CPA Publication No. CPA/WP-80-3, March 1980.
146. Hattis, D., E. Rothenberg and N.A. Ashford, "Some Considerations for the Design of OSHA Policy on Medical Surveillance and Removal Provisions in Occupational Health Standards," Report to U.S. Department of Labor under Contract No. J-9-F-8-004, CPA Publication No. CPA/WP-79-9, November 1979.

147. Hattis, D. and W. Mendez, "Vinyl Chloride: What Happened in the U.S.?" Proceedings of the Workshop on Occupational Health Standards, November 8-11, 1979, Mont. Ste. Marie, Quebec, Canada.
148. Hattis, D., B. Ross, and E. Rothenberg, "Methodology for Assessing the Health Impacts of OSHA Health Standards -- Task 1.2: Classification of Worker Exposures to Occupational Health Hazards," Report to the Department of Labor under Contract No. J-9-F-8-0106, CPA Publication No. CPA/WP-79-12, August 1979.
149. Hattis, D., C. Mitchell, B. Ross and W. Mendez, "Methodology for Assessing Economic and Health Impacts of OSHA Health Standards -- Task 1.3: Classification of Health Effects Produced by Exposure to Occupational Hazards," Report to the Department of Labor under Contract No. J-9-F-8-0106, CPA Publication No. CPA/WP-79-13, August 1979.
150. N.A. Ashford, D. Hattis, G.R. Heaton, and J.I. Katz, "Mobilizing National Resources for the Control of Occupational Cancer," Report to the Office of Technology Assessment under Contract No. OTA-C-78-293, CPA Publication No. CPA-79-4/a, June 1979.
151. N.A. Ashford, D. Hattis, G.R. Heaton, A. Jaffe, S.T. Owen, and W.C. Priest, "Environmental/Safety Regulation and Technological Change in the U.S. Chemical Industry," Report to the National Science Foundation under Grant No. PRA76-21368, CPA Publication No. CPA/79-6, March 1979.
152. W.C. Priest, W. Mendez, D. Hattis, and N.A. Ashford, "Calculation of Costs of Medical Removal Protection Provisions of OSHA Lead Standard with Phased-In Removal-Return Triggers," Report to the Department of Labor under Contract No. J-9-F-8-0044, CPA Publication No. CPA-78-16, August 1978.
153. Hattis, D., W. Mendez and N.A. Ashford, "Analysis of Available Evidence on Blood Lead-Air Lead Relationships Relevant to the Selection of a Permissible Occupational Exposure Limit for Lead in Air," Report to the Department of Labor Under Contract No. J-9-F-8-0044, CPA Publication No. CPA-78-13, July 1978.
154. Hattis, D., S. Owen, R. Gecht and N.A. Ashford, "A Strategic Plan for OSHA Occupational Disease Abatement," Report to the U.S. Department of Labor under Contract No. J-9-F-7-0089, CPA Publication No. CPA-78-11, April 1978.
155. Ashford, N.A., R.D. Gecht, D. Hattis, and J.I. Katz, "The Effects of OSHA Medical Removal Protection on Labor Costs of Selected Lead Industries," Report to U.S. Department of Labor under Contract No. 172646, Massachusetts Institute of Technology, Center for Policy Alternatives, CPA Publication No. CPA-77/11, December 1, 1977.
156. Hattis, D. and A.E. Murray, "Industrial Prospects for Chitin and Protein from Shellfish Wastes," MIT Sea Grant Program, Report No. MITSC 77-3, Cambridge, MA 1977.
157. Hattis, D. and A.E. Murray, "Approaches to a Practical Assessment of Supply and Demand for Chitin Products in the United States," First International Conference on Chitin/Chitosan, April 11-13, 1977, Boston, MA MIT Sea Grant, 1978.
158. Hattis, D., N.A. Ashford, E. Zolt, J.I. Katz, and G.R. Heaton, "Economic/Social Impact of Occupational Noise Exposure Regulations," Testimony presented at the OSHA Hearings on the Economic Impact of Occupational Noise Exposure, EPA 550/9-77-532, U.S. Environmental Protection Agency, Washington, D.C., September 1976.
159. Hattis, D., N.A. Ashford, A.E. Murray and K. Seo, "Industrial Applications of Chitin and Chitin Derivatives," in Interocean '76, Third International Conference and Exhibition for Ocean Engineering and Marine Sciences, June 15-19, 1976, Dusseldorf, Germany.

160. Hadzima, J., D. Hattis, A. Mesrobian, S. Hazen, J. Katz and N.A. Ashford, "A Case Study on the Regulation of Vinyl Chloride Emissions in the Workplace," Report to the Council on Environmental Quality under Contract No. EQ4ACA35, CPA Publication No. CPA-76-3/d, April 1976.
161. Hattis, D., J. Hadzima, J. Katz, S. Hazen and N.A. Ashford, "A Case Study on the FDA Regulation of PVC Food Packaging," Report to the Council on Environmental Quality under Contract No. EQ4ACA35, CPA Publication No. CPA-76-3/d, April 1976.
162. Hattis, D., G. Heaton, A. Mesrobian and N.A. Ashford, "A Case Study on the Suspension of Alkylmercury Seed Treatments," Report to the Council on Environmental Quality under Contract No. EQ4ACA35, CPA Publication No. CPA-76-3/e, April 1976.
163. Hattis, D., B. Lichter, G. Heaton and N.A. Ashford, "A Case Study on the Regulation of Mercury Water Discharges by the Chlor-Alkali Industry," Report to the Council on Environmental Quality under Contract No. EQ4ACA35, CPA Publication No. CPA-76-3/e, April 1976.
164. Hattis, D., S. Hazen, G. Heaton and N.A. Ashford, "A Case Study on Possible OSHA Regulation of the Storage and Transfer of Bulk Benzene," Report to the Council on Environmental Quality under Contract No. EQ4ACA35, CPA Publication No. CPA-76-3/c, April 1976.
165. Hattis, D. and A.E. Murray, "PCB's and Their Substitutes -- A Brief Look at Some Examples of Past Tradeoffs," in Proceedings of the National Conference on Polychlorinated Biphenyls, November 19-21, Chicago, Illinois, EPA 560/6-75-004, Washington, D.C., March 1976.
166. Hattis, D., N.A. Ashford, G.R. Heaton and J.I. Katz, Some Considerations in Choosing an Occupational Noise Exposure Regulation, EPA 550/9-76-007, U.S. Environmental Protection Agency, Washington, D.C., February 1976.
167. Hattis, D., P. Dollive and S.S. Epstein, "Information for Decision Making on Occupational Safety and Health Problems in Ohio--An Analysis of Available and Potentially Available Sources of Detailed Statistics," Report to the Ohio Occupational Task Force, 11/74.
168. Epstein, S. S. and D. Hattis, "Adverse Health Effects and Chemical Pollutants of the Environment," in Environment--Resources, Pollution, and Society, William W. Murdoch, ed., 2nd edition, Sinauer Associates, Inc., Stamford, Conn., 1975.
169. Hattis, D., "Proliferation of Antigen Binding Cells and Immunoglobulin Bearing Cells--and--Case Studies in the Use of Scientific Information in Social Decision-Making: Lead Arsenate as an Urban Insecticide and Sodium Nitrite as a Food Additive," Dissertation, Stanford University, December 1973.
170. Hattis, D., "The FDA and Nitrite--A Case Study of Violations of the Food, Drug, and Cosmetic Act with Respect to a Particular Food Additive," Presented in hearings before the Select Committee on Nutrition and Food Needs of the United States Senate, September 21, 1972, pp. 1692-1720.

Exhibit C



**SOUTHERN CALIFORNIA
AVIATION INDUSTRY IMPACT ANALYSIS**

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AL00017



EXECUTIVE SUMMARY

CIC Research, Inc., was retained by the Southern California Association of Governments (SCAG) to prepare an impact analysis of the Southern California aviation industry on the regional economy in the year 2020. For this study SCAG prepared a baseline 2020 aviation activity forecast (RTP-Medium) and four alternative forecast scenarios. The RTP-Medium scenario is a forecast for 157 million annual air passengers and 8.9 million tons of air cargo for the year 2020. This level of aviation activity represents a 92 percent increase in passenger volume and a 242 percent increase in air cargo tonnage from 1998.

The passenger and cargo volumes for each aviation forecast scenario were then allocated among the regional airports based on transportation demand modeling and analysis prepared by Advanced Transportation Systems. To quantify the resulting economic impacts of the aviation forecast scenarios, CIC designed a regional input-output model with projections of output and employment for the local economy in the year 2020. The following are the major findings of CIC's economic impact analysis.

STUDY FINDINGS

- ◆ For 1998, employment in the aviation transportation sector of the six-county SCAG region was estimated at 66,000 jobs (0.8%) of the region's total of 8,240,000 jobs.
- ◆ Total sales of the air transportation sector in 1998 were about \$7.4 billion (0.9%) of the region-wide total output of \$801 billion.
- ◆ Based on regional projections of employment growth and productivity, the six-county SCAG economy will be about 66% larger in terms of employment than it is today, with about 13,750,000 total jobs in 2020.
- ◆ Total output of the SCAG region will grow in real terms an estimated 117% to about \$1.7 trillion in 2020 (measured in 1998 \$s).
- ◆ Sales of the aviation industry or more accurately air transportation services will reach \$18.7 billion, representing about 1.1% of the output of the regional economy in 2020.
- ◆ Employment within the air transportation services sector will encompass about 110,000 jobs or about 0.8% of the total employment within the SCAG region in the year 2020.
- ◆ For the purposes of this analysis, the economic impacts of air transportation services (i.e., airports, passenger carriers, and cargo carriers) are measured at three levels:
 - 1) air transportation service providers (i.e., the air transportation sector)
 - 2) non-resident air traveler expenditures in the region; and
 - 3) linkage to locally produced goods and services that are exported by air.

Each successive level of impact comprises greater levels of economic activity that are not solely dependent upon the air transportation services of the SCAG region.

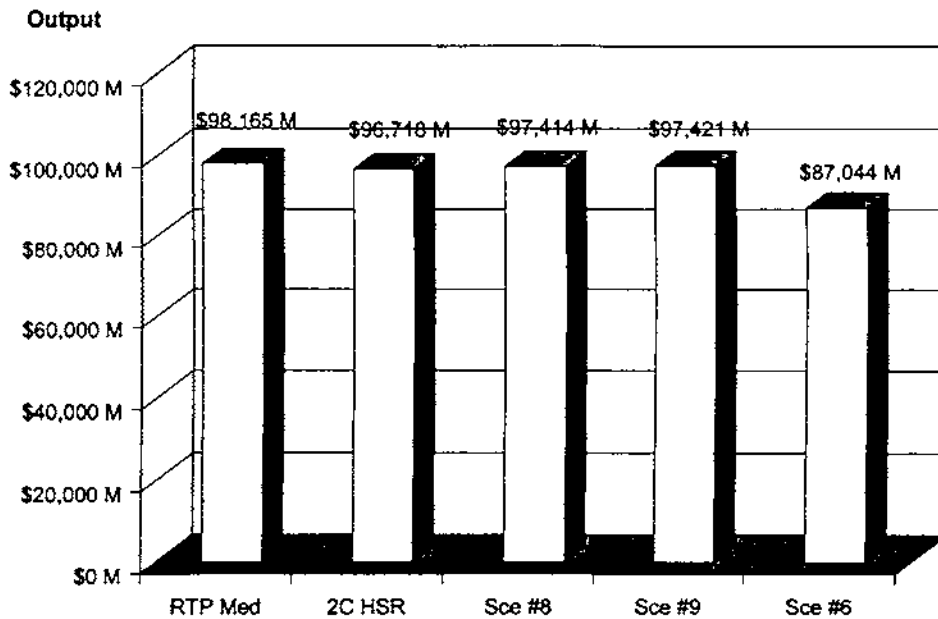
**SUMMARY OF LEVEL 1, 2, AND 3 SCAG REGION ECONOMIC IMPACTS
FOR FIVE ALTERNATIVE 2020 AVIATION DEVELOPMENT SCENARIOS**
(Dollar Amounts Stated in 1998 \$Millions)

Economic Impact Estimates (Direct, indirect, and induced)	2020 Aviation Services Impact Scenarios				
	RTP Med	2C HSR	Scn #8	Scn #9	Scn #6
Level 1 - Air Transportation Services (Only)					
Output	\$30,068 M	\$29,815 M	\$29,888 M	\$29,573 M	\$26,904 M
Income	\$12,167 M	\$12,070 M	\$12,098 M	\$11,977 M	\$10,957 M
Employment	191,080	189,476	189,938	187,935	170,978
Indirect Business Taxes	\$1,304 M	\$1,293 M	\$1,296 M	\$1,283 M	\$1,167 M
Level-2 Non-Resident Air Travelers (Only)					
Output	\$31,397 M	\$30,510 M	\$31,045 M	\$31,752 M	\$27,300 M
Income	\$10,907 M	\$10,625 M	\$10,801 M	\$11,029 M	\$9,577 M
Employment	348,471	338,808	344,787	352,566	303,164
Indirect Business Taxes	\$2,559 M	\$2,482 M	\$2,525 M	\$2,584 M	\$2,221 M
Combined Levels-1, 2: Air Transportation Services and Non-Resident Air Traveler Impacts					
Output	\$61,465 M	\$60,325 M	\$60,933 M	\$61,325 M	\$54,205 M
Income	\$23,074 M	\$22,695 M	\$22,899 M	\$23,006 M	\$20,534 M
Employment	539,551	528,284	534,725	540,501	474,141
Indirect Business Taxes	\$3,863 M	\$3,776 M	\$3,821 M	\$3,867 M	\$3,388 M
Level-3 Economic Impacts Derived From Air Transportation Of Locally Produced Foreign Exports (Only)					
Output	\$36,700 M	\$36,392 M	\$36,481 M	\$36,096 M	\$32,839 M
Income	\$12,243 M	\$12,146 M	\$12,174 M	\$12,053 M	\$11,025 M
Employment	166,736	165,336	165,739	163,991	149,194
Indirect Business Taxes	\$1,147 M	\$1,137 M	\$1,140 M	\$1,128 M	\$1,026 M
Combined Levels-1, 2, 3: Air Transportation Services, Non-Resident Air Travelers, and Locally Produced Air Exports					
Output	\$98,165 M	\$96,718 M	\$97,414 M	\$97,421 M	\$87,044 M
Income	\$35,317 M	\$34,841 M	\$35,073 M	\$35,059 M	\$31,559 M
Employment	706,287	693,620	700,464	704,492	623,336
Indirect Business Taxes	\$5,010 M	\$4,913 M	\$4,962 M	\$4,995 M	\$4,415 M

Source: CIC Research, Inc.

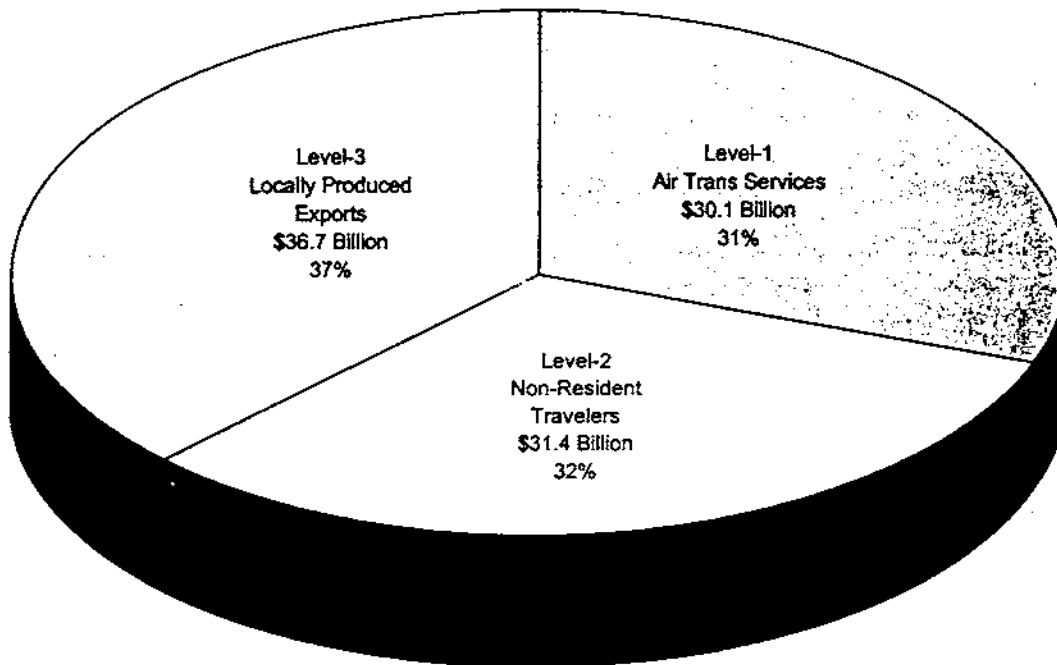
- ◆ As can be seen from the results of the five scenarios, the impact estimates are very similar with the exception of Scenario 6. A difference of about 2% in total output or employment exists for the first four listed scenarios. This is not too surprising in that the scenarios are very similar in total passenger volume and cargo shipments. However, Scenario 6 is constrained to about 140 MAP compared to 157 MAP for the RTP-Medium Scenario. As a result, Scenario 6 generates about 11.4% less economic impact for the region and 11.8% fewer jobs (-\$11.2 billion and -83,000 jobs, respectively).
- ◆ The overall total impact estimate of \$98.2 billion (RTP-Medium) indicates that the air transportation sector will support nearly 6% of the total regional economic activity and about 5% of the total regional employment.

**COMBINED TOTAL LEVELS-1, 2, AND 3 SCAG REGION ECONOMIC IMPACTS
FOR FIVE ALTERNATIVE 2020 AVIATION DEVELOPMENT SCENARIOS**
(Dollar Amounts Stated in 1998 \$Millions)



**SCAG REGION 2020 RTP-MEDIUM AVIATION FORECAST SCENARIO
LEVELS OF ECONOMIC IMPACT**

\$98.2 Billion Total Impact



- ◆ The Level-1: Air transportation Services economic impacts represent about \$30.1 billion (31%) of the total \$98 billion in economic activity supported by the aviation industry within the SCAG region. Level-1 impacts represent the most conservative measure of the value of air transportation services to the regional economy and the greatest association of direct cause and effect.
- ◆ The Level-2: Non-resident air traveler expenditure impacts represent about \$31.4 billion (32%) of the total \$98 billion in economic activity supported by the aviation industry within the SCAG region. The Level-3: Impacts of locally produced foreign exports represent about \$36.7 billion (37%) of the total \$98 billion in economic activity.
- ◆ With each additional level of impacts there is less and less association of cause and effect for the total level of economic activity (direct, indirect, and induced) supported by the region's air transportation services. While the estimates of total economic activity associated with air transportation services are reasonable, there is greater opportunity for substitution effects with reliance on alternative modes of transportation.
- ◆ There are substantial catalytic impacts that will likely result from the development of new commercial airports and the major expansions of existing airports under the alternative aviation scenario forecasts. These catalytic impacts which are generated by new business activity attracted to an airport area are difficult to quantify. Estimates of the potential catalytic impacts of the 2020 RTP development scenarios were not generated as part of the workscope for this study.

Suggestions For Additional Study and Analysis

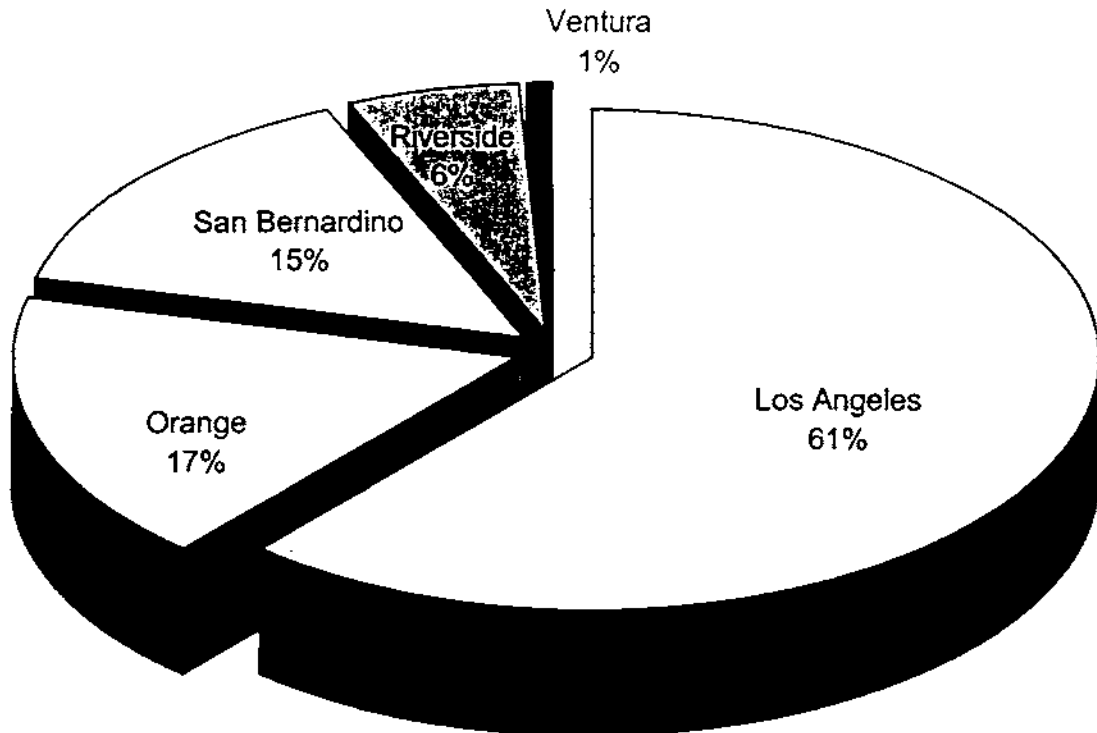
- ◆ Additional study is needed on the substitution effects of all available transportation options. The RADAM model for allocation of transportation demand (passengers and cargo) could provide a framework for analysis of transportation mode substitution and all potential mixes of transportation modes based on pricing, access, and service levels. This would help to provide better insight to the degree of influence associated with the Level-2 and Level-3 measures of economic impacts.
- ◆ Additional study is recommended related to capital investment, industry clusters, and catalytic economic impacts. These impacts would result from the expansion of the region's aviation infrastructure and service levels (domestic and international). This type of analysis could provide valuable guidance for long-term regional transportation planning and economic development.

Regionwide v. County Level Economic Impacts

- ◆ Although the region-wide economic impacts show little variation between scenarios, there are much greater impact variations between scenarios by County, at least for Level-1, *i.e.*, Transportation Services production. However, Level-2 and Level-3 economic impacts are much more dispersed within the regional economy. As a result very small differences in county-level impacts would occur for Level-2: Non-resident air traveler impacts, and Level-3: Foreign exports of locally produced goods. The in-region origin and destination of air travelers and foreign exports of locally produced

goods demonstrates very little change dependent upon airport usage. This result is strongly supported by the results of the RADAM aviation demand allocation modeling.

2020 RTP MEDIUM SCENARIO FORECAST
EMPLOYMENT IMPACTS OF AIR TRANSPORTATION SERVICES BY COUNTY
(191,000 Total Jobs)



- ◆ For each of the alternative aviation development scenarios the resulting economic impacts by county represent two percent or less of each respective county economy. Even though the impact of Scenario 2C-HSR has seven times the impact of Scenario 9 on the Orange County economy, the resulting increase in 37,600 jobs (44,100 jobs v. 6,500 jobs), still represents only about 1.5 percent of the total countywide employment in 2020. Therefore, while there are measurable differences in the relative county-level impacts of the alternative regional aviation forecasts, the resulting impact levels do not represent a substantial economic loss or benefit to the individual counties.
- ◆ Under each scenario, including the RTP baseline, Los Angeles County airports would account for a much smaller percentage of the region's total air transportation services. The largest increases in other counties air transportation services would be in the greatly expanding air cargo markets. By 2020 airports located in Los Angeles county will still account for as much as two-thirds of total air passengers in the SCAG region (RTP-Medium), but less than half of total regional air cargo.
- ◆ Under scenarios where a new Orange County international airport is developed at El Toro, Orange County would become the primary reliever for expanding air passengers. Under all of the scenarios, there are greatly expanded air cargo services offered in San Bernardino and Riverside Counties.

**LEVEL-1 ECONOMIC IMPACTS OF AIR TRANSPORTATION SERVICES BY COUNTY
FOR FIVE SELECTED 2020 AVIATION DEVELOPMENT SCENARIOS**
(Dollar Amounts Stated in 1998 \$Millions)

Impact Category/ County	SCE RTP	SCE 2C HSR	SCE 8	SCE 9	SCE 6
Output Impact:					
Los Angeles	\$18,487 M	\$13,883 M	\$15,572 M	\$17,160 M	\$16,391 M
Orange	\$5,196 M	\$6,935 M	\$5,939 M	\$1,024 M	\$2,231 M
San Bernardino	\$4,424 M	\$6,628 M	\$6,471 M	\$8,490 M	\$5,359 M
Riverside	\$1,749 M	\$1,814 M	\$1,905 M	\$2,898 M	\$2,915 M
Ventura	\$212 M	\$555 M	\$0 M	\$0 M	\$8 M
Total	\$30,068 M	\$29,815 M	\$29,888 M	\$29,573 M	\$26,904 M
Income Impact:					
Los Angeles	\$7,481 M	\$5,620 M	\$6,303 M	\$6,950 M	\$6,675 M
Orange	\$2,102 M	\$2,807 M	\$2,404 M	\$415 M	\$908 M
San Bernardino	\$1,790 M	\$2,683 M	\$2,619 M	\$3,439 M	\$2,183 M
Riverside	\$708 M	\$735 M	\$771 M	\$1,174 M	\$1,187 M
Ventura	\$86 M	\$225 M	\$0 M	\$0 M	\$3 M
Total	\$12,167 M	\$12,070 M	\$12,098 M	\$11,977 M	\$10,957 M
Tax Revenue Impact:					
Los Angeles	\$802 M	\$602 M	\$675 M	\$744 M	\$711 M
Orange	\$225 M	\$301 M	\$258 M	\$44 M	\$97 M
San Bernardino	\$192 M	\$287 M	\$281 M	\$368 M	\$232 M
Riverside	\$76 M	\$79 M	\$83 M	\$126 M	\$126 M
Ventura	\$9 M	\$24 M	\$0 M	\$0 M	\$0 M
Total	\$1,304 M	\$1,293 M	\$1,296 M	\$1,283 M	\$1,167 M
Employment Impact:					
Los Angeles	117,485	88,228	98,963	109,052	104,166
Orange	33,020	44,071	37,742	6,508	14,177
San Bernardino	28,114	42,122	41,125	53,955	34,058
Riverside	11,117	11,531	12,108	18,420	18,523
Ventura	1,344	3,524	-	-	52
Total	191,080	189,476	189,938	187,935	170,978
Percentage Of County Employment:					
Los Angeles	1.6%	1.2%	1.4%	1.5%	1.4%
Orange	1.1%	1.4%	1.2%	0.2%	0.5%
S.B. / Riverside	1.5%	2.1%	2.1%	2.8%	2.0%
Ventura	0.2%	0.5%	0.0%	0.0%	0.0%
Total	1.4%	1.4%	1.4%	1.4%	1.2%

Source: CIC Research, Inc.

- ◆ The greatest redistribution of air transportation services would take place under the high-speed rail scenario 2C HSR. The least redistribution of air transportation services would take place under scenario 6, which because of existing constraints, would also result in an smaller overall growth in both Los Angeles and Orange Counties, as well as for the region as a whole.

- ◆ The largest difference for any county between one scenario condition and the others is the development of an international airport at El Toro. This development is present in the scenarios RTP-Medium, 2C HSR and Scenario 8. It is not present in Scenario 9 and Scenario 6. With El Toro, and high-speed rail (HSR) the greatest reduction in Los Angeles County economic impact is obtained (Scenario 2C HSR). Without El Toro but with HSR (Scenario 9), the lower level of Orange County economic impacts occur due to a substantial expansion in air service within San Bernardino County. This is also the only scenario in which a county that presently offers a substantive level of air transportation services would experience an actual reduction in total economic impact.

Final Study Conclusions

- ◆ The largest difference in terms of economic impacts for the aviation forecast scenarios exists between the RTP-Medium and Scenario 6. This difference equals about \$11.2 billion in total regional output and 83,000 jobs. While on the surface these may seem like fairly large impacts, the total 2020 regional economy will generate about \$1.7 trillion in output and 13,750,000 total jobs. Therefore, the differences between the RTP-Medium scenario and Scenario 6 represents a little more than one half of one percent of the regional economy in 2020.
- ◆ Given the relatively small differences in overall economic impacts, it would seem likely that the planning decisions among the alternative regional aviation development scenarios may be more strategically related to environmental and transportation congestion impacts (air and ground) rather than the future economic impacts.



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INTRODUCTION

CIC Research, Inc. has prepared this economic analysis of the Southern California aviation industry under contract to the Southern California Association of Governments (SCAG). The SCAG region includes the six counties of Ventura, Los Angeles, San Bernardino, Riverside, Orange, and Imperial. For the purposes of this study, Southern California is defined as the six-county SCAG region plus San Diego County. The planning horizon for SCAG is the year 2020 for each of the alternative air transportation development scenarios. SCAG was responsible for providing CIC Research, Inc. with the alternative air transportation forecast scenarios, including detailed air passenger and air cargo forecasts.¹ CIC Research was then responsible for estimating the resulting economic impacts for each of the 2020 forecast alternatives. The economic impacts in this report are detailed for each of the counties, as well as a SCAG region total.

BACKGROUND

During the next 20 years, the SCAG region's population is projected to increase by 6.4 million to a total of over 22.4 million. Total employment during the same period is projected to increase by 3.9 million jobs to a total of 10.5 million. This growth will add to what is already regarded as a highly congested regional transportation system, including air transportation. The region's airports served 81.9 million annual passengers (MAP) in 1998 and handled 2.6 million tons of cargo. The demand for aviation services is projected to reach 157 MAP and 8.9 million cargo tons by the year 2020.² This rapid expansion raises a number of issues about the supply side of the air transportation industry, including questions about the capacity of existing airports and the associated congestion in the air and on the ground. Generally speaking, the issues aim at finding the best way to meet demand, in terms of the evolving future configuration of airport traffic, and what value to the region's economy does each possible growth path represent.

¹ Air passenger and air cargo forecasts for the 2020 Regional Transportation Plan were generated by SCAG and then allocated to regional airports by Advanced Transportation Systems' RADAM model under a separate contract.

² CommunityLink 21: Regional Transportation Plan, Southern California Association of Governments, 1998.

A number of decisions will have to be made during the next few years that will effect the future not only of the Aviation Industry but by extension, the spatial distribution of the growth in businesses and population in the region. The decisions and their outcomes will also be impacted by other decisions, including those made in adjacent areas. For example, San Diego County, which is sandwiched between the SCAG region and Baja California, Mexico, is also in the process of planning for 20 MAP if constrained and up to 28 MAP if unconstrained. Currently, Lindbergh Field (SAN) serves 14.8 MAP and 118,000 tons of cargo, which is about two thirds of San Diego's air passenger demand and twenty percent of its air cargo.³ In addition, 12 airports were recently privatized in Mexico, including the Tijuana Rodriguez Field. The new ownership of the Tijuana airport is seriously considering a cross-border international terminal link in the U.S. which could add additional international long-haul capacity to the Southern California region.

NATIONAL AND REGIONAL AVIATION PERSPECTIVE

It is helpful to understand the relative size of the aviation industry in Southern California (including San Diego County) compared with the Nation and the State of California. Due to the way in which national aviation statistics are compiled, it is easier to compare air passenger enplanements (i.e., departing passengers boarded on planes) at Southern California, California, and U.S. airports.

Air Passenger Enplanements

There were a total of 660 million air passenger enplanements for U.S. airports in 1998. In comparison, there were 82.2 million total enplanements for California airports, and there were 47.8 million enplanements within Southern California. California represents about 13 percent of the U.S. total enplanements and Southern California represents about 7 percent. The Los Angeles International Airport (LAX) dominates air transportation in both the Southern California region and the state as a whole. LAX accounts for over one third (37%) of the state's total passenger enplanements and Southern California (including LAX) accounts for more than half (58%) of passenger enplanements in California.

³ Advanced Transportation Systems, "March Air Force Base Joint Use Feasibility Study, Appendix A: Lindbergh Field & San Diego County. Southern California Association of Governments, 1997.

Table 1

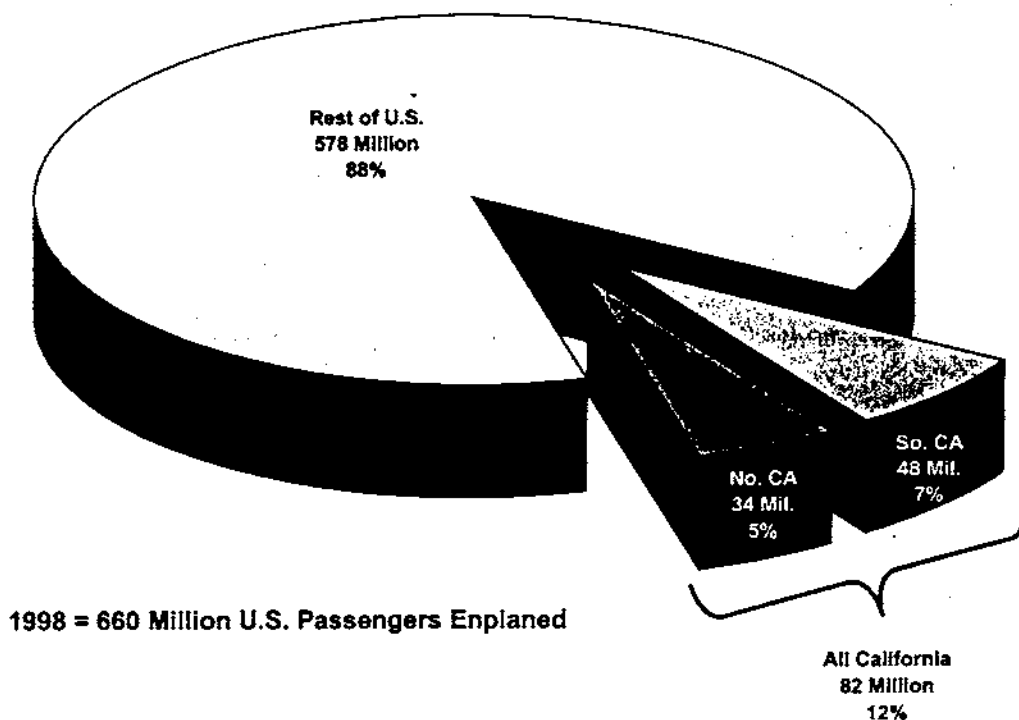
TOTAL 1998 PASSENGER ENPLANEMENTS

Airport	Enplanements	Percentage of State	Percentage of US Total
Los Angeles International (LAX)	30,191,000	36.7%	4.6%
San Diego International (SAN)	7,436,000	9.1%	1.1%
John Wayne (SNA)	3,642,000	4.4%	0.6%
Ontario (ONT)	3,201,000	3.9%	0.5%
Burbank-Glendale-Pasadena (BUR)	2,360,000	2.9%	0.4%
Palm Springs (PSP)	584,000	0.7%	0.1%
Long Beach (LBA)	301,000	0.4%	0.0%
Southern California All Airports Total	47,812,000	58.2%	7.2%
State Total	82,155,000	100.0%	12.5%
US Total	659,659,000		100.0%

Source: : FAA DOT/TSC CY1998 ACAIS Database.

Figure 1

TOTAL 1998 U.S. PASSENGER ENPLANEMENTS



Source: : FAA DOT/TSC CY1998 ACAIS Database

Air Cargo Tonnage

LAX dominance is also evident with respect to air cargo. Approximately 39 percent of all domestic air cargo enplaned in the state is shipped out of LAX, while 63 percent of all air cargo enplaned (including air exports) in the state is shipped out of Southern California. Nationally, Southern California contributes over 8 percent of the total air cargo enplaned, with LAX contributing over 4 percent by itself with just domestic air cargo. Air cargo shipped out of California airports make up over 13 percent of the 15 million tons enplaned in the United States in 1998.⁴

Table 2
TOTAL TONS OF AIR CARGO SHIPPED DURING 1998

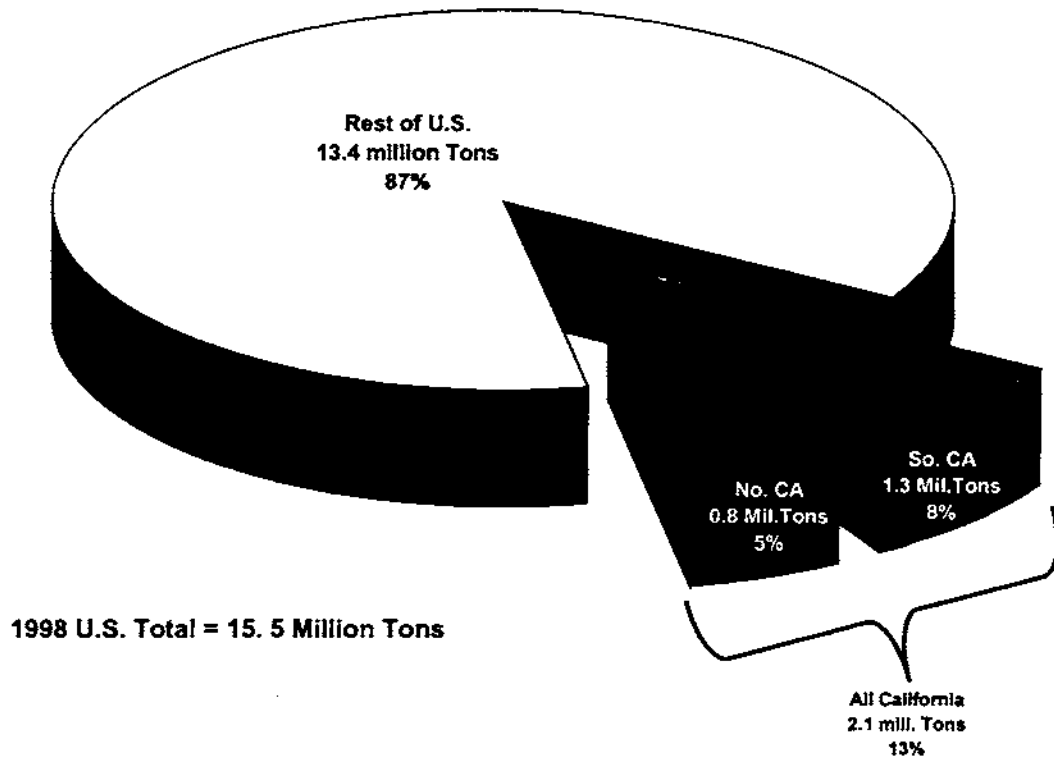
Airport / Region	Thousands of Tons	Percentage of State	Percentage of US Total
Domestic Cargo Enplanements			
Los Angeles International (LAX)	686.1	33.3%	4.4%
Ontario (ONT)	213.4	10.4%	1.4%
San Diego International (SAN)	61.4	3.0%	0.4%
John Wayne (SNA)	21.5	1.0%	0.1%
Burbank-Glendale-Pasadena (BUR)	17.5	0.8%	0.1%
Long Beach (LBA)	15.1	0.7%	0.1%
Palm Springs (PSP)	0.1	0.0%	0.0%
Domestic Southern California Cargo			
Domestic Southern California Cargo	1,014.9	49.3%	6.6%
Southern California Exports	285.4	13.9%	1.8%
Total Southern California Cargo Enplanements	1,300.3	63.1%	8.4%
California Domestic Cargo			
California Domestic Cargo	1,745.6	84.7%	11.3%
California Exports	314.3	15.3%	2.0%
Total California Cargo Enplanements	2,059.9	100.0%	13.3%
US Domestic Cargo			
US Domestic Cargo	12,776.0		82.7%
US Exports	2,681.3		17.3%
Total US Cargo Enplanements	15,457.3		100.0%

Source : "Schedule: T3 - Airport Activity Statistics", U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, Department of Commerce, Bureau of the Census

⁴ All cargo airports are defined by the FAA as airports that in addition to any other air transportation services available, are served by aircraft providing air transportation of only cargo with a total annual landed weight of more than 100 million pounds.

Figure 2

Total Tons of Air Cargo Shipped During 1998

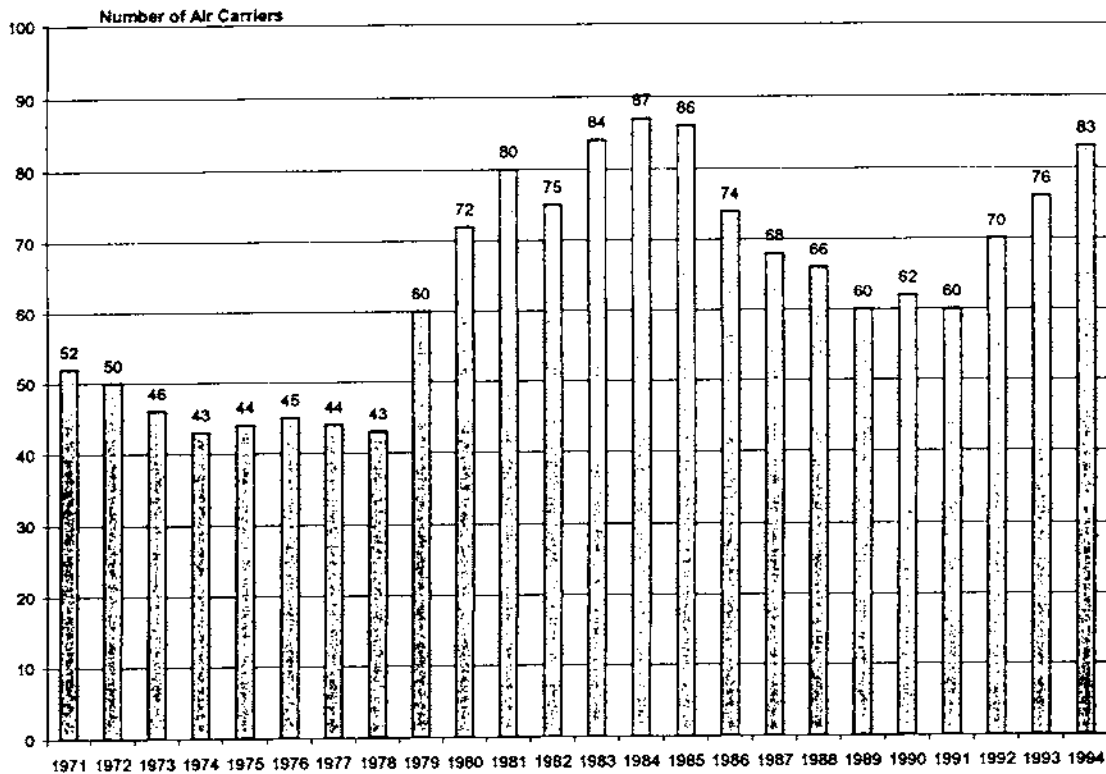


Source : "Schedule. T3 - Airport Activity Statistics", U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information
U.S. Department of Commerce, Bureau of Census

The Recent History of Air Passenger Travel

Since the advent of commercial jet aircraft, no change in the airline industry has impacted it as much as the Airline Deregulation Act of 1978. This legislation allowed any firm that met fitness requirements to enter or exit the air transport industry in any domestic market. In addition, prior to deregulation fares were regulated, but following the act the airlines were allowed to set fares and compete based on market conditions. The initial effect was the immediate increase in air carriers and a fare war that increased air passenger traffic. Figure 3, indicates the number of air carriers in the U.S. market submitting U.S. Dot Form 41 reports by year. The figure clearly shows an increase in air transport firms in the time following the legislation. Indeed, between 1978 and 1979 there was 40 percent increase in U.S. air carriers.

Figure 3
Air Carriers Submitting U.S. DOT Form 41 Reports



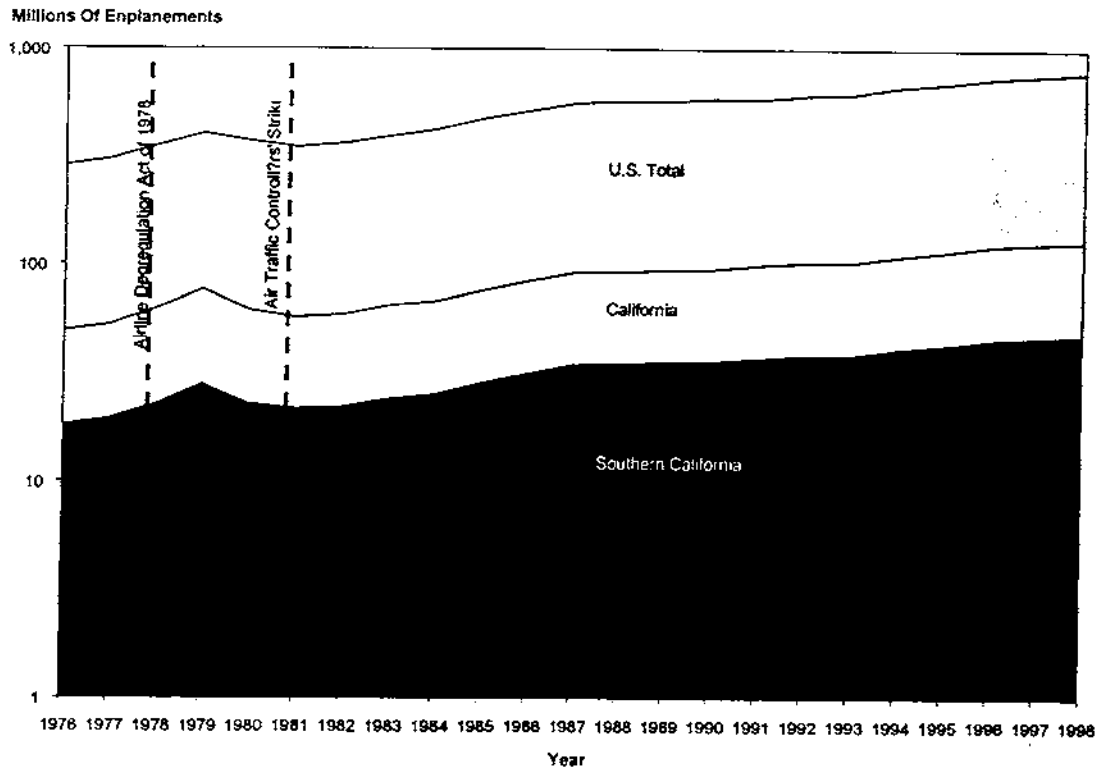
Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information.

The deregulation of fares brought about a fare war as air carriers, both newly formed and older larger carriers introduced market strategies to conserve or increase market shares. The result of these fare decreases was a stimulation of demand. As indicated in Figure 4 the number of passenger enplanements increased dramatically in 1979 both in the U.S. as a whole and in Southern California specifically. However the increases were moderated in an anemic economy of 1980 as enplanements fell to just above 1978 levels and continued to drop in 1981 when the air traffic controllers' strike disrupted the market during an already weak economy. The end result was a decentralization of the airline industry as the market share of total traffic accounted for by the largest air carriers decreased from 94 percent in 1978 to 77 percent in 1985.

As airfares decreased the airlines responded by increasing efficiency and changing their route structures to lower costs. The results were a change from a linear point-to-point network to a hub-and-spoke network. This of course, allowed airlines to service many points without

having all points directly interconnected. In addition, airlines developed innovative marketing strategies including frequent flyer programs, sophisticated discounting practices, and close operating agreements with smaller carriers and commuters to service lower demand routes while maintaining market control.

Figure 4
Number of Passenger Enplanements



* Note: A logarithmic scale is used to more readily compare Southern California, and California as a whole with the U.S. Total.
Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information and Federal Aviation Administration, Aviation Policy and Plans Office.

Once the market disruptions of deregulation and labor difficulties were totally absorbed into the system, the air passenger industry settled into a steady growth pattern similar to that witnessed prior to 1978. Table 3 presents the annual percent change in passenger enplanements.

* Bureau of Transportation Statistics, Transportation Statistics Annual Report 1996, "Appendix A: An Overview of the U.S. Commercial Airline Industry", p 236

Table 3
Annual Percent Change In Air Passenger Enplanements

Year	Southern California	California	US Total
1976	NA	NA	NA
1977	7.3%	7.1%	7.4%
1978	16.4%	20.7%	14.9%
1979	23.3%	22.0%	11.7%
1980	-18.6%	-20.9%	-5.0%
1981	-4.7%	-8.9%	-5.8%
1982	1.9%	4.1%	4.6%
1983	8.7%	11.5%	7.7%
1984	5.3%	4.7%	8.3%
1985	13.2%	11.5%	12.3%
1986	10.6%	10.5%	8.4%
1987	10.1%	9.5%	8.6%
1988	1.0%	0.3%	2.5%
1989	2.2%	2.3%	-0.1%
1990	0.4%	1.6%	3.0%
1991	3.5%	5.5%	-1.2%
1992	3.2%	3.1%	4.4%
1993	0.5%	-0.1%	1.8%
1994	6.8%	6.6%	8.0%
1995	4.5%	5.7%	3.5%
1996	6.1%	6.6%	5.4%
1997	2.9%	2.7%	3.5%
1998	2.5%	2.1%	3.9%
Passenger Enplanement Growth Summaries			
1976-1980	125.3%	124.9%	131.0%
Average Annual	8.5%	8.4%	8.7%
1980-1990	58.6%	55.7%	59.9%
Average Annual	4.7%	4.5%	4.8%
1990-1998	34.1%	36.9%	33.1%
Average Annual	3.7%	4.0%	3.6%
1976-1998	166.6%	166.0%	178.7%
Average Annual	4.6%	4.5%	4.8%
Population and Employment (Avg. Annual Growth)			
Population 1976-1998	2.0%	1.9%	1.0%
Employment 1976-1998	2.3%	2.5%	2.2%

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, and Federal Aviation Administration, Aviation Policy and Plans Office.

Since 1976, the average annual compounded rate of growth in enplanements has been 4.8 percent for the U.S. compared to 4.5 percent for California and 4.6 percent for Southern California. As a way of comparison, employment grew at an annual rate of 2.3 percent in Southern California, 2.5 percent in California as a whole, and at 2.2 percent for the U.S. during this same period. Population grew at an annual rate of 2.0 percent in Southern California, 1.9 percent in California, and 1.0 percent in the U.S. from 1976 to 1998.

From this comparison, it is evident that air passenger service in Southern California has grown faster than the population or employment, however, not as fast as was experienced by the rest of the country, even though employment and population increased at a faster rate in the local region. However, it is interesting that in recent years (1990-1998), air passenger enplanements in Southern California and California have outpaced the nation. In general, air passenger service has increased faster than the economy as measured by the Gross Domestic Product, which has expanded at an inflation-adjusted annual growth rate of 3.1 percent since 1977.

Recent History Of Air Freight Transport

Although air transportation of freight makes up a small proportion of the total shipments of goods, it makes a significant contribution to the flow of commodities in the U.S. Air transport has been the traditional method of transporting high value, time critical goods. As the U.S. economy changed from material-intensive to knowledge-intensive, and with the advent of overnight air delivery using the hub-and-spoke method of implementing delivery routes, the importance of airfreight operations increased dramatically. This change continued in the 1990s. Table 4 summarizes selected results of the 1993 and 1997 Commodity Flow Surveys as they pertain to airfreight.

Nationally the value of goods shipped by air increased by 53 percent between 1993 and 1997, compared to 30 percent for the total of all cargo modes. Nearly 3 percent of the value of all goods shipped in the U.S. are transported by air. This percentage is higher in California where in 1993 nearly 5 percent of goods shipped from California went by air (1997 figures are not currently available). There was an even more dramatic increase in the tonnage shipped by air during the period. Between 1993 and 1997 total tonnage shipped by air increased 61 percent compared to only 19 percent for all modes. However, airfreight shipments represent less than one tenth of one percent of all tonnage shipped.

Table 4

**U.S. AIR FREIGHT COMPARED TO ALL MODES OF SHIPPING
(1993 and 1997)**

	1993	1997	Percent Change
Value of Shipments (\$millions)			
All Modes	\$ 5,846,334	\$ 7,623,623	30.4%
Air Transportation	\$ 139,086	\$ 213,405	53.4%
Air Percent of All Modes	2.4%	2.8%	17.7%
Tons of Shipments (000s)			
All Modes	9,688,493	11,562,916	19.3%
Air Transportation	3,139	5,047	60.8%
Air Percent of All Modes	< 0.1%	< 0.1%	
Value Per Ton			
All Modes	\$ 603	\$ 659	9.3%
Air Transportation	\$ 44,309	\$ 42,284	-4.6%

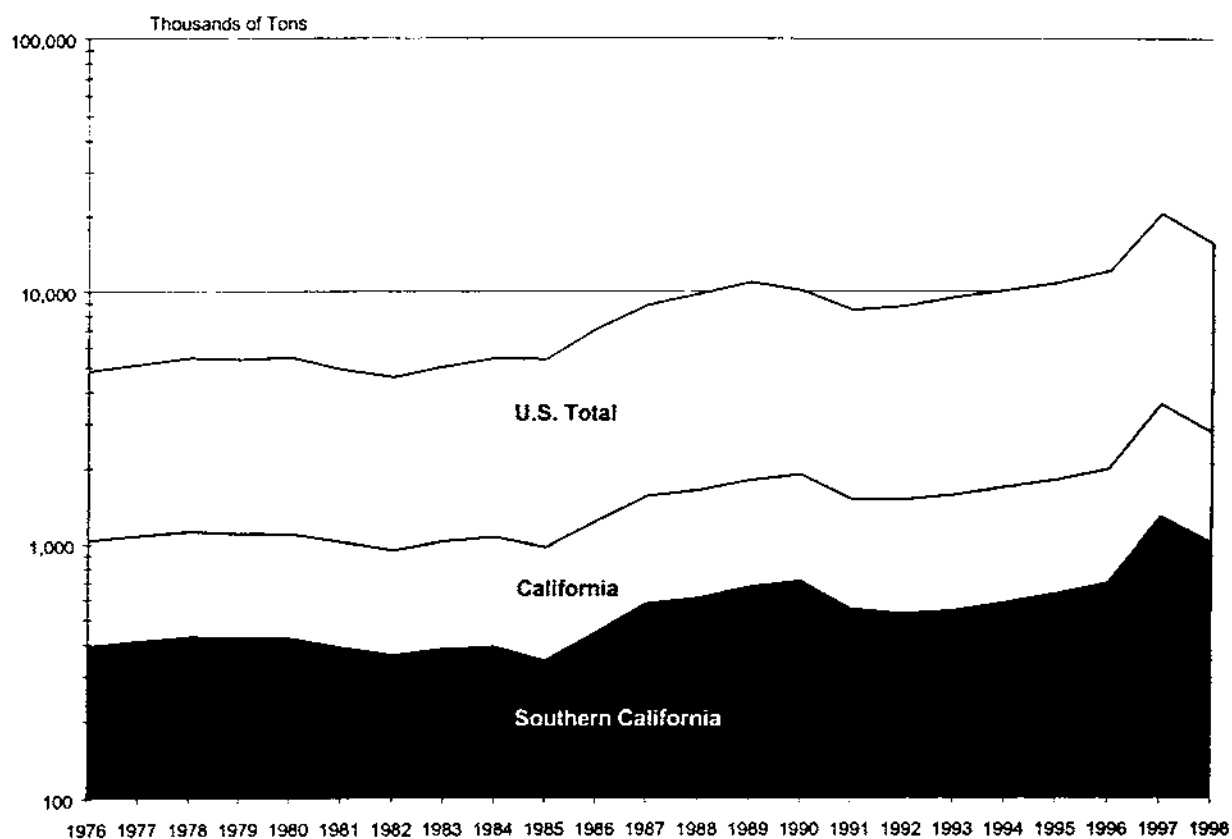
Source: "1997 Commodity Flow Survey", U.S. Department of Commerce, Economics and Statistics Administration, Bureau Of The Census and U.S. Department of Transportation, Bureau Of Transportation Statistics.

The average value per ton of goods shipped by air decreased from 1993 by nearly 5 percent while it increased for all other modes by 9 percent. This would indicate that it has become economically feasible to ship lower value goods by air. However it is still primarily a method for shipping high value commodities as the average ton shipped is valued at over \$ 42,000 per ton compared to \$659 per ton for all modes.

Comparing Southern California with the rest of the United States, similar patterns of growth and declines are indicated. Figure 5 presents a time series of cargo shipped from Southern California , California and the United States as a whole. In general, with a few exceptions, cargo enplanements tonnage in Southern California has increased in lockstep with nation as a whole. The general trend upward in tonnage appears to have only been disrupted by economic recessions of the early 80's and 90's. Table 5 presents the annual percent change in tonnage of freight enplanements.

Figure 5

U.S. FREIGHT AND MAIL ENPLANEMENTS*



* Note: A logarithmic scale is used to more readily compare Southern California, and California as a whole with the U.S. Total.

Source: "Schedule: T3 - Airport Activity Statistics", U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information

Since 1976, freight tonnage enplaned grew at an annual rate of 5.7 percent for the U.S. compared to 4.7 percent for California and 4.4 percent for Southern California. As stated previously in this report, this is contrary to what was indicated by other statistical indicators, such as employment and population, which rose faster for Southern California and California than the rest of the Nation.

Table 5

ANNUAL PERCENT CHANGE IN TONNAGE OF FREIGHT ENPLANEMENTS

Year	Southern California	California	US Total
1976	NA	NA	NA
1977	4.8%	4.7%	6.3%
1978	3.9%	3.4%	6.9%
1979	-1.0%	-2.2%	-1.3%
1980	-0.4%	-0.7%	2.7%
1981	-7.7%	-5.9%	-11.5%
1982	-6.9%	-7.5%	-6.5%
1983	5.9%	9.8%	10.5%
1984	1.8%	5.0%	9.1%
1985	-11.5%	-7.1%	0.7%
1986	28.6%	25.4%	33.7%
1987	30.5%	23.3%	23.5%
1988	5.1%	6.1%	12.0%
1989	10.8%	9.2%	11.6%
1990	6.0%	4.9%	-9.9%
1991	-22.9%	-19.0%	-15.5%
1992	-4.1%	2.2%	4.3%
1993	2.8%	5.6%	9.6%
1994	7.7%	7.1%	6.4%
1995	8.5%	6.0%	6.9%
1996	10.2%	10.4%	11.9%
1997	22.5%	17.8%	13.4%
1998	18.3%	15.1%	11.8%
Overall Growth 1976-1998	159.0%	173.8%	235.6%
Average Annual 1977-1998	4.4%	4.7%	5.7%
Population 1976-1998	2.0%	1.9%	1.0%
Employment 1976-1998	2.3%	2.5%	2.2%

Source: "Schedule: T3 - Airport Activity Statistics", U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information

AIR TRANSPORTATION FORECASTS

U.S. Government Forecast Of Air Passenger Volume

The U.S. Department of Transportation has prepared forecasts of U.S. air passenger volumes through 2015. These forecasts can be compared to some extent with the 2020 SCAG region forecasts that will be the subject of this economic impact analysis.

Table 6

U.S.D.O.T. FORECAST OF AIR PASSENGER ENPLANEMENTS

Year	Southern California	California	U.S. Total
1998	47.8	82.2	659.7
1999	49.4	84.9	684.7
2000	51.0	87.7	709.9
2001	53.0	91.2	737.4
2002	55.1	94.9	765.8
2003	57.3	98.7	795.0
2004	59.6	102.7	825.1
2005	62.0	106.9	856.2
2006	64.4	111.0	886.8
2007	67.0	115.4	918.3
2008	69.6	119.9	950.9
2009	72.4	124.6	984.4
2010	75.2	129.4	1,019.0
2011	77.7	133.8	1,050.7
2012	80.4	138.2	1,083.3
2013	83.1	142.9	1,116.7
2014	85.9	147.7	1,150.9
2015	88.8	152.6	1,186.1
Percent Change 1998-2015	85.8%	85.6%	79.8%
Avg. Ann. % Chg. 1998-2015	3.7%	3.7%	3.5%

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information and Federal Aviation Administration, Aviation Policy and Plans Office.

The forecasted annual growth rate for air passenger enplanements through the year 2015 is about 25 percent slower than the average annual air passenger growth experienced over the last 22 years. In Table 4 the average annual rate of growth for the U.S., California, and Southern California was about 4.5 percent per year for the period of 1977 to 1998. The

projected annual growth rate in air passenger volumes for the 17-year period of 1998 through 2015 is about 3.5 percent. However, it should be noted that while the annual growth rate for the U.S. was a little faster than California and Southern California in the last 22 year period, the Nation is expected to grow at a little slower rate than the State or the local region over the next 17 years.

SCAG 2020 Regional Transportation Plan Forecasts

The Southern California Association of Governments has prepared a 2020 regional transportation plan baseline forecast (RTP Medium) and several alternative forecasts of air passenger and air cargo volume for the year 2020. The RTP Medium and four alternative forecasts scenarios (scenarios 2C-HSR, 8, 9, and 6) are the focus of the economic impact analysis of this study.

Table 7
2020 RTP AIR PASSENGER FORECASTS

Year / Forecast Scenario	Air Passengers (000s)	Percent Change	Avg. Annual Growth Rate
Base Year:			
1998	81,850	--	--
2020 Forecast Scenario:			
RTP Medium	157,410	92.3%	3.0%
2C-HSR	156,089	90.7%	3.0%
Scenario 8	156,469	91.2%	3.0%
Scenario 9	154,819	89.1%	2.9%
Scenario 6	140,850	72.1%	2.5%

Source: Southern California Association of Governments.

The SCAG RTP medium projection for annual growth in air passenger volumes during the 22-year forecast period is about 3.0 percent per year. This annual rate of growth is about 19 percent slower than the U.S.D.O.T. forecast of 3.7 percent per year for Southern California and would result in about 24.6 million fewer annual passengers by the year 2020. It should be noted that the U.S.D.O.T. forecast was only through the year 2015 and was reporting a slowing rate of growth (e.g., 3.37% annual growth rate for 2014 to 2015). However, the SCAG forecast is still much more conservative than the U.S.D.O.T. forecast.

Table 8
2020 RTP AIR CARGO FORECASTS

Year / Forecast Scenario	Air Cargo (tons)	Percent Change (1998-2020)	Avg. Annual Growth Rate (1998-2020)
Base Year:			
1998	2,605,559	--	--
2020 Forecast Scenario:			
RTP Medium	8,900,277	241.6%	5.7%
2C-HSR	8,900,877	241.6%	5.7%
Scenario 8	8,900,899	241.6%	5.7%
Scenario 9	8,900,900	241.6%	5.7%
Scenario 6	N/A	N/A	N/A

Source: Southern California Association of Governments.

The SCAG RTP medium projection for annual growth in tonnage of air cargo shipments during the 22-year forecast period is about 5.7 percent per year. There is no statistical difference between the five SCAG 2020 cargo forecast scenarios, except that no forecast is presented with the Scenario 6 air passenger forecast. The 5.7 percent annual rate of growth in tonnage of air shipments results in a 242 percent increase in total cargo weight. The 8.9 million tons of shipments forecast for the year 2020 is 6.3 million tons more than the 2.6 million shipped in 1998.

Private Sector Aviation Forecasts. The Airports Council International (ACI) forecast of air passengers and air cargo growth was released in September 1998 for the period of 1998 to 2010. The ACI forecast for air cargo indicates 6.4% average annual growth in traffic worldwide. ACI's forecasts of passenger traffic for the U.S. is just under 3% annual growth and 4.7% worldwide. The Boeing forecast of air cargo, released in June 1999, reports world air freight will grow 6.4% annually through 2018 and the greatest air freight regional market growth will occur for intra-Asian routes which will average 8.2% annual growth. The Airbus report, published in June 1999, forecasts worldwide growth in air passenger traffic at an average annual rate of 5.0 percent, while cargo traffic growth will average 5.9 percent per year.

Forecasts of air cargo shipments are more difficult to predict, however, there are several factors related to business information systems and changes in technology that may have a substantial impact on the demand for shipment of air cargo. The following section discusses some of these potential impacts.

E-COMMERCE AND THE AVIATION INDUSTRY

Rapidly changing e-commerce technologies will have a substantial impact on the long-term trend in air transportation demand. Measuring current impacts and forecasting are difficult because the Internet and the "dot-com" business model is a revolution that is currently in process. As new and existing businesses rush to fulfill the needs of their customers in cyberspace, the historical distribution systems of "bricks and mortar" retail stores has been turned upside down. Even more importantly however, is the electronic interconnection of the global chain of suppliers, manufacturers, distributors, retailers, and consumers, resulting in greater productivity with smaller just in time (JIT) inventory deliveries for both manufacturers and retailers.

Business To Consumer E-Commerce

In a global market where the lowest cost supplier wins, the higher cost of air transportation is a penalty to be avoided unless the increased delivery speed sufficiently reduces other costs such as product inventory. As a general rule of thumb, air cargo shipments are twice as expensive as surface transportation. In the early build-up phase of e-retail, many dot-com companies are willing to provide overnight delivery at no extra charge while losing money on every sale in order to build sales volume and market share.

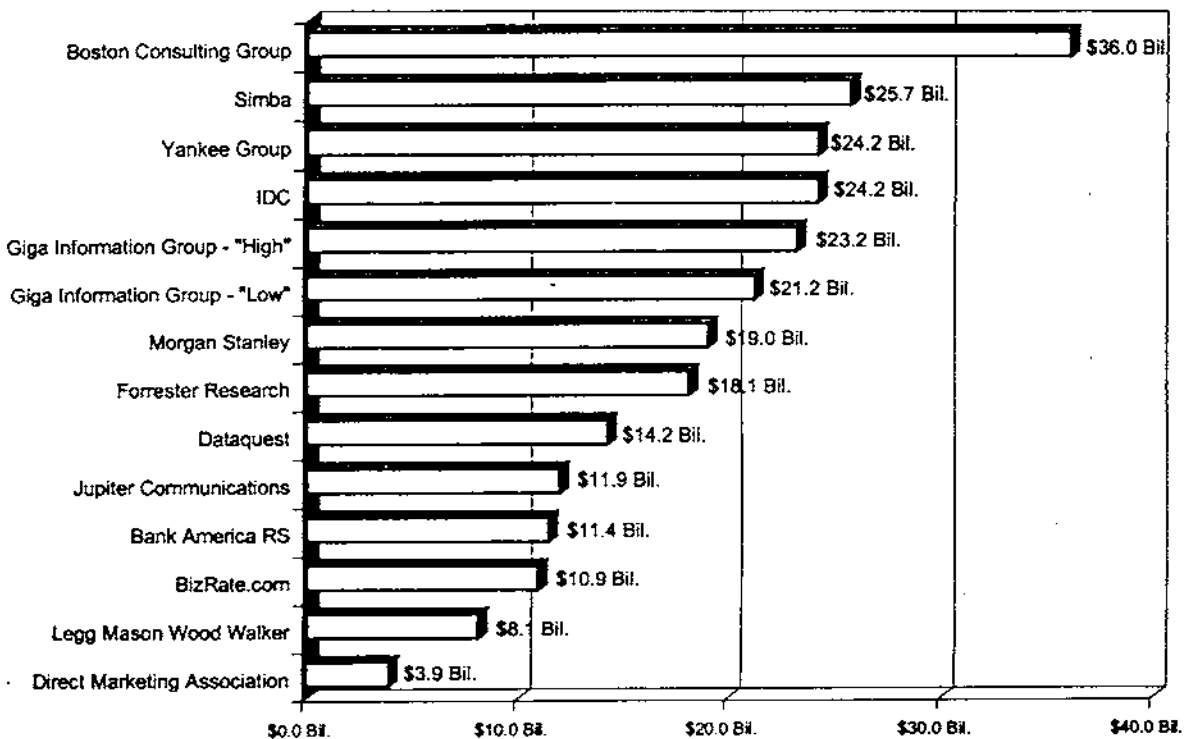
However, the next phase of e-retail has started for some of the dot-com companies. Some of these companies have determined that operating without a physical presence lacks some efficiency and doesn't completely serve their customers' needs. They have determined that they need to combine "clicks and mortar" to reduce overall costs and to increase overall customer satisfaction with the fulfillment process. Amazon.com will spend \$300 million to purchase and build 3.0 million square feet of warehouse space during the next year. Federated department Stores, Inc. acquired catalog operator Fingerhut Cos. for \$1.7 billion. Fingerhut's warehouses are also used for inventory and distribution for companies such as Wal-Mart Stores, Inc. and e-Toys, Inc. Webvan Group, Inc., is planning to spend \$1 billion to build 27 distribution centers in the U.S.⁵ As a result of establishing more traditional regional and metro-area warehousing distribution channels, proportionately less air cargo delivery costs will be required for each dollar of Internet retail sales.

Currently it is difficult to measure the amount of Internet e-commerce business to consumer sales (B2C). This also makes it difficult to forecast this dynamic revolution in business operations. For example, in September 1999 an e-Marketer report compiled estimates

of 1999 total consumer online shopping revenues from 13 different market research companies. The estimates of total 1999 sales ranged from a high of \$36 billion (Boston Consulting Group) to a low of \$3.9 billion (Direct Marketing Association). Other notable estimates were \$24.2 billion (Yankee Group), \$18.1 billion (Forrester Research), and \$11.9 billion (Jupiter Communications).⁶

The report highlights the current difficulty in measuring e-commerce. Although sales are growing rapidly, the study also indicates that e-commerce represents about one percent of the \$2.3 trillion U.S. retail sales in 1999. However, all these studies include services such as transportation (e.g., airline tickets) and financial services in their estimates of B2C e-commerce. The more appropriate measure would be total e-commerce as a percent of total personal consumption which is estimated at \$2,315 Billion in 1999, which equals less than one half of one percent.

Figure 6
Estimated 1999 Consumer Online Shopping Revenues



⁵ Wall Street Journal, "E-Commerce: Getting the Goods", November 22, 1999, pg. R39.

⁶ The e-Marketer, "e-RetailReport", September 1999, <www.emarketer.com>.

Potential E-Commerce Market Penetration. Some products and services will continue to be fairly resistant to remote e-commerce purchase of the good or service without the consumer's physical presence or inspection of the item or service at the point of sale. For example, eating and drinking purchases, grocery purchases (Webvan.com notwithstanding) gasoline purchases, auto and home repairs, real estate, and many personal services. Clothing purchases, jewelry, art, furniture, autos (new and used), and even many household appliances are somewhat resistant to remote purchase because of the consumer's desire to inspect (e.g., see, touch, hear, and even smell) the product.⁷ Furthermore, for some consumers there is a recreational and social aspect of shopping that is not fulfilled by the Internet. Therefore, most industry analysts are expecting far slower growth and market penetration of consumer e-commerce than business to business e-commerce, at least in sectors that are already well served by brick and mortar.

Global Market Place. The emerging global supply chain information systems and e-commerce are stimulating strong growth in air shipments. Some package delivery services like UPS and the U.S. Postal Service are currently experiencing rapid growth in delivery volume to fulfill e-commerce purchases. FedEx, the pioneer in overnight document delivery, has a smaller focus on residential delivery, and has experienced slower sales growth due to the introduction of sophisticated supply chain management systems and e-mail delivery of business documents. The Wall Street Journal reported that during the last 25 years FedEx has filled a need when businesses required fast delivery of relatively small and lightweight components, key production parts or had to make up for lost time in delivering products or documents. This need for speed was often driven by business decisions that were made with inaccurate and/or out-of-date information on inventories, production schedules, and sales.⁸

Electronic Document Delivery and Bill Presentation. There is a strong push for electronic bill presentation and payment. On average, it costs the billing company approximately \$1.25 to send a paper invoice statement and about \$1 to process the invoice payment. In contrast e-billing and electronic payment processing averages about \$0.50 and \$0.10, respectively per transaction. Nearly 25 percent of all postal service revenues are currently derived from delivery of hard-copy bill statements and the return delivery of payments.⁹

The U.S. Postal Service delivered 201.6 billion pieces of mail in 1999 (+2.3%). However, Robert Krause, vice president of electronic commerce at the USPS, is forecasting a

⁷ Lisa M. Grobar, Ph.D., "Regional Economic Forecast, 1999-2004", November 17, 1999.

⁸ The Wall Street Journal, "Overnight, Everything Changed for FedEx; Can It Reinvent Itself?", November 4, 1999.

⁹ Randy Barrett, "E-Mail Address Unknown", Inter@ctive Week, October 11, 1999.

decline in physical document delivery by 2005. This will occur as a result of electronic document delivery, electronic courier services (encrypted and certified document delivery), and electronic bill presentation resulting in a 3 percent annual decline in USPS mail volume.^{10,11}

Business To Business E-Commerce

Business to business (B2B) sales over the Internet have experienced rapid growth and acceptance across a wide spectrum of industries. Total B2B sales in 1999 are estimated at about \$100 billion, about a three-fold increase from 1998. The B2B sales are easily adapted from more traditional phone or fax orders for business supplies, parts, and materials. Both the selling company and the purchasing company are better served at lower transaction costs through the online sales. The Boston Consulting Group has forecasted B2B e-commerce sales to continue to expand at 300% per year from 1998 through 2003, reaching \$2.8 trillion and will represent about 25% of total U.S. B2B industry sales.¹²

The B2B electronic Internet transaction replaces the traditional sales order process, but this does not usually change the traditional distribution channels for shipment and delivery of the business products and materials. However, other related digital information forces are driving substantial changes in traditional distribution channels.

Supply Chain Management Systems. A fully integrated, global supply chain management system, goes beyond an intranet that digitally links a single business' operations and administrative functions. The supply chain requirements for information are now end-to-end, incorporating detailed current inventory, production capacity, and delivery information from many suppliers' operations as well as customers' operations for business to business sales and/or anticipating product demands of the retail consumer. The introduction of these very sophisticated, vertically integrated, supply chain management systems are yielding higher productivity and substantially reduced costs for businesses, including faster product design, lower cost suppliers, internet based product testing, faster overall production, efficient inventory management, and faster fulfillment.^{13,14}

Just In Time Delivery. In order to reduce the costs of carrying inventories, many supply contracts are now written with guarantees for just in time deliveries. For some suppliers there is no alternative to air transport of their products in order to meet the trend toward shorter periods between the purchase order and physical delivery. This is especially true for products with very

¹⁰ Randolph Schmid, "Postal Service Marks Fifth Straight Profit-Making Year", Associated Press, December 9, 1999.

¹¹ Randy Barrett, Op Cit.

¹² Mel Duvall, "B2B E-Commerce To Skyrocket," Interactive Week, December 22, 1999.

¹³ Internet World, "Web-Enabled Enterprise: Cisco's Billion Dollar Plan", October 1, 1999, pg 70.

short life cycles such as some electronic components and computer chips, but is also true for fashion apparel and higher value perishable items. The air cargo industry is benefiting from the surge in electronic commerce as businesses increasingly turn to Internet-based ordering, shipping and tracking options and drive up the demand for just-in-time delivery solutions. As a result, UPS Chairman, James Kelly, reports that his company estimates that U.S. inventories will be reduced by \$500 billion (about 50%) over the next five years.¹⁵

JIT manufacturing processes across a broad spectrum of industries are creating greater pressure on independent parts and sub-assembly suppliers to either locate operations nearer their largest customers (the Mother plant) or to secure rapid, dependable distribution channels. This is exactly what has been occurring in Mexico with the maquiladora plant operations. For example, Sanyo's large television manufacturing facility in Tijuana, Mexico receives approximately 32,000 pounds of international air shipments through LAX with transshipment by truck each working day. However, by January 1, 2001 nearly all non-NAFTA country suppliers to Sanyo's Tijuana operation will be located in Mexico. Effectively, removing nearly 5,000 tons of annual air shipments that currently transit through the LAX port of entry.¹⁶

E-Commerce And Air Cargo Forecast. Both the Boeing and Airbus 20-year forecasts for air cargo and air passenger volumes incorporate impact assumptions for the changing global supply chain and forecasts of worldwide GDP. Their combined forecasts indicate that U.S. air cargo tonnage will increase about 215%, while air passenger volume will increase by 80%. Total worldwide air cargo will increase 245% and Asia will lead all world regions with an estimated increase of 380% for the period. A recent air cargo study by Mohamed Zairi of the University of Bradford Management Centre, UK specifically addresses shorter product lifecycles and global supply chain management systems. Professor Zairi has forecasted a somewhat higher 20-year growth increase of 266% for air cargo worldwide (6.7% annual average). In addition Zairi's growth forecast for the Asian region is 460% (9.0% annual average growth).¹⁷

Southern California's major international ports (i.e., LAX, San Pedro, and Long Beach) are important gateways for import and export trade with the Asian markets. The very strong growth forecasts for Asian-region air cargo, indicate that Southern California should benefit from the existing strong Asian international trade flow. It is likely therefore, that growth in international air cargo volumes will exceed worldwide average growth rates listed above.

¹⁴ Internet World, "The Supply Chain, Simplified Via the Web", October 15, 1999, pg 57.

¹⁵ Barbara Cook, "E-Commerce: Air Cargo Goes High Tech", *Airport Magazine*, June 1999.

¹⁶ CIC Research, Inc., "Survey of San Diego and Baja California Shippers and Freight Forwarders", May 1999.

¹⁷ Mohamed Zairi, "Benchmarking in the Air-Freight Industry", *International Journal of Physical Distribution & Logistics Management*, Vol. 29, No. 5, 1999.

Therefore, the current 20-year air cargo growth forecast of 242% (2.6 million tons rising to 8.9 million tons) for the SCAG region is probably conservative. With unconstrained air service, the 242% growth forecast for air cargo is probably the low-end for the SCAG region, with increases in the mid to high-end range of 265% to 285% (6.7% - 7.0% annual average growth) over the next 20 years.

The forecasts for continued rapid development of the Asian economies and the dynamics of a global marketplace and global supply chains will require constant monitoring and reevaluation of air cargo and air passenger growth trends.



ECONOMIC IMPACT STUDY METHODOLOGY

STATEMENT OF THE PROBLEM

There have been many studies that focused on individual parts of the SCAG region's aviation industry. Several studies have also been undertaken on the potential for conversion of one of the region's military airports to commercial use. (e.g., El Toro, March, Norton, etc.)¹⁸ These studies have two things in common. First, they highlight the congestion in the most heavily used airports, and the need for expansion of airport facilities to meet the region's growing demand for air transportation services. Second, they assess the economic benefits associated with the project they have under review.

With every potential aviation project supplying services that would otherwise be supplied somewhere else in the region, the Southern California Association of Governments (SCAG) has decided there is a need to look at the region's air transportation services as a whole. SCAG's objective was to estimate the future (year 2020) region-wide demand for aviation services without any constraints at any airport (i.e. a 2020 baseline). This future unconstrained baseline and the resulting economic benefits would compare alternative airport and infrastructure development scenarios that introduce constraints and inducements to reshape the future aviation industry in the region. In this way, comparisons can be drawn which show the differential economic impacts, and their distribution within the region.

STUDY METHODOLOGY OBJECTIVES

This study has a number of objectives including assessing the economic impact of the aviation industry on the SCAG region in the year 2020, and how certain proposed though as yet hypothetical changes in the region's airport system will change the economic impacts. The study also examines other economic characteristics of the region in terms of how they would affect the future regional economy and air transportation's role in it. The additional study objectives include assessments of:

¹⁸ op cit. See also, Erie, Steven P. et al, "A New Orange County Airport at El Toro: An Economic Benefits Study," 1998.

- Custom district exports and imports with estimates of local content.
- The region's service industries exports and imports.
- The manner in which e-commerce will impact the movement of goods and people and whether the current air cargo forecast captures the growth impact from e-commerce.
- Comparisons of aviation's transportation services with other transportation modes.
- Transshipments of domestic products and analysis of product origin and destination.

These elements are discussed in the report and analyzed more thoroughly in the Appendices.

Methodological Approach

Many economic studies have been conducted on the aviation industry of specific regions and have included many and varied concepts of the economic role of the industry. Most studies go beyond a simple cost benefit analysis of whether the airport project will generate sufficient revenues to cover the capital and operating costs yet fall short of a complete cost benefit study going into external costs and benefits. Studies that have attempted to quantify external costs such as noise, and other environmental pollution, as well as social benefits of aviation have been criticized for being too ambitious relative to the data.¹⁹ For example, studies have attempted to quantify the reduction in the market value of residential housing attributable to airport noise.²⁰ At the same time, *increases* in commercial land values around airports is said to be attributable to the "catalytic" benefits of proximity to air transportation.²¹

Focus On Benefits. It is more common to find studies that limit economic analysis to only the benefits side of the equation. A thorough list of the economic benefits of air transportation is presented by the Air Transport Action Group (ATAG) in an article which reviews global performance, growth, and local impacts defined as the direct, indirect and induced impacts.²² The article goes further to describe certain "catalytic" economic benefits of air transportation. Such benefits are attributable to "new and faster means for distributing goods and services throughout the world", resulting in "increased economic efficiency" which results in

¹⁹ Howard, George P., "The Airport Environment: Economic Impact on the Community," 1974, Airport Economic Planning. Pgs.569-582, 1974.

²⁰ Uyeno, Dean & Stanley W. Hamilton & Andrew J.G. Biggs, "Density of Residential Land Use and the Impact of Airport Noise," Journal of Transport Economics and Policy, pg. 3-18, 1993. See also Collins, Alan & Alec Evans, "Aircraft Noise and Residential Property Values: An Artificial Neural Network Approach," Journal of Transport Economics and Policy, pgs. 175-197, 1994.

²¹ Erie, Steven P., John Kasarda, & Andrew McKenzie, "A New Orange County Airport at El Toro: an Economic Benefits Study, 1998.

²² ATAG, The Economic Benefits of Air Transport (1994).

lowered cost of trade and wider markets for existing industries, and whole new industries made possible by air transportation.

Many studies have included variations on “catalytic” economic impacts, which could be interpreted as external (or social) benefits. The idea of catalytic impact is very much like the notion that forward linkages in economic input-output models are a better guide to a sector’s potential for generating economic development than are the backward linkages typically used in economic impact studies.²³ That is, the sales of air transportation services to other sectors of the economy are a more important indicator of the role of air transportation in the economic growth of a region, than are the purchases by air transportation providers from the rest of the economy. However, it is the latter on which airport economic impact studies are based.

The Chicken Or The Egg. Other studies have questioned whether airports generate economic growth. Rather they argue that the growth in air transportation services is in response to the general growth in the region.²⁴ This chicken or egg controversy, however, could be bypassed by using an economic growth conceptualization that treats air transportation in the context of economic or industry “clusters.” The idea here is that aviation may be part of a variety of industry clusters, which taken together, provide critical inputs to growing segments of the economy.

Industry Cluster Analysis. For example, this type of analysis would put aviation, along with recreation, entertainment and attractions, hotels, convention centers, etc., in a “tourism cluster” of economic activity that comprises a significant part of the Southern California economy. It is also suggested that in combination with a number of high tech industries, aviation may form an industry cluster with just-in-time (JIT) manufacturing as well as e-commerce. These are economic clusters that together provide for significant growth in the region’s future economic base.²⁵ The critical characteristic of air transportation in this case is the sector’s ability to quickly move air cargo throughout the world. Although the main focus of this study is on the economic and fiscal impacts of the Southern California aviation industry, certain aspects of a broader analysis of economic benefits will be introduced with the additional objectives outlined in the Introduction.

Studies have also gone into the “costs” associated with **not** expanding an airport or adding new airports. This goes beyond the concept of “opportunity cost” or “benefits foregone” by quantifying congestion costs and associated deterioration of competitive position relative to

²³ Hoover, Edgar M., An Introduction to Regional Economics, New York, Alfred A. Knopf, p. 290, 1971.

²⁴ de Neufville, Richard, “The Bottom Line,” 145-167 in Richard de Neufville, Airport Systems Planning, 1976.

²⁵

less congested airports.²⁶ This along with the length of time it takes to develop new airports is cited as a primary reason for moving ahead on new airport initiatives well in advance of the demand for new services. The main focus of this study avoids much of this type of analysis, as it is simply too difficult to quantify. However, this study does employ SCAG's forecasts of total regional air passenger and cargo volume, coupled with airport by airport allocation predictions from a Regional Airport Demand Allocation Model (RADAM) which may implicitly or explicitly include such difficult to measure elements.²⁷

There are at least two I-O applications that have been used in the analysis of the economic impact of a region's air transportation facilities. One follows a more conventional application of input-output economic impact analysis defining direct and indirect impact as limited to current production of air transportation services. The other, follows the FAA guidelines and includes capital spending as part of direct impacts, and includes all capital and current spending associated with the demands placed on the regional economy by air passengers in the category "indirect impacts".²⁸ There are arguments for each of these approaches so rather than picking one over the other, this study will assess reasonable economic impact estimates both ways.

²⁶ Erie, Steven P., John Kasarda, & Andrew McKenzie, "A New Orange County Airport at El Toro: an Economic Benefits Study, 1998.

²⁷ *Ibid* See Appendix A.

²⁸ Other approaches have included air passenger spending in direct impacts, see for example State of California Airport Economic Impact Model, produced by Economic Research Associates under contract with the California Department of Transportation Division of Aeronautics, 1994.



SCAG REGION AVIATION INDUSTRY ECONOMIC IMPACTS

METHODOLOGY

In this study a conventional application of regional input-output (I-O) analysis is used to measure the economic impacts of aviation services within the SCAG region. The levels of air transportation services that are analyzed are based on four different 2020 regional transportation planning scenarios for aviation development. The assumptions and parameters of these development scenarios are explained in greater detail in the appendix.

Two methodological features of the I-O analysis are presented. The first is the derivation of input-output relationships in the region using data and software provided by the Minnesota Implan Group (MIG). This I-O modeling software and data is called IMPLAN and is available (for a fee) for every county in the United States. The most recent data at the onset of this study was 1996, but with price data and productivity data available from the U.S. Department of Labor, Bureau of Labor Statistics, CIC prepared I-O models for 1998 and 2020. Additional data for the 2020 model were derived from employment forecasts by county made or obtained by SCAG. All dollar amounts for the I-O analysis are stated in 1998 dollars.

Definitions

The application of I-O models to aviation impact analysis has been used in many prior studies. Indeed, the FAA has established impact analysis guidelines because of a range of quality and a lack of comparable standards among the various studies. Unfortunately, many aviation impact studies are still not comparable because of variation in approach based on different conventions for reporting results and different interpretations of the impact analysis guidelines provided by the FAA. A more thorough discussion of these differences is presented in Appendix A.

Differences in many of the publicly released studies relating to impacts (aside from air passengers and air cargo volume differences) were primarily related to which economic activities were included in the analysis and which were excluded. Further substantial differences are related to which convention is used to report the results of the economic impact study. The latter boils down to whether the income impacts (*i.e.*, wages, salaries, and

proprietors earnings) are summed with the output impacts (*i.e.*, sales of all sectors including sales of labor and entrepreneurial effort) to arrive at an estimate of the total economic impact. In this study, output does not include income, but both output and income impacts are estimated and presented.²⁹

Some airport impact studies have only included economic activities involved in the production of aviation services, while others have included anything and everything that uses air transportation services as well as anything and everything that the air transportation services producers use (refer to footnote 29 below). The following paragraphs describe four levels of economic impacts, with each additional level encompassing a larger sphere of economic activities that are less and less directly related to air transportation services.

Level-1 Impacts. In some studies, the I-O analysis limited the direct economic impacts to just those associated with the production of air transportation services. This is the most conservative level of impact analysis. This Level-1 Impact as defined in this study includes the direct effects (the revenue or output) of only those enterprises involved with the production of air transportation services. This includes all businesses that are engaged in furnishing domestic and/or foreign transportation by air and also those operating airports and flying fields and furnishing terminal services. These include all air transportation passenger services scheduled and unscheduled, air courier services, and air cargo services.

The indirect impacts of the I-O model are derived from the direct production of air transportation services and would include establishments that provide the fuel and many other inputs required by aircraft and airports. For example, many establishments provide inputs to airport operations, such as security, telecommunications, maintenance, power and other utility companies. The Level-1 Impact analysis also includes the induced impacts, which are the purchases made by the employees of the businesses that directly or indirectly produce the air transportation services. The resulting "direct", "indirect", and "induced" impacts of Level-1, represent the lowest level of impact assessment and are the most easily justified. Impact assessments beyond this level are less easily argued as attributable to aviation services.

Level-2 Impacts. Level-2 Impacts include the impacts described above in Level-1 and also include the impacts of non-resident air passengers. These are the direct, indirect and induced impacts of goods and services purchased by non-resident air passengers while they are in the SCAG region (*i.e.*, non-air transportation expenditures such as meals, lodging, ground transportation, shopping, and entertainment). This excludes air passengers that reside in the

²⁹ If this sounds like double counting the impact, it is because it is. CIC will save for another day the discussion of bigger numbers that beget ever-bigger numbers.

region and air passengers that are in-transit (*i.e.*, they do not leave the air transportation area and therefore, do not spend money in the region outside the airport).

At Level-2 there is an implied assumption that these non-resident air travelers would not have traveled to the SCAG region if air transportation services were not available. The purchases of non-residents (many of whom are leisure travelers to the SCAG region), are considered exported goods or services that are purchased by customers who live and work outside of the local economy.

Level-3 Impacts. A third level of economic impacts adds to the first and second levels those economic activities that use air cargo carriers to export their products. This assumes that exporters would not have been able to manufacture and ship their product by any other means including alternative airports outside of the SCAG region. We have provided an assessment of the activities that ship to foreign destinations, but we have assumed that air cargo shipments to domestic markets would find alternative transportation modes or routes.

Level-4 Impacts. A fourth level of economic impact analysis would include what is called in the literature “catalytic impacts.” This includes activities that are attracted to airport locations, not because they provide inputs to the aviation services, but because proximity to air transportation gives them a competitive edge. It is very difficult to separate these effects from the first three levels of impact described above, and much of the discussion of catalytic impacts deals with the capital investment features of these activities in the vicinity of airports. Indeed, catalytic impacts were not estimated in this study because of the difficulty in separating such impacts and because this study does not assess construction or capital goods requirements in the future scenarios.³⁰

³⁰ At SCAG’s request, no capital goods transactions were included in this analysis. For example, all of the aviation related investments that would be made between the present and the year 2020 are excluded from the study. Obviously, given the SCAG region development options that are proposed for the next 20 years, capital investments could result in substantial and quite different economic impacts.

RTP 2020 MEDIUM SCENARIO: BASELINE 2020 RTP FORECAST

There were a total of 11 aviation forecast scenarios for the SCAG region in the year 2020. The RTP 2020 Medium scenario is the baseline planning forecast consisting of 157 MAP and 8.9 million tons of air cargo in the year 2020 assuming all of the regional airports are unconstrained. A total of five forecast alternatives were chosen for the analysis.

Level-1 Economic Impact Results: 2020 RTP Medium Scenario

At the first level of impact for the SCAG region 2020 RTP Medium Scenario, the air transportation services sector will generate total impacts (direct, indirect, and induced) of:

- ◆ \$30.1 billion in total output (revenue)
- ◆ 191,100 jobs
- ◆ \$12.2 billion income
- ◆ \$1.3 billion tax revenue

(see Appendix G for detailed impacts)

Level-2 Total Economic Impacts

Based on the 2020 Medium RTP forecast scenario, the Level-1 air transportation services impacts are combined with the Level-2 impacts attributable to non-resident air passenger expenditures. The resulting total Level-Two Impacts (direct, indirect, and induced) are:

- ◆ \$61.5 billion total output
- ◆ 539,600 jobs
- ◆ \$23.1 billion income
- ◆ \$3.9 billion tax revenue

Level-3 Total Economic Impacts

The same 2020 Medium RTP Scenario with the third level of economic impacts included increases the total economic impact estimates to:

- ◆ \$98.2 billion total output
- ◆ 706,300 jobs
- ◆ \$35.3 billion income
- ◆ \$5.0 billion tax revenue

Level-3 economic impacts include the value of economic activities attributable to foreign exports of goods produced in the region. This assumes a large sphere of impacts whereby specific

goods manufactured in the region would not find any alternative mode of transportation (including ground shipment to another out-of-region airport) and therefore would not be produced if they could not be exported from the local economy by air.³¹

SCENARIO 2C-HSR: 2020 RTP FORECAST ALTERNATIVE

Scenario 2C-HSR modifies the RTP 2020 medium scenario to answer the question: "What effect does high speed rail (HSR) have on Ontario and Inland Empire airports' ability to meet future demand?" This scenario assumes HSR linking the Inland Empire (March and/or Ontario airports) to LAX. It also assumes constrained Burbank (9.7 MAP) El Toro (28.8 MAP) and LAX (70 MAP and 2 million tons cargo) and legally constrained Long Beach (3.0 MAP), John Wayne, March, Ontario, Palm Springs, Palmdale, Pt Mugu, San Bernardino International, and Southern California Logistics airports are assumed unconstrained (see Appendix G for detailed impacts).

Level 1 Total Economic Impacts: Scenario 2C HSR

The level-1 total economic impacts based on the 2020 forecast Scenario 2C HSR will generate direct, indirect, and induced impacts of:

- ◆ \$29.8 billion output
- ◆ 189,500 jobs
- ◆ \$12.1 billion income
- ◆ \$1.3 billion tax revenue

Level-2 Total Economic Impacts: Scenario 2C HSR

The Level-2 economic impacts based on the 2020 forecast Scenario 2C HSR are estimated at:

- ◆ \$60.3 billion total output
- ◆ 528,300 jobs
- ◆ \$22.7 billion income
- ◆ \$3.8 billion tax revenue

Level-3 Total Economic Impacts: Scenario 2C HSR

Level-3 total economic impacts based on the 2020 forecast Scenario 2C HSR are estimated at:

³¹ This of course leaves out impacts attributable to capital transactions, as for example the construction of new airports. It also excludes so-called "catalytic impacts."

- ◆ \$96.7 billion total output
- ◆ 693,600 jobs
- ◆ \$34.8 billion income
- ◆ \$4.9 billion tax revenue

SCENARIO 8: 2020 RTP FORECAST ALTERNATIVE

Scenario 8 answers the question: "What impacts will the addition of an unconstrained El Toro and high speed rail services have on the air transportation system's ability to meet future demand?" Other specific criteria of Scenario 8 included that the March, Ontario, Palm Springs, Palmdale, San Bernardino International, and Southern California Logistics airports would be unconstrained. In addition, a new terminal is assumed for Burbank (9.4 MAP with 14 gates), while both John Wayne and LAX would be physically constrained to existing capacity. Long Beach would be legally constrained to 3.0 MAP and there no air transportation services would be offered at Point Mugu. (see Appendix G for detailed impacts).

Level-1 Total Economic Impacts: Scenario 8

Level-1 economic impacts based on 2020 forecast Scenario 8 will generate total direct, indirect, and induced impacts of:

- ◆ \$29.9 billion total output
- ◆ 190,000 jobs
- ◆ \$12.1 billion income
- ◆ \$1.3 billion tax revenue.

Level-2 Total Economic Impacts: Scenario 2C HSR

Level-2 economic impacts based on 2020 forecast Scenario 8 will generate total direct, indirect, and induced impacts of:

- ◆ \$60.9 billion total output
- ◆ 534,700 jobs
- ◆ \$22.9 billion income
- ◆ \$3.8 billion tax revenue

Level-3 Total Economic Impacts: Scenario 2C HSR

Level-3 economic impacts based on 2020 forecast Scenario 8 will generate total direct, indirect, and induced impacts of:

- ◆ \$97.4 billion total output
- ◆ 700,500 jobs
- ◆ \$35.1 billion income
- ◆ \$5.0 billion tax revenue

SCENARIO 9: 2020 RTP FORECAST ALTERNATIVE

Scenario 9 answers the question: "What effect would the LAX master plan improvements have on the airport system, without El Toro, but with HSR. Everything else would be the same as in Scenario 8: no constraints on March, Ontario, Palm Springs, Palmdale, San Bernardino International, and Southern California Logistics; a new terminal is assumed for Burbank (9.4 MAP with 14 gates); both John Wayne and LAX would be physically constrained to existing capacity; Long Beach would be legally constrained to 3.0 MAP; and no air transportation service would be provided at Point Mugu. (see Appendix G for detailed impacts).

Level-1 Total Economic Impacts: Scenario 9

Level-1 economic impacts based on 2020 forecast Scenario 9 will generate total direct, indirect, and induced impacts of:

- ◆ \$29.6 billion
- ◆ 187,900 jobs
- ◆ \$12.0 billion income
- ◆ \$1.3 billion tax revenue

Level-2 Total Economic Impacts: Scenario 9

Level-2 economic impacts based on 2020 forecast Scenario 9 will generate total direct, indirect, and induced impacts of:

- ◆ \$61.3 billion total output
- ◆ 540,500 jobs
- ◆ \$23.0 billion income
- ◆ \$3.9 billion tax revenue

Level-3 Total Economic Impacts: Scenario 9

Level-3 economic impacts based on 2020 forecast Scenario 8 will generate total direct, indirect, and induced impacts of:

- ◆ \$97.4 billion total output
- ◆ 704,500 jobs
- ◆ \$35.1 billion income
- ◆ \$5.0 billion tax revenue

SCENARIO 6: 2020 RTP FORECAST ALTERNATIVE

Scenario 6 answers the question: "Can the aviation system with existing legal and physical constraints meet future demand? Burbank would be physically constrained to 9.4 MAP. Ontario would be physically constrained to 20 MAP. Los Angeles International Airport

and March Inland Port would be constrained to their existing physical capacity. John Wayne and Long Beach would be legally constrained to 8.4 MAP and 3.0 MAP, respectively.

Level-1 Total Economic Impacts: Scenario 6

Level-1 economic impacts based on 2020 forecast Scenario 6 will generate total direct, indirect, and induced impacts of:

- ◆ \$26.9 billion total output
- ◆ 171,000 jobs
- ◆ \$11.0 billion income
- ◆ \$1.2 billion tax revenue

Level-2 Total Economic Impacts: Scenario 6

Level-2 economic impacts based on 2020 forecast Scenario 6 will generate total direct, indirect, and induced impacts of:

- ◆ \$54.2 billion total output
- ◆ 474,100 jobs
- ◆ \$20.5 billion income
- ◆ \$3.4 billion tax revenue

Level-3 Total Economic Impacts: Scenario 6

Level-3 economic impacts based on 2020 forecast Scenario 6 will generate total direct, indirect, and induced impacts of:

- ◆ \$87.0 billion total output
- ◆ 623,300 jobs.
- ◆ \$31.6 billion income
- ◆ \$4.4 billion tax revenue

ALTERNATIVE 2020 SCENARIOS: IMPACTS SUMMARY

The following table summarizes the results of the five alternative aviation development scenarios. In spite of large differences in the individual airport improvements and air traffic restrictions within the region, the resulting economic impact estimates are very similar with the exception of Scenario 6. Very little difference (about 2% in total output or employment) exists between the RTP Medium Scenario and Scenarios 2C-HSR, 8, and 9. This is not too surprising in that the scenarios yield very similar total regional passenger volumes and cargo shipments. Scenario 6 results in smaller total economic impacts, only because air passenger volumes are constrained to about 140 MAP compared to 157 MAP for the RTP Medium Scenario. As a result, Scenario 6 generates about 11.4% less economic impact for the region and 11.8% fewer jobs (-\$11.2 billion and -83,000 jobs, respectively).

Table 9

**SUMMARY OF LEVEL 1, 2, AND 3 SCAG REGION ECONOMIC IMPACTS
FOR FIVE ALTERNATIVE 2020 AVIATION DEVELOPMENT SCENARIOS**
(Dollar Amounts Stated in 1998 \$Millions)

Economic Impact Estimates (Direct, Indirect, and Induced)	2020 Aviation Services Impact Scenarios				
	RTP Med	2C HSR	Scn #8	Scn #9	Scn #6
Level 1 - Air Transportation Services (Only)					
Output	\$30,068 M	\$29,815 M	\$29,888 M	\$29,573 M	\$26,904 M
Income	\$12,167 M	\$12,070 M	\$12,098 M	\$11,977 M	\$10,957 M
Employment	191,080	189,476	189,938	187,935	170,978
Indirect Business Taxes	\$1,304 M	\$1,293 M	\$1,296 M	\$1,283 M	\$1,167 M
Level-2 Non-Resident Air Travelers (Only)					
Output	\$31,397 M	\$30,510 M	\$31,045 M	\$31,752 M	\$27,300 M
Income	\$10,907 M	\$10,625 M	\$10,801 M	\$11,029 M	\$9,577 M
Employment	348,471	338,808	344,787	352,566	303,164
Indirect Business Taxes	\$2,559 M	\$2,482 M	\$2,525 M	\$2,584 M	\$2,221 M
Combined Levels-1, 2: Air Transportation Services and Non-Resident Air Traveler Impacts					
Output	\$61,465 M	\$60,325 M	\$60,933 M	\$61,325 M	\$54,205 M
Income	\$23,074 M	\$22,695 M	\$22,899 M	\$23,006 M	\$20,534 M
Employment	539,551	528,284	534,725	540,501	474,141
Indirect Business Taxes	\$3,863 M	\$3,776 M	\$3,821 M	\$3,867 M	\$3,388 M
Level-3 Economic Impacts Derived From Air Transportation Of Locally Produced Foreign Exports (Only)					
Output	\$36,700 M	\$36,392 M	\$36,481 M	\$36,096 M	\$32,839 M
Income	\$12,243 M	\$12,146 M	\$12,174 M	\$12,053 M	\$11,025 M
Employment	166,736	165,336	165,739	163,991	149,194
Indirect Business Taxes	\$1,147 M	\$1,137 M	\$1,140 M	\$1,128 M	\$1,026 M
Combined Levels-1, 2, 3: Air Transportation Services, Non-Resident Air Travelers, and Locally Produced Air Exports					
Output	\$98,165 M	\$96,718 M	\$97,414 M	\$97,421 M	\$87,044 M
Income	\$35,317 M	\$34,841 M	\$35,073 M	\$35,059 M	\$31,559 M
Employment	706,287	693,620	700,464	704,492	623,336
Indirect Business Taxes	\$5,010 M	\$4,913 M	\$4,962 M	\$4,995 M	\$4,415 M

Source: CIC Research, Inc.

Figure 7

**COMBINED TOTAL LEVELS-1, 2, AND 3 SCAG REGION ECONOMIC IMPACTS
FOR FIVE ALTERNATIVE 2020 AVIATION DEVELOPMENT SCENARIOS**
(Dollar Amounts Stated in 1998 \$Millions)

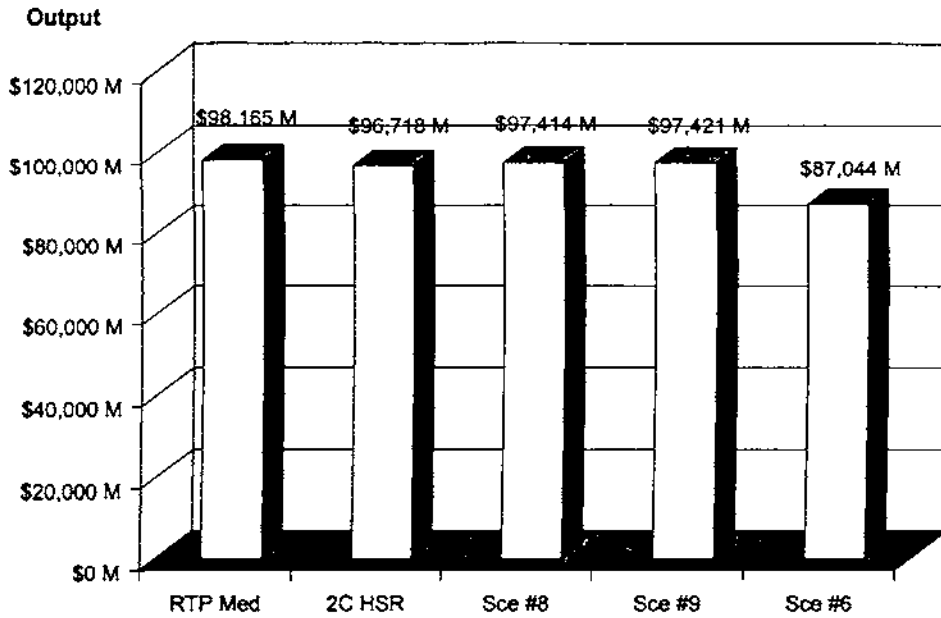
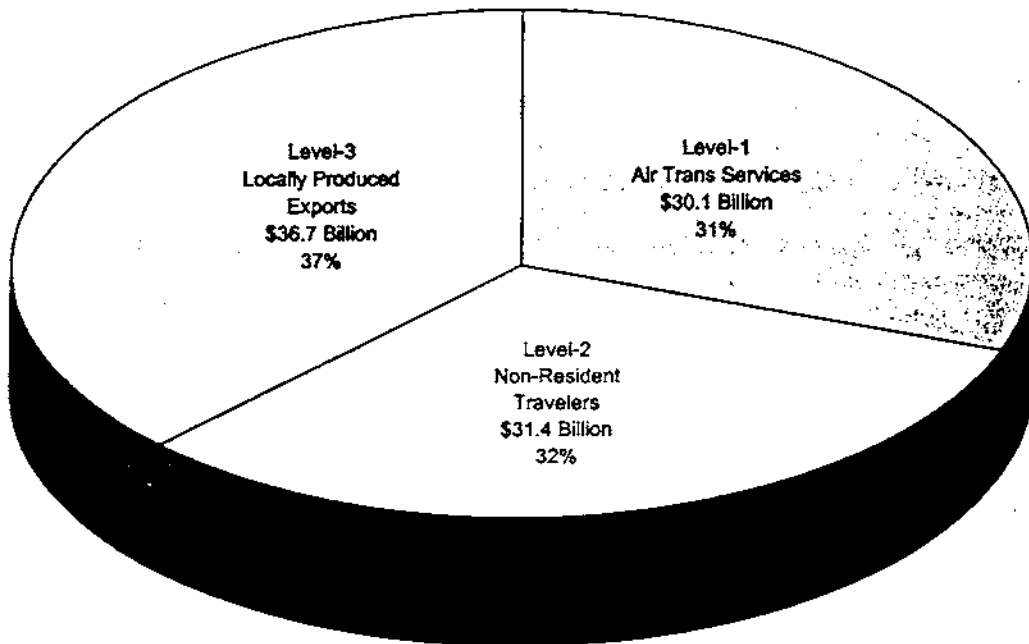


Figure 8

**SCAG REGION 2020 RTP MEDIUM AVIATION DEVELOPMENT SCENARIO
LEVELS OF ECONOMIC IMPACT**



REGIONWIDE V. COUNTY-LEVEL IMPACTS

Although the region-wide economic impacts yield very little differences between the 2020 aviation development scenarios, there are large impact variations between scenarios at the County level. Nearly all of the variation at the county level occurs in terms of Level-1 economic impacts, *i.e.*, Air Transportation Services production. In general, the Level-2 non-resident air passenger expenditures and the Level-3 manufacturing exports by air are not impacted by the location of air transportation services within the region. However, it should be noted that the 2020 SCAG region aviation forecast scenarios and the RADAM demand allocation modeling, did not attempt to measure the level of air service demand as a result of changes in regional air service location.

One might reasonably assume that air travelers and air cargo shippers would prefer to use airports that are the most convenient to their origin and destination. However, the RADAM modeling indicates that price, flight frequency, air carriers, and other factors significantly impact the choice of airport usage. This further supports the lack of variation in the regionwide economic impact estimates resulting from the very small differences in total passenger and cargo volume among the five regional forecast scenarios.

Air Passenger Impacts. Once on the ground the non-resident air traveler demonstrates a pattern of visitation within the region that is largely unaffected by the location of the airport within the region. For example, business travelers will travel to the location of their client's office and many leisure travelers will visit Disneyland or Universal Studios regardless of the location of the airport within the region. Consequently, we can say with some assurance that whatever the county distribution of economic impacts related to air passengers, the total regional impact is little affected by any of the forecast scenarios. However, it would seem reasonable to assume that to the extent that the in-region distribution of air passenger landings better reflects the regional origin or destinations of passengers once on the ground, the demand for inter-county ground transportation would be reduced. This suggests that planning for the future of aviation in the region may be more strategically related to environmental and transportation congestion issues than to future economic impacts.

Cargo Impacts. The location of most industries that use air transportation services to export their products manufactured within the region would be largely unaffected by any of the aviation forecast scenarios. This conclusion is substantially supported by the results of the RADAM air cargo shipment allocations by origin/destination airport within the region. The SCAG estimate of 80 percent leakage of San Diego County origin/destination air cargo through LAX, further supports the minimal in-region airport location impacts of air cargo service.

Infrastructure and Catalytic Impacts. This study has not addressed the economic impacts of the substantial capital investment in new aviation and related transportation infrastructure or the value of catalytic impacts resulting from the alternative scenarios. In this case, along with the impacts associated with new construction to expand or create new airports, there would be additional construction to expand or create new industrial facilities that would be attractive to those economic activities that have a high propensity to locate near airports.

COUNTY LEVEL ECONOMIC IMPACTS

County Distribution of Air Transportation Services (Level 1) Output Impacts

Under each 2020 aviation forecast scenario, including the RTP Medium (*i.e.*, the baseline forecast), Los Angeles county airports would account for a much smaller percentage of the region's total air transportation services than today. The largest increases in air transportation services outside of L.A. County are generated by shifts in the greatly expanded air cargo market. Currently, airports located within Los Angeles County generate more than 80 percent of the total air passenger and air cargo volume for the SCAG region. However, by 2020 Los Angeles county airports will account for 68 percent of the passengers and only 46 percent of the total regional air cargo.

Under scenarios where a new Orange County International Airport is developed at El Toro, Orange County would act as the primary reliever for expanding air passenger volumes in the region. Under all of the scenarios, there are greatly expanded air cargo services offered in San Bernardino and Riverside Counties. The greatest redistribution of air transportation services would occur under the high-speed rail scenario 2C HSR. The smallest redistribution of air transportation services would take place under Scenario 6 which because of existing constraints would also result in smaller growth in both Los Angeles and Orange Counties, as well as for the region as a whole. Overall variability is relatively small except for Scenario 6 which is about 11 percent lower primarily because of constraints at both LAX and John Wayne.

The largest difference for any county between one scenario condition and the others is the development of El Toro. This development is present in SCE RTP, SCE 2C HSR and SCE 8. It is not present in SCE 9 and SCE 6. With the El Toro airport and high-speed rail (SCE 2C HSR), the smallest proportion of air transportation services is allocated to L. A. County of any of the forecast scenarios (53% of passengers and 32% of cargo). Without El Toro but with HSR, (SCE 9) the reductions in Orange County occur with a substantial expansion in San Bernardino County. This is also the only scenario in which a county that presently offers a substantive level of air transportation services would experience an actual reduction in economic impact.

Table 10

**LEVEL-1 ECONOMIC IMPACTS OF AIR TRANSPORTATION SERVICES BY COUNTY
FOR FIVE SELECTED 2020 AVIATION DEVELOPMENT SCENARIOS**
(Dollar Amounts Stated in 1998 \$Millions)

Impact Category/ County	SCE RTP	SCE 2C HSR	SCE 8	SCE 9	SCE 6
Output Impact:					
Los Angeles	\$18,487 M	\$13,883 M	\$15,572 M	\$17,160 M	\$16,391 M
Orange	\$5,196 M	\$6,935 M	\$5,939 M	\$1,024 M	\$2,231 M
San Bernardino	\$4,424 M	\$6,628 M	\$6,471 M	\$8,490 M	\$5,359 M
Riverside	\$1,749 M	\$1,814 M	\$1,905 M	\$2,898 M	\$2,915 M
Ventura	\$212 M	\$555 M	\$0 M	\$0 M	\$8 M
Total	\$30,068 M	\$29,815 M	\$29,888 M	\$29,573 M	\$26,904 M
Income Impact:					
Los Angeles	\$7,481 M	\$5,620 M	\$6,303 M	\$6,950 M	\$6,675 M
Orange	\$2,102 M	\$2,807 M	\$2,404 M	\$415 M	\$908 M
San Bernardino	\$1,790 M	\$2,683 M	\$2,619 M	\$3,439 M	\$2,183 M
Riverside	\$708 M	\$735 M	\$771 M	\$1,174 M	\$1,187 M
Ventura	\$86 M	\$225 M	\$0 M	\$0 M	\$3 M
Total	\$12,167 M	\$12,070 M	\$12,098 M	\$11,977 M	\$10,957 M
Tax Revenue Impact:					
Los Angeles	\$802 M	\$602 M	\$675 M	\$744 M	\$711 M
Orange	\$225 M	\$301 M	\$258 M	\$44 M	\$97 M
San Bernardino	\$192 M	\$287 M	\$281 M	\$368 M	\$232 M
Riverside	\$76 M	\$79 M	\$83 M	\$126 M	\$126 M
Ventura	\$9 M	\$24 M	\$0 M	\$0 M	\$0 M
Total	\$1,304 M	\$1,293 M	\$1,296 M	\$1,283 M	\$1,167 M
Employment Impact:					
Los Angeles	117,485	88,228	98,963	109,052	104,166
Orange	33,020	44,071	37,742	6,508	14,177
San Bernardino	28,114	42,122	41,125	53,955	34,058
Riverside	11,117	11,531	12,108	18,420	18,523
Ventura	1,344	3,524	-	-	52
Total	191,080	189,476	189,938	187,935	170,978
Percentage Of County Employment:					
Los Angeles	1.6%	1.2%	1.4%	1.5%	1.4%
Orange	1.1%	1.4%	1.2%	0.2%	0.5%
S.B. / Riverside	1.5%	2.1%	2.1%	2.8%	2.0%
Ventura	0.2%	0.5%	0.0%	0.0%	0.0%
Total	1.4%	1.4%	1.4%	1.4%	1.2%

Source: CIC Research, Inc.

Figure 9

**LEVEL-1 OUTPUT IMPACTS OF AIR TRANSPORTATION SERVICES BY COUNTY
FOR FIVE SELECTED 2020 AVIATION DEVELOPMENT SCENARIOS**
(Dollar Amounts Stated in 1998 \$Millions)

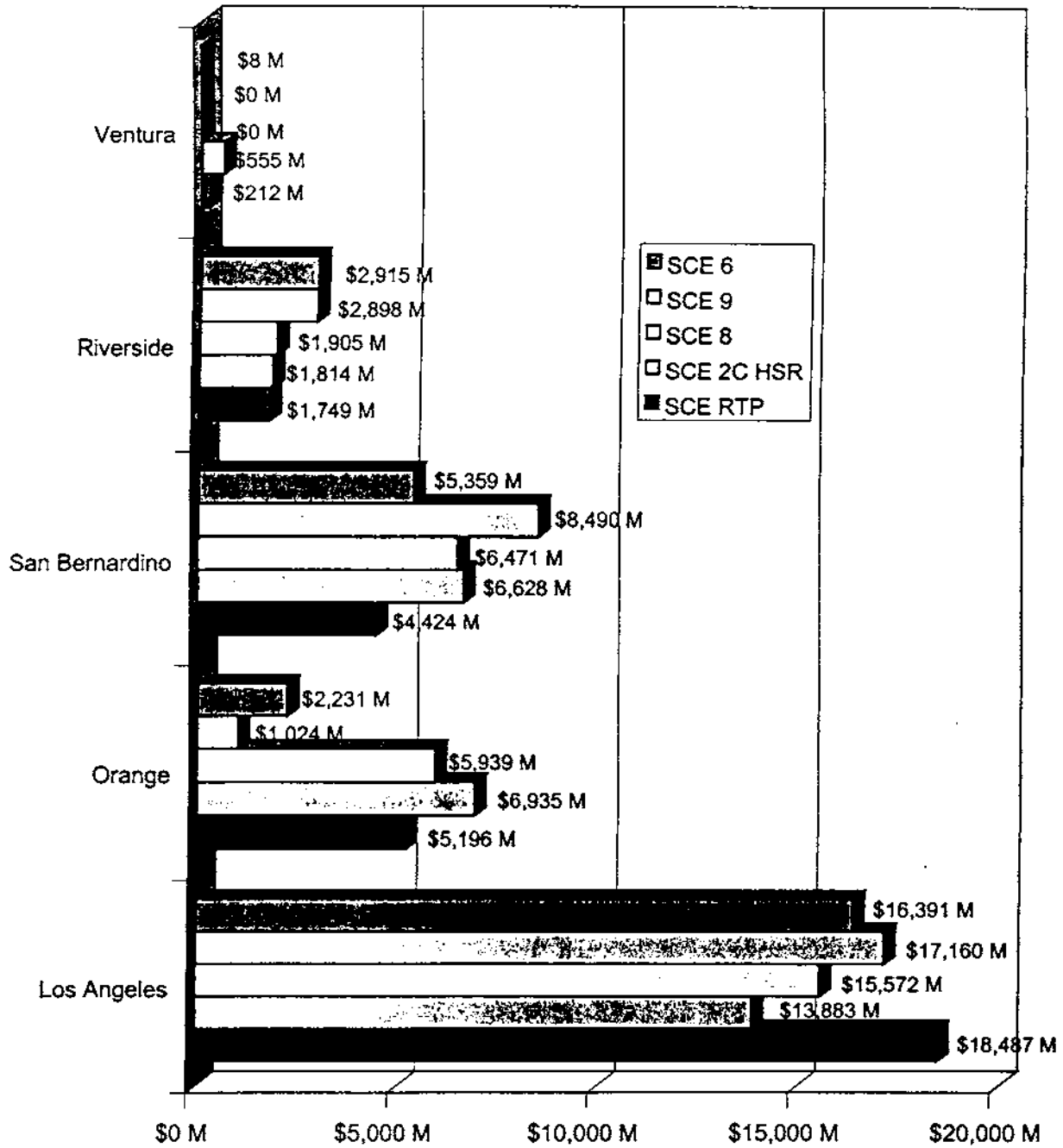
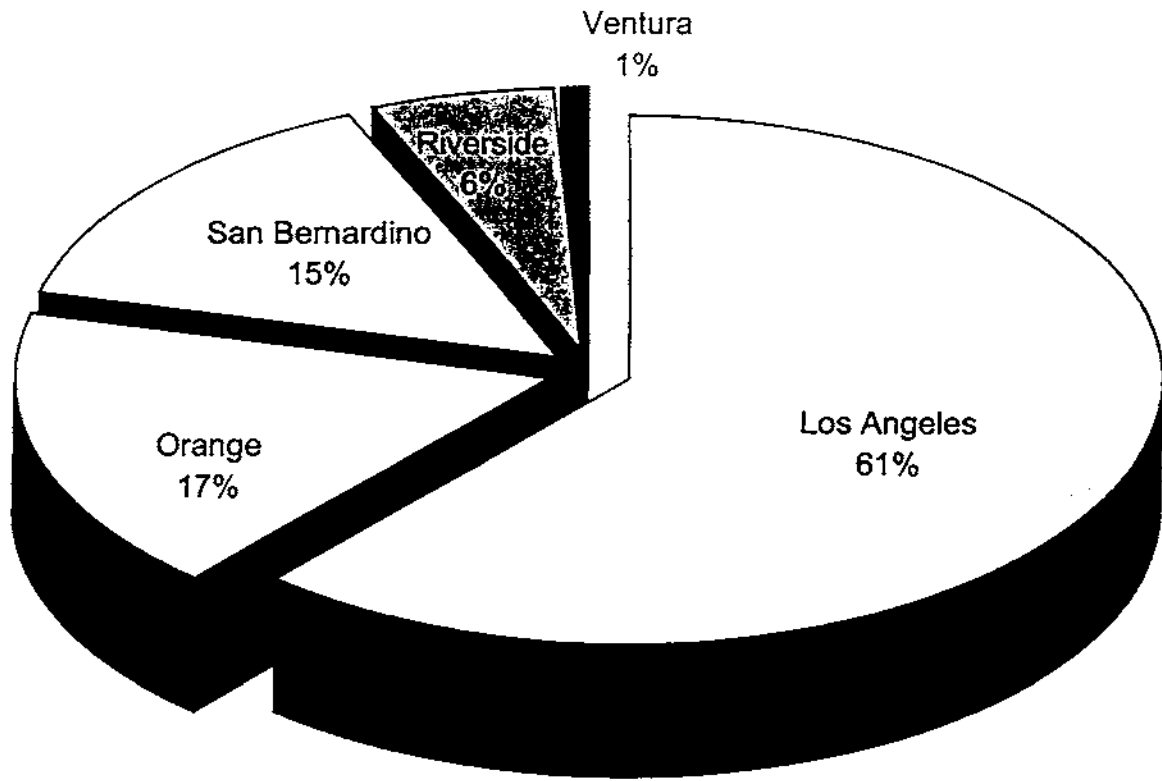


Figure 10
2020 RTP MEDIUM SCENARIO FORECAST
EMPLOYMENT IMPACTS OF AIR TRANSPORTATION SERVICES BY COUNTY
 (191,000 Total Jobs)



For each of the alternative aviation development scenarios the resulting economic impacts by county represent two percent or less of the total economy of each county, respectively. Even though the impact of Scenario 2C-HSR has seven times the impact of Scenario 9 on the Orange County economy, the resulting difference of 37,600 jobs (44,100 jobs v. 6,500 jobs), still represents only about 1.5 percent of the total countywide employment in 2020. Therefore, while there are measurable differences in the relative county-level impacts of the alternative regional aviation forecasts, the resulting impact levels do not represent a substantial economic loss or benefit to the individual counties.



APPENDICES

- A. Economic Impact Methodology**
- B. Summary of Regional Airport Studies**
- C. Foreign Trade**
- D. SCAG Region Economic Shift Share Analysis**
- E. Forecast Scenarios and 2020 SCAG Region Economy
(Historical air passenger and air cargo volumes)**
- F. 55-Sector Model Summary of Economic Impacts by Forecast
Scenario**
- G. Detailed 55-Sector Model Economic Impacts by Forecast
Scenario**



APPENDIX A

ECONOMIC IMPACT METHODOLOGY

Airport Impact Study Variations From Classical Analysis

Most recent studies of the regional economic significance of airports follow to some extent a methodology discussed in a 1992 study by the FAA.³² The methodology basically follows the logic of economic input-output analysis in that it classifies impacts into three categories: 1) direct impacts, 2) indirect impacts, and 3) induced impacts. The direct impacts are defined as deriving mainly from on-site "economic activities carried out by airlines, airport management, fixed base operators, and other tenants with a direct involvement in aviation. Direct impacts, however, include not only direct employment and direct "airport construction and capital improvements," but include as well, off-site {production of goods and services that are used at the airport". This is similar to the definition in input-output analysis of the direct requirements used in the production of air transportation services. However, it differs by the inclusion of "airport construction and capital improvements" which in most static input-output models is treated as exogenous in a production function for air transportation services.³³

Indirect Impacts. There is also a departure from conventional I-O analysis in the definition of indirect impacts, which are "derived primarily from off-site economic activities that are attributable to the airport." Mentioned indirect activities include "travel agencies, hotels, restaurants, and retail establishments," except for those located on-site which are included with the direct economic impacts. This is different in several ways from the conventional definition of indirect impacts. It includes all purchases by these businesses including capital expansion and improvements, which, as in the case of direct impacts, would be excluded in a static, input-output model analysis. More significantly, however, the more traditional application of input-output analysis would exclude all of these activities except those that are linked to the direct purchases made by the air transportation sector.

³² Butler, Stewart E. & Lawrence J. Kieman, Estimating the Regional Economic Significance of Airports. 1992.

³³ No analysis of the economic impact of the construction or expansion of airports is planned in the present study. This analysis would take more resources than have been allocated to this study. Moreover, the comparisons of economic impact would be influenced by the considerable differences in the expected capital outlays for different scenarios.

The logic for the connection to the above sectors is made because many of the passengers on aircraft use “travel agencies, hotels, restaurants, and retail establishments.” The article does suggest that “it would be desirable to distinguish between visitors who would not have traveled to the region if there were no airport, and those who would have come anyway by some other form of transportation.” However, the more conventional application of input-output economic impact analysis would not include these visitor impacts at all. That is to say, transporting passengers does not give license to a claim to any impact produced by those passengers beyond those businesses and economic resources required for the production of the transportation service itself. The argument for their inclusion is based strictly on the desire to find a measure of all of the region’s economic activity that would not occur if not for the presence of air transportation services.

Induced Impacts. Induced impacts are defined the same way in the FAA guidelines as conventional input-output economic impact analysis. It is produced by the expenditures made by all of the local residents who directly or indirectly receive income from the economic activities counted in the direct and indirect impacts. It also includes spending from income resulting from locally produced goods and services that are purchased from induced employment and income, and so forth through successive rounds of earnings and expenditures giving rise to the term “multiplier effects.” As stated, this is the conventional application of input-output analysis of induced effects. However, to the extent the analysis is applied to direct and indirect effects that are not included in a conventional I-O analysis, the induced impacts derived from them would likewise be overstated. Further discussion of the peculiarities involved in these departures will be made below in a discussion of some of the applications to specific airport studies.

In this study CIC Research was careful to differentiate between what was included and what was excluded in the input-output analysis. This was done by first estimating the regional total direct, indirect, and induced impacts of producing air transportation services only (Level-1: core economic impacts). At the next level of impact activity the regional total direct, indirect, and induced impacts associated with producing the goods and services demanded by non-resident air passengers (Level-2 impacts) are estimated. This still leaves out air cargo impacts, at least explicitly. To the extent air cargo is part of airport operations, it is of course covered by the Level-1 impacts. However, some of the impacts of air cargo can be identified separately as a forward linkage to goods produced within the region (Level-3 impacts). Moreover, air cargo is much more interesting from the “catalytic” impact point of view and its rapid growth is revealed preference testimony that the benefit of delivery speed is greater than its relatively higher cost.

The Economic Input-Output Model. This study uses IMPLAN software and data to develop regional input-output models for the SCAG area. The IMPLAN methodology reduces the benchmark 1987 BEA national input-output model to regional proportions using regional purchase coefficients derived from local area data.³⁴ The 1987 BEA benchmark model has a single air transportation sector, but it also has a separate sector for SIC 4311 U.S. Postal Service, which aids in the analysis of air cargo. Further detail on air cargo is derived from the RADAM air cargo module; from data provided by airports and airlines, and from freight forwarders, shippers, and consolidators.

Supporting analysis of air cargo was made by examining the regional economy in its capacity as a major U.S. port, with information on exports and imports blended with the economic input-output analysis to assess the role of the region's air cargo activity in a more global context. The IMPLAN models also predict the level of imports and exports, foreign and domestic. These estimates compared to actual data are useful to the analysis of air cargo, and provide a means as well for assessing the merits of the IMPLAN model and making adjustments where needed to the regional purchase coefficients.³⁵

DEFINITION OF ECONOMIC IMPACT

The definition of economic impacts may vary depending on the study objectives and the study authors. For this study CIC Research has employed a classical input-output model approach to the definition and measurement of economic impacts. Taking economic analysis one step at a time should help clarify what is meant by economic impact. For example, the 1996 IMPLAN input-output model for the SCAG region estimates air transportation output at \$7.2 billion, employment of 66,170, employee compensation of \$2.9 billion, and total value added of \$4.0 billion. By 2020 air transportation services are projected to reach \$18 billion in output, 110,000 employees, with income of \$7.8 billion. The \$7.2 billion is an estimate of the benefits received by the users of air transportation services. It is a "revealed preference" for air transportation, meaning they were willing to give up \$7.2 billion to get the services. That is, air transportation service users paid \$7.2 billion (costs) to receive (at least) \$7.2 billion of benefits. Beyond this, cost benefit analysis becomes somewhat esoteric.

Economic Impact Analysis: In providing the \$7.2 billion of services, the Air Transportation sector used 66,170 employees, who were paid \$2.9 billion, which was the

³⁴ Olson, Doug and Scott Lindall, "IMPLAN Professional Software, Analysis, and Data Guide" ,Minnesota IMPLAN Group, Inc., 1996.

³⁵ Olson, Doug and Scott Lindall, "IMPLAN Professional Software, Analysis, and Data Guide" ,Minnesota IMPLAN Group, Inc., 1996.

principle part of the \$4.0 billion in value added produced by the sector in the region. The latter figure represents air transportation's contribution to the Gross Regional Product of the SCAG region. There is no reason to double count any of these numbers. The \$2.9 billion is included in the 4.0 billion, and the \$4.0 billion is included in the \$7.2 billion.

Applying multipliers to these figures must be done cautiously, and usually only in the context of changes in final demand for air transportation services. The associated multipliers are shown in Table A-1. The proportion of sales that are to final demand is shown in Table A-2. The first column of Table A-1 shows that for one million dollars sales to final demand, there is a direct impact of \$1.0 million, an indirect impact of \$335,000 and a \$429,000 induced impact for a total impact of \$1.764 million. (Type I multiplier times direct = direct + indirect = \$1.335 million; Type 2 multiplier times direct = direct + indirect + induced = \$1.764 million).

The employment row is interpreted in the same manner: Total employment required to sell \$1.0 million of air transportation services is 9.163 direct jobs. The production of the \$335,000 indirect output requires an additional 3.113 employees within the region's industries. Additional employment required to produce the output required to cover the \$429,000 of induced output is 5.339 jobs for a total employment of 17.615. This is the total "direct indirect and induced" employment required to produce one million dollars of Air Transportation Services in the SCAG region.

Table A-1
SCAG REGION AIR TRANSPORTATION - MEASURES OF ECONOMIC ACTIVITY
 (Dollar Amounts in \$Millions)

Measure	Direct Effects	Indirect Effects	Induced Effects	Total	Type I Multiplier	Type II Multiplier
Output	\$1.000	\$0.335	\$0.429	\$1.764	1.335	1.764
Employment	\$9.163	\$3.113	\$5.339	\$17.615	1.340	1.922
Total Value Added	\$0.556	\$0.175	\$0.269	\$0.999	1.314	1.797
Personal Income	\$0.418	\$0.116	\$0.164	\$0.698	1.276	1.669
Employee Compensation	\$0.400	\$0.095	\$0.139	\$0.633	1.237	1.585
Other Property Type Income	\$0.107	\$0.045	\$0.077	\$0.229	1.426	2.147
Indirect Business Taxes	\$0.031	\$0.013	\$0.028	\$0.072	1.430	2.317

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

Table A-2

SCAG REGION AIR TRANSPORTATION – PURCHASES / SALES BY SECTOR
(Dollar Amounts in \$Millions)

Sector	Purchases/ Payments	Percentage of Total	Sales/ Demand	Percentage of Total
Total Intermediate	\$1,793.9	24.8%	\$984.5	13.6%
Resident Households	\$2,885.5	40.0%	\$1,122.2	15.5%
Other In Region Final Payments / Sales	\$1,145.8	15.9%	\$269.4	3.7%
Domestic Trade	\$1,337.8	18.5%	\$2,548.8	35.3%
Foreign Trade	\$58.7	0.8%	\$2,296.9	31.8%
Total	\$7,221.7	100.0%	\$7,221.7	100.0%

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

Any assessment of economic impact that goes beyond these numbers, must rely on some additional impact criteria. There are two ways specified in the literature.³⁶ One relates to the spending behavior (excluding air transportation expenditures) of non-resident air passengers, while in the region. The other relates to the role of air transportation as a catalyst for the location of industry in the region that would otherwise locate elsewhere.

Comparative Economic Impacts

This study's primary focus is not so much on the actual economic impacts of airports and aviation or even how future changes in airports and aviation effect the economic impacts. Rather, the focus is on comparing economic impacts between various scenarios of future air transportation services supply and demand. For this reason more is made of consistency in the assessment of economic impacts between scenarios, than of capturing the totality of economic impact of a given scenario. A measure that can be applied uniformly between different scenarios is therefor preferred to one that is likely to treat one scenario more favorably than another even if the measure has more appeal in terms of capturing the full economic benefits of aviation. For this reason conservative estimates are preferred, and the focus applied to assessing the essential differences between scenarios.

There are a number of ways economic impacts can vary depending on the future air traffic volumes at different airports in the region. 1) The overall volume of air traffic (passengers and/or cargo) can differ; 2) the mix of passengers (types) can differ; and or the mix of passenger

³⁶ Actually there are three ways if the concept of consumer surplus is introduced. Consumer surplus increases the amount of an expenditure a person makes for a service, to an amount that the person would have been willing to make had he not been able to make a better deal. This has been argued to be a better estimate of the total benefit received by the user. The problem is, it is impossible to measure.

and cargo can differ; and 3) the catalytic effects can differ. The effort here will focus on developing a model that can assess the differences in economic impacts for exogenous specified changes in these elements. This is done by first developing a baseline economic impact scenario. These economic impacts are then compared to those from alternate scenarios each having certain specified differences in basic airport volumes (passengers and cargo) at various airports.



APPENDIX B

SUMMARY OF PRIOR REGIONAL AIRPORT STUDIES

Wilbur Smith Associates (a transportation consulting firm) has conducted a number of specific airport economic impact studies, including studies of LAX, John Wayne, Van Nuys, and Ontario airports.³⁷ Each of these studies follows the FAA approved methodology except that the precaution to limit air passenger impacts to just those who would not have come to the area without air transportation seems to be waived as too difficult to determine. In these studies, direct impact is defined as all economic activity at the airport, and all off-site activity that supplies inputs to any activity at the airport, (these are limited to Southern California producers). Indirect impacts include all expenditures by non-resident air passengers, including flight crew layovers, and air transportation expenditures by Southern California resident air passengers, including travel agencies. Indirect impact also includes air cargo and reflects the "value of outbound freight."

Application of Economic Multipliers. The Wilbur Smith Associates studies, make a conceptual leap, which is probably in the interpretation of the vague language in FAA guidelines, when it equates these defined direct and indirect impact measurements to **final demand** then applies RIMS- II multipliers to estimate induced impacts.³⁸ RIMS-II multipliers are defined as the sum of the direct, indirect, and induced effects (as measured by output, employment or income) divided by the direct effects. The RIMS-II multipliers are therefore ratios which by definition when multiplied times the direct effect gives the total (direct plus indirect plus induced) effect. A multiplier that would be somehow applied to both the direct and indirect effect would be a ratio of total (direct plus indirect plus induced) divided by (direct plus indirect), which obviously would be a much smaller ratio. There are apparently problems here in the interpretation of language associated with what is a precise mathematical formula, in fact, an identity. This probably explains why the induced effects alone in Wilbur Smith Associates studies are three times as large as the direct and indirect effects combined, and over twice as

³⁷ Reports include Economic Impact Updates for the City of Los Angeles, Department of Airports for LAX, ONT, and VNY, by Wilbur Smith Associates, all in 1992.

large as the total earnings impact. Stated another way, expenditures from earnings (definition of induced effects) are more than double earnings, a good trick even in a zero personal savings economy.³⁹

It is reasonably clear from the example provided in the FAA guidelines that induced effects are derived from expenditures out of income directly or indirectly attributable to air transportation services. To be more specific, they are the product of multipliers applied to the **earnings** of people directly or indirectly employed as a result of aviation services. "...induced impacts are the multiplier effects of employment, payroll, and other direct (and indirect) consequences of airport activity." The hypothetical example in the FAA guidelines applies a multiplier to the airport payroll that is magnitude 1.0 or less, depending of the population of the region. However, it then applies the same multiplier to **all** of the airport's indirect effects. In other words, spending from payroll is the source of induced effects, except where passenger spending is involved. In this case, it is not just the payroll of those economic activities supplying air passengers, rather it is total sales to air passengers, although the language is "value added expenditure" rather than sales.

Inappropriate Application of Economic Multipliers. Perhaps using multipliers of magnitude 1.0 or less makes up for including amounts in indirect impacts beyond earnings. However, RIMS-II multipliers are all greater than 1.0, in fact, in most cases they are greater than 2.0. Moreover, they are not ratios of the total divided by the direct plus indirect, they are total divided by direct. The expanded amounts in the definition of direct and indirect plus the enlarged multiplier, combine to make a total economic impact that is an order of magnitude larger than what a more conventional application of input-output analysis would yield.

At the other end of the interpretation of the FAA guidelines are studies made by Martin O'Connell on the economic impacts of Dulles and National airports in the Washington D.C. area. In these studies, multiplier effects were limited to type I on output, (direct and indirect effects) and induced impacts on output only attributable to earnings impacts. This results in total impacts of much lower than two times direct impacts. No estimates were made of visitor related impacts, perhaps an acknowledgement that all air passengers would have arrived anyhow either using another airport, or some other of the many transportation links to the Nations Capital. The jobs per MAP (1,607 Dulles and 1,382 National) are also orders of magnitude

³⁸ Cartwright Joseph V., Richard M. Beemiller and Richard D. Gustely, "RIMS II Regional Input-Output Modeling System, U.S. Department of Commerce, Bureau of Economic Analysis, 1981.

³⁹ See page 2-7 in Economic Impact Update: Los Angeles International Airport (LAX) Wilbur Smith Associates, 1992.

lower than Wilbur Smith's (6,691 LAX, 8,799 Ontario, and 22,924 John Wayne).⁴⁰ The differences are similar when comparing output measures per MAP (\$150 million Dulles, \$187 million National, \$844 million LAX, \$1 billion Ontario, and \$577 million John Wayne).⁴¹

Other studies, have found a more middle ground in application of the economic methodology outlined by the FAA. These studies tend to find employment impacts in the 2,000 to 3,000 per MAP, and output impacts in the \$300 million to \$400 million range.

⁴⁰ Data are taken from Appendix B Table B-1 "A New Orange County Airport at El Toro: An Economic Benefits Study," Steven P. Erie, et al, 1998.

⁴¹ The application of RIMS II multipliers to the "direct and indirect" effects appears to have been used to estimate "induced" effects rather than total effects, to get the total, they once again include the direct and indirect, in effect double counting it.

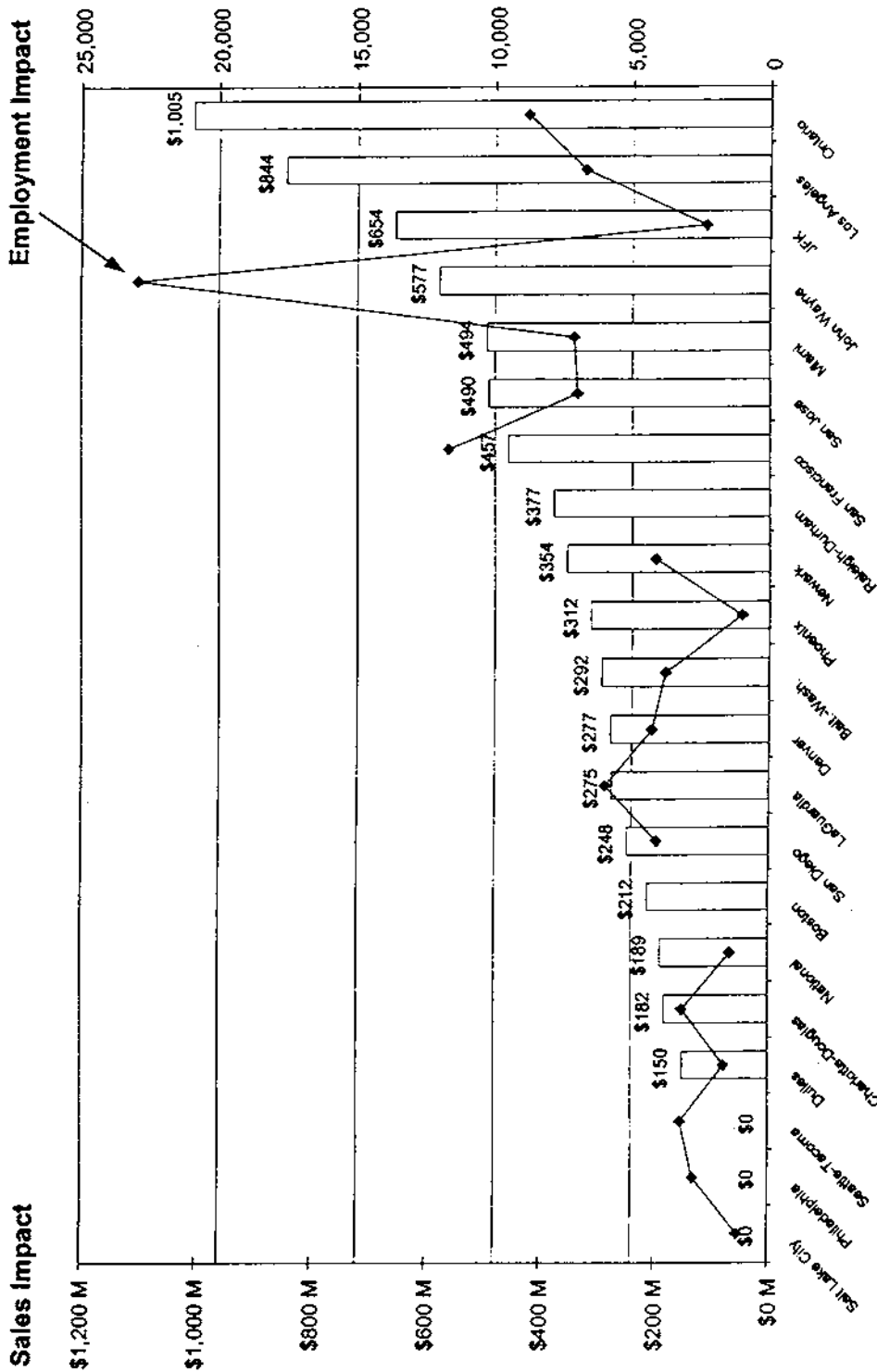
Table B-1

SUMMARY COMPARISON OF AIRPORT IMPACT STUDIES

Airport (Ranked By Total Impact Per MAP*)	Economic Impact Study Author	Economic Impact Study Base Year	MAP* For Base Year Of Study	MAP 1997	Cargo Tonnage 1997	Economic Impact Per MAP		
						Direct Impact (\$Millions)	Total Impact (\$Millions)	Total Jobs
Selected Airport Economic Impact Studies:								
1. Ontario	Wilbur Smith	1993-4	5.4	6.3	418,709	\$76.5	\$1,004.6	10,265
2. Los Angeles	Wilbur Smith	1992	43.8	60.1	1,872,528	\$76.0	\$844.2	9,189
3. JFK	NY/NJ Port	1997	31.2	31.2	1,661,400	\$211.5	\$653.8	2,313
4. John Wayne	Wilbur Smith	1992	6.1	7.7	18,579	\$47.4	\$577.0	9,355
5. Miami	Landrum Brown	1997	25.0	34.5	1,765,827	\$43.9	\$493.6	7,093
6. San Jose	O'Connell	1995	8.1	10.2	110,697	\$111.4	\$490.1	8,796
7. San Francisco	O'Connell	1994	31.3	40.5	779,923	N.A.	\$456.9	15,112
8. Raleigh-Durham	UNC Charlotte	1990	5.9	6.7	90,158	N.A.	\$377.1	10,343
9. Newark	NY/NJ Port	1998	29.1	30.9	1,048,954	N.A.	\$354.0	4,431
10. Phoenix	FAA	1993	30.8	30.5	314,653	\$159.1	\$311.7	4,157
11. Balt.-Wash.	Wilbur Smith	1996	13.2	14.1	199,725	\$45.2	\$292.3	4,040
12. Denver	Wilbur Smith	1998	32.0	35.0	437,108	\$30.1	\$276.6	4,650
13. LaGuardia	NY/NJ Port	1997	20.7	21.6	84,069	\$0.0	\$275.4	3,487
14. San Diego	SourcePoint	1998	14.3	14.3	124,309	\$139.9	\$247.7	4,084
15. Boston	Massport	1996	25.1	25.5	440,879	\$58.6	\$211.7	
16. National	O'Connell	1991	11.9	15.8	48,234	\$111.0	\$188.7	885
17. Charlotte-Douglas	O'Connell	1998	22.0	22.8	194,031	\$177.0	\$181.7	3,131
18. Seattle-Tacoma	O'Connell	1996	18.8	24.7	393,485	\$154.3	\$181.0	3,187
19. Dulles	O'Connell	1991	15.4	13.6	351,296	\$114.9	\$150.0	6,875
20. Philadelphia	O'Connell	1996	16.0	22.4	492,349	\$4.6	\$68.8	1,894
21. Salt Lake City	Univ. of Utah	1990	12.6	21.1	253,207	\$59.5	\$14.4	1,128
Southern California Aviation Industry Impact Summary:								
Level-1 Air Trans Svcs	CIC Research	1998 / 2020	157.4	79.8	2,607,507	\$114.9	\$191.0	1,214
Level-2 Air Svcs & Non-resident air travelers	CIC Research	1998 / 2020	157.4	79.8	2,607,507	\$217.1	\$390.5	2,214

* MAP = millions of annual air passengers (enplaned and deplaned)
Source: CIC Research, Inc.

Figure B-1
COMPARISON OF OUTPUT AND EMPLOYMENT IMPACTS FOR SELECTED AIRPORT STUDIES





APPENDIX C

FOREIGN TRADE

EXPORTS AND IMPORTS

Rapid growth in exports and imports through California ports help to fuel the economic recovery in California and the SCAG region from the recession of the early 1990s. Growth in exports averaged over 10 percent per year, during the decade, while imports were growing at slightly under nine percent. The rapid growth in the water-borne shipment of international trade accounts for a lot of this increase. Still, air cargo tonnage increased during the period by 54 percent, which suggests that air shipments were holding onto their share of a growing market.

Table C-1

FOREIGN TRADE THROUGH CALIFORNIA PORTS, 1990 TO 1997*

Year	Exports		Imports		Total	
	\$millions	Percent Change	\$millions	Percent Change	\$millions	Percent Change
1990	\$68,552	8.7%	\$97,122	3.2%	\$165,673	5.4%
1991	\$73,860	7.7%	\$100,744	3.7%	\$174,604	5.4%
1992	\$81,139	9.9%	\$111,548	10.7%	\$192,687	10.4%
1993	\$82,174	1.3%	\$125,348	12.4%	\$207,522	7.7%
1994	\$95,615	16.4%	\$144,002	14.9%	\$239,617	15.5%
1995	\$116,825	22.2%	\$165,045	14.6%	\$281,870	17.6%
1996	\$124,291	6.4%	\$169,980	3.0%	\$294,271	4.4%
1997	\$131,292	5.6%	\$184,791	8.7%	\$316,084	7.4%
90-96 Ave.	\$91,779	10.4%	\$130,541	8.9%	\$222,321	9.5%
90-97 Ave.	\$96,719	9.8%	\$137,322	8.9%	\$234,041	9.2%

* Data reflect value of trade through California customs districts and not value of exported goods originating in California or imported goods destined for California.

Source: U.S. Department of Commerce, Bureau of the Census. <http://www.census.gov/>
 Department of Finance, Financial and Economic Research (916) 322-2263.

Table C-2

**VALUE OF EXPORTS AND IMPORTS THROUGH CALIFORNIA PORTS
BY ALL MODES OF TRANSPORTATION, 1990 TO 1996
(\$millions)**

EXPORTS								
Year	California		San Francisco c/		Los Angeles d/		San Diego e/	
1990	\$68,552	8.7%	\$23,117	7.8%	\$42,069	9.0%	\$3,366	11.8%
1991	\$73,860	7.7%	\$23,893	3.4%	\$46,050	9.5%	\$3,917	16.4%
1992	\$81,139	9.9%	\$27,188	13.8%	\$49,400	7.3%	\$4,551	16.2%
1993	\$82,174	1.3%	\$29,392	8.1%	\$48,280	-2.3%	\$4,502	-1.1%
1994	\$95,615	16.4%	\$34,195	16.3%	\$55,835	15.6%	\$5,585	24.1%
1995	\$116,779	22.1%	\$43,691	27.8%	\$67,004	20.0%	\$6,083	8.9%
1996	\$124,120	6.3%	\$47,723	9.2%	\$68,923	2.9%	\$7,473	22.9%
IMPORTS								
1990	\$97,122	3.2%	\$28,141	3.2%	\$64,592	2.9%	\$4,389	8.5%
1991	\$100,744	3.7%	\$29,308	4.1%	\$66,651	3.2%	\$4,785	9.0%
1992	\$111,548	10.7%	\$33,386	13.9%	\$72,581	8.9%	\$5,580	16.6%
1993	\$125,349	12.4%	\$38,910	16.5%	\$80,170	10.5%	\$6,268	12.3%
1994	\$144,002	14.9%	\$46,308	19.0%	\$90,239	12.6%	\$7,455	18.9%
1995	\$165,222	14.7%	\$59,114	27.7%	\$97,177	7.7%	\$8,930	19.8%
1996	\$169,981	2.9%	\$57,804	-2.2%	\$101,185	4.1%	\$10,992	23.1%

a/ f.a.s. Value Basis b/ Custom Value Basis

c/ Customs district extends from northern California border south to Monterey Bay, and east to Salt Lake City.

d/ Customs district extends from south of Monterey Bay to Carpinteria and east to Las Vegas.

e/ Customs district extends from San Diego east to Phoenix.

Source: U.S. Department of Commerce, Bureau of the Census, Highlights of U.S. Export and Import Trade (FT 990), December, (1984-1988) and U.S. Exports and Imports of Merchandise on CD-ROM (1989 forward).
Department of Finance. Financial and Economic Research Unit (916) 322-2263.

There are indications that some of the expanded imports are attributable to production moving off shore. For example, the leading import "Computer storage devices and parts" is associated with a significant negative shift (9.4%) in the region's share of the Computer Storage Device sector, a shift that cost the region almost 3,000 jobs. Similar losses occurred in Computers, Computer Peripheral Equipment, and other computer related manufacturing, in all totaling a loss of over 15,000 jobs in the region. The aviation sector's role in these reallocations is informative, since one of the main features of the new global economy is that manufacturing will seek more efficient (lower cost) locations and rely on transportation to move products back into areas where they used to be produced. That "big sucking noise" mentioned by Ross Perot wasn't just jobs leaving the country, it was the sound of jet engines returning with the products made offshore.

The example of aviation's role in increased goods in motion accompanying movements of domestic production to lower wage countries, is in sharp contrast to the previous analysis of aviation clustering with other "visitor related" activities. In the case of visitors, everybody wins.

The visitor industries cluster is an example of a complementary relationship among different economic activities. In the second case, aviation's gain is other activities' loss, or at least other employees loss. That is, by moving production off shore, companies gain lower cost production, aviation gains new cargo business, but the employees of factories that shifted to off shore production wind up having to make an adjustment. Still one would have to cite this as an example of a cluster, albeit not a totally complementary cluster.

A pattern that is emerging is one where technological innovation protected by patents and copyrights, develops in the United States. Then as elements of the finished manufactured product achieves a commodity status it is a candidate for manufacture in lower wage countries. The products are then produced abroad imported into U.S. markets (and throughout the world) with royalty payments, and or other service fees paid to the U.S. companies that began the process. The commodity balance of payments continues to deteriorate for the U.S. where a new record imbalance in the balance of payments occurs almost every month. Still, the dollar remains strong because the companies that gain the surplus produced from the technological advances are U.S. based. Also the U.S. services producing industries, financials, communications, transportation, etc. with increasingly global markets are gaining market share as the global manufacturing system spreads out.

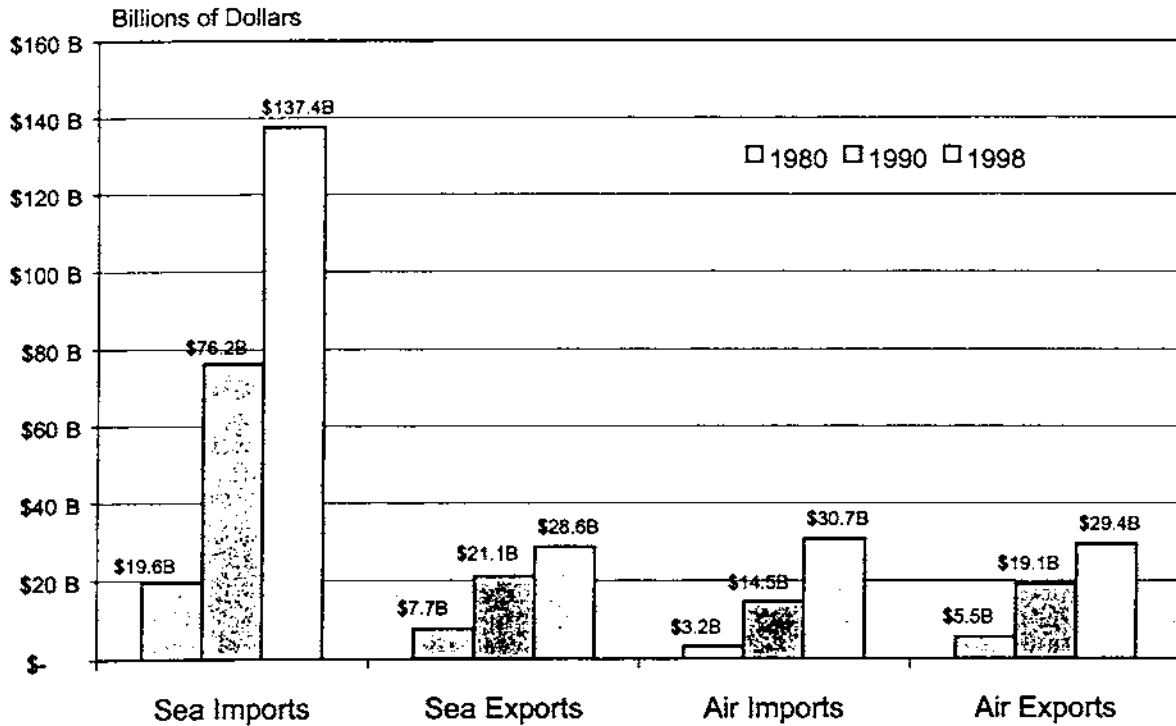
Another type of cluster is also seen in a high tech combination with aviation. The biotech cluster. In this case, exports of Biological Products, and Prepared Diagnostic Substances, both show steady sizable increases.

REGIONAL EXPORTS AND IMPORTS

Although the physical amount exported overseas out of Southern California by sea is substantially greater than the physical amount airfreighted, the value of those shipments are comparable. In 1998 over 26 million tons of commodities valued at \$28.6 billion were exported by sea from Southern California while 285 thousand tons values at \$29.4 billion were exported by air. Figure C-1 indicates that the value of exports by air has increased substantially since 1980 growing at an average of 10% per year. This was a faster growth rate than exports by sea which increased at 8% per year. The value of imports by air also increased at a great rate, increasing at an annual rate of 13% per year compared to 11% in for Sea Imports. The value of imports by air in 1998 almost matched air exports (\$30.7 billion). This is in contrast to the value of exports by ship in 1998 which was only one fifth that of imports (\$137.4 billion).

Figure C-1

**VALUE OF EXPORTS/IMPORTS
FROM SOUTHERN CALIFORNIA BY MODE OF SHIPPING**

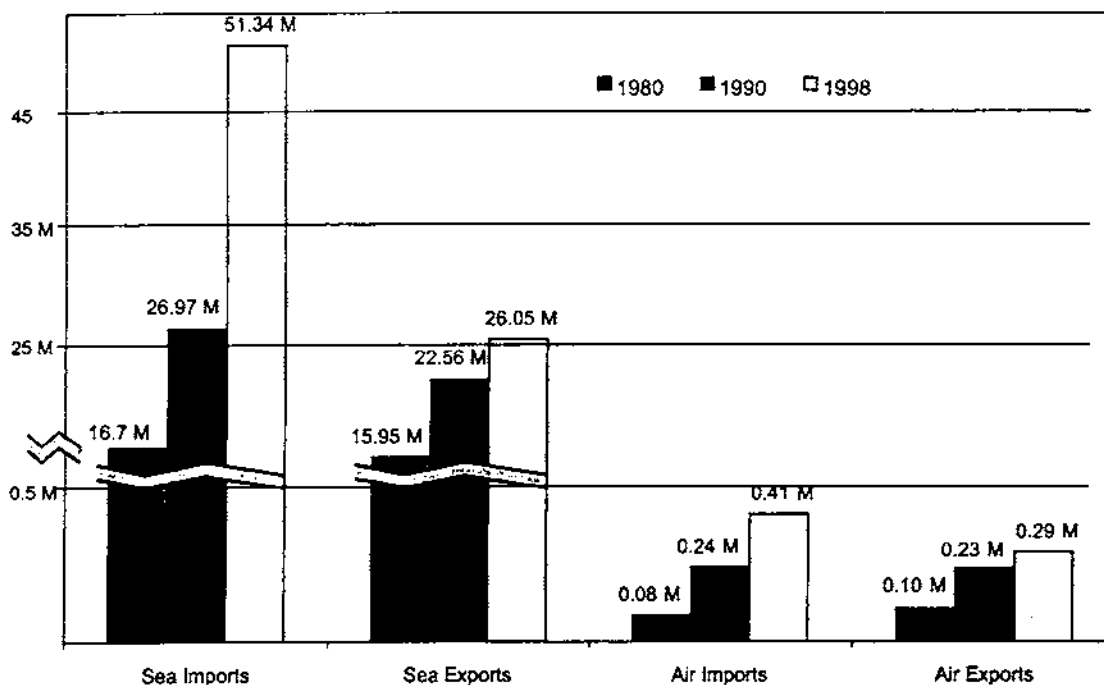


Avg Ann. % Chg (1980-1990)	15%	11%	16%	13%
Avg Ann. % Chg (1990-1998)	8%	4%	10%	6%
Avg Ann. % Chg (1980-1998)	11%	8%	13%	10%

As stated earlier, the physical amount of shipments, measured as weight, between sea-borne and air-borne modes of shipment, are practically incomparable. Figure C-2 indicates the differences between the two methods of shipping. The lower growth rates in for mass of commodities both exported and imported is indicative of the role of inflation in increasing the value of imports and exports. A noticeable exception is the imports by sea going vessels during the 1990 to 1998 period where both weight and value rose by 8%. This is probably due to decreases in oil prices negating any increase in the value of other commodities.

Figure C-2

**WEIGHT OF EXPORTS/IMPORTS
FROM SOUTHERN CALIFORNIA BY MODE OF SHIPPING**



Avg Ann. % Chg (1980-1990)	5%	4%	11%	8%
Avg Ann. % Chg (1990-1998)	8%	2%	7%	3%
Avg Ann. % Chg (1980-1998)	6%	3%	9%	6%

Electrical and electronic equipment and supplies is the category that accounts for the most value of imports and exports by air. Nearly 36 percent of the total value of imports and exports by air are in that category. The electrical and electronic equipment and supplies category was also the category of the greatest value of imports by ship accounting for 17 percent of all waterborne imports. However, the value of in the chemical and allied products made up the largest export category accounting 19 percent of the value of all waterborne exports. The following detailed tables list the value of commodities exported and imported for air into the area and the United States as a whole. In addition, detail tables of the weight of commodities exported and imported are also included.

Table C-3
**Top 50 U.S. Air Cargo Exports By Industry
 Ranked For Los Angeles Customs District (1998)**

Rank	SIC	SIC Description	Total U.S.		Los Angeles Customs District	
			Value (Mil. \$)	Weight (000 Lbs.)	Value (Mil. \$)	Weight (000 Lbs.)
1	2752	PRINTED MATTER, LITHOGRAPHIC	\$5,939.7	18,681	\$514.1	1,258
2	2821	PLASTICS MATERIALS AND RESINS	\$1,472.4	23,550	\$495.6	4,312
3	2835	PREPARED DIAGNOSTIC SUBSTANCES	\$4,145.7	66,030	\$356.1	5,226
4	2836	BIOLOGICAL PRODUCTS	\$2,621.7	30,408	\$349.1	4,158
5	3089	PLASTICS PRODUCTS, NSPF	\$2,598.5	50,763	\$305.4	6,506
6	3339	PRIMARY NONFERROUS METALS, NSPF	\$3,338.1	39,687	\$288.4	3,356
7	3357	NONFERROUS METAL WIRE & CABLE, DR	\$570.4	28,969	\$235.4	8,566
8	3494	VALVES AND PIPE FITTINGS, NSPF	\$1,518.2	27,385	\$176.4	2,689
9	3499	FABRICATED METAL PRODUCTS, NSPF	\$1,930.1	45,282	\$173.4	4,001
10	3511	TURBINES AND TURBINE GENERATOR SE	\$1,553.5	26,116	\$161.6	2,203
11	3533	OIL AND GAS FIELD EQUIPMENT, AND	\$1,946.9	98,843	\$136.8	6,212
12	3541	MACHINE TOOLS, METAL-CUTTING, AND	\$639.4	5,673	\$128.7	900
13	3559	SPECIAL INDUSTRY MACHINERY, NSPF,	\$789.7	60,168	\$91.0	7,477
14	3569	GENERAL INDUST MACH & EQUIPMENT &	\$471.5	9,795	\$84.2	1,931
15	3571	ELECTRONIC COMPUTERS	\$901.1	61,767	\$84.1	6,174
16	3572	COMPUTER STORAGE DEVICES	\$633.6	21,578	\$82.8	2,288
17	3577	COMPUTER PERIPHERAL EQUIP NSPF &	\$1,216.2	10,093	\$81.7	973
18	3579	OFFICE MACHINES, NSPF, AND PARTS,	\$702.2	15,477	\$74.1	1,417
19	3599	MACHINERY, EXC ELECTRICAL, NSPF A	\$252.1	12,435	\$73.5	2,825
20	3625	RELAYS AND INDUSTRIAL CONTROLS	\$724.7	12,168	\$66.2	1,081
21	3643	CURRENT-CARRYING WIRING DEVICES	\$360.7	77,129	\$65.5	14,200
22	3651	RADIO/TV RECV SETS, PHONOGRAPHS,	\$689.0	50,686	\$62.0	2,334
23	3652	PHONOGRAPH RECRDS, RECRD BLANKS &	\$282.5	12,261	\$60.3	1,698
24	3661	TELEPHONE AND TELEGRAPH APPARATUS	\$632.8	6,725	\$54.8	497
25	3663	RADIO, TV COMMUN, BRDCST & STUDIO	\$403.3	18,503	\$53.7	2,019
26	3672	PRINTED CIRCUIT BOARDS	\$230.9	8,017	\$49.9	1,870
27	3674	SEMICONDUCTORS AND RELATED DEVICE	\$548.2	21,339	\$49.5	988
28	3678	CONNECTORS, FOR ELECTRONIC APPLIC	\$126.4	17,095	\$46.1	5,379
29	3679	ELECTRONIC COMPONENTS, NSPF	\$648.6	21,618	\$45.3	2,189
30	3695	MAGNETIC RECORDING MEDIA	\$489.7	21,627	\$43.2	1,238
31	3699	ELECTRICAL EQUIP & SUPPLIES, NSPF	\$427.4	5,850	\$42.7	241
32	3714	MOTOR VEHICLE PARTS AND ACCESSORI	\$44.9	29	\$40.5	15
33	3721	AIRCRAFT	\$196.0	19,863	\$40.4	3,152
34	3724	AIRCRAFT ENGINES AND ENGINE PARTS	\$2,961.7	986	\$40.1	82
35	3728	AIRCRAFT EQUIPMENT, NSPF	\$607.7	54,970	\$39.3	2,783
36	3812	SEARCH, DETECTN, NAVIG & GUIDANCE	\$1,270.4	67,206	\$34.6	3,301
37	3823	INDUSTRIAL INSTRUMENTS F MEASUREMENT	\$128.1	8,790	\$32.6	1,927
38	3825	INSTRUMTS F MEASURG & TESTG ELEC	\$299.7	7,890	\$32.3	834
39	3826	LABORATORY ANALYTICAL INSTRUMENTS	\$162.6	11,180	\$32.2	2,384
40	3827	OPTICAL INSTRUMENTS, AND PARTS, N	\$251.5	11,247	\$31.1	993
41	3829	MEASURING & CONTROLLING DEVICES N	\$499.6	39,376	\$31.0	1,813
42	3841	SURGICAL & MEDICAL INSTRUMENTS &	\$697.4	20,227	\$30.9	970
43	3842	ORTHOPEDIC, PROSTHETIC & SURGICL	\$155.2	27,553	\$30.4	6,375
44	3843	DENTAL EQUIPMENT, SUPPLIES, AND P	\$204.9	20,077	\$28.8	2,435
45	3844	X-RAY APPARATUS AND TUBES, AND PA	\$309.9	11,981	\$27.9	826
46	3845	ELECTROMEDICAL & ELECTROTHERAPEUT	\$291.9	8,577	\$27.3	747
47	3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLI	\$193.7	8,023	\$26.6	489
48	3949	SPORTING AND ATHLETIC GOODS, AND	\$184.6	23,045	\$24.6	1,850
49	3XXX	MANUFACTURED COMMODITIES NOT IDEN	\$173.8	6,468	\$23.3	679
50	9200	USED OR SECOND-HAND MERCHANDISE	\$251.5	10,713	\$23.3	781
Sub-Total 50 Industries			\$47,689.9	1,283,917	\$5,128.7	138,643
Sub-Total Next 50 Industries			\$169,893.2	4,380,240	\$26,732.0	462,230
Total - Top 100 Industries			\$217,583.1	5,664,157	\$31,860.7	600,873

Source: U.S. Department of Commerce, Customs Agency (1998)

Table C-4
Top 50 U.S. Air Cargo Imports By Industry
Ranked For Los Angeles Customs District (1998)

Rank	SIC	SIC Description	Total U.S.		Los Angeles Customs District	
			Value (Mil. \$)	Weight (000 Lbs.)	Value (Mil. \$)	Weight (000 Lbs.)
1	3572	COMPUTER STORAGE DEVICES, AND PAR	\$16,262.0	193,782	\$5,670.7	73,141
2	3674	SEMICONDUCTORS & RELATED DEVICES,	\$29,041.3	125,874	\$4,851.7	28,705
3	3571	COMPUTERS, AND PARTS, NSPF	\$26,850.2	330,186	\$4,800.1	66,542
4	9800	U.S. GDS RET & REIMPTD ART, DTY P	\$12,912.0	137,656	\$1,158.0	11,972
5	3339	PRIMARY NONFERROUS METALS, NSPF	\$4,471.2	5,126	\$909.0	554
6	3663	RADIO, BROADCAST & TV COMMUNICATI	\$4,272.5	52,541	\$779.0	9,999
7	3724	AIRCRAFT ENGINES AND ENGINE PARTS	\$8,556.3	38,753	\$626.6	2,884
8	3679	ELECTRONIC COMPONENTS, NSPF	\$4,862.4	123,635	\$604.6	19,160
9	3911	JEWELRY, OF PRECIOUS METAL	\$3,958.8	8,352	\$576.7	770
10	3577	COMPUTER PERIPHERAL EQUIP, NSPF A	\$2,307.9	73,296	\$531.0	15,892
11	3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLI	\$2,239.0	61,322	\$385.0	9,649
12	3672	PRINTED CIRCUIT BOARDS	\$1,705.6	38,024	\$376.3	7,249
13	2833	MEDICINALS AND BOTANICALS	\$7,189.5	22,291	\$339.7	1,216
14	3651	RADIO & TV REC SETS, PHONOGRPH, R	\$1,621.2	61,669	\$295.2	15,770
15	3661	TELEPHONE AND TELEGRAPH APPARATUS	\$3,304.7	93,795	\$294.1	11,202
16	3873	WATCHES, CLOCKS, CLOCKWORK OPER D	\$2,223.5	32,140	\$283.0	3,428
17	3915	JEWELERS' FINDINGS & MATERIALS, &	\$8,823.7	2,755	\$268.8	354
18	2369	CHILDREN'S OUTERWEAR, NSPF	\$2,250.0	210,094	\$236.7	25,015
19	9200	USED OR SECOND-HAND MERCHANDISE	\$3,237.7	21,125	\$229.9	1,819
20	3944	GAMES, TOYS & CHILDREN'S VEH EXC	\$1,320.0	74,685	\$229.5	15,383
21	9900	SPECIAL CLASSIFICATION PROVISIONS	\$804.1	20,725	\$217.9	3,122
22	3825	INSTRMNTS F MEASURING & TSTNG ELEC	\$2,021.6	23,842	\$210.1	2,591
23	3559	SPECIAL INDUSTRY MACHINERY, NSPF,	\$1,207.2	29,880	\$185.8	4,617
24	3728	AIRCRAFT EQUIPMENT, NSPF	\$1,925.7	16,716	\$173.0	2,013
25	3827	OPTICAL INSTRUMENTS, AND PARTS, N	\$1,385.0	19,478	\$169.9	3,381
26	3695	RECORDING MEDIA	\$387.4	14,326	\$153.2	4,094
27	3677	ELECTRONIC COILS AND TRANSFORMERS	\$539.1	13,538	\$145.8	3,562
28	3579	OFFICE MACHINES, NSPF, AND PARTS,	\$442.1	14,253	\$143.2	3,225
29	2331	WOMEN'S AND MISSES' BLOUSES AND S	\$1,262.6	98,738	\$142.1	11,522
30	2321	MEN'S AND BOY'S SHIRTS	\$1,066.5	119,919	\$137.4	16,614
31	3851	OPHTHALMIC GOODS, AND PARTS, NSPF	\$1,252.8	23,101	\$126.0	2,989
32	2221	BROAD WOVEN FABRICS, MAN-MADE FIB	\$595.2	44,329	\$119.1	10,180
33	3652	PHONO REC, PRE-RECRD MGNTC TPS O	\$619.1	31,490	\$117.4	4,633
34	3949	SPORTING AND ATHLETIC GOODS, AND	\$433.2	39,743	\$113.3	9,454
35	3714	MOTOR VEHICLE PARTS AND ACCESSORI	\$1,325.7	194,879	\$112.9	10,261
36	3691	STORAGE BATTERIES, AND PARTS, NSP	\$428.5	16,251	\$110.9	3,323
37	3699	ELECTRCL EQUIP & SUPPLIES, NSPF A	\$1,015.8	22,983	\$107.5	2,681
38	3625	RELAYS AND INDUSTRIAL CONTROLS, A	\$1,136.0	43,188	\$106.4	3,433
39	3499	FABRICATED METAL PRODUCTS, NSPF	\$650.7	34,868	\$100.2	3,608
40	2335	WOMEN'S AND MISSES' DRESSES	\$705.3	49,729	\$94.8	8,017
41	3812	NAVIGATION, AERONAUTICAL, ETC. SY	\$735.4	5,806	\$94.8	799
42	3356	EXTRUDED NONFERROUS MET MLL PRODS	\$671.9	4,635	\$90.1	443
43	3675	ELECTRONIC CAPACITORS	\$703.7	13,570	\$89.2	2,460
44	3357	NONFERROUS METL WIRE & CABLE, DRA	\$659.4	38,709	\$85.8	7,343
45	2836	BIOLOGICAL PRODUCTS	\$799.5	4,632	\$83.1	687
46	3942	DOLLS AND STUFFED TOY ANIMALS	\$198.2	32,152	\$80.5	14,293
47	3578	CALCULATING & ACCOUNTING MACH, AN	\$296.7	10,797	\$79.8	1,771
48	3569	GENERAL INDUST MACHINERY & EQUIP,	\$1,054.4	41,081	\$76.6	3,330
49	2869	INDUSTRIAL ORGANIC CHEMICALS, NSP	\$2,704.3	37,149	\$74.8	1,938
50	3999	MANUFACTURED ARTICLES, NSPF	\$452.9	37,515	\$73.8	6,081
		Sub-Total Top 50 Imports	\$174,889.7	2,805,122	\$27,061.3	473,172
		Sub-Total Next 50 Imports	\$49,592.6	3,765,913	\$3,574.9	341,339
		Total - Top 100 Imports	\$224,482.3	6,571,035	\$30,636.2	814,511

Source: U.S. Department of Commerce, Customs Agency (1998)



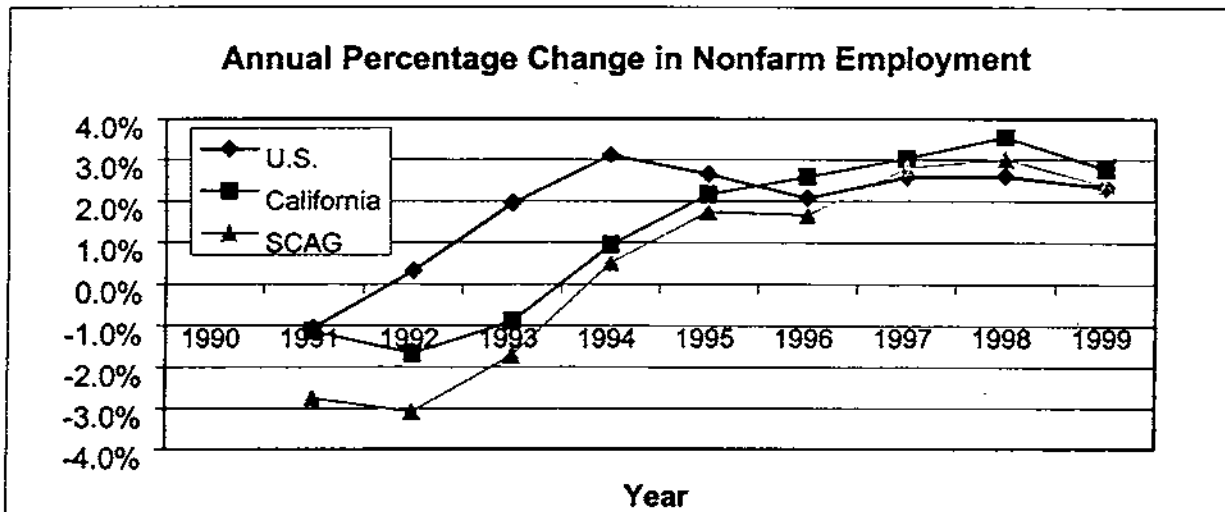
APPENDIX D

SCAG REGION ECONOMIC SHARE ANALYSIS

REGIONAL ECONOMIC BACKGROUND INFORMATION

The last decade of the twentieth century has been a period of dynamic change in the economy of the United States. Nowhere has this been more evident than in the State of California, and in particular Southern California. Downsizing the military, and cuts in defense spending in the early 1990s hit this area very hard. Still, underlying these severe contractions, was a robust economy in the making, an economy that was increasingly focused on international trade in goods and services. However, while employment growth rates turned positive in the U.S. in 1992, it took California and the SCAG region until 1994 to begin increasing. After 1996, California and the SCAG region began to outperform the country as a whole.

Figure D-1



That aviation has played an important role in the transformation of the U.S. economy and in particular the California and SCAG region economy is quite evident from the data. Therefore, before discussing the 2020 SCAG regional economy, it is informative to examine some of the key elements of economic change that have occurred in the last decade.

The remarkable growth in the U.S. economy included all sectors except mining, where increasingly the U.S. is relying on imports to meet growing demand. This was and is also the case with manufacturing, where while manufacturing output increased at a robust 4.8 percent annual average rate, employment in manufacturing actually declined. Increasingly manufacturing is finding its way to lower cost countries. Aviation is playing an important part in this through movement of business personnel between countries, and the movement of cargo.

Some remarkable changes occurred in Agriculture where total value added increased at a very high 8.2 percent while the value of output was increasing at a much lower 1.6 percent. The reason for this is shown in the component parts of value added. Proprietor earnings declined by 4.9 percent while employee compensation other property income (mostly corporate profits) increased an annual average of 5.7 percent and nearly 200 percent respectively. This burgeoning corporate farming sector and declining family farming was also the source of rapid increases in indirect business taxes.

Table D-1

UNITED STATES AVERAGE ANNUAL PERCENTAGE CHANGE IN OUTPUT, VALUE ADDED AND EMPLOYMENT, 1990 TO 1996

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Agriculture	1.6%	0.8%	5.7%	-4.3%	198.9%	23.3%	8.2%
Mining	-7.6%	-2.6%	0.0%	5.4%	-9.0%	-12.0%	-7.9%
Construction	2.1%	0.9%	3.4%	10.2%	0.4%	13.1%	4.4%
Manufacturing	4.8%	-0.5%	3.9%	32.1%	-0.3%	5.9%	2.9%
TCPU	7.9%	1.6%	5.4%	18.8%	5.4%	15.0%	6.7%
Trade	10.5%	1.8%	5.3%	9.3%	43.8%	11.8%	9.6%
FIRE	9.7%	1.6%	6.5%	51.7%	10.5%	2.3%	8.5%
Services	8.5%	4.1%	8.5%	3.5%	12.3%	13.4%	8.0%
Government	7.9%	1.5%	5.4%	0.0%	80.3%	0.0%	8.1%
Other	10.0%	-1.7%	0.4%	0.0%	26.0%	0.0%	10.0%
Totals	6.5%	1.8%	5.6%	7.3%	8.0%	6.1%	6.4%

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

These patterns generally held for the SCAG region, although much more pronounced. Some of the more remarkable percentage changes in the region are due to the tyranny of small numbers. For example in agriculture 1990 "other property income" was actually negative, which makes the average percentage change difficult to express.

Table D-2

SCAG REGION AVERAGE ANNUAL CHANGE IN OUTPUT, VALUE ADDED AND EMPLOYMENT, 1990 TO 1996

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Agriculture	1.6%	-0.2%	1.6%	-5.7%	n.a.	84.5%	5.6%
Mining	-8.2%	10.5%	7.3%	-5.2%	-10.1%	-10.1%	-8.2%
Construction	-3.1%	-4.0%	-4.0%	4.8%	-2.8%	24.3%	-2.2%
Manufacturing	0.7%	-3.1%	-1.3%	15.2%	-6.1%	9.5%	-2.4%
TCPU	9.1%	1.4%	2.5%	16.9%	4.1%	31.1%	5.2%
Trade	6.8%	0.2%	0.4%	11.3%	37.7%	7.1%	4.7%
FIRE	7.9%	-1.2%	-0.9%	53.0%	8.6%	5.3%	6.2%
Services	7.0%	2.7%	2.4%	3.5%	9.6%	22.4%	3.6%
Government	-3.7%	-8.5%	-5.5%	0.0%	35.4%	0.0%	-4.1%
Other	-0.7%	3.3%	6.8%	0.0%	-15.3%	0.0%	-0.7%
Totals	3.4%	-1.7%	-1.0%	6.8%	5.4%	7.9%	1.6%

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

The primary difference between the U.S. and California and the SCAG region is in the Government sector. Nationwide, government employment was increasing at an average annual rate of 1.5 percent while in the SCAG region, it was declining at a rate of -8.5 percent. Table 18 shows the dramatic changes in absolute terms. The negative million-job change in government employment was mostly military base closure related. And the 235,638 decrease in manufacturing jobs was mainly in defense related industries. The peace dividend was costly to the Southern California economy. The decline in the construction industry was in response to the general decline related to the military and defense related decreases. When vacancy rates go up, construction spending goes down.

Table D-3

SCAG REGION CHANGE IN OUTPUT, VALUE ADDED AND EMPLOYMENT, 1990 TO 1996

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Agriculture	\$568.3	-1,989	\$151.5	-\$492.8	\$1,207.2	\$111.8	\$977.8
Mining	-\$3,623.5	7,075	\$236.2	-\$50.9	-\$2,457.6	-\$359.4	-\$2,631.6
Construction	-\$8,853.3	-132,424	-\$3,565.8	\$992.4	-\$184.5	\$178.3	-\$2,579.5
Manufacturing	\$7,026.9	-235,638	-\$3,799.6	\$1,329.3	-\$9,460.9	\$817.5	-\$11,113.7
TCPU	\$20,169.4	26,455	\$1,841.3	\$1,393.0	\$2,271.5	\$1,973.8	\$7,479.7
Trade	\$30,548.1	21,449	\$977.1	\$1,872.1	\$8,844.3	\$4,502.7	\$16,196.2
FIRE	\$47,874.8	-47,098	-\$1,053.8	\$2,878.3	\$23,390.6	\$3,623.7	\$28,838.8
Services	\$54,544.6	398,459	\$9,664.0	\$3,466.7	\$4,776.3	\$1,819.1	\$19,726.1
Government	-\$15,524.2	-1,015,129	-\$20,643.8	\$0.0	\$4,722.2	-\$4.3	-\$15,925.9
Other	-\$55.8	21,149	\$365.0	\$0.0	-\$420.8	\$0.0	-\$55.8
Totals	\$132,675.2	-957,690	-\$15,827.7	\$11,388.1	\$32,688.3	\$12,663.4	\$40,912.0

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

* Dollar amounts in \$millions.

Shift Share Analysis

A method of measurement of regional economic change that avoids the tyranny of small numbers is called shift share analysis. This method defines the region in terms of its share of an area that contains that region, for example the SCAG region as a part or share of the State of California or of the United States as a whole. By computing the difference in the share at different times, a measure is taken of the change in the region relative to the state or U.S. For example, Table D-4 and D-5 illustrate the same type of information that was presented in Table D-3 for the SCAG region as reflected in "shares" of the California economy in 1990 and 1996 respectively. Table D-6 indicates the "shift" in shares between the years 1990 and 1996.

Table D-4

**SCAG REGION SHARE OF CALIFORNIA OUTPUT, VALUE ADDED AND EMPLOYMENT
(1990)**

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Agriculture	24.3%	22.9%	26.6%	19.1%	25.2%	16.4%	22.2%
Mining	32.8%	37.1%	38.4%	40.5%	34.0%	41.4%	35.3%
Construction	45.7%	45.7%	45.6%	45.7%	45.8%	45.9%	45.6%
Manufacturing	53.9%	57.9%	54.8%	60.0%	54.9%	40.9%	54.6%
TCPU	45.4%	48.9%	47.8%	50.7%	45.8%	44.8%	47.0%
Trade	52.6%	50.5%	53.1%	50.5%	50.8%	52.7%	52.7%
FIRE	52.1%	50.4%	53.3%	52.1%	51.9%	49.9%	51.9%
Services	53.8%	51.2%	54.0%	52.3%	55.3%	51.5%	53.8%
Government	41.1%	39.8%	39.7%	0.0%	63.2%	51.6%	40.3%
Other	55.1%	59.7%	59.7%	0.0%	47.9%	0.0%	55.1%
Totals	49.7%	47.6%	48.8%	47.2%	51.3%	49.9%	49.3%

Source: CIC Research, 1999. Derived from IMPLAN 1990 data.

Just looking at the 1996 share information (Table D-5) indicates that the SCAG region is about half of the California economy by most measures. However, the share declines between 1990 and 1996. The decline is best examined by looking at the "Shift" Table D-8. Table D-8 shows clearly that the SCAG Region was losing ground to the rest of California from 1990 to 1996 in virtually every sector except Transportation, Communications, and Public Utilities and Mining. The mining change is actually related to an in region shift from relatively high value to low value (sand and gravel) mining. This was due to a ramp up in road construction, which partially offset a severely depressed construction sector.

Table D-5

**SCAG REGION SHARE OF CALIFORNIA OUTPUT, VALUE ADDED AND EMPLOYMENT,
1996**

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Agriculture	19.0%	20.7%	21.3%	18.8%	17.3%	16.9%	19.3%
Mining	45.4%	44.6%	45.1%	39.9%	48.5%	46.9%	46.9%
Construction	44.1%	44.4%	43.7%	44.7%	42.5%	43.3%	43.9%
Manufacturing	47.7%	53.9%	47.7%	57.0%	41.2%	41.7%	46.0%
TCPU	46.8%	49.1%	48.8%	47.5%	44.8%	43.1%	46.5%
Trade	50.2%	48.5%	50.2%	48.6%	50.6%	50.6%	50.2%
FIRE	49.9%	48.4%	49.5%	50.1%	50.1%	50.6%	50.0%
Services	51.0%	49.4%	50.3%	50.0%	54.4%	52.4%	50.7%
Government	41.0%	39.9%	40.4%	0.0%	36.2%	0.0%	39.7%
Other	61.1%	57.6%	61.7%	0.0%	47.0%	0.0%	61.1%
Totals	47.8%	47.0%	47.0%	47.5%	47.0%	49.1%	47.2%

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

Table D-6

**SHIFT IN SHARE OF OUTPUT, VALUE ADDED AND EMPLOYMENT
FOR THE SCAG REGION COMPARED TO CALIFORNIA 1990 TO 1996**

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Agriculture	-5.3%	-2.2%	-5.2%	-0.2%	-7.8%	0.4%	-3.0%
Mining	12.7%	7.5%	6.7%	-0.6%	14.4%	5.5%	11.6%
Construction	-1.7%	-1.3%	-1.9%	-1.0%	-3.2%	-2.6%	-1.7%
Manufacturing	-6.2%	-4.0%	-7.1%	-3.0%	-13.7%	0.8%	-8.6%
TCPU	1.4%	0.2%	1.0%	-3.2%	-1.1%	-1.7%	-0.5%
Trade	-2.4%	-2.0%	-2.9%	-1.8%	-0.2%	-2.2%	-2.5%
FIRE	-2.2%	-2.0%	-3.9%	-2.0%	-1.8%	0.7%	-1.9%
Services	-2.8%	-1.9%	-3.8%	-2.3%	-0.9%	1.0%	-3.0%
Government	-0.1%	0.1%	0.6%	0.0%	-27.0%	-51.6%	-0.5%
Other	6.1%	-2.1%	2.0%	0.0%	-0.8%	0.0%	6.1%
Totals	-1.9%	-0.6%	-1.7%	0.3%	-4.3%	-0.8%	-2.1%

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

The negative share changes for the SCAG region relative to California are illustrated best by looking and the changes that were taking place throughout California relative to the U.S. economy as a whole. Table D-7 shows these dramatic changes in the California economy. The only sector gaining ground on the U.S. economy in California was Agriculture. Everything else was negative.

Table D-7

**SHIFT IN SHARE OF OUTPUT, VALUE ADDED AND EMPLOYMENT
FOR CALIFORNIA COMPARED TO THE U.S. 1990 TO 1996**

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Agriculture	2.8%	0.5%	0.5%	-1.6%	23.9%	6.7%	0.5%
Mining	-2.5%	2.1%	1.0%	-3.6%	-3.7%	0.9%	-2.1%
Construction	-3.5%	-3.4%	-5.1%	-3.0%	-1.5%	3.2%	-4.3%
Manufacturing	-1.0%	-1.1%	-1.8%	-4.6%	-1.6%	1.3%	-1.7%
TCPU	0.2%	-0.2%	-1.9%	0.1%	-0.4%	4.1%	-0.6%
Trade	-1.3%	-0.6%	-2.6%	2.0%	-1.3%	-1.8%	-2.1%
FIRE	-0.4%	-1.6%	-4.1%	1.0%	-0.6%	2.0%	-0.9%
Services	-0.2%	-0.4%	-3.1%	0.8%	-1.4%	3.3%	-2.2%
Government	-11.0%	-13.5%	-12.3%	0.0%	-0.9%	0.0%	-11.7%
Other	-7.8%	4.9%	5.4%	0.0%	-17.1%	0.0%	-7.8%
Totals	-1.3%	-2.6%	-4.5%	-0.5%	-0.3%	1.2%	-2.7%

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

By comparison, the shifts in the SCAG region relative to the U.S. economy as a whole appear relatively more modest (Table D-8). However, this is because the share measures are half those of California. Table D-6 already demonstrated that SCAG regional economy was losing share of the California economy as a whole.

Table D-8

**SHIFT IN SHARE OF OUTPUT, VALUE ADDED AND EMPLOYMENT
FOR THE SCAG REGION COMPARED TO THE U.S. 1990 TO 1996**

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Agriculture	0.0%	-0.2%	-1.1%	-0.3%	4.9%	1.1%	-0.4%
Mining	-0.2%	1.2%	0.8%	-1.5%	-0.4%	0.6%	-0.1%
Construction	-1.8%	-1.7%	-2.5%	-1.5%	-1.0%	1.2%	-2.1%
Manufacturing	-1.1%	-1.0%	-1.8%	-3.1%	-2.3%	0.6%	-1.8%
TCPU	0.3%	-0.1%	-0.8%	-0.4%	-0.3%	1.6%	-0.3%
Trade	-1.0%	-0.5%	-1.7%	0.7%	-0.7%	-1.2%	-1.4%
FIRE	-0.5%	-1.0%	-2.6%	0.2%	-0.6%	1.1%	-0.8%
Services	-0.5%	-0.4%	-2.2%	0.0%	-0.9%	1.8%	-1.6%
Government	-4.5%	-5.4%	-4.8%	0.0%	-4.3%	-6.9%	-4.8%
Other	-3.7%	2.6%	3.7%	0.0%	-8.2%	0.0%	-3.7%
Totals	-0.9%	-1.3%	-2.4%	-0.2%	-0.7%	0.5%	-1.6%

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

Changes in the Transportation Industries

The transportation sector of California was impacted by the same changes that rocked the state's economy in general. However, the underlying strength of the economy, agriculture, and manufactured goods that account for the bulk of U.S. exports and imports provided a growing base that fueled the recovery. The only state transportation sector that increased relative to the U.S. as a whole was Pipelines except natural gas. This only because this sector declined in the U.S. while managing a very small gain in California. However, overall, the California transportation sector grew only slightly less (0.6%) than the U.S. as a whole. Moreover, the SCAG transportation sectors also grew at only a slightly lower (0.3%) rate than the U.S. as a whole, and Water transportation grew faster than the U.S.

Table D-9

CHANGE IN OUTPUT, VALUE ADDED AND EMPLOYMENT, CALIFORNIA 1990 – 1996

*Millions of dollars

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Railroads and Related Services	\$648.3	-5,458	-\$93.8	-\$5.0	\$436.8	-\$1.1	\$336.9
Local, Interurban Passenger Transit	\$670.6	10,811	\$299.7	\$100.7	\$71.7	\$8.4	\$480.5
Motor Freight Transport and Warehousing	\$7,860.2	5,554	\$500.8	\$237.2	-\$301.0	\$143.5	\$580.5
Water Transportation	\$2,499.3	-1,068	\$275.7	\$17.0	\$444.6	\$122.7	\$859.9
Air Transportation	\$5,563.9	35,189	\$1,513.3	\$136.2	\$1,294.0	-\$14.8	\$2,928.7
Pipe Lines, Except Natural Gas	\$19.7	45	\$31.4	\$0.0	-\$154.9	\$30.0	-\$93.6
Arrangement Of Passenger Transportation	\$565.1	3,002	\$188.4	\$26.8	\$322.3	\$39.0	\$576.5
Transportation Services	\$2,300.2	10,294	\$432.9	\$49.3	\$436.6	\$23.2	\$942.1
Total	\$20,127.2	58,370	\$3,148.4	\$562.3	\$2,550.0	\$350.8	\$6,611.5

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

Table D-10

**SHIFT IN SHARE OF OUTPUT, VALUE ADDED AND EMPLOYMENT
FOR CALIFORNIA COMPARED TO THE U.S. 1990 - 1996**

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Railroads and Related Services	-0.9%	-0.7%	-1.0%	0.0%	-0.8%	0.6%	-0.9%
Local, Interurban Passenger Transit	0.0%	0.0%	-0.4%	2.8%	-0.1%	4.0%	0.0%
Motor Freight Transport and Warehousing	-0.7%	-0.2%	-1.2%	0.0%	-0.3%	3.2%	-0.7%
Water Transportation	-0.1%	0.0%	0.2%	-12.7%	0.7%	4.0%	0.4%
Air Transportation	-1.5%	-1.2%	-2.2%	13.7%	-1.4%	0.6%	-1.6%
Pipe Lines, Except Natural Gas	2.7%	2.9%	2.6%	0.0%	2.9%	4.2%	2.9%
Arrangement Of Passenger Transportation	-2.4%	-0.6%	-2.0%	-13.7%	-0.7%	0.3%	-3.1%
Transportation Services	-2.3%	0.8%	-1.4%	-17.2%	-0.2%	1.8%	-4.2%
Total	-0.6%	-0.1%	-1.0%	-0.7%	1.3%	2.3%	-0.4%

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

Table D-11

CHANGE IN OUTPUT, VALUE ADDED AND EMPLOYMENT, SCAG REGION 1990 - 1996
*Millions of dollars

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Railroads and Related Services	\$480.6	-1,303	\$36.5	-\$0.2	\$233.2	\$4.8	\$274.2
Local, Interurban Passenger Transit	\$258.0	3,164	\$111.5	\$44.5	\$29.1	\$3.1	\$188.2
Motor Freight Transport and Warehousing	\$3,201.7	-3,322	\$58.9	\$73.4	-\$200.9	\$59.5	-\$9.1
Water Transportation	\$1,570.4	625	\$235.6	\$8.4	\$257.6	\$76.5	\$578.0
Air Transportation	\$3,109.7	20,103	\$931.4	\$72.5	\$668.6	\$2.2	\$1,674.7
Pipe Lines, Except Natural Gas	-\$219.9	-120	-\$1.8	\$0.0	-\$207.7	\$7.5	-\$202.1
Arrangement Of Passenger Transportation	\$308.7	1,658	\$95.9	\$14.8	\$178.1	\$22.3	\$311.1
Transportation Services	\$1,421.7	6,830	\$265.7	\$33.8	\$264.4	\$14.1	\$578.0
Total	\$10,131.0	27,634	\$1,733.7	\$247.2	\$1,222.3	\$190.0	\$3,393.1

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.

Table D-12

**SHIFT IN SHARE OF OUTPUT, VALUE ADDED AND EMPLOYMENT
FOR THE SCAG REGION COMPARED TO THE U.S. 1990 – 1996**

Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income*	Indirect Business Tax*	Total Value Added*
Railroads and Related Services	0.1%	0.2%	0.1%	0.0%	0.2%	0.8%	0.1%
Local, Interurban Passenger Transit	-0.4%	-0.5%	-0.6%	1.0%	-0.5%	1.5%	-0.4%
Motor Freight Transport and Warehousing	-0.6%	-0.4%	-0.9%	-0.3%	-0.5%	1.2%	-0.7%
Water Transportation	0.8%	0.6%	1.3%	-5.9%	1.6%	3.6%	1.4%
Air Transportation	-0.3%	-0.3%	-0.6%	7.3%	-0.2%	0.6%	-0.3%
Pipe Lines, Except Natural Gas	-0.5%	0.8%	-0.6%	0.0%	-0.4%	0.8%	-0.4%
Arrangement Of Passenger Transportation	-1.4%	-0.3%	-1.4%	-7.4%	-0.7%	0.5%	-1.9%
Transportation Services	-1.2%	0.8%	-0.8%	-10.0%	-0.1%	1.2%	-2.4%
Total	-0.3%	-0.1%	-0.4%	-0.6%	0.4%	1.3%	-0.2%

Source: CIC Research, 1999. Derived from IMPLAN 1996 data.



APPENDIX E

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

**2020 REGIONAL TRANSPORTATION PLAN
FORECAST SCENARIOS
AND
2020 SCAG REGION ECONOMY**

Table E-1
SCAG 2020 RTP FORECAST SCENARIOS

Scenario	Description	PA Mgmt	RUR	LAX	ONT	El Toro	John Wayne	LOB	PBP	PHD	BPO	BCI	March	
RTP	With all airports unconstrained, what is demand in 2020?													
	Total Passengers	1,693,210	9,239,197	94,181,512	15,399,399	22,297,499	7,092,701	2,692,880	1,899,360	130,018	1,778,985	124,870	914,132	
	Domestic	1,683,210	9,236,137	46,185,082	14,263,226	16,775,044	7,002,801	2,602,890	1,699,360	130,018	1,778,985	124,870	914,132	
	Commuter	115,629	532,928	2,500,501	854,487	635,779	341,668	113,253	0	0	0	0	83,069	
	Short	1,487,771	5,968,189	22,000,482	8,308,989	8,338,990	5,562,012	1,500,101	1,008,200	0	0	0	831,658	
	Medium Long	314,310	2,218,754	11,602,763	4,108,966	3,379,416	982,196	783,125	311,994	0	1,779,945	0	155,492	
	Long	45,550	529,508	13,078,319	696,962	2,424,000	77,032	408,099	205,805	0	0	0	84,903	
	International	0	0	44,985,920	1,103,180	5,532,450	0	0	0	0	0	0	0	0
	Total Cargo (tons)	9,302.8	76,900.0	3,845,449.8	1,241,283.2	1,321,689.4	22,677.4	59,987.5	16,936.7	16,936.7	16,936.7	885,213.4	300,237.5	1,000,012.4
	Domestic (tons)	9,100.8	70,000.0	3,246,863.1	873,567.9	942,858.3	22,697.6	59,987.5	16,936.7	16,936.7	16,936.7	735,119.4	293,589.0	841,014.4
International (tons)	0.0	0.0	1,593,583.5	367,725.7	348,171.1	0.0	0.0	0.0	0.0	0.0	150,094.0	37,648.4	158,997.9	
SC	What effect does HERT have on Ontario and Inland Empire airports (in addition to most major demand)?													
	Total Passengers	3,029,210	9,410,937	70,090,014	26,098,954	28,890,102	8,399,177	3,090,181	1,793,787	1,157,177	1,309,690	665,171	1,828,562	
	Domestic	3,029,210	9,410,937	32,279,819	22,879,283	21,336,357	9,399,177	3,000,181	1,793,787	1,157,177	1,309,690	493,721	1,828,562	
	Commuter	204,472	551,666	577,648	563,233	452,373	345,368	90,305	89,098	89,315	48,132	55,640	81,233	
	Short	2,290,104	5,791,402	12,794,640	7,661,536	7,724,485	6,060,692	1,600,360	1,119,273	1,018,431	1,176,497	409,881	1,344,424	
	Medium Long	533,747	2,714,790	7,845,000	6,757,858	6,990,640	1,974,198	699,749	522,530	88,431	131,091	0	162,895	
	Long	60,887	412,148	11,049,582	5,970,375	6,403,641	188,923	329,719	61,808	0	0	0	0	
	International	0	0	37,726,066	3,222,071	7,461,745	0	0	0	0	0	0	0	0
	Total Cargo (tons)	212,044.7	87,159.1	2,990,030.5	2,087,893.3	1,096,208.0	34,437.7	83,093.4	14,170.0	14,170.0	14,170.0	630,497.8	230,387.4	636,594.2
	Domestic (tons)	193,325.1	87,159.1	1,428,353.3	1,404,943.1	1,220,232.8	24,437.7	63,063.4	14,170.0	14,170.0	14,170.0	13,334.5	32,785.0	158,817.0
International (tons)	18,518.6	0	1,561,677.2	682,950.2	475,975.2	0	0	0	0	0	601,500.0	1,800,000.0	6,780,000.0	
Can the existing airport system with current legal and physical constraints meet future demand?	Total Passengers													
	Total Cargo (tons)													
	Domestic (tons)													
	International (tons)													
	What will the addition of El Toro have on Airport System's (with NSR) ability to meet future demand?	Total Passengers												
		Domestic												
		Commuter												
		Short												
		Medium Long												
		Long												
International														
Total Cargo (tons)														
Domestic (tons)														
International (tons)														
What effect would LAX Master Plan improvements have on Airport System (with El Toro) with NSR?	Total Passengers													
	Domestic													
	Commuter													
	Short													
	Medium Long													
	Long													
	International													
	Total Cargo (tons)													
	Domestic (tons)													
	International (tons)													

Table E-2
HISTORICAL (1960 - 1998) AND PROJECTED (2020) AIR PASSENGER VOLUMES
 (000s)

Year	MJG	Burbank	John Wayne	El Toro	Long Beach	Los Angeles	Ontario	Palm Springs	PMD	SBD	SCI	MAR	TOTAL
1960		864	12			6,065							6,941
1961		862	17			6,947	29						7,855
1962		810	20			7,633	44	40					8,547
1963		628	25			9,904	99	52					10,718
1964		570	333			10,696	146	79					11,824
1965		707	46			12,579	188	92					13,612
1966		876	65			15,251	248	105					16,545
1967		1,899	394			18,125	399	122					20,939
1968		721	722		314	20,346	573	215					22,891
1969		1,178	648		288	21,310	744	239					24,607
1970		1,319	948		89	20,781	873	268					24,278
1971		1,362	1,127		223	20,347	855	268					24,282
1972		1,475	1,408		262	22,078	1,028	288					26,541
1973		1,571	1,583		257	23,502	1,172	320					28,385
1974		1,643	1,583		245	23,585	1,250	335					28,641
1975		1,631	1,825		320	23,719	1,288	348					28,130
1976		1,718	2,159		332	25,883	1,435	428					32,053
1977		1,999	2,381		404	28,362	1,681	506					35,333
1978		2,251	2,558		400	32,901	2,005	581					40,674
1979		2,386	2,379		392	34,923	2,361	623					43,064
1980		1,917	2,379		162	33,040	2,005	519					40,022
1981		1,901	2,380		180	32,723	1,805	443					39,432
1982		2,432	2,531		430	32,383	2,024	398					40,198
1983		2,847	2,794		826	33,427	2,472	514					42,880
1984		2,745	2,827		1,079	34,362	3,073	604					44,690
1985		2,917	3,284		1,104	36,258	3,609	605					47,777
1986		3,021	4,059		1,118	41,418	4,245	714					54,575
1987		3,167	4,564		1,207	44,873	4,575	834					59,220
1988		3,043	4,674		1,170	44,399	4,798	829					58,913
1989		2,718	4,516		1,379	45,048	5,289	860					59,820
1990		3,493	4,587		1,456	45,810	5,420	915					61,681
1991		3,712	4,855		1,353	45,668	5,792	858					62,238
1992		3,828	5,673		834	46,965	6,121	882	88				64,391
1993		4,349	6,142		612	47,845	6,192	825	122				66,087
1994		4,838	6,774		490	51,050	6,386	979	129				70,646
1995		4,973	7,159		425	53,909	6,405	947	113				73,931
1996		4,838	7,308		435	57,975	6,242	1,115	113				78,026
1997		4,718	7,718		611	59,177	6,296	1,180	104				79,804
1998		4,732	7,460		647	61,219	6,435	1,256	104				81,850
Forecast Scenarios													
MED RTP	1,963	9,238	7,003	22,207	2,803	94,181	15,368	1,699	130	1,780	125	914	157,410
2C-HSR	3,029	9,410	9,399	28,800	3,000	70,000	28,098	1,794	1,157	1,307	466	1,629	156,089
SCE 8	-	9,410	8,400	25,102	3,000	78,008	25,577	2,235	1,398	1,456	608	1,274	156,469
SCE 9	-	9,410	8,400	-	3,000	86,401	33,798	3,014	1,224	2,883	1,200	5,490	154,819
SCE 6	-	9,410	8,400	-	3,000	78,010	29,020	3,630	3,990	6,010	1,600	6,780	140,850

Source: Southern California Association of Governments

Table E-3
HISTORICAL (1965 – 1998) AND PROJECTED (2020) AIR CARGO VOLUMES
 (Tons)

Year	MOGU	Burbank	John Wayne	Long Beach	Los Angeles	Ontario	Palm Springs	Palmdale	El Toro	SBD	SCI	MAR	Total
1965	-	-	-	-	261,766	-	-	-	-	-	-	-	261,766
1966	-	-	-	-	305,363	-	-	-	-	-	-	-	305,363
1967	-	-	-	-	360,264	-	-	-	-	-	-	-	360,264
1968	-	-	-	-	419,639	-	-	-	-	-	-	-	419,639
1969	-	-	-	-	478,321	-	-	-	-	-	-	-	478,321
1970	-	-	-	-	521,470	-	-	-	-	-	-	-	521,470
1971	-	-	-	-	567,404	-	-	-	-	-	-	-	567,404
1972	-	-	-	-	655,771	-	-	-	-	-	-	-	655,771
1973	-	-	-	-	721,035	-	-	-	-	-	-	-	721,035
1974	-	-	-	-	741,612	-	-	-	-	-	-	-	741,612
1975	-	-	-	-	714,961	2,917	-	-	-	-	-	-	717,878
1976	-	-	-	-	770,899	-	-	-	-	-	-	-	770,899
1977	-	-	-	-	812,290	-	-	-	-	-	-	-	812,290
1978	-	-	-	-	917,798	-	-	-	-	-	-	-	917,798
1979	10,204	-	-	1,056	900,600	8,543	-	-	-	-	-	-	920,403
1980	-	-	-	564	881,889	4,773	-	-	-	-	-	-	887,326
1981	7,776	-	-	872	903,586	9,580	-	-	-	-	-	-	921,814
1982	6,575	-	-	1,400	857,725	56,003	-	-	-	-	-	-	921,703
1983	7,422	-	-	2,431	904,793	94,600	-	-	-	-	-	-	1,009,246
1984	6,557	-	-	4,290	948,599	147,529	-	-	-	-	-	-	1,106,975
1985	6,555	-	-	3,817	929,243	176,488	-	-	-	-	-	-	1,116,203
1986	12,357	-	-	3,069	1,016,803	199,978	-	-	-	-	-	-	1,232,207
1987	13,249	-	-	5,806	1,160,026	218,914	-	-	-	-	-	-	1,397,995
1988	12,429	-	-	3,436	1,212,262	286,411	383	-	-	-	-	-	1,514,921
1989	14,853	-	-	4,876	1,245,939	284,988	398	-	-	-	-	-	1,551,054
1990	20,161	-	-	18,882	1,284,373	246,300	422	8	-	-	-	-	1,570,146
1991	17,435	-	-	26,456	1,258,209	282,558	362	5	-	-	-	-	1,585,025
1992	18,030	-	-	27,113	1,365,157	306,973	329	4	-	-	-	-	1,717,606
1993	28,444	-	-	30,656	1,462,330	353,302	313	5	-	-	-	-	1,875,050
1994	31,002	-	-	27,732	1,703,445	379,911	297	3	-	-	-	-	2,142,390
1995	36,043	15,778	-	26,567	1,760,995	386,953	224	2	-	-	-	-	2,226,562
1996	39,623	20,012	-	29,957	1,895,751	437,139	240	2	-	-	-	-	2,422,724
1997	36,325	21,727	-	34,481	2,052,993	461,747	233	1	-	-	-	-	2,607,507
1998	40,032	17,829	-	41,469	2,051,800	454,231	198	0	-	-	-	-	2,605,559
Forecast Scenarios													
Med RTP	9,104	70,000	25,898	59,987	3,943,447	1,241,283	16,596	16,670	1,331,329	885,213	300,237	1,000,012	8,900,277
SCE 2C	212,045	67,752	24,438	63,003	2,590,001	2,087,868	14,171	114,902	1,699,206	770,947	263,132	993,411	8,900,877
SCE 8	-	73,399	25,200	63,002	2,974,426	2,046,148	17,882	119,989	1,506,141	801,048	291,279	982,385	8,900,899
SCE 9	-	73,399	33,600	66,002	3,456,049	2,771,425	15,059	117,828	-	866,619	291,583	1,209,345	8,900,900

Source: Southern California Association of Governments

**COMPARISON OF SCAG REGION ECONOMY
(1996 IMPLAN Baseline v. 2020 Forecast Model)**

Sector	IMPLAN SCAG Model		2020 Employment Forecast		Price Change To 1996 Base and Real Output Forecast		Percent Change
	1996 Industry Output*	1996 Employment	SCAG Employment Forecast	Estimated 2020 Employment	Change In Price Index 1996-1998	1996 Industry Output (1996 \$M)	
Livestock & Livestock Products	\$1,589.92 M	11,744	-19.9%	9,524	4.0%	\$1,895 M	19.9%
Agriculture	\$2,410.86 M	32,706	-18.9%	26,520	4.9%	\$2,530 M	10.6%
Forestry & Forest Products	\$59.44 M	434	-18.9%	352	2.8%	\$65 M	8.0%
Commercial Fishing	\$2,250.16 M	91,396	132.1%	212,131	1.6%	\$3.8 M	21.1%
Mining	\$3,774.82 M	16,271	-60.5%	3,563	-0.8%	\$2,748 M	-19.9%
Agricultural Services	\$38,198.10 M	416,276	0.0%	416,276	3.9%	\$39,207 M	18.3%
Construction	\$17,619.17 M	89,316	-19.1%	53,350	1.9%	\$17,965 M	40.0%
Food Processing	\$15.10 M	32	-19.1%	28	2.9%	\$18 M	16.2%
Tobacco	\$2,840.47 M	24,925	1.9%	28,399	2.3%	\$2,905 M	15.7%
Apparel	\$10,160.87 M	125,342	-24.9%	94,132	0.7%	\$10,232 M	150.8%
Textiles	\$1,061.80 M	21,452	14.2%	24,599	2.4%	\$2,008 M	39.9%
Wood Products	\$4,244.24 M	41,658	5.7%	44,031	2.6%	\$4,355 M	19.9%
Furniture	\$5,165.50 M	24,738	23.9%	30,824	10.9%	\$5,038 M	15.5%
Pulp and Paper	\$10,968.46 M	95,959	33.0%	127,063	5.8%	\$11,037 M	0.7%
Printing & Publishing	\$8,983.41 M	35,371	11.0%	39,484	5.2%	\$9,493 M	2.7%
Chemicals	\$19,610.56 M	10,821	-49.0%	5,643	3.3%	\$17,165 M	11.9%
Petroleum & Coal Products	\$7,759.12 M	51,070	43.2%	74,153	6.0%	\$9,148 M	300.5%
Rubber Products	\$419.94 M	6,317	-67.6%	2,047	4.2%	\$437 M	47.3%
Leather Products	\$3,320.32 M	24,103	-21.7%	17,971	4.1%	\$3,457 M	142.3%
Stone, Clay & Glass Products	\$4,988.78 M	22,630	-24.1%	17,178	9.6%	\$5,458 M	143.1%
Primary Metals	\$11,837.98 M	60,980	-17.2%	48,000	3.6%	\$12,260 M	135.1%
Fabricated Metals	\$5,204.06 M	35,098	-28.6%	25,753	2.7%	\$5,346 M	141.3%
Industrial Machinery	\$24,846.83 M	140,083	-8.8%	129,335	1.5%	\$24,006 M	179.5%
Electrical Machinery	\$21,148.45 M	111,277	3.5%	115,172	1.7%	\$21,413 M	19.3%
Transportation Equipment	\$18,636.37 M	91,444	8.2%	96,037	1.5%	\$18,918 M	238.6%
Scientific Instruments	\$3,419.98 M	96,511	-30.9%	25,229	2.0%	\$3,490 M	122.9%
Miscellaneous Manufacturing	\$1,252.06 M	6,673	-9.7%	6,092	-0.1%	\$1,241 M	136.6%
Railroads and Related Services	\$951.05 M	23,162	19.4%	27,605	1.5%	\$966 M	162.8%
Local, Interurban Passenger Transit	\$9,064.34 M	93,612	32.4%	123,842	2.7%	\$9,208 M	262.8%
Motor Trucks, Transport and Warehousing	\$2,612.85 M	10,676	10.3%	12,416	6.2%	\$2,987 M	174.3%
Water Transportation	\$7,253.73 M	96,170	89.9%	110,372	2.3%	\$7,384 M	252.9%
Air Transportation	\$7,358.32 M	105,064	107.7%	219,217	6.7%	\$7,366 M	278.9%
Other Transportation	\$34,702.61 M	110,443	24.0%	136,950	0.8%	\$34,910 M	174.8%
Communications & Public Utilities	\$50,543.84 M	458,154	35.7%	621,715	2.8%	\$51,678 M	203.4%
Wholesale Trade	\$38,532.10 M	99,972	49.9%	1,298,897	1.5%	\$39,091 M	200.7%
Retail Trade	\$15,846.06 M	423,934	49.9%	629,965	2.3%	\$16,211 M	146.6%
Eating & Drinking	\$148,519.87 M	598,949	39.1%	833,138	3.1%	\$153,092 M	208.3%
FIRE	\$5,015.52 M	94,512	81.7%	196,965	4.2%	\$5,227 M	195.8%
Hotels and Lodging Places	\$0,059.77 M	177,784	75.5%	312,010	2.8%	\$0,230 M	257.1%
Personal Services	\$31,609.48 M	600,892	194.5%	1,196,131	5.8%	\$33,434 M	397.7%
Automobile Rental and Leasing	\$2,027.01 M	16,626	81.7%	28,884	3.8%	\$2,152 M	181.7%
Auto Repair Services	\$7,305.87 M	104,587	94.8%	203,967	2.5%	\$7,488 M	197.9%
All Other Services	\$126,354.40 M	1,700,913	139.5%	4,002,287	3.6%	\$133,189 M	257.9%
Amusement and Recreation Services, N.E.C.	\$4,492.30 M	124,766	138.5%	295,119	3.2%	\$4,838 M	448.3%
Other State and Local Govt Enterprises	\$5,866.53 M	24,986	43.1%	35,340	2.6%	\$6,052 M	143.1%
Other Federal Government Enterprises	\$522.55 M	3,082	-20.8%	2,282	1.1%	\$539 M	110.0%
Noncomparable Imports	\$0.00 M	0	0.0%	0	0.0%	\$0 M	100.0%
Scrap	\$0.00 M	0	0.0%	0	0.0%	\$0 M	100.0%
Used and Secondhand Goods	\$3,644.39 M	87,480	-30.7%	46,770	1.1%	\$3,684 M	103.9%
Federal Government - Military	\$4,287.13 M	84,933	-25.3%	63,445	1.1%	\$4,313 M	74.7%
Federal Government - Non-Military	\$0.00 M	0	0.0%	0	0.0%	\$0 M	100.0%
State & Local Government - Education	\$14,981.08 M	406,390	49.2%	605,220	2.6%	\$15,074 M	222.1%
State & Local Government - Non-Education	\$19,510.48 M	319,325	24.5%	397,584	2.8%	\$19,023 M	194.5%
ROW IVA	-\$122.94 M	0	0.0%	0	0.0%	-\$122.94 M	143.0%
Domestic Services	\$1,426.82 M	127,870	0.0%	127,870	3.3%	\$1,473 M	108.6%
Total	\$776,058.77 M	6,238,805	68.8%	13,747,851	3.0%	\$801,432 M	110.8%



APPENDIX F

SCAG REGION

55-SECTOR MODEL SUMMARY OF ECONOMIC IMPACTS

BY 2020 RTP FORECAST SCENARIO

FOR:

OUTPUT, INCOME, EMPLOYMENT, AND TAXES

Table F-1

Level-1,2,and 3 Combined Total Economic Impacts

2020 SCAG REGION OUTPUT ATTRIBUTABLE TO AIRPORT RELATED ECONOMIC ACTIVITY

(In Millions of 1998 \$s)

Sector	RTP Medium	H2C	SCE #8	SCE #9	SCE #6	2020 Economy Total	RTP % of Total Economy
Livestock & Livestock Products	\$67 M	\$66 M	\$66 M	\$67 M	\$59 M	\$1,996 M	3.4%
Agriculture	\$47 M	\$46 M	\$47 M	\$47 M	\$42 M	\$2,682 M	1.6%
Forestry & Forest Products	\$1 M	\$1 M	\$1 M	\$1 M	\$1 M	\$65 M	1.7%
Commercial Fishing	\$16 M	\$16 M	\$16 M	\$16 M	\$15 M	\$46 M	35.8%
Agricultural Services	\$52 M	\$51 M	\$52 M	\$52 M	\$46 M	\$5,299 M	1.0%
Mining	\$57 M	\$56 M	\$57 M	\$56 M	\$51 M	\$745 M	7.6%
Construction	\$861 M	\$848 M	\$855 M	\$858 M	\$762 M	\$46,973 M	1.8%
Food Processing	\$801 M	\$785 M	\$794 M	\$800 M	\$705 M	\$25,137 M	3.2%
Tobacco	\$1 M	\$1 M	\$1 M	\$1 M	\$1 M	\$27 M	2.4%
Textiles	\$312 M	\$309 M	\$310 M	\$308 M	\$279 M	\$4,523 M	6.9%
Apparel	\$1,283 M	\$1,271 M	\$1,275 M	\$1,263 M	\$1,147 M	\$15,430 M	8.3%
Wood Products	\$26 M	\$26 M	\$26 M	\$26 M	\$23 M	\$2,809 M	0.9%
Furniture	\$248 M	\$246 M	\$246 M	\$244 M	\$221 M	\$7,399 M	3.4%
Pulp and Paper	\$435 M	\$429 M	\$432 M	\$431 M	\$387 M	\$10,615 M	4.1%
Printing & Publishing	\$655 M	\$646 M	\$650 M	\$649 M	\$581 M	\$18,084 M	3.6%
Chemicals	\$897 M	\$887 M	\$891 M	\$885 M	\$800 M	\$19,927 M	4.5%
Petroleum & Coal Products	\$1,890 M	\$1,870 M	\$1,878 M	\$1,866 M	\$1,686 M	\$19,208 M	9.8%
Rubber Products	\$194 M	\$192 M	\$193 M	\$191 M	\$174 M	\$24,479 M	0.8%
Leather Products	\$30 M	\$30 M	\$30 M	\$30 M	\$27 M	\$207 M	14.6%
Stone, Clay & Glass Products	\$90 M	\$89 M	\$89 M	\$89 M	\$80 M	\$4,919 M	1.8%
Primary Metals	\$355 M	\$352 M	\$353 M	\$349 M	\$318 M	\$7,825 M	4.5%
Fabricated Metals	\$514 M	\$510 M	\$511 M	\$506 M	\$460 M	\$19,015 M	2.7%
Industrial Machinery	\$1,434 M	\$1,422 M	\$1,425 M	\$1,411 M	\$1,283 M	\$7,554 M	19.0%
Electrical Machinery	\$9,790 M	\$9,705 M	\$9,731 M	\$9,633 M	\$8,756 M	\$43,252 M	22.6%
Transportation Equipment	\$4,593 M	\$4,554 M	\$4,565 M	\$4,517 M	\$4,109 M	\$42,366 M	10.8%
Scientific Instruments	\$5,126 M	\$5,082 M	\$5,095 M	\$5,043 M	\$4,586 M	\$38,336 M	13.4%
Miscellaneous Manufacturing	\$712 M	\$705 M	\$708 M	\$702 M	\$636 M	\$4,289 M	16.6%
Railroads and Related Services	\$92 M	\$91 M	\$91 M	\$91 M	\$82 M	\$1,698 M	5.4%
Local, Interurban Passenger Transit	\$438 M	\$426 M	\$433 M	\$442 M	\$382 M	\$1,239 M	35.4%
Motor Freight Transport and Warehousing	\$604 M	\$595 M	\$600 M	\$599 M	\$536 M	\$28,095 M	2.3%
Water Transportation	\$90 M	\$89 M	\$89 M	\$89 M	\$80 M	\$5,206 M	1.7%
Air Transportation	\$18,593 M	\$18,436 M	\$18,482 M	\$18,289 M	\$16,636 M	\$18,586 M	100.0%
Other Transportation	\$1,887 M	\$1,860 M	\$1,873 M	\$1,873 M	\$1,674 M	\$23,333 M	8.1%
Communications & Public Utilities	\$2,246 M	\$2,211 M	\$2,230 M	\$2,234 M	\$1,989 M	\$60,963 M	3.7%
Wholesale Trade	\$3,294 M	\$3,253 M	\$3,271 M	\$3,259 M	\$2,930 M	\$105,719 M	3.1%
Other Retail Trade	\$10,965 M	\$10,681 M	\$10,807 M	\$10,957 M	\$9,583 M	\$78,456 M	14.0%
Eating & Drinking	\$5,068 M	\$4,937 M	\$5,014 M	\$5,107 M	\$4,423 M	\$24,090 M	21.0%
FIRE	\$5,442 M	\$5,356 M	\$5,402 M	\$5,415 M	\$4,817 M	\$320,422 M	1.7%
Hotels and Lodging Places	\$6,565 M	\$6,408 M	\$6,521 M	\$6,650 M	\$5,736 M	\$10,234 M	64.1%
Personal Services	\$285 M	\$281 M	\$283 M	\$284 M	\$252 M	\$16,017 M	1.8%
Business Services	\$2,921 M	\$2,877 M	\$2,899 M	\$2,902 M	\$2,589 M	\$132,967 M	2.2%
Automobile Rental and Leasing	\$1,230 M	\$1,211 M	\$1,234 M	\$1,254 M	\$1,084 M	\$3,480 M	35.4%
Auto Repair Services	\$432 M	\$426 M	\$429 M	\$429 M	\$384 M	\$19,299 M	2.2%
All Other Services	\$5,948 M	\$5,846 M	\$5,899 M	\$5,923 M	\$5,256 M	\$372,130 M	1.6%
Amusement and Recreation Services, N.E.C.	\$1,230 M	\$1,194 M	\$1,213 M	\$1,239 M	\$1,069 M	\$20,783 M	5.9%
Other State and Local Govt Enterprises	\$326 M	\$322 M	\$324 M	\$324 M	\$289 M	\$8,660 M	3.8%
Other Federal Government Enterprises	\$21 M	\$21 M	\$21 M	\$21 M	\$19 M	\$592 M	3.6%
Household Income *	\$26,968 M	\$34,841 M	\$35,073 M	\$35,059 M	\$31,559 M	\$676,244 M	4.0%
Total Outlay	\$98,165 M	\$96,718 M	\$97,414 M	\$97,421 M	\$87,044 M	\$1,623,166 M	6.0%
Percentage of Total SCAG Regional Economy	6.0%	6.0%	6.0%	6.0%	5.4%	100.0%	

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

Table F-2

Level-1,2,and 3 Combined Total Economic Impacts

2020 SCAG REGION INCOME ATTRIBUTABLE TO AIRPORT RELATED ECONOMIC ACTIVITY
(In Millions of 1998 \$s)

Sector	RTP Medium	H2C	SCE #8	SCE #9	SCE #6	2020 Economy Total	RTP % of Total Economy
Livestock & Livestock Products	\$10 M	\$17 M	\$17 M	\$17 M	\$15 M	\$509 M	2.0%
Agriculture	\$12 M	\$16 M	\$16 M	\$16 M	\$14 M	\$920 M	1.3%
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	\$5 M	1.6%
Commercial Fishing	\$8 M	\$8 M	\$8 M	\$8 M	\$8 M	\$24 M	35.6%
Agricultural Services	\$16 M	\$32 M	\$32 M	\$32 M	\$29 M	\$3,317 M	0.5%
Mining	\$12 M	\$13 M	\$13 M	\$13 M	\$12 M	\$175 M	6.8%
Construction	\$208 M	\$348 M	\$352 M	\$353 M	\$313 M	\$19,312 M	1.1%
Food Processing	\$67 M	\$123 M	\$125 M	\$126 M	\$111 M	\$3,953 M	1.7%
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	\$4 M	1.9%
Textiles	\$71 M	\$74 M	\$74 M	\$74 M	\$67 M	\$1,085 M	6.5%
Apparel	\$322 M	\$328 M	\$329 M	\$326 M	\$296 M	\$3,980 M	8.1%
Wood Products	\$7 M	\$9 M	\$9 M	\$9 M	\$8 M	\$947 M	0.7%
Furniture	\$68 M	\$72 M	\$72 M	\$71 M	\$65 M	\$2,156 M	3.1%
Pulp and Paper	\$75 M	\$100 M	\$100 M	\$100 M	\$90 M	\$2,463 M	3.1%
Printing & Publishing	\$184 M	\$246 M	\$246 M	\$247 M	\$222 M	\$6,894 M	2.7%
Chemicals	\$159 M	\$177 M	\$178 M	\$177 M	\$160 M	\$3,985 M	4.0%
Petroleum & Coal Products	\$126 M	\$133 M	\$133 M	\$133 M	\$120 M	\$1,364 M	9.2%
Rubber Products	\$45 M	\$45 M	\$45 M	\$44 M	\$40 M	\$5,696 M	0.8%
Leather Products	\$8 M	\$10 M	\$10 M	\$10 M	\$9 M	\$67 M	12.2%
Stone Clay & Glass Products	\$25 M	\$26 M	\$26 M	\$26 M	\$24 M	\$1,449 M	1.7%
Primary Metals	\$72 M	\$72 M	\$72 M	\$71 M	\$65 M	\$1,594 M	4.5%
Fabricated Metals	\$150 M	\$162 M	\$162 M	\$151 M	\$137 M	\$5,669 M	2.6%
Industrial Machinery	\$441 M	\$441 M	\$443 M	\$438 M	\$398 M	\$2,346 M	18.8%
Electrical Machinery	\$2,705 M	\$2,723 M	\$2,731 M	\$2,703 M	\$2,457 M	\$12,137 M	22.3%
Transportation Equipment	\$1,572 M	\$1,561 M	\$1,565 M	\$1,549 M	\$1,409 M	\$14,524 M	10.8%
Scientific Instruments	\$1,791 M	\$1,790 M	\$1,795 M	\$1,776 M	\$1,615 M	\$13,505 M	13.3%
Miscellaneous Manufacturing	\$201 M	\$212 M	\$213 M	\$211 M	\$191 M	\$1,288 M	15.8%
Railroads and Related Services	\$28 M	\$36 M	\$36 M	\$35 M	\$32 M	\$662 M	4.2%
Local, Interurban Passenger Transit	\$27 M	\$254 M	\$258 M	\$263 M	\$227 M	\$737 M	3.7%
Motor Freight Transport and Warehousing	\$141 M	\$193 M	\$194 M	\$194 M	\$174 M	\$8,465 M	1.7%
Water Transportation	\$20 M	\$25 M	\$25 M	\$25 M	\$22 M	\$1,451 M	1.4%
Air Transportation	\$7,756 M	\$7,712 M	\$7,731 M	\$7,650 M	\$6,959 M	\$7,775 M	99.8%
Other Transportation	\$847 M	\$1,213 M	\$1,221 M	\$1,221 M	\$1,091 M	\$15,213 M	5.6%
Communications & Public Utilities	\$378 M	\$609 M	\$513 M	\$514 M	\$458 M	\$14,020 M	2.7%
Wholesale Trade	\$1,163 M	\$1,320 M	\$1,327 M	\$1,322 M	\$1,189 M	\$42,893 M	2.7%
Other Retail Trade	\$1,801 M	\$1,828 M	\$1,850 M	\$1,875 M	\$1,640 M	\$40,286 M	4.5%
Eating & Drinking	\$566 M	\$1,895 M	\$1,924 M	\$1,960 M	\$1,697 M	\$9,246 M	6.1%
FIRE	\$708 M	\$797 M	\$804 M	\$806 M	\$717 M	\$47,667 M	1.5%
Hotels and Lodging Places	\$519 M	\$2,450 M	\$2,493 M	\$2,543 M	\$2,193 M	\$3,913 M	13.3%
Personal Services	\$80 M	\$132 M	\$133 M	\$134 M	\$119 M	\$7,527 M	1.1%
Business Services	\$1,098 M	\$1,631 M	\$1,643 M	\$1,645 M	\$1,467 M	\$75,374 M	1.5%
Automobile Rental and Leasing	\$101 M	\$343 M	\$350 M	\$356 M	\$307 M	\$987 M	10.2%
Auto Repair Services	\$114 M	\$154 M	\$155 M	\$155 M	\$139 M	\$6,990 M	1.6%
All Other Services	\$1,793 M	\$3,112 M	\$3,140 M	\$3,153 M	\$2,798 M	\$198,086 M	0.9%
Amusement and Recreation Services, N.E.C.	\$86 M	\$429 M	\$436 M	\$445 M	\$384 M	\$7,473 M	1.1%
Other State and Local Govt Enterprises	\$47 M	\$72 M	\$72 M	\$72 M	\$65 M	\$1,932 M	2.4%
Other Federal Government Enterprises	\$4 M	\$6 M	\$6 M	\$6 M	\$6 M	\$172 M	2.4%
Household Income	\$1,335 M	\$2,002 M	\$2,002 M	\$2,002 M	\$2,002 M	\$76,006 M	1.8%
Total Outlay	\$26,968 M	\$34,841 M	\$35,073 M	\$35,059 M	\$31,559 M	\$676,244 M	4.0%
Percentage of Total SCAG Regional Economy	4.0%	5.2%	5.2%	5.2%	4.7%	100.0%	

Table F-3
Level-1,2,and 3 Combined Total Economic Impacts

**2020 SCAG REGION EMPLOYMENT
ATTRIBUTABLE TO AIRPORT RELATED ECONOMIC ACTIVITY
(In Millions of 1998 \$s)**

Sector	RTP Total	H2C Total	SCE 8 Total	SCE 9 Total	SCE 6 Total	2020 Economy Total	RTP Percent of Total
Livestock & Livestock Products	319	314	317	318	282	9,524	3.4%
Agriculture	466	459	462	462	414	26,525	1.8%
Forestry & Forest Products	6	6	6	8	5	352	1.7%
Commercial Fishing	227	225	226	223	203	634	35.8%
Agricultural Services	2,093	2,056	2,078	2,092	1,847	212,131	1.0%
Mining	273	269	271	269	243	3,563	7.6%
Construction	7,643	7,520	7,587	7,611	6,762	416,776	1.8%
Food Processing	1,709	1,676	1,694	1,707	1,505	53,650	3.2%
Tobacco	1	1	1	1	1	26	2.4%
Textiles	1,753	1,737	1,743	1,727	1,567	25,399	6.9%
Apparel	7,825	7,756	7,778	7,703	6,997	94,132	8.3%
Wood Products	230	227	229	228	205	24,498	0.9%
Furniture	1,475	1,461	1,468	1,454	1,318	44,031	3.4%
Pulp and Paper	1,256	1,239	1,247	1,245	1,116	30,624	4.1%
Printing & Publishing	4,600	4,538	4,568	4,560	4,086	127,093	3.6%
Chemicals	1,777	1,758	1,765	1,754	1,585	39,484	4.5%
Petroleum & Coal Products	575	569	571	568	513	5,843	9.8%
Rubber Products	588	583	584	578	526	74,153	0.8%
Leather Products	300	296	298	296	267	2,047	14.6%
Stone Clay & Glass Products	321	318	319	317	287	17,571	1.8%
Primary Metals	780	773	775	767	698	17,176	4.5%
Fabricated Metals	1,865	1,848	1,853	1,835	1,667	68,969	2.7%
Industrial Machinery	4,888	4,846	4,859	4,809	4,373	25,753	19.0%
Electrical Machinery	28,600	28,351	28,427	28,142	25,580	126,355	22.6%
Transportation Equipment	12,485	12,380	12,410	12,280	11,171	115,172	10.8%
Scientific Instruments	13,352	13,238	13,272	13,135	11,944	99,857	13.4%
Miscellaneous Manufacturing	4,189	4,149	4,163	4,127	3,742	25,229	16.6%
Railroads and Related Services	330	326	327	327	293	6,093	5.4%
Local, Interurban Passenger Transit	7,881	7,675	7,797	7,947	6,874	27,655	28.5%
Motor Freight Transport and Warehousing	2,868	2,828	2,848	2,845	2,546	123,942	2.3%
Water Transportation	215	212	213	212	191	12,416	1.7%
Air Transportation	109,883	108,955	109,225	108,084	98,315	109,842	100.0%
Other Transportation	17,650	17,395	17,521	17,518	15,656	218,217	8.1%
Communications & Public Utilities	5,047	4,969	5,010	5,020	4,469	136,950	3.7%
Wholesale Trade	19,369	19,131	19,238	19,166	17,233	621,715	3.1%
Other Retail Trade	60,090	58,533	59,225	60,043	52,517	1,289,807	4.7%
Eating & Drinking	132,528	129,113	131,117	133,541	115,658	629,965	21.0%
FIRE	14,150	13,927	14,046	14,080	12,526	833,138	1.7%
Hotels and Lodging Places	87,658	85,668	87,076	88,804	76,595	136,655	64.1%
Personal Services	5,558	5,468	5,517	5,536	4,916	312,010	1.6%
Business Services	39,452	38,862	39,162	39,197	34,967	1,796,131	2.2%
Automobile Rental and Leasing	9,506	9,351	9,530	9,687	8,372	26,884	35.4%
Auto Repair Services	4,561	4,498	4,530	4,527	4,048	203,697	2.2%
All Other Services	63,967	62,870	63,439	63,793	56,523	4,002,247	1.9%
Amusement and Recreation Services, N.E.C.	17,467	16,957	17,226	17,593	15,183	295,119	5.9%
Other State and Local Govt Enterprises	1,332	1,312	1,322	1,323	1,181	35,340	3.8%
Other Federal Government Enterprises	82	81	81	81	73	2,262	3.6%
Household Income	7,099	6,998	7,047	7,044	6,299	127,670	5.6%
Total Outlay	706,287	693,620	700,464	704,492	623,336	12,634,322	5.6%
Percentage of Total SCAG Regional Economy	5.6%	5.5%	5.6%	5.6%	4.9%	100.0%	

Table F-4

Level-1,2,and 3 Combined Total Economic Impacts

2020 SCAG REGION TAXES ATTRIBUTABLE TO AIRPORT RELATED ECONOMIC ACTIVITY
(In Millions of 1998 \$s)

Sector	RTP Total	H2C Total	SCE 8 Total	SCE 9 Total	SCE 6 Total	2020 Economy Total	RTP Percent of Total
Livestock & Livestock Products	\$1 M	\$1 M	\$1 M	\$1 M	\$0 M	\$16 M	3.4%
Agriculture	\$1 M	\$1 M	\$1 M	\$1 M	\$1 M	\$57 M	1.8%
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	\$5 M	1.7%
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	\$1 M	35.8%
Agricultural Services	\$2 M	\$1 M	\$2 M	\$2 M	\$1 M	\$153 M	1.0%
Mining	\$4 M	\$3 M	\$3 M	\$3 M	\$3 M	\$46 M	7.6%
Construction	\$7 M	\$7 M	\$7 M	\$7 M	\$6 M	\$369 M	1.8%
Food Processing	\$19 M	\$18 M	\$19 M	\$19 M	\$16 M	\$586 M	3.2%
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	\$1 M	2.4%
Textiles	\$2 M	\$2 M	\$2 M	\$2 M	\$2 M	\$30 M	6.9%
Apparel	\$5 M	\$5 M	\$5 M	\$5 M	\$4 M	\$59 M	8.3%
Wood Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	\$15 M	0.9%
Furniture	\$1 M	\$1 M	\$1 M	\$1 M	\$1 M	\$42 M	3.4%
Pulp and Paper	\$5 M	\$5 M	\$5 M	\$5 M	\$4 M	\$122 M	4.1%
Printing & Publishing	\$7 M	\$7 M	\$7 M	\$7 M	\$6 M	\$200 M	3.6%
Chemicals	\$9 M	\$9 M	\$9 M	\$9 M	\$8 M	\$193 M	4.5%
Petroleum & Coal Products	\$67 M	\$67 M	\$67 M	\$66 M	\$60 M	\$683 M	9.8%
Rubber Products	\$1 M	\$1 M	\$1 M	\$1 M	\$1 M	\$154 M	0.8%
Leather Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	\$1 M	14.6%
Stone Clay & Glass Products	\$1 M	\$1 M	\$1 M	\$1 M	\$1 M	\$69 M	1.8%
Primary Metals	\$4 M	\$4 M	\$4 M	\$4 M	\$4 M	\$92 M	4.5%
Fabricated Metals	\$5 M	\$5 M	\$5 M	\$5 M	\$5 M	\$190 M	2.7%
Industrial Machinery	\$11 M	\$11 M	\$11 M	\$11 M	\$10 M	\$59 M	19.0%
Electrical Machinery	\$82 M	\$82 M	\$82 M	\$81 M	\$74 M	\$363 M	22.6%
Transportation Equipment	\$43 M	\$43 M	\$43 M	\$42 M	\$38 M	\$396 M	10.8%
Scientific Instruments	\$35 M	\$35 M	\$35 M	\$35 M	\$32 M	\$264 M	13.4%
Miscellaneous Manufacturing	\$13 M	\$13 M	\$13 M	\$13 M	\$12 M	\$78 M	16.6%
Railroads and Related Services	\$2 M	\$2 M	\$2 M	\$2 M	\$2 M	\$44 M	5.4%
Local, Interurban Passenger Transit	\$5 M	\$5 M	\$5 M	\$5 M	\$5 M	\$15 M	35.4%
Motor Freight Transport and Warehousing	\$9 M	\$9 M	\$9 M	\$9 M	\$8 M	\$410 M	2.3%
Water Transportation	\$3 M	\$3 M	\$3 M	\$3 M	\$3 M	\$183 M	1.7%
Air Transportation	\$581 M	\$576 M	\$578 M	\$572 M	\$520 M	\$581 M	100.0%
Other Transportation	\$20 M	\$19 M	\$20 M	\$20 M	\$18 M	\$244 M	8.1%
Communications & Public Utilities	\$157 M	\$155 M	\$156 M	\$157 M	\$139 M	\$4,270 M	3.7%
Wholesale Trade	\$507 M	\$501 M	\$504 M	\$502 M	\$451 M	\$16,279 M	3.1%
Other Retail Trade	\$1,766 M	\$1,720 M	\$1,740 M	\$1,764 M	\$1,543 M	\$12,633 M	14.0%
Eating & Drinking	\$362 M	\$352 M	\$358 M	\$364 M	\$316 M	\$1,719 M	21.0%
FIRE	\$554 M	\$545 M	\$550 M	\$551 M	\$491 M	\$32,627 M	1.7%
Hotels and Lodging Places	\$426 M	\$416 M	\$424 M	\$432 M	\$373 M	\$665 M	64.1%
Personal Services	\$8 M	\$8 M	\$8 M	\$8 M	\$7 M	\$453 M	1.8%
Business Services	\$54 M	\$53 M	\$54 M	\$54 M	\$48 M	\$2,471 M	2.2%
Automobile Rental and Leasing	\$86 M	\$85 M	\$86 M	\$88 M	\$76 M	\$243 M	35.4%
Auto Repair Services	\$18 M	\$18 M	\$18 M	\$18 M	\$16 M	\$817 M	2.2%
All Other Services	\$66 M	\$65 M	\$65 M	\$66 M	\$58 M	\$4,122 M	1.8%
Amusement and Recreation Services, N.E.C.	\$58 M	\$56 M	\$57 M	\$58 M	\$50 M	\$974 M	5.9%
Other State and Local Govt Enterprises	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.8%
Other Federal Government Enterprises	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.6%
Household Income	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4.9%
Total Outlay	\$5,010 M	\$4,913 M	\$4,962 M	\$4,995 M	\$4,415 M	\$82,995 M	6.0%
Percentage of Total SCAG Regional Economy	6.0%	5.9%	6.0%	6.0%	5.3%	100.0%	



APPENDIX G

**SCAG REGION
DETAILED 55-SECTOR MODEL ECONOMIC IMPACTS
BY 2020 RTP FORECAST SCENARIO
FOR:
OUTPUT, INCOME, EMPLOYMENT, AND TAXES**

LEVEL-1 RTP MEDIUM
SCAG REGION 2020 AIR TRANSPORTATION SERVICES IMPACTS

Sector	Millions Of 1998 \$s					Employment impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$11 M	\$11 M	\$3 M	\$0 M	50
Agriculture	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	61
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Agricultural Services	\$0 M	\$8 M	\$8 M	\$5 M	\$0 M	322
Mining	\$0 M	\$29 M	\$29 M	\$7 M	\$2 M	137
Construction	\$0 M	\$189 M	\$189 M	\$78 M	\$1 M	1,674
Food Processing	\$0 M	\$171 M	\$171 M	\$27 M	\$4 M	365
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$16 M	\$16 M	\$4 M	\$0 M	90
Apparel	\$0 M	\$26 M	\$26 M	\$7 M	\$0 M	160
Wood Products	\$0 M	\$4 M	\$4 M	\$1 M	\$0 M	33
Furniture	\$0 M	\$18 M	\$18 M	\$5 M	\$0 M	107
Pulp and Paper	\$0 M	\$60 M	\$60 M	\$14 M	\$1 M	174
Printing & Publishing	\$0 M	\$159 M	\$159 M	\$60 M	\$2 M	1,114
Chemicals	\$0 M	\$92 M	\$92 M	\$18 M	\$1 M	182
Petroleum & Coal Products	\$0 M	\$1,439 M	\$1,439 M	\$102 M	\$51 M	438
Rubber Products	\$0 M	\$2 M	\$2 M	\$0 M	\$0 M	5
Leather Products	\$0 M	\$5 M	\$5 M	\$2 M	\$0 M	51
Stone Clay & Glass Products	\$0 M	\$3 M	\$3 M	\$1 M	\$0 M	10
Primary Metals	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	2
Fabricated Metals	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	35
Industrial Machinery	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	34
Electrical Machinery	\$0 M	\$156 M	\$156 M	\$44 M	\$1 M	457
Transportation Equipment	\$0 M	\$17 M	\$17 M	\$6 M	\$0 M	47
Scientific Instruments	\$0 M	\$34 M	\$34 M	\$12 M	\$0 M	87
Miscellaneous Manufacturing	\$0 M	\$38 M	\$38 M	\$11 M	\$1 M	224
Railroads and Related Services	\$0 M	\$23 M	\$23 M	\$9 M	\$1 M	84
Local, Interurban Passenger Transit	\$0 M	\$16 M	\$16 M	\$10 M	\$0 M	363
Motor Freight Transport and Warehousing	\$0 M	\$126 M	\$126 M	\$41 M	\$2 M	597
Water Transportation	\$0 M	\$44 M	\$44 M	\$12 M	\$2 M	105
Air Transportation	\$18,090 M	\$367 M	\$18,457 M	\$7,721 M	\$577 M	109,078
Other Transportation	\$0 M	\$1,168 M	\$1,168 M	\$762 M	\$12 M	10,928
Communications & Public Utilities	\$0 M	\$635 M	\$635 M	\$146 M	\$44 M	1,427
Wholesale Trade	\$0 M	\$592 M	\$592 M	\$240 M	\$91 M	3,484
Other Retail Trade	\$0 M	\$1,690 M	\$1,690 M	\$289 M	\$272 M	9,283
Eating & Drinking	\$0 M	\$361 M	\$361 M	\$139 M	\$26 M	9,443
FIRE	\$0 M	\$1,569 M	\$1,569 M	\$233 M	\$160 M	4,079
Hotels and Lodging Places	\$0 M	\$117 M	\$117 M	\$45 M	\$8 M	1,562
Personal Services	\$0 M	\$76 M	\$76 M	\$36 M	\$2 M	1,476
Business Services	\$0 M	\$933 M	\$933 M	\$529 M	\$17 M	12,597
Automobile Rental and Leasing	\$0 M	\$29 M	\$29 M	\$8 M	\$2 M	222
Auto Repair Services	\$0 M	\$102 M	\$102 M	\$37 M	\$4 M	1,080
All Other Services	\$0 M	\$1,482 M	\$1,482 M	\$789 M	\$16 M	15,940
Amusement and Recreation Services, N.E.C.	\$0 M	\$45 M	\$45 M	\$16 M	\$2 M	636
Other State and Local Govt Enterprises	\$0 M	\$93 M	\$93 M	\$21 M	\$0 M	378
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	27
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,451
Total Outlay	\$18,090 M	\$11,978 M	\$30,068 M	\$12,167 M	\$1,304 M	191,080

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-2 RTP MEDIUM
SCAG REGION 2020 NON-RESIDENT AIR PASSENGER IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$27 M	\$27 M	\$7 M	\$0 M	130
Agriculture	\$0 M	\$14 M	\$14 M	\$5 M	\$0 M	137
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	2
Agricultural Services	\$0 M	\$28 M	\$28 M	\$17 M	\$1 M	1,118
Mining	\$0 M	\$9 M	\$9 M	\$2 M	\$1 M	41
Construction	\$0 M	\$362 M	\$362 M	\$149 M	\$3 M	3,215
Food Processing	\$0 M	\$441 M	\$441 M	\$69 M	\$10 M	941
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$18 M	\$18 M	\$4 M	\$0 M	101
Apparel	\$0 M	\$34 M	\$34 M	\$9 M	\$0 M	205
Wood Products	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	52
Furniture	\$0 M	\$16 M	\$16 M	\$5 M	\$0 M	96
Pulp and Paper	\$0 M	\$116 M	\$116 M	\$27 M	\$1 M	334
Printing & Publishing	\$0 M	\$176 M	\$176 M	\$67 M	\$2 M	1,239
Chemicals	\$0 M	\$108 M	\$108 M	\$22 M	\$1 M	215
Petroleum & Coal Products	\$0 M	\$231 M	\$231 M	\$18 M	\$8 M	70
Rubber Products	\$0 M	\$3 M	\$3 M	\$1 M	\$0 M	8
Leather Products	\$0 M	\$5 M	\$5 M	\$2 M	\$0 M	50
Stone Clay & Glass Products	\$0 M	\$5 M	\$5 M	\$1 M	\$0 M	17
Primary Metals	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	3
Fabricated Metals	\$0 M	\$13 M	\$13 M	\$4 M	\$0 M	47
Industrial Machinery	\$0 M	\$15 M	\$15 M	\$5 M	\$0 M	50
Electrical Machinery	\$0 M	\$156 M	\$156 M	\$44 M	\$1 M	457
Transportation Equipment	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	19
Scientific Instruments	\$0 M	\$41 M	\$41 M	\$15 M	\$0 M	108
Miscellaneous Manufacturing	\$0 M	\$44 M	\$44 M	\$13 M	\$1 M	259
Railroads and Related Services	\$0 M	\$22 M	\$22 M	\$8 M	\$1 M	78
Local, Interurban Passenger Transit	\$384 M	\$17 M	\$401 M	\$238 M	\$5 M	7,042
Motor Freight Transport and Warehousing	\$0 M	\$176 M	\$176 M	\$57 M	\$3 M	837
Water Transportation	\$0 M	\$21 M	\$21 M	\$6 M	\$1 M	49
Air Transportation	\$0 M	\$55 M	\$55 M	\$23 M	\$2 M	326
Other Transportation	\$384 M	\$213 M	\$597 M	\$389 M	\$6 M	5,583
Communications & Public Utilities	\$0 M	\$869 M	\$869 M	\$200 M	\$61 M	1,952
Wholesale Trade	\$0 M	\$687 M	\$687 M	\$279 M	\$106 M	4,039
Other Retail Trade	\$1,948 M	\$5,564 M	\$7,511 M	\$1,286 M	\$1,210 M	41,162
Eating & Drinking	\$4,143 M	\$270 M	\$4,413 M	\$1,694 M	\$315 M	115,403
FIRE	\$0 M	\$2,167 M	\$2,167 M	\$322 M	\$221 M	5,634
Hotels and Lodging Places	\$6,147 M	\$125 M	\$6,272 M	\$2,398 M	\$408 M	83,754
Personal Services	\$0 M	\$122 M	\$122 M	\$58 M	\$3 M	2,386
Business Services	\$0 M	\$1,018 M	\$1,018 M	\$577 M	\$19 M	13,745
Automobile Rental and Leasing	\$1,114 M	\$47 M	\$1,162 M	\$329 M	\$81 M	8,973
Auto Repair Services	\$0 M	\$132 M	\$132 M	\$48 M	\$6 M	1,396
All Other Services	\$868 M	\$1,766 M	\$2,634 M	\$1,402 M	\$29 M	28,332
Amusement and Recreation Services, N.E.C.	\$1,100 M	\$40 M	\$1,140 M	\$410 M	\$53 M	16,191
Other State and Local Govt Enterprises	\$0 M	\$114 M	\$114 M	\$25 M	\$0 M	466
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	28
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,182
Total Outlay	\$16,087 M	\$15,310 M	\$31,397 M	\$10,907 M	\$2,559 M	348,471

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1 AND LEVEL-2 RTP MEDIUM
SCAG REGION 2020 AIR SERVICES AND NON-RESIDENT AIR PASSENGER IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$38 M	\$38 M	\$3 M	\$0 M	181
Agriculture	\$0 M	\$20 M	\$20 M	\$2 M	\$0 M	197
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	1
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	2
Agricultural Services	\$0 M	\$36 M	\$36 M	\$6 M	\$1 M	1,439
Mining	\$0 M	\$37 M	\$37 M	\$7 M	\$2 M	178
Construction	\$0 M	\$551 M	\$551 M	\$80 M	\$4 M	4,889
Food Processing	\$0 M	\$612 M	\$612 M	\$37 M	\$14 M	1,305
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$34 M	\$34 M	\$4 M	\$0 M	191
Apparel	\$0 M	\$60 M	\$60 M	\$7 M	\$0 M	365
Wood Products	\$0 M	\$10 M	\$10 M	\$1 M	\$0 M	86
Furniture	\$0 M	\$34 M	\$34 M	\$5 M	\$0 M	203
Pulp and Paper	\$0 M	\$176 M	\$176 M	\$15 M	\$2 M	509
Printing & Publishing	\$0 M	\$335 M	\$335 M	\$62 M	\$4 M	2,353
Chemicals	\$0 M	\$200 M	\$200 M	\$19 M	\$2 M	397
Petroleum & Coal Products	\$0 M	\$1,670 M	\$1,670 M	\$110 M	\$59 M	508
Rubber Products	\$0 M	\$4 M	\$4 M	\$0 M	\$0 M	13
Leather Products	\$0 M	\$10 M	\$10 M	\$2 M	\$0 M	101
Stone Clay & Glass Products	\$0 M	\$8 M	\$8 M	\$1 M	\$0 M	27
Primary Metals	\$0 M	\$2 M	\$2 M	\$0 M	\$0 M	5
Fabricated Metals	\$0 M	\$22 M	\$22 M	\$3 M	\$0 M	81
Industrial Machinery	\$0 M	\$24 M	\$24 M	\$3 M	\$0 M	83
Electrical Machinery	\$0 M	\$313 M	\$313 M	\$45 M	\$3 M	914
Transportation Equipment	\$0 M	\$24 M	\$24 M	\$6 M	\$0 M	66
Scientific Instruments	\$0 M	\$75 M	\$75 M	\$12 M	\$1 M	195
Miscellaneous Manufacturing	\$0 M	\$82 M	\$82 M	\$12 M	\$1 M	483
Railroads and Related Services	\$0 M	\$45 M	\$45 M	\$10 M	\$1 M	163
Local, Interurban Passenger Transit	\$384 M	\$33 M	\$417 M	\$15 M	\$5 M	7,404
Motor Freight Transport and Warehousing	\$0 M	\$302 M	\$302 M	\$44 M	\$5 M	1,434
Water Transportation	\$0 M	\$65 M	\$65 M	\$13 M	\$2 M	154
Air Transportation	\$18,090 M	\$422 M	\$18,512 M	\$7,722 M	\$579 M	109,404
Other Transportation	\$384 M	\$1,382 M	\$1,765 M	\$768 M	\$18 M	16,511
Communications & Public Utilities	\$0 M	\$1,504 M	\$1,504 M	\$207 M	\$105 M	3,379
Wholesale Trade	\$0 M	\$1,279 M	\$1,279 M	\$346 M	\$197 M	7,523
Other Retail Trade	\$1,948 M	\$7,254 M	\$9,202 M	\$1,499 M	\$1,482 M	50,425
Eating & Drinking	\$4,143 M	\$631 M	\$4,774 M	\$453 M	\$341 M	124,848
FIRE	\$0 M	\$3,735 M	\$3,735 M	\$454 M	\$380 M	9,713
Hotels and Lodging Places	\$6,147 M	\$242 M	\$6,389 M	\$452 M	\$415 M	85,316
Personal Services	\$0 M	\$198 M	\$198 M	\$39 M	\$6 M	3,862
Business Services	\$0 M	\$1,950 M	\$1,950 M	\$548 M	\$36 M	26,342
Automobile Rental and Leasing	\$1,114 M	\$76 M	\$1,190 M	\$89 M	\$83 M	9,195
Auto Repair Services	\$0 M	\$235 M	\$235 M	\$43 M	\$10 M	2,476
All Other Services	\$868 M	\$3,248 M	\$4,116 M	\$818 M	\$46 M	44,272
Amusement and Recreation Services, N.E.C.	\$1,100 M	\$85 M	\$1,185 M	\$70 M	\$56 M	16,827
Other State and Local Govt Enterprises	\$0 M	\$207 M	\$207 M	\$21 M	\$0 M	845
Other Federal Government Enterprises	\$0 M	\$14 M	\$14 M	\$2 M	\$0 M	55
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	4,632
Total Outlay	\$34,177 M	\$27,287 M	\$61,465 M	\$14,725 M	\$3,863 M	539,551

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-3 RTP MEDIUM
SCAG REGION 2020 AIR CARGO IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$17 M	\$12 M	\$29 M	\$7 M	\$0 M	138
Agriculture	\$18 M	\$10 M	\$27 M	\$9 M	\$1 M	269
Forestry & Forest Products	\$1 M	\$0 M	\$1 M	\$0 M	\$0 M	5
Commercial Fishing	\$16 M	\$0 M	\$16 M	\$8 M	\$0 M	225
Agricultural Services	\$0 M	\$16 M	\$16 M	\$10 M	\$0 M	654
Mining	\$0 M	\$20 M	\$20 M	\$5 M	\$1 M	94
Construction	\$0 M	\$310 M	\$310 M	\$128 M	\$2 M	2,754
Food Processing	\$23 M	\$166 M	\$189 M	\$30 M	\$4 M	403
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$42 M	\$236 M	\$278 M	\$67 M	\$2 M	1,563
Apparel	\$1,142 M	\$81 M	\$1,223 M	\$315 M	\$5 M	7,460
Wood Products	\$3 M	\$13 M	\$17 M	\$6 M	\$0 M	145
Furniture	\$137 M	\$77 M	\$214 M	\$62 M	\$1 M	1,272
Pulp and Paper	\$23 M	\$236 M	\$259 M	\$60 M	\$3 M	747
Printing & Publishing	\$150 M	\$169 M	\$320 M	\$122 M	\$4 M	2,247
Chemicals	\$362 M	\$335 M	\$697 M	\$139 M	\$7 M	1,380
Petroleum & Coal Products	\$9 M	\$211 M	\$220 M	\$16 M	\$8 M	67
Rubber Products	\$179 M	\$11 M	\$190 M	\$44 M	\$1 M	575
Leather Products	\$12 M	\$8 M	\$20 M	\$7 M	\$0 M	199
Stone Clay & Glass Products	\$71 M	\$11 M	\$82 M	\$24 M	\$1 M	294
Primary Metals	\$309 M	\$44 M	\$353 M	\$72 M	\$4 M	775
Fabricated Metals	\$353 M	\$139 M	\$492 M	\$147 M	\$5 M	1,783
Industrial Machinery	\$1,284 M	\$125 M	\$1,409 M	\$438 M	\$11 M	4,805
Electrical Machinery	\$7,165 M	\$2,312 M	\$9,477 M	\$2,859 M	\$80 M	27,686
Transportation Equipment	\$4,528 M	\$40 M	\$4,568 M	\$1,566 M	\$43 M	12,419
Scientific Instruments	\$4,734 M	\$317 M	\$5,051 M	\$1,779 M	\$35 M	13,157
Miscellaneous Manufacturing	\$564 M	\$66 M	\$630 M	\$189 M	\$11 M	3,706
Railroads and Related Services	\$0 M	\$47 M	\$47 M	\$18 M	\$1 M	167
Local, Interurban Passenger Transit	\$0 M	\$21 M	\$21 M	\$13 M	\$0 M	476
Motor Freight Transport and Warehousing	\$0 M	\$302 M	\$302 M	\$98 M	\$5 M	1,434
Water Transportation	\$0 M	\$25 M	\$25 M	\$7 M	\$1 M	60
Air Transportation	\$0 M	\$81 M	\$81 M	\$34 M	\$3 M	479
Other Transportation	\$0 M	\$122 M	\$122 M	\$79 M	\$1 M	1,139
Communications & Public Utilities	\$0 M	\$743 M	\$743 M	\$171 M	\$52 M	1,668
Wholesale Trade	\$0 M	\$2,014 M	\$2,014 M	\$817 M	\$310 M	11,846
Other Retail Trade	\$0 M	\$1,764 M	\$1,764 M	\$302 M	\$284 M	9,665
Eating & Drinking	\$0 M	\$294 M	\$294 M	\$113 M	\$21 M	7,682
FIRE	\$0 M	\$1,706 M	\$1,706 M	\$254 M	\$174 M	4,437
Hotels and Lodging Places	\$0 M	\$175 M	\$175 M	\$67 M	\$11 M	2,342
Personal Services	\$0 M	\$87 M	\$87 M	\$41 M	\$2 M	1,696
Business Services	\$0 M	\$971 M	\$971 M	\$550 M	\$18 M	13,110
Automobile Rental and Leasing	\$0 M	\$40 M	\$40 M	\$11 M	\$3 M	310
Auto Repair Services	\$0 M	\$198 M	\$198 M	\$72 M	\$8 M	2,085
All Other Services	\$0 M	\$1,831 M	\$1,831 M	\$975 M	\$20 M	19,695
Amusement and Recreation Services, N.E.C.	\$0 M	\$45 M	\$45 M	\$16 M	\$2 M	640
Other State and Local Govt Enterprises	\$0 M	\$119 M	\$119 M	\$27 M	\$0 M	487
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	27
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,467
Total Outlay	\$21,142 M	\$15,558 M	\$36,700 M	\$12,243 M	\$1,147 M	166,736

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1, LEVEL-2, AND LEVEL-3 RTP MEDIUM
COMBINED SCAG REGION 2020 AIR TRANSPORTATION SERVICES, NON-RESIDENT AIR
PASSENGER IMPACTS, AND AIR CARGO IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$17 M	\$50 M	\$67 M	\$10 M	\$1 M	319
Agriculture	\$18 M	\$30 M	\$47 M	\$12 M	\$1 M	466
Forestry & Forest Products	\$1 M	\$1 M	\$1 M	\$0 M	\$0 M	6
Commercial Fishing	\$16 M	\$0 M	\$16 M	\$8 M	\$0 M	227
Agricultural Services	\$0 M	\$52 M	\$52 M	\$16 M	\$2 M	2,093
Mining	\$0 M	\$57 M	\$57 M	\$12 M	\$4 M	273
Construction	\$0 M	\$861 M	\$861 M	\$208 M	\$7 M	7,643
Food Processing	\$23 M	\$778 M	\$801 M	\$67 M	\$19 M	1,709
Tobacco	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	1
Textiles	\$42 M	\$270 M	\$312 M	\$71 M	\$2 M	1,753
Apparel	\$1,142 M	\$140 M	\$1,283 M	\$322 M	\$5 M	7,825
Wood Products	\$3 M	\$23 M	\$26 M	\$7 M	\$0 M	230
Furniture	\$137 M	\$111 M	\$248 M	\$68 M	\$1 M	1,475
Pulp and Paper	\$23 M	\$412 M	\$435 M	\$75 M	\$5 M	1,256
Printing & Publishing	\$150 M	\$504 M	\$655 M	\$184 M	\$7 M	4,600
Chemicals	\$362 M	\$535 M	\$897 M	\$159 M	\$9 M	1,777
Petroleum & Coal Products	\$9 M	\$1,881 M	\$1,890 M	\$126 M	\$67 M	575
Rubber Products	\$179 M	\$15 M	\$194 M	\$45 M	\$1 M	588
Leather Products	\$12 M	\$18 M	\$30 M	\$8 M	\$0 M	300
Stone Clay & Glass Products	\$71 M	\$19 M	\$90 M	\$25 M	\$1 M	321
Primary Metals	\$309 M	\$46 M	\$355 M	\$72 M	\$4 M	780
Fabricated Metals	\$353 M	\$161 M	\$514 M	\$150 M	\$5 M	1,865
Industrial Machinery	\$1,284 M	\$150 M	\$1,434 M	\$441 M	\$11 M	4,888
Electrical Machinery	\$7,165 M	\$2,625 M	\$9,790 M	\$2,705 M	\$82 M	28,600
Transportation Equipment	\$4,528 M	\$64 M	\$4,593 M	\$1,572 M	\$43 M	12,485
Scientific Instruments	\$4,734 M	\$392 M	\$5,126 M	\$1,791 M	\$35 M	13,352
Miscellaneous Manufacturing	\$564 M	\$148 M	\$712 M	\$201 M	\$13 M	4,189
Railroads and Related Services	\$0 M	\$92 M	\$92 M	\$28 M	\$2 M	330
Local, Interurban Passenger Transit	\$384 M	\$55 M	\$438 M	\$27 M	\$5 M	7,881
Motor Freight Transport and Warehousing	\$0 M	\$604 M	\$604 M	\$141 M	\$9 M	2,868
Water Transportation	\$0 M	\$90 M	\$90 M	\$20 M	\$3 M	215
Air Transportation	\$18,090 M	\$503 M	\$18,593 M	\$7,756 M	\$581 M	109,883
Other Transportation	\$384 M	\$1,504 M	\$1,887 M	\$847 M	\$20 M	17,650
Communications & Public Utilities	\$0 M	\$2,246 M	\$2,246 M	\$378 M	\$157 M	5,047
Wholesale Trade	\$0 M	\$3,294 M	\$3,294 M	\$1,163 M	\$507 M	19,369
Other Retail Trade	\$1,948 M	\$9,018 M	\$10,965 M	\$1,801 M	\$1,766 M	60,090
Eating & Drinking	\$4,143 M	\$925 M	\$5,068 M	\$566 M	\$362 M	132,528
FIRE	\$0 M	\$5,442 M	\$5,442 M	\$708 M	\$554 M	14,150
Hotels and Lodging Places	\$6,147 M	\$418 M	\$6,565 M	\$519 M	\$426 M	87,658
Personal Services	\$0 M	\$285 M	\$285 M	\$80 M	\$8 M	5,558
Business Services	\$0 M	\$2,921 M	\$2,921 M	\$1,098 M	\$54 M	39,452
Automobile Rental and Leasing	\$1,114 M	\$116 M	\$1,230 M	\$101 M	\$86 M	9,506
Auto Repair Services	\$0 M	\$432 M	\$432 M	\$114 M	\$18 M	4,581
All Other Services	\$868 M	\$5,080 M	\$5,948 M	\$1,793 M	\$66 M	63,967
Amusement and Recreation Services, N.E.C.	\$1,100 M	\$130 M	\$1,230 M	\$86 M	\$58 M	17,467
Other State and Local Govt Enterprises	\$0 M	\$326 M	\$326 M	\$47 M	\$0 M	1,332
Other Federal Government Enterprises	\$0 M	\$21 M	\$21 M	\$4 M	\$0 M	82
Household Income*	\$0 M	\$0 M	\$0 M	\$1,335 M	\$0 M	7,099
Total Outlay	\$55,320 M	\$42,845 M	\$98,165 M	\$26,968 M	\$5,010 M	706,287

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1 SCENARIO 2C HSR
SCAG REGION 2020 AIR TRANSPORTATION SERVICES IMPACTS**

Sector	Millions Of 1998 \$\$					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	50
Agriculture	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	60
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Agricultural Services	\$0 M	\$8 M	\$8 M	\$5 M	\$0 M	319
Mining	\$0 M	\$28 M	\$28 M	\$7 M	\$2 M	136
Construction	\$0 M	\$187 M	\$187 M	\$77 M	\$1 M	1,660
Food Processing	\$0 M	\$169 M	\$169 M	\$27 M	\$4 M	362
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$16 M	\$16 M	\$4 M	\$0 M	89
Apparel	\$0 M	\$26 M	\$26 M	\$7 M	\$0 M	159
Wood Products	\$0 M	\$4 M	\$4 M	\$1 M	\$0 M	33
Furniture	\$0 M	\$18 M	\$18 M	\$5 M	\$0 M	106
Pulp and Paper	\$0 M	\$60 M	\$60 M	\$14 M	\$1 M	173
Printing & Publishing	\$0 M	\$157 M	\$157 M	\$60 M	\$2 M	1,105
Chemicals	\$0 M	\$91 M	\$91 M	\$18 M	\$1 M	180
Petroleum & Coal Products	\$0 M	\$1,426 M	\$1,426 M	\$101 M	\$51 M	434
Rubber Products	\$0 M	\$2 M	\$2 M	\$0 M	\$0 M	5
Leather Products	\$0 M	\$5 M	\$5 M	\$2 M	\$0 M	50
Stone Clay & Glass Products	\$0 M	\$3 M	\$3 M	\$1 M	\$0 M	10
Primary Metals	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	2
Fabricated Metals	\$0 M	\$9 M	\$9 M	\$3 M	\$0 M	34
Industrial Machinery	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	33
Electrical Machinery	\$0 M	\$155 M	\$155 M	\$44 M	\$1 M	453
Transportation Equipment	\$0 M	\$17 M	\$17 M	\$6 M	\$0 M	47
Scientific Instruments	\$0 M	\$33 M	\$33 M	\$12 M	\$0 M	87
Miscellaneous Manufacturing	\$0 M	\$38 M	\$38 M	\$11 M	\$1 M	222
Railroads and Related Services	\$0 M	\$23 M	\$23 M	\$9 M	\$1 M	84
Local, Interurban Passenger Transit	\$0 M	\$16 M	\$16 M	\$10 M	\$0 M	360
Motor Freight Transport and Warehousing	\$0 M	\$125 M	\$125 M	\$40 M	\$2 M	592
Water Transportation	\$0 M	\$44 M	\$44 M	\$12 M	\$2 M	104
Air Transportation	\$17,938 M	\$364 M	\$18,302 M	\$7,856 M	\$572 M	108,163
Other Transportation	\$0 M	\$1,159 M	\$1,159 M	\$755 M	\$12 M	10,836
Communications & Public Utilities	\$0 M	\$630 M	\$630 M	\$145 M	\$44 M	1,415
Wholesale Trade	\$0 M	\$587 M	\$587 M	\$238 M	\$90 M	3,455
Other Retail Trade	\$0 M	\$1,676 M	\$1,676 M	\$287 M	\$270 M	9,185
Eating & Drinking	\$0 M	\$358 M	\$358 M	\$137 M	\$26 M	9,364
FIRE	\$0 M	\$1,555 M	\$1,555 M	\$231 M	\$158 M	4,044
Hotels and Lodging Places	\$0 M	\$116 M	\$116 M	\$44 M	\$8 M	1,549
Personal Services	\$0 M	\$75 M	\$75 M	\$35 M	\$2 M	1,464
Business Services	\$0 M	\$925 M	\$925 M	\$524 M	\$17 M	12,491
Automobile Rental and Leasing	\$0 M	\$29 M	\$29 M	\$8 M	\$2 M	220
Auto Repair Services	\$0 M	\$101 M	\$101 M	\$37 M	\$4 M	1,071
All Other Services	\$0 M	\$1,470 M	\$1,470 M	\$782 M	\$16 M	15,806
Amusement and Recreation Services, N.E.C.	\$0 M	\$44 M	\$44 M	\$16 M	\$2 M	631
Other State and Local Govt Enterprises	\$0 M	\$92 M	\$92 M	\$21 M	\$0 M	376
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	27
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,430
Total Outlay	\$17,938 M	\$11,877 M	\$29,815 M	\$12,070 M	\$1,293 M	189,476

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-2 SCENARIO 2C HSR
SCAG REGION 2020 NON-RESIDENT AIR PASSENGER IMPACTS**

Sector	Millions Of 1998 \$s					Employment impacts
	Direct Impact	Indirect and Induced impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$27 M	\$27 M	\$7 M	\$0 M	127
Agriculture	\$0 M	\$13 M	\$13 M	\$5 M	\$0 M	133
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	2
Agricultural Services	\$0 M	\$27 M	\$27 M	\$17 M	\$1 M	1,088
Mining	\$0 M	\$8 M	\$8 M	\$2 M	\$1 M	40
Construction	\$0 M	\$353 M	\$353 M	\$145 M	\$3 M	3,129
Food Processing	\$0 M	\$428 M	\$428 M	\$67 M	\$10 M	914
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$18 M	\$18 M	\$4 M	\$0 M	98
Apparel	\$0 M	\$33 M	\$33 M	\$8 M	\$0 M	200
Wood Products	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	51
Furniture	\$0 M	\$16 M	\$16 M	\$5 M	\$0 M	94
Pulp and Paper	\$0 M	\$113 M	\$113 M	\$26 M	\$1 M	325
Printing & Publishing	\$0 M	\$172 M	\$172 M	\$65 M	\$2 M	1,205
Chemicals	\$0 M	\$105 M	\$105 M	\$21 M	\$1 M	209
Petroleum & Coal Products	\$0 M	\$225 M	\$225 M	\$16 M	\$8 M	69
Rubber Products	\$0 M	\$3 M	\$3 M	\$1 M	\$0 M	8
Leather Products	\$0 M	\$5 M	\$5 M	\$2 M	\$0 M	49
Stone Clay & Glass Products	\$0 M	\$5 M	\$5 M	\$1 M	\$0 M	17
Primary Metals	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	3
Fabricated Metals	\$0 M	\$13 M	\$13 M	\$4 M	\$0 M	45
Industrial Machinery	\$0 M	\$14 M	\$14 M	\$4 M	\$0 M	48
Electrical Machinery	\$0 M	\$152 M	\$152 M	\$43 M	\$1 M	445
Transportation Equipment	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	18
Scientific Instruments	\$0 M	\$40 M	\$40 M	\$14 M	\$0 M	105
Miscellaneous Manufacturing	\$0 M	\$43 M	\$43 M	\$13 M	\$1 M	252
Railroads and Related Services	\$0 M	\$21 M	\$21 M	\$8 M	\$1 M	76
Local, Interurban Passenger Transit	\$373 M	\$17 M	\$389 M	\$232 M	\$5 M	6,843
Motor Freight Transport and Warehousing	\$0 M	\$171 M	\$171 M	\$56 M	\$3 M	814
Water Transportation	\$0 M	\$20 M	\$20 M	\$6 M	\$1 M	48
Air Transportation	\$0 M	\$54 M	\$54 M	\$22 M	\$2 M	317
Other Transportation	\$373 M	\$208 M	\$581 M	\$379 M	\$6 M	5,430
Communications & Public Utilities	\$0 M	\$845 M	\$845 M	\$194 M	\$59 M	1,900
Wholesale Trade	\$0 M	\$668 M	\$668 M	\$271 M	\$103 M	3,929
Other Retail Trade	\$1,878 M	\$5,378 M	\$7,256 M	\$1,242 M	\$1,168 M	39,764
Eating & Drinking	\$4,025 M	\$263 M	\$4,288 M	\$1,646 M	\$306 M	112,131
FIRE	\$0 M	\$2,109 M	\$2,109 M	\$314 M	\$215 M	5,483
Hotels and Lodging Places	\$5,996 M	\$122 M	\$6,118 M	\$2,339 M	\$397 M	81,696
Personal Services	\$0 M	\$119 M	\$119 M	\$56 M	\$3 M	2,322
Business Services	\$0 M	\$990 M	\$990 M	\$561 M	\$18 M	13,371
Automobile Rental and Leasing	\$1,096 M	\$46 M	\$1,142 M	\$324 M	\$80 M	8,823
Auto Repair Services	\$0 M	\$129 M	\$129 M	\$47 M	\$5 M	1,359
All Other Services	\$842 M	\$1,718 M	\$2,560 M	\$1,363 M	\$28 M	27,534
Amusement and Recreation Services, N.E.C.	\$1,066 M	\$39 M	\$1,105 M	\$397 M	\$52 M	15,691
Other State and Local Govt Enterprises	\$0 M	\$111 M	\$111 M	\$25 M	\$0 M	454
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	27
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,122
Total Outlay	\$15,649 M	\$14,861 M	\$30,510 M	\$10,625 M	\$2,482 M	338,808

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1 AND LEVEL-2 SCENARIO 2C HSR
SCAG REGION 2020 AIR SERVICESN AND NON-RESIDENT AIR PASSENGER IMPACTS**

Sector	Millions Of 1998 \$\$					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$37 M	\$37 M	\$9 M	\$0 M	177
Agriculture	\$0 M	\$20 M	\$20 M	\$7 M	\$0 M	193
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	1
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	2
Agricultural Services	\$0 M	\$35 M	\$35 M	\$22 M	\$1 M	1,407
Mining	\$0 M	\$37 M	\$37 M	\$9 M	\$2 M	176
Construction	\$0 M	\$540 M	\$540 M	\$222 M	\$4 M	4,789
Food Processing	\$0 M	\$598 M	\$598 M	\$94 M	\$14 M	1,276
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$33 M	\$33 M	\$8 M	\$0 M	187
Apparel	\$0 M	\$59 M	\$59 M	\$15 M	\$0 M	358
Wood Products	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	84
Furniture	\$0 M	\$34 M	\$34 M	\$10 M	\$0 M	199
Pulp and Paper	\$0 M	\$173 M	\$173 M	\$40 M	\$2 M	498
Printing & Publishing	\$0 M	\$329 M	\$329 M	\$125 M	\$4 M	2,310
Chemicals	\$0 M	\$196 M	\$196 M	\$39 M	\$2 M	389
Petroleum & Coal Products	\$0 M	\$1,652 M	\$1,652 M	\$117 M	\$59 M	502
Rubber Products	\$0 M	\$4 M	\$4 M	\$1 M	\$0 M	13
Leather Products	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	99
Stone Clay & Glass Products	\$0 M	\$8 M	\$8 M	\$2 M	\$0 M	27
Primary Metals	\$0 M	\$2 M	\$2 M	\$0 M	\$0 M	5
Fabricated Metals	\$0 M	\$22 M	\$22 M	\$7 M	\$0 M	80
Industrial Machinery	\$0 M	\$24 M	\$24 M	\$7 M	\$0 M	82
Electrical Machinery	\$0 M	\$307 M	\$307 M	\$86 M	\$3 M	898
Transportation Equipment	\$0 M	\$24 M	\$24 M	\$8 M	\$0 M	65
Scientific Instruments	\$0 M	\$73 M	\$73 M	\$26 M	\$1 M	191
Miscellaneous Manufacturing	\$0 M	\$81 M	\$81 M	\$24 M	\$1 M	474
Railroads and Related Services	\$0 M	\$44 M	\$44 M	\$17 M	\$1 M	160
Local, Interurban Passenger Transit	\$373 M	\$33 M	\$405 M	\$241 M	\$5 M	7,202
Motor Freight Transport and Warehousing	\$0 M	\$296 M	\$296 M	\$96 M	\$5 M	1,407
Water Transportation	\$0 M	\$64 M	\$64 M	\$18 M	\$2 M	152
Air Transportation	\$17,938 M	\$417 M	\$18,355 M	\$7,678 M	\$574 M	108,479
Other Transportation	\$373 M	\$1,367 M	\$1,739 M	\$1,134 M	\$18 M	16,266
Communications & Public Utilities	\$0 M	\$1,475 M	\$1,475 M	\$339 M	\$103 M	3,314
Wholesale Trade	\$0 M	\$1,256 M	\$1,256 M	\$509 M	\$193 M	7,384
Other Retail Trade	\$1,878 M	\$7,054 M	\$8,932 M	\$1,529 M	\$1,438 M	48,949
Eating & Drinking	\$4,025 M	\$621 M	\$4,646 M	\$1,783 M	\$332 M	121,495
FIRE	\$0 M	\$3,664 M	\$3,664 M	\$545 M	\$373 M	9,527
Hotels and Lodging Places	\$5,996 M	\$238 M	\$6,234 M	\$2,384 M	\$405 M	83,245
Personal Services	\$0 M	\$194 M	\$194 M	\$91 M	\$5 M	3,786
Business Services	\$0 M	\$1,915 M	\$1,915 M	\$1,085 M	\$36 M	25,882
Automobile Rental and Leasing	\$1,096 M	\$75 M	\$1,171 M	\$332 M	\$82 M	9,044
Auto Repair Services	\$0 M	\$230 M	\$230 M	\$83 M	\$10 M	2,430
All Other Services	\$842 M	\$3,188 M	\$4,030 M	\$2,145 M	\$45 M	43,340
Amusement and Recreation Services, N.E.C.	\$1,066 M	\$83 M	\$1,149 M	\$413 M	\$54 M	16,322
Other State and Local Govt Enterprises	\$0 M	\$203 M	\$203 M	\$45 M	\$0 M	829
Other Federal Government Enterprises	\$0 M	\$14 M	\$14 M	\$4 M	\$0 M	54
Household Income*	\$0 M	\$0 M	\$0 M	\$1,335 M	\$0 M	4,552
Total Outlay	\$33,587 M	\$26,738 M	\$60,325 M	\$22,695 M	\$3,776 M	528,284

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-3 SCENARIO 2C HSR
SCAG REGION 2020 AIR CARGO IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$16 M	\$12 M	\$29 M	\$7 M	\$0 M	137
Agriculture	\$17 M	\$9 M	\$27 M	\$9 M	\$1 M	266
Forestry & Forest Products	\$1 M	\$0 M	\$1 M	\$0 M	\$0 M	5
Commercial Fishing	\$16 M	\$0 M	\$16 M	\$8 M	\$0 M	223
Agricultural Services	\$0 M	\$16 M	\$16 M	\$10 M	\$0 M	649
Mining	\$0 M	\$19 M	\$20 M	\$5 M	\$1 M	94
Construction	\$0 M	\$308 M	\$308 M	\$127 M	\$2 M	2,731
Food Processing	\$23 M	\$165 M	\$187 M	\$29 M	\$4 M	400
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$42 M	\$234 M	\$276 M	\$66 M	\$2 M	1,549
Apparel	\$1,133 M	\$80 M	\$1,213 M	\$313 M	\$5 M	7,398
Wood Products	\$3 M	\$13 M	\$16 M	\$6 M	\$0 M	143
Furniture	\$135 M	\$77 M	\$212 M	\$62 M	\$1 M	1,262
Pulp and Paper	\$23 M	\$234 M	\$257 M	\$60 M	\$3 M	741
Printing & Publishing	\$149 M	\$168 M	\$317 M	\$121 M	\$4 M	2,228
Chemicals	\$359 M	\$332 M	\$691 M	\$138 M	\$7 M	1,369
Petroleum & Coal Products	\$8 M	\$210 M	\$218 M	\$15 M	\$8 M	66
Rubber Products	\$177 M	\$11 M	\$188 M	\$44 M	\$1 M	570
Leather Products	\$12 M	\$8 M	\$20 M	\$6 M	\$0 M	197
Stone Clay & Glass Products	\$70 M	\$11 M	\$82 M	\$24 M	\$1 M	291
Primary Metals	\$306 M	\$44 M	\$350 M	\$71 M	\$4 M	768
Fabricated Metals	\$350 M	\$138 M	\$488 M	\$145 M	\$5 M	1,768
Industrial Machinery	\$1,273 M	\$124 M	\$1,398 M	\$434 M	\$11 M	4,765
Electrical Machinery	\$7,105 M	\$2,293 M	\$9,397 M	\$2,637 M	\$79 M	27,454
Transportation Equipment	\$4,490 M	\$40 M	\$4,530 M	\$1,553 M	\$42 M	12,314
Scientific Instruments	\$4,694 M	\$314 M	\$5,009 M	\$1,764 M	\$34 M	13,046
Miscellaneous Manufacturing	\$559 M	\$65 M	\$625 M	\$188 M	\$11 M	3,675
Railroads and Related Services	\$0 M	\$46 M	\$46 M	\$18 M	\$1 M	166
Local, Interurban Passenger Transit	\$0 M	\$21 M	\$21 M	\$13 M	\$0 M	472
Motor Freight Transport and Warehousing	\$0 M	\$299 M	\$299 M	\$97 M	\$5 M	1,422
Water Transportation	\$0 M	\$25 M	\$25 M	\$7 M	\$1 M	60
Air Transportation	\$0 M	\$80 M	\$80 M	\$34 M	\$3 M	475
Other Transportation	\$0 M	\$121 M	\$121 M	\$79 M	\$1 M	1,129
Communications & Public Utilities	\$0 M	\$736 M	\$736 M	\$169 M	\$52 M	1,654
Wholesale Trade	\$0 M	\$1,997 M	\$1,997 M	\$810 M	\$308 M	11,747
Other Retail Trade	\$0 M	\$1,749 M	\$1,749 M	\$299 M	\$282 M	9,584
Eating & Drinking	\$0 M	\$291 M	\$291 M	\$112 M	\$21 M	7,618
FIRE	\$0 M	\$1,692 M	\$1,692 M	\$252 M	\$172 M	4,400
Hotels and Lodging Places	\$0 M	\$174 M	\$174 M	\$66 M	\$11 M	2,322
Personal Services	\$0 M	\$86 M	\$86 M	\$41 M	\$2 M	1,682
Business Services	\$0 M	\$962 M	\$962 M	\$546 M	\$18 M	13,000
Automobile Rental and Leasing	\$0 M	\$40 M	\$40 M	\$11 M	\$3 M	308
Auto Repair Services	\$0 M	\$196 M	\$196 M	\$71 M	\$8 M	2,067
All Other Services	\$0 M	\$1,816 M	\$1,816 M	\$967 M	\$20 M	19,529
Amusement and Recreation Services, N.E.C.	\$0 M	\$45 M	\$45 M	\$16 M	\$2 M	635
Other State and Local Govt Enterprises	\$0 M	\$118 M	\$118 M	\$26 M	\$0 M	483
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	26
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,446
Total Outlay	\$20,965 M	\$15,427 M	\$36,392 M	\$12,146 M	\$1,137 M	165,336

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1, LEVEL-2, AND LEVEL-3 SCENARIO 2C HSR
COMBINED SCAG REGION 2020 AIR TRANSPORTATION SERVICES, NON-RESIDENT AIR
PASSENGER IMPACTS, AND AIR CARGO IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$16 M	\$49 M	\$66 M	\$17 M	\$1 M	314
Agriculture	\$17 M	\$29 M	\$46 M	\$16 M	\$1 M	459
Forestry & Forest Products	\$1 M	\$1 M	\$1 M	\$0 M	\$0 M	6
Commercial Fishing	\$16 M	\$0 M	\$16 M	\$8 M	\$0 M	225
Agricultural Services	\$0 M	\$51 M	\$51 M	\$32 M	\$1 M	2,056
Mining	\$0 M	\$56 M	\$56 M	\$13 M	\$3 M	269
Construction	\$0 M	\$848 M	\$848 M	\$348 M	\$7 M	7,520
Food Processing	\$23 M	\$763 M	\$785 M	\$123 M	\$18 M	1,676
Tobacco	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	1
Textiles	\$42 M	\$268 M	\$309 M	\$74 M	\$2 M	1,737
Apparel	\$1,133 M	\$139 M	\$1,271 M	\$328 M	\$5 M	7,756
Wood Products	\$3 M	\$23 M	\$26 M	\$9 M	\$0 M	227
Furniture	\$135 M	\$110 M	\$246 M	\$72 M	\$1 M	1,461
Pulp and Paper	\$23 M	\$406 M	\$429 M	\$100 M	\$5 M	1,239
Printing & Publishing	\$149 M	\$497 M	\$646 M	\$246 M	\$7 M	4,538
Chemicals	\$369 M	\$528 M	\$887 M	\$177 M	\$9 M	1,758
Petroleum & Coal Products	\$8 M	\$1,861 M	\$1,870 M	\$133 M	\$67 M	569
Rubber Products	\$177 M	\$15 M	\$192 M	\$45 M	\$1 M	583
Leather Products	\$12 M	\$18 M	\$30 M	\$10 M	\$0 M	296
Stone Clay & Glass Products	\$70 M	\$19 M	\$89 M	\$26 M	\$1 M	318
Primary Metals	\$306 M	\$46 M	\$352 M	\$72 M	\$4 M	773
Fabricated Metals	\$350 M	\$180 M	\$510 M	\$152 M	\$5 M	1,848
Industrial Machinery	\$1,273 M	\$148 M	\$1,422 M	\$441 M	\$11 M	4,846
Electrical Machinery	\$7,105 M	\$2,600 M	\$9,705 M	\$2,723 M	\$82 M	28,351
Transportation Equipment	\$4,490 M	\$64 M	\$4,554 M	\$1,561 M	\$43 M	12,380
Scientific Instruments	\$4,694 M	\$388 M	\$5,082 M	\$1,790 M	\$35 M	13,238
Miscellaneous Manufacturing	\$559 M	\$146 M	\$705 M	\$212 M	\$13 M	4,149
Railroads and Related Services	\$0 M	\$91 M	\$91 M	\$35 M	\$2 M	326
Local, Interurban Passenger Transit	\$373 M	\$54 M	\$426 M	\$254 M	\$5 M	7,675
Motor Freight Transport and Warehousing	\$0 M	\$595 M	\$595 M	\$193 M	\$9 M	2,828
Water Transportation	\$0 M	\$89 M	\$89 M	\$25 M	\$3 M	212
Air Transportation	\$17,938 M	\$498 M	\$18,436 M	\$7,712 M	\$576 M	108,955
Other Transportation	\$373 M	\$1,487 M	\$1,860 M	\$1,213 M	\$19 M	17,395
Communications & Public Utilities	\$0 M	\$2,211 M	\$2,211 M	\$509 M	\$155 M	4,969
Wholesale Trade	\$0 M	\$3,253 M	\$3,253 M	\$1,320 M	\$501 M	19,131
Other Retail Trade	\$1,878 M	\$8,803 M	\$10,681 M	\$1,828 M	\$1,720 M	58,533
Eating & Drinking	\$4,025 M	\$912 M	\$4,937 M	\$1,895 M	\$352 M	129,113
FIRE	\$0 M	\$5,356 M	\$5,356 M	\$797 M	\$545 M	13,927
Hotels and Lodging Places	\$5,996 M	\$412 M	\$6,408 M	\$2,450 M	\$416 M	85,568
Personal Services	\$0 M	\$281 M	\$281 M	\$132 M	\$8 M	5,468
Business Services	\$0 M	\$2,877 M	\$2,877 M	\$1,631 M	\$53 M	38,862
Automobile Rental and Leasing	\$1,096 M	\$115 M	\$1,211 M	\$343 M	\$85 M	9,351
Auto Repair Services	\$0 M	\$426 M	\$426 M	\$154 M	\$18 M	4,498
All Other Services	\$842 M	\$5,004 M	\$5,846 M	\$3,112 M	\$65 M	62,870
Amusement and Recreation Services, N.E.C.	\$1,066 M	\$128 M	\$1,194 M	\$429 M	\$56 M	16,957
Other State and Local Govt Enterprises	\$0 M	\$322 M	\$322 M	\$72 M	\$0 M	1,312
Other Federal Government Enterprises	\$0 M	\$21 M	\$21 M	\$6 M	\$0 M	81
Household Income*	\$0 M	\$0 M	\$0 M	\$2,002 M	\$0 M	6,998
Total Outlay	\$54,552 M	\$42,166 M	\$96,718 M	\$34,841 M	\$4,913 M	693,620

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

LEVEL-1 SCENARIO #8
SCAG REGION 2020 AIR TRANSPORTATION SERVICES IMPACTS

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$11 M	\$11 M	\$3 M	\$0 M	50
Agriculture	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	60
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Agricultural Services	\$0 M	\$8 M	\$8 M	\$5 M	\$0 M	320
Mining	\$0 M	\$29 M	\$29 M	\$7 M	\$2 M	136
Construction	\$0 M	\$188 M	\$188 M	\$77 M	\$1 M	1,664
Food Processing	\$0 M	\$170 M	\$170 M	\$27 M	\$4 M	362
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$16 M	\$16 M	\$4 M	\$0 M	89
Apparel	\$0 M	\$26 M	\$26 M	\$7 M	\$0 M	159
Wood Products	\$0 M	\$4 M	\$4 M	\$1 M	\$0 M	33
Furniture	\$0 M	\$18 M	\$18 M	\$5 M	\$0 M	106
Pulp and Paper	\$0 M	\$60 M	\$60 M	\$14 M	\$1 M	173
Printing & Publishing	\$0 M	\$158 M	\$158 M	\$60 M	\$2 M	1,108
Chemicals	\$0 M	\$91 M	\$91 M	\$18 M	\$1 M	181
Petroleum & Coal Products	\$0 M	\$1,430 M	\$1,430 M	\$102 M	\$51 M	435
Rubber Products	\$0 M	\$2 M	\$2 M	\$0 M	\$0 M	5
Leather Products	\$0 M	\$5 M	\$5 M	\$2 M	\$0 M	50
Stone Clay & Glass Products	\$0 M	\$3 M	\$3 M	\$1 M	\$0 M	10
Primary Metals	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	2
Fabricated Metals	\$0 M	\$9 M	\$9 M	\$3 M	\$0 M	34
Industrial Machinery	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	33
Electrical Machinery	\$0 M	\$155 M	\$155 M	\$44 M	\$1 M	454
Transportation Equipment	\$0 M	\$17 M	\$17 M	\$6 M	\$0 M	47
Scientific Instruments	\$0 M	\$33 M	\$33 M	\$12 M	\$0 M	87
Miscellaneous Manufacturing	\$0 M	\$38 M	\$38 M	\$11 M	\$1 M	222
Railroads and Related Services	\$0 M	\$23 M	\$23 M	\$9 M	\$1 M	84
Local, Interurban Passenger Transit	\$0 M	\$16 M	\$16 M	\$10 M	\$0 M	360
Motor Freight Transport and Warehousing	\$0 M	\$125 M	\$125 M	\$41 M	\$2 M	594
Water Transportation	\$0 M	\$44 M	\$44 M	\$12 M	\$2 M	105
Air Transportation	\$17,982 M	\$365 M	\$18,346 M	\$7,674 M	\$574 M	108,426
Other Transportation	\$0 M	\$1,161 M	\$1,161 M	\$757 M	\$12 M	10,862
Communications & Public Utilities	\$0 M	\$631 M	\$631 M	\$145 M	\$44 M	1,418
Wholesale Trade	\$0 M	\$589 M	\$589 M	\$239 M	\$91 M	3,463
Other Retail Trade	\$0 M	\$1,680 M	\$1,680 M	\$288 M	\$271 M	9,207
Eating & Drinking	\$0 M	\$359 M	\$359 M	\$138 M	\$26 M	9,387
FIRE	\$0 M	\$1,559 M	\$1,559 M	\$232 M	\$159 M	4,054
Hotels and Lodging Places	\$0 M	\$116 M	\$116 M	\$44 M	\$8 M	1,553
Personal Services	\$0 M	\$75 M	\$75 M	\$35 M	\$2 M	1,467
Business Services	\$0 M	\$927 M	\$927 M	\$525 M	\$17 M	12,522
Automobile Rental and Leasing	\$0 M	\$29 M	\$29 M	\$8 M	\$2 M	221
Auto Repair Services	\$0 M	\$102 M	\$102 M	\$37 M	\$4 M	1,074
All Other Services	\$0 M	\$1,473 M	\$1,473 M	\$784 M	\$16 M	15,845
Amusement and Recreation Services, N.E.C.	\$0 M	\$45 M	\$45 M	\$16 M	\$2 M	632
Other State and Local Govt Enterprises	\$0 M	\$92 M	\$92 M	\$21 M	\$0 M	377
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	27
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,436
Total Outlay	\$17,982 M	\$11,906 M	\$29,888 M	\$12,098 M	\$1,296 M	189,938

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-2 SCENARIO #8
SCAG REGION 2020 NON-RESIDENT AIR PASSENGER IMPACTS**

Sector	Millions Of 1998 \$s					
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	Employment Impacts
Livestock & Livestock Products	\$0 M	\$27 M	\$27 M	\$7 M	\$0 M	129
Agriculture	\$0 M	\$14 M	\$14 M	\$5 M	\$0 M	135
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	2
Agricultural Services	\$0 M	\$28 M	\$28 M	\$17 M	\$1 M	1,108
Mining	\$0 M	\$8 M	\$8 M	\$2 M	\$1 M	40
Construction	\$0 M	\$359 M	\$359 M	\$148 M	\$3 M	3,185
Food Processing	\$0 M	\$436 M	\$436 M	\$69 M	\$10 M	930
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$18 M	\$18 M	\$4 M	\$0 M	100
Apparel	\$0 M	\$33 M	\$33 M	\$9 M	\$0 M	203
Wood Products	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	52
Furniture	\$0 M	\$16 M	\$16 M	\$5 M	\$0 M	95
Pulp and Paper	\$0 M	\$115 M	\$115 M	\$27 M	\$1 M	331
Printing & Publishing	\$0 M	\$175 M	\$175 M	\$67 M	\$2 M	1,227
Chemicals	\$0 M	\$107 M	\$107 M	\$21 M	\$1 M	213
Petroleum & Coal Products	\$0 M	\$229 M	\$229 M	\$16 M	\$8 M	70
Rubber Products	\$0 M	\$3 M	\$3 M	\$1 M	\$0 M	8
Leather Products	\$0 M	\$5 M	\$5 M	\$2 M	\$0 M	50
Stone Clay & Glass Products	\$0 M	\$5 M	\$5 M	\$1 M	\$0 M	17
Primary Metals	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	3
Fabricated Metals	\$0 M	\$13 M	\$13 M	\$4 M	\$0 M	46
Industrial Machinery	\$0 M	\$14 M	\$14 M	\$4 M	\$0 M	49
Electrical Machinery	\$0 M	\$155 M	\$155 M	\$43 M	\$1 M	453
Transportation Equipment	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	19
Scientific Instruments	\$0 M	\$41 M	\$41 M	\$14 M	\$0 M	107
Miscellaneous Manufacturing	\$0 M	\$44 M	\$44 M	\$13 M	\$1 M	257
Railroads and Related Services	\$0 M	\$22 M	\$22 M	\$8 M	\$1 M	77
Local, Interurban Passenger Transit	\$379 M	\$17 M	\$396 M	\$236 M	\$5 M	6,963
Motor Freight Transport and Warehousing	\$0 M	\$175 M	\$175 M	\$57 M	\$3 M	829
Water Transportation	\$0 M	\$20 M	\$20 M	\$6 M	\$1 M	49
Air Transportation	\$0 M	\$55 M	\$55 M	\$23 M	\$2 M	323
Other Transportation	\$379 M	\$212 M	\$591 M	\$385 M	\$6 M	5,526
Communications & Public Utilities	\$0 M	\$861 M	\$861 M	\$198 M	\$60 M	1,933
Wholesale Trade	\$0 M	\$680 M	\$680 M	\$276 M	\$105 M	3,999
Other Retail Trade	\$1,908 M	\$5,467 M	\$7,374 M	\$1,262 M	\$1,187 M	40,410
Eating & Drinking	\$4,096 M	\$267 M	\$4,363 M	\$1,674 M	\$311 M	114,094
FIRE	\$0 M	\$2,146 M	\$2,146 M	\$319 M	\$219 M	5,581
Hotels and Lodging Places	\$6,106 M	\$124 M	\$6,230 M	\$2,382 M	\$405 M	83,195
Personal Services	\$0 M	\$121 M	\$121 M	\$57 M	\$3 M	2,364
Business Services	\$0 M	\$1,007 M	\$1,007 M	\$571 M	\$19 M	13,608
Automobile Rental and Leasing	\$1,118 M	\$47 M	\$1,165 M	\$331 M	\$81 M	9,001
Auto Repair Services	\$0 M	\$131 M	\$131 M	\$47 M	\$6 M	1,383
All Other Services	\$856 M	\$1,749 M	\$2,605 M	\$1,387 M	\$29 M	28,017
Amusement and Recreation Services, N.E.C.	\$1,084 M	\$39 M	\$1,124 M	\$404 M	\$53 M	15,957
Other State and Local Govt Enterprises	\$0 M	\$113 M	\$113 M	\$25 M	\$0 M	462
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	28
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,159
Total Outlay	\$15,927 M	\$15,118 M	\$31,045 M	\$10,801 M	\$2,525 M	344,787

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1 AND LEVEL-2 SCENARIO #8
SCAG REGION 2020 AIR SERVICES AND NON-RESIDENT AIR PASSENGER IMPACTS**

Sector	Millions Of 1999 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$38 M	\$38 M	\$10 M	\$0 M	179
Agriculture	\$0 M	\$20 M	\$20 M	\$7 M	\$0 M	195
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	1
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	2
Agricultural Services	\$0 M	\$36 M	\$36 M	\$22 M	\$1 M	1,427
Mining	\$0 M	\$37 M	\$37 M	\$9 M	\$2 M	177
Construction	\$0 M	\$547 M	\$547 M	\$225 M	\$4 M	4,850
Food Processing	\$0 M	\$606 M	\$606 M	\$95 M	\$14 M	1,293
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$34 M	\$34 M	\$8 M	\$0 M	189
Apparel	\$0 M	\$59 M	\$59 M	\$15 M	\$0 M	362
Wood Products	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	85
Furniture	\$0 M	\$34 M	\$34 M	\$10 M	\$0 M	201
Pulp and Paper	\$0 M	\$175 M	\$175 M	\$41 M	\$2 M	504
Printing & Publishing	\$0 M	\$332 M	\$332 M	\$127 M	\$4 M	2,334
Chemicals	\$0 M	\$199 M	\$199 M	\$40 M	\$2 M	393
Petroleum & Coal Products	\$0 M	\$1,659 M	\$1,659 M	\$118 M	\$59 M	505
Rubber Products	\$0 M	\$4 M	\$4 M	\$1 M	\$0 M	13
Leather Products	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	100
Stone Clay & Glass Products	\$0 M	\$8 M	\$8 M	\$2 M	\$0 M	27
Primary Metals	\$0 M	\$2 M	\$2 M	\$0 M	\$0 M	5
Fabricated Metals	\$0 M	\$22 M	\$22 M	\$7 M	\$0 M	81
Industrial Machinery	\$0 M	\$24 M	\$24 M	\$8 M	\$0 M	82
Electrical Machinery	\$0 M	\$310 M	\$310 M	\$87 M	\$3 M	907
Transportation Equipment	\$0 M	\$24 M	\$24 M	\$8 M	\$0 M	66
Scientific Instruments	\$0 M	\$74 M	\$74 M	\$26 M	\$1 M	193
Miscellaneous Manufacturing	\$0 M	\$81 M	\$81 M	\$24 M	\$1 M	479
Railroads and Related Services	\$0 M	\$45 M	\$45 M	\$18 M	\$1 M	161
Local, Interurban Passenger Transit	\$379 M	\$33 M	\$412 M	\$245 M	\$5 M	7,323
Motor Freight Transport and Warehousing	\$0 M	\$300 M	\$300 M	\$97 M	\$5 M	1,423
Water Transportation	\$0 M	\$64 M	\$64 M	\$18 M	\$2 M	153
Air Transportation	\$17,982 M	\$419 M	\$18,401 M	\$7,697 M	\$575 M	108,749
Other Transportation	\$379 M	\$1,373 M	\$1,752 M	\$1,142 M	\$18 M	16,389
Communications & Public Utilities	\$0 M	\$1,492 M	\$1,492 M	\$343 M	\$104 M	3,351
Wholesale Trade	\$0 M	\$1,269 M	\$1,269 M	\$515 M	\$195 M	7,462
Other Retail Trade	\$1,908 M	\$7,147 M	\$9,054 M	\$1,550 M	\$1,458 M	49,617
Eating & Drinking	\$4,096 M	\$626 M	\$4,722 M	\$1,812 M	\$337 M	123,481
FIRE	\$0 M	\$3,706 M	\$3,706 M	\$551 M	\$377 M	9,635
Hotels and Lodging Places	\$6,106 M	\$241 M	\$6,347 M	\$2,427 M	\$412 M	84,748
Personal Services	\$0 M	\$197 M	\$197 M	\$92 M	\$6 M	3,831
Business Services	\$0 M	\$1,934 M	\$1,934 M	\$1,097 M	\$36 M	26,130
Automobile Rental and Leasing	\$1,118 M	\$76 M	\$1,194 M	\$339 M	\$83 M	9,221
Auto Repair Services	\$0 M	\$233 M	\$233 M	\$84 M	\$10 M	2,457
All Other Services	\$856 M	\$3,222 M	\$4,078 M	\$2,171 M	\$45 M	43,862
Amusement and Recreation Services, N.E.C.	\$1,084 M	\$84 M	\$1,168 M	\$420 M	\$55 M	16,590
Other State and Local Govt Enterprises	\$0 M	\$205 M	\$205 M	\$46 M	\$0 M	838
Other Federal Government Enterprises	\$0 M	\$14 M	\$14 M	\$4 M	\$0 M	55
Household Income*	\$0 M	\$0 M	\$0 M	\$1,335 M	\$0 M	4,595
Total Outlay	\$33,909 M	\$27,024 M	\$60,933 M	\$22,899 M	\$3,821 M	534,725

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-3 SCENARIO #8
SCAG REGION 2020 AIR CARGO IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$17 M	\$12 M	\$29 M	\$7 M	\$0 M	138
Agriculture	\$17 M	\$10 M	\$27 M	\$9 M	\$1 M	267
Forestry & Forest Products	\$1 M	\$0 M	\$1 M	\$0 M	\$0 M	5
Commercial Fishing	\$16 M	\$0 M	\$16 M	\$8 M	\$0 M	224
Agricultural Services	\$0 M	\$16 M	\$16 M	\$10 M	\$0 M	650
Mining	\$0 M	\$20 M	\$20 M	\$5 M	\$1 M	94
Construction	\$0 M	\$309 M	\$309 M	\$127 M	\$2 M	2,738
Food Processing	\$23 M	\$165 M	\$188 M	\$30 M	\$4 M	401
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$42 M	\$235 M	\$277 M	\$66 M	\$2 M	1,553
Apparel	\$1,136 M	\$80 M	\$1,216 M	\$314 M	\$5 M	7,416
Wood Products	\$3 M	\$13 M	\$16 M	\$5 M	\$0 M	144
Furniture	\$136 M	\$77 M	\$213 M	\$62 M	\$1 M	1,265
Pulp and Paper	\$23 M	\$234 M	\$257 M	\$60 M	\$3 M	743
Printing & Publishing	\$150 M	\$168 M	\$318 M	\$121 M	\$4 M	2,233
Chemicals	\$360 M	\$333 M	\$692 M	\$138 M	\$7 M	1,372
Petroleum & Coal Products	\$8 M	\$210 M	\$219 M	\$16 M	\$8 M	66
Rubber Products	\$178 M	\$11 M	\$189 M	\$44 M	\$1 M	571
Leather Products	\$12 M	\$8 M	\$20 M	\$5 M	\$0 M	198
Stone Clay & Glass Products	\$71 M	\$11 M	\$82 M	\$24 M	\$1 M	292
Primary Metals	\$307 M	\$44 M	\$351 M	\$71 M	\$4 M	770
Fabricated Metals	\$351 M	\$138 M	\$489 M	\$146 M	\$5 M	1,773
Industrial Machinery	\$1,277 M	\$124 M	\$1,401 M	\$435 M	\$11 M	4,776
Electrical Machinery	\$7,122 M	\$2,298 M	\$9,420 M	\$2,643 M	\$79 M	27,520
Transportation Equipment	\$4,601 M	\$40 M	\$4,541 M	\$1,557 M	\$42 M	12,344
Scientific Instruments	\$4,706 M	\$315 M	\$5,021 M	\$1,769 M	\$35 M	13,078
Miscellaneous Manufacturing	\$561 M	\$65 M	\$626 M	\$188 M	\$11 M	3,684
Railroads and Related Services	\$0 M	\$46 M	\$46 M	\$18 M	\$1 M	166
Local, Interurban Passenger Transit	\$0 M	\$21 M	\$21 M	\$13 M	\$0 M	474
Motor Freight Transport and Warehousing	\$0 M	\$300 M	\$300 M	\$97 M	\$5 M	1,425
Water Transportation	\$0 M	\$25 M	\$25 M	\$7 M	\$1 M	60
Air Transportation	\$0 M	\$81 M	\$81 M	\$34 M	\$3 M	476
Other Transportation	\$0 M	\$121 M	\$121 M	\$79 M	\$1 M	1,132
Communications & Public Utilities	\$0 M	\$738 M	\$738 M	\$170 M	\$52 M	1,658
Wholesale Trade	\$0 M	\$2,002 M	\$2,002 M	\$812 M	\$308 M	11,775
Other Retail Trade	\$0 M	\$1,753 M	\$1,753 M	\$300 M	\$282 M	9,607
Eating & Drinking	\$0 M	\$292 M	\$292 M	\$112 M	\$21 M	7,836
FIRE	\$0 M	\$1,696 M	\$1,696 M	\$252 M	\$173 M	4,410
Hotels and Lodging Places	\$0 M	\$174 M	\$174 M	\$67 M	\$11 M	2,328
Personal Services	\$0 M	\$87 M	\$87 M	\$41 M	\$2 M	1,686
Business Services	\$0 M	\$965 M	\$965 M	\$547 M	\$18 M	13,032
Automobile Rental and Leasing	\$0 M	\$40 M	\$40 M	\$11 M	\$3 M	309
Auto Repair Services	\$0 M	\$196 M	\$196 M	\$71 M	\$8 M	2,073
All Other Services	\$0 M	\$1,820 M	\$1,820 M	\$969 M	\$20 M	19,577
Amusement and Recreation Services, N.E.C.	\$0 M	\$45 M	\$45 M	\$16 M	\$2 M	637
Other State and Local Govt Enterprises	\$0 M	\$119 M	\$119 M	\$26 M	\$0 M	484
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	26
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,452
Total Outlay	\$21,016 M	\$15,465 M	\$36,481 M	\$12,174 M	\$1,140 M	165,739

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1, LEVEL-2, AND LEVEL-3 SCENARIO #8
COMBINED SCAG REGION 2020 AIR TRANSPORTATION SERVICES, NON-RESIDENT AIR
PASSENGER IMPACTS, AND AIR CARGO IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$17 M	\$50 M	\$66 M	\$17 M	\$1 M	317
Agriculture	\$17 M	\$29 M	\$47 M	\$16 M	\$1 M	462
Forestry & Forest Products	\$1 M	\$1 M	\$1 M	\$0 M	\$0 M	6
Commercial Fishing	\$16 M	\$0 M	\$16 M	\$8 M	\$0 M	226
Agricultural Services	\$0 M	\$52 M	\$52 M	\$32 M	\$2 M	2,078
Mining	\$0 M	\$57 M	\$57 M	\$13 M	\$3 M	271
Construction	\$0 M	\$855 M	\$855 M	\$352 M	\$7 M	7,587
Food Processing	\$23 M	\$771 M	\$794 M	\$125 M	\$19 M	1,694
Tobacco	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	1
Textiles	\$42 M	\$269 M	\$310 M	\$74 M	\$2 M	1,743
Apparel	\$1,136 M	\$139 M	\$1,275 M	\$329 M	\$5 M	7,778
Wood Products	\$3 M	\$23 M	\$26 M	\$9 M	\$0 M	229
Furniture	\$136 M	\$111 M	\$246 M	\$72 M	\$1 M	1,466
Pulp and Paper	\$23 M	\$409 M	\$432 M	\$100 M	\$5 M	1,247
Printing & Publishing	\$150 M	\$500 M	\$650 M	\$248 M	\$7 M	4,568
Chemicals	\$360 M	\$531 M	\$891 M	\$178 M	\$9 M	1,765
Petroleum & Coal Products	\$8 M	\$1,870 M	\$1,878 M	\$133 M	\$67 M	571
Rubber Products	\$178 M	\$15 M	\$193 M	\$45 M	\$1 M	584
Leather Products	\$12 M	\$18 M	\$30 M	\$10 M	\$0 M	298
Stone Clay & Glass Products	\$71 M	\$19 M	\$89 M	\$26 M	\$1 M	319
Primary Metals	\$307 M	\$46 M	\$353 M	\$72 M	\$4 M	775
Fabricated Metals	\$351 M	\$160 M	\$511 M	\$152 M	\$5 M	1,853
Industrial Machinery	\$1,277 M	\$149 M	\$1,425 M	\$443 M	\$11 M	4,859
Electrical Machinery	\$7,122 M	\$2,609 M	\$9,731 M	\$2,731 M	\$82 M	28,427
Transportation Equipment	\$4,501 M	\$64 M	\$4,565 M	\$1,565 M	\$43 M	12,410
Scientific Instruments	\$4,706 M	\$389 M	\$5,095 M	\$1,795 M	\$35 M	13,272
Miscellaneous Manufacturing	\$561 M	\$147 M	\$708 M	\$213 M	\$13 M	4,163
Railroads and Related Services	\$0 M	\$91 M	\$91 M	\$36 M	\$2 M	327
Local, Interurban Passenger Transit	\$379 M	\$54 M	\$433 M	\$258 M	\$5 M	7,797
Motor Freight Transport and Warehousing	\$0 M	\$600 M	\$600 M	\$194 M	\$9 M	2,848
Water Transportation	\$0 M	\$89 M	\$89 M	\$25 M	\$3 M	213
Air Transportation	\$17,982 M	\$500 M	\$18,482 M	\$7,731 M	\$578 M	109,225
Other Transportation	\$379 M	\$1,494 M	\$1,873 M	\$1,221 M	\$20 M	17,521
Communications & Public Utilities	\$0 M	\$2,230 M	\$2,230 M	\$513 M	\$156 M	5,010
Wholesale Trade	\$0 M	\$3,271 M	\$3,271 M	\$1,327 M	\$504 M	19,238
Other Retail Trade	\$1,908 M	\$8,900 M	\$10,807 M	\$1,850 M	\$1,740 M	59,225
Eating & Drinking	\$4,096 M	\$918 M	\$5,014 M	\$1,924 M	\$358 M	131,117
FIRE	\$0 M	\$5,402 M	\$5,402 M	\$804 M	\$550 M	14,048
Hotels and Lodging Places	\$6,106 M	\$415 M	\$6,521 M	\$2,493 M	\$424 M	87,076
Personal Services	\$0 M	\$283 M	\$283 M	\$133 M	\$8 M	5,517
Business Services	\$0 M	\$2,899 M	\$2,899 M	\$1,643 M	\$54 M	39,162
Automobile Rental and Leasing	\$1,118 M	\$116 M	\$1,234 M	\$350 M	\$86 M	9,530
Auto Repair Services	\$0 M	\$429 M	\$429 M	\$155 M	\$18 M	4,530
All Other Services	\$856 M	\$5,042 M	\$5,899 M	\$3,140 M	\$65 M	63,439
Amusement and Recreation Services, N.E.C.	\$1,084 M	\$129 M	\$1,213 M	\$436 M	\$57 M	17,226
Other State and Local Govt Enterprises	\$0 M	\$324 M	\$324 M	\$72 M	\$0 M	1,322
Other Federal Government Enterprises	\$0 M	\$21 M	\$21 M	\$6 M	\$0 M	81
Household Income*	\$0 M	\$0 M	\$0 M	\$2,002 M	\$0 M	7,047
Total Outlay	\$54,925 M	\$42,489 M	\$97,414 M	\$35,073 M	\$4,962 M	700,464

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

LEVEL-1 SCENARIO #9
SCAG REGION 2020 AIR TRANSPORTATION SERVICES IMPACTS

Sector	Millions Of 1998 \$\$					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	50
Agriculture	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	60
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Agricultural Services	\$0 M	\$8 M	\$8 M	\$5 M	\$0 M	316
Mining	\$0 M	\$28 M	\$28 M	\$7 M	\$2 M	135
Construction	\$0 M	\$186 M	\$186 M	\$76 M	\$1 M	1,647
Food Processing	\$0 M	\$168 M	\$168 M	\$26 M	\$4 M	359
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$16 M	\$16 M	\$4 M	\$0 M	88
Apparel	\$0 M	\$26 M	\$26 M	\$7 M	\$0 M	157
Wood Products	\$0 M	\$4 M	\$4 M	\$1 M	\$0 M	33
Furniture	\$0 M	\$18 M	\$18 M	\$5 M	\$0 M	105
Pulp and Paper	\$0 M	\$59 M	\$59 M	\$14 M	\$1 M	172
Printing & Publishing	\$0 M	\$156 M	\$156 M	\$59 M	\$2 M	1,096
Chemicals	\$0 M	\$90 M	\$90 M	\$18 M	\$1 M	179
Petroleum & Coal Products	\$0 M	\$1,415 M	\$1,415 M	\$101 M	\$50 M	430
Rubber Products	\$0 M	\$2 M	\$2 M	\$0 M	\$0 M	5
Leather Products	\$0 M	\$5 M	\$5 M	\$2 M	\$0 M	50
Stone Clay & Glass Products	\$0 M	\$3 M	\$3 M	\$1 M	\$0 M	10
Primary Metals	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	2
Fabricated Metals	\$0 M	\$9 M	\$9 M	\$3 M	\$0 M	34
Industrial Machinery	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	33
Electrical Machinery	\$0 M	\$154 M	\$154 M	\$43 M	\$1 M	449
Transportation Equipment	\$0 M	\$17 M	\$17 M	\$6 M	\$0 M	47
Scientific Instruments	\$0 M	\$33 M	\$33 M	\$12 M	\$0 M	86
Miscellaneous Manufacturing	\$0 M	\$37 M	\$37 M	\$11 M	\$1 M	220
Railroads and Related Services	\$0 M	\$23 M	\$23 M	\$9 M	\$1 M	83
Local, Interurban Passenger Transit	\$0 M	\$16 M	\$16 M	\$10 M	\$0 M	357
Motor Freight Transport and Warehousing	\$0 M	\$124 M	\$124 M	\$40 M	\$2 M	587
Water Transportation	\$0 M	\$43 M	\$43 M	\$12 M	\$2 M	103
Air Transportation	\$17,792 M	\$361 M	\$18,153 M	\$7,593 M	\$568 M	107,283
Other Transportation	\$0 M	\$1,149 M	\$1,149 M	\$749 M	\$12 M	10,748
Communications & Public Utilities	\$0 M	\$624 M	\$624 M	\$144 M	\$44 M	1,403
Wholesale Trade	\$0 M	\$583 M	\$583 M	\$236 M	\$90 M	3,427
Other Retail Trade	\$0 M	\$1,662 M	\$1,662 M	\$285 M	\$268 M	9,110
Eating & Drinking	\$0 M	\$355 M	\$355 M	\$136 M	\$25 M	9,288
FIRE	\$0 M	\$1,543 M	\$1,543 M	\$230 M	\$157 M	4,011
Hotels and Lodging Places	\$0 M	\$115 M	\$115 M	\$44 M	\$7 M	1,537
Personal Services	\$0 M	\$75 M	\$75 M	\$35 M	\$2 M	1,452
Business Services	\$0 M	\$917 M	\$917 M	\$520 M	\$17 M	12,390
Automobile Rental and Leasing	\$0 M	\$28 M	\$28 M	\$8 M	\$2 M	218
Auto Repair Services	\$0 M	\$101 M	\$101 M	\$36 M	\$4 M	1,062
All Other Services	\$0 M	\$1,458 M	\$1,458 M	\$776 M	\$16 M	15,678
Amusement and Recreation Services, N.E.C.	\$0 M	\$44 M	\$44 M	\$16 M	\$2 M	626
Other State and Local Govt Enterprises	\$0 M	\$91 M	\$91 M	\$20 M	\$0 M	373
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	27
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,410
Total Outlay	\$17,792 M	\$11,780 M	\$29,573 M	\$11,977 M	\$1,283 M	187,935

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

LEVEL-2 SCENARIO #9
SCAG REGION 2020 NON-RESIDENT AIR PASSENGER IMPACTS

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$28 M	\$28 M	\$7 M	\$0 M	132
Agriculture	\$0 M	\$14 M	\$14 M	\$5 M	\$0 M	138
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	1
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	2
Agricultural Services	\$0 M	\$28 M	\$28 M	\$18 M	\$1 M	1,132
Mining	\$0 M	\$9 M	\$9 M	\$2 M	\$1 M	41
Construction	\$0 M	\$367 M	\$367 M	\$151 M	\$3 M	3,256
Food Processing	\$0 M	\$446 M	\$446 M	\$70 M	\$10 M	952
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$18 M	\$18 M	\$4 M	\$0 M	102
Apparel	\$0 M	\$34 M	\$34 M	\$9 M	\$0 M	208
Wood Products	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	53
Furniture	\$0 M	\$16 M	\$16 M	\$5 M	\$0 M	98
Pulp and Paper	\$0 M	\$117 M	\$117 M	\$27 M	\$1 M	338
Printing & Publishing	\$0 M	\$178 M	\$178 M	\$68 M	\$2 M	1,254
Chemicals	\$0 M	\$110 M	\$110 M	\$22 M	\$1 M	217
Petroleum & Coal Products	\$0 M	\$234 M	\$234 M	\$17 M	\$8 M	71
Rubber Products	\$0 M	\$3 M	\$3 M	\$1 M	\$0 M	8
Leather Products	\$0 M	\$5 M	\$5 M	\$2 M	\$0 M	51
Stone Clay & Glass Products	\$0 M	\$5 M	\$5 M	\$1 M	\$0 M	17
Primary Metals	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	3
Fabricated Metals	\$0 M	\$13 M	\$13 M	\$4 M	\$0 M	47
Industrial Machinery	\$0 M	\$15 M	\$15 M	\$5 M	\$0 M	50
Electrical Machinery	\$0 M	\$158 M	\$158 M	\$44 M	\$1 M	463
Transportation Equipment	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	19
Scientific Instruments	\$0 M	\$42 M	\$42 M	\$15 M	\$0 M	109
Miscellaneous Manufacturing	\$0 M	\$45 M	\$45 M	\$13 M	\$1 M	262
Railroads and Related Services	\$0 M	\$22 M	\$22 M	\$9 M	\$1 M	79
Local, Interurban Passenger Transit	\$388 M	\$17 M	\$405 M	\$241 M	\$5 M	7,121
Motor Freight Transport and Warehousing	\$0 M	\$178 M	\$178 M	\$58 M	\$3 M	847
Water Transportation	\$0 M	\$21 M	\$21 M	\$6 M	\$1 M	50
Air Transportation	\$0 M	\$56 M	\$56 M	\$23 M	\$2 M	330
Other Transportation	\$388 M	\$216 M	\$604 M	\$394 M	\$6 M	5,650
Communications & Public Utilities	\$0 M	\$880 M	\$880 M	\$202 M	\$62 M	1,976
Wholesale Trade	\$0 M	\$695 M	\$695 M	\$282 M	\$107 M	4,089
Other Retail Trade	\$1,957 M	\$5,603 M	\$7,560 M	\$1,294 M	\$1,217 M	41,427
Eating & Drinking	\$4,189 M	\$273 M	\$4,463 M	\$1,713 M	\$318 M	116,698
FIRE	\$0 M	\$2,194 M	\$2,194 M	\$326 M	\$223 M	5,705
Hotels and Lodging Places	\$6,236 M	\$127 M	\$6,363 M	\$2,433 M	\$413 M	84,964
Personal Services	\$0 M	\$124 M	\$124 M	\$58 M	\$4 M	2,416
Business Services	\$0 M	\$1,030 M	\$1,030 M	\$584 M	\$19 M	13,912
Automobile Rental and Leasing	\$1,138 M	\$48 M	\$1,186 M	\$336 M	\$83 M	9,163
Auto Repair Services	\$0 M	\$134 M	\$134 M	\$49 M	\$6 M	1,414
All Other Services	\$877 M	\$1,788 M	\$2,664 M	\$1,418 M	\$30 M	28,654
Amusement and Recreation Services, N.E.C.	\$1,110 M	\$40 M	\$1,151 M	\$414 M	\$54 M	16,338
Other State and Local Govt Enterprises	\$0 M	\$116 M	\$116 M	\$26 M	\$0 M	472
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	28
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,208
Total Outlay	\$16,283 M	\$15,469 M	\$31,752 M	\$11,029 M	\$2,584 M	352,566

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1 AND LEVEL-2 SCENARIO #9
SCAG REGION 2020 AIR SERVICES AND NON-RESIDENT AIR PASSENGER IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$38 M	\$38 M	\$10 M	\$0 M	182
Agriculture	\$0 M	\$20 M	\$20 M	\$7 M	\$0 M	198
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	1
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	2
Agricultural Services	\$0 M	\$36 M	\$36 M	\$23 M	\$1 M	1,448
Mining	\$0 M	\$37 M	\$37 M	\$9 M	\$2 M	176
Construction	\$0 M	\$553 M	\$553 M	\$227 M	\$4 M	4,902
Food Processing	\$0 M	\$614 M	\$614 M	\$97 M	\$14 M	1,310
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$34 M	\$34 M	\$8 M	\$0 M	191
Apparel	\$0 M	\$60 M	\$60 M	\$15 M	\$0 M	365
Wood Products	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	86
Furniture	\$0 M	\$34 M	\$34 M	\$10 M	\$0 M	202
Pulp and Paper	\$0 M	\$177 M	\$177 M	\$41 M	\$2 M	510
Printing & Publishing	\$0 M	\$334 M	\$334 M	\$127 M	\$4 M	2,350
Chemicals	\$0 M	\$200 M	\$200 M	\$40 M	\$2 M	396
Petroleum & Coal Products	\$0 M	\$1,649 M	\$1,649 M	\$117 M	\$59 M	502
Rubber Products	\$0 M	\$4 M	\$4 M	\$1 M	\$0 M	13
Leather Products	\$0 M	\$10 M	\$10 M	\$3 M	\$0 M	100
Stone Clay & Glass Products	\$0 M	\$8 M	\$8 M	\$2 M	\$0 M	28
Primary Metals	\$0 M	\$2 M	\$2 M	\$0 M	\$0 M	5
Fabricated Metals	\$0 M	\$22 M	\$22 M	\$7 M	\$0 M	81
Industrial Machinery	\$0 M	\$24 M	\$24 M	\$8 M	\$0 M	83
Electrical Machinery	\$0 M	\$312 M	\$312 M	\$88 M	\$3 M	912
Transportation Equipment	\$0 M	\$24 M	\$24 M	\$8 M	\$0 M	66
Scientific Instruments	\$0 M	\$75 M	\$75 M	\$26 M	\$1 M	195
Miscellaneous Manufacturing	\$0 M	\$82 M	\$82 M	\$25 M	\$1 M	483
Railroads and Related Services	\$0 M	\$45 M	\$45 M	\$18 M	\$1 M	162
Local, Interurban Passenger Transit	\$388 M	\$33 M	\$421 M	\$250 M	\$5 M	7,478
Motor Freight Transport and Warehousing	\$0 M	\$302 M	\$302 M	\$98 M	\$5 M	1,435
Water Transportation	\$0 M	\$64 M	\$64 M	\$18 M	\$2 M	153
Air Transportation	\$17,792 M	\$417 M	\$18,209 M	\$7,617 M	\$569 M	107,612
Other Transportation	\$388 M	\$1,365 M	\$1,753 M	\$1,143 M	\$18 M	16,398
Communications & Public Utilities	\$0 M	\$1,504 M	\$1,504 M	\$346 M	\$105 M	3,380
Wholesale Trade	\$0 M	\$1,278 M	\$1,278 M	\$518 M	\$197 M	7,515
Other Retail Trade	\$1,957 M	\$7,265 M	\$9,222 M	\$1,578 M	\$1,485 M	50,537
Eating & Drinking	\$4,189 M	\$628 M	\$4,818 M	\$1,849 M	\$344 M	125,986
FIRE	\$0 M	\$3,737 M	\$3,737 M	\$556 M	\$380 M	9,716
Hotels and Lodging Places	\$6,236 M	\$242 M	\$6,478 M	\$2,477 M	\$421 M	86,501
Personal Services	\$0 M	\$199 M	\$199 M	\$93 M	\$6 M	3,868
Business Services	\$0 M	\$1,947 M	\$1,947 M	\$1,104 M	\$36 M	26,302
Automobile Rental and Leasing	\$1,138 M	\$76 M	\$1,214 M	\$345 M	\$85 M	9,382
Auto Repair Services	\$0 M	\$235 M	\$235 M	\$85 M	\$10 M	2,476
All Other Services	\$877 M	\$3,245 M	\$4,122 M	\$2,194 M	\$46 M	44,332
Amusement and Recreation Services, N.E.C.	\$1,110 M	\$84 M	\$1,195 M	\$430 M	\$56 M	16,964
Other State and Local Govt Enterprises	\$0 M	\$207 M	\$207 M	\$46 M	\$0 M	845
Other Federal Government Enterprises	\$0 M	\$14 M	\$14 M	\$4 M	\$0 M	55
Household Income*	\$0 M	\$0 M	\$0 M	\$1,335 M	\$0 M	4,618
Total Outlay	\$34,075 M	\$27,250 M	\$61,325 M	\$23,006 M	\$3,867 M	540,501

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-3 SCENARIO #9
SCAG REGION 2020 AIR CARGO IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$16 M	\$12 M	\$29 M	\$7 M	\$0 M	136
Agriculture	\$17 M	\$9 M	\$27 M	\$9 M	\$1 M	264
Forestry & Forest Products	\$1 M	\$0 M	\$1 M	\$0 M	\$0 M	5
Commercial Fishing	\$16 M	\$0 M	\$16 M	\$8 M	\$0 M	221
Agricultural Services	\$0 M	\$16 M	\$16 M	\$10 M	\$0 M	644
Mining	\$0 M	\$19 M	\$19 M	\$5 M	\$1 M	93
Construction	\$0 M	\$305 M	\$305 M	\$126 M	\$2 M	2,709
Food Processing	\$22 M	\$163 M	\$186 M	\$29 M	\$4 M	397
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$41 M	\$232 M	\$274 M	\$66 M	\$2 M	1,537
Apparel	\$1,124 M	\$79 M	\$1,203 M	\$310 M	\$5 M	7,337
Wood Products	\$3 M	\$13 M	\$16 M	\$6 M	\$0 M	142
Furniture	\$134 M	\$76 M	\$210 M	\$61 M	\$1 M	1,251
Pulp and Paper	\$23 M	\$232 M	\$255 M	\$59 M	\$3 M	735
Printing & Publishing	\$148 M	\$166 M	\$314 M	\$120 M	\$3 M	2,210
Chemicals	\$356 M	\$329 M	\$685 M	\$137 M	\$7 M	1,368
Petroleum & Coal Products	\$8 M	\$208 M	\$216 M	\$15 M	\$8 M	66
Rubber Products	\$176 M	\$11 M	\$187 M	\$43 M	\$1 M	565
Leather Products	\$12 M	\$8 M	\$20 M	\$6 M	\$0 M	196
Stone Clay & Glass Products	\$70 M	\$11 M	\$81 M	\$24 M	\$1 M	289
Primary Metals	\$304 M	\$43 M	\$347 M	\$71 M	\$4 M	782
Fabricated Metals	\$347 M	\$137 M	\$484 M	\$144 M	\$5 M	1,754
Industrial Machinery	\$1,263 M	\$123 M	\$1,386 M	\$431 M	\$11 M	4,726
Electrical Machinery	\$7,047 M	\$2,274 M	\$9,321 M	\$2,616 M	\$78 M	27,230
Transportation Equipment	\$4,454 M	\$39 M	\$4,493 M	\$1,540 M	\$42 M	12,214
Scientific Instruments	\$4,656 M	\$312 M	\$4,968 M	\$1,750 M	\$34 M	12,940
Miscellaneous Manufacturing	\$555 M	\$65 M	\$620 M	\$186 M	\$11 M	3,645
Railroads and Related Services	\$0 M	\$46 M	\$46 M	\$18 M	\$1 M	164
Local, Interurban Passenger Transit	\$0 M	\$21 M	\$21 M	\$12 M	\$0 M	469
Motor Freight Transport and Warehousing	\$0 M	\$297 M	\$297 M	\$96 M	\$5 M	1,410
Water Transportation	\$0 M	\$25 M	\$25 M	\$7 M	\$1 M	59
Air Transportation	\$0 M	\$80 M	\$80 M	\$33 M	\$2 M	471
Other Transportation	\$0 M	\$120 M	\$120 M	\$78 M	\$1 M	1,120
Communications & Public Utilities	\$0 M	\$730 M	\$730 M	\$168 M	\$51 M	1,641
Wholesale Trade	\$0 M	\$1,981 M	\$1,981 M	\$804 M	\$305 M	11,651
Other Retail Trade	\$0 M	\$1,735 M	\$1,735 M	\$297 M	\$279 M	9,506
Eating & Drinking	\$0 M	\$289 M	\$289 M	\$111 M	\$21 M	7,556
FIRE	\$0 M	\$1,678 M	\$1,678 M	\$250 M	\$171 M	4,364
Hotels and Lodging Places	\$0 M	\$173 M	\$173 M	\$66 M	\$11 M	2,303
Personal Services	\$0 M	\$86 M	\$86 M	\$40 M	\$2 M	1,668
Business Services	\$0 M	\$955 M	\$955 M	\$541 M	\$18 M	12,895
Automobile Rental and Leasing	\$0 M	\$40 M	\$40 M	\$11 M	\$3 M	305
Auto Repair Services	\$0 M	\$194 M	\$194 M	\$70 M	\$8 M	2,051
All Other Services	\$0 M	\$1,801 M	\$1,801 M	\$959 M	\$20 M	19,370
Amusement and Recreation Services, N.E.C.	\$0 M	\$44 M	\$44 M	\$16 M	\$2 M	630
Other State and Local Govt Enterprises	\$0 M	\$117 M	\$117 M	\$26 M	\$0 M	479
Other Federal Government Enterprises	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	26
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,426
Total Outlay	\$20,794 M	\$15,302 M	\$36,096 M	\$12,053 M	\$1,128 M	163,991

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1, LEVEL-2, AND LEVEL-3 SCENARIO #9
COMBINED SCAG REGION 2020 AIR TRANSPORTATION SERVICES, NON-RESIDENT AIR
PASSENGER IMPACTS, AND AIR CARGO IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$16 M	\$50 M	\$67 M	\$17 M	\$1 M	318
Agriculture	\$17 M	\$29 M	\$47 M	\$16 M	\$1 M	462
Forestry & Forest Products	\$1 M	\$1 M	\$1 M	\$0 M	\$0 M	6
Commercial Fishing	\$16 M	\$0 M	\$16 M	\$8 M	\$0 M	223
Agricultural Services	\$0 M	\$52 M	\$52 M	\$33 M	\$2 M	2,092
Mining	\$0 M	\$56 M	\$56 M	\$13 M	\$3 M	269
Construction	\$0 M	\$858 M	\$858 M	\$353 M	\$7 M	7,611
Food Processing	\$22 M	\$777 M	\$800 M	\$126 M	\$19 M	1,707
Tobacco	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	1
Textiles	\$41 M	\$266 M	\$308 M	\$74 M	\$2 M	1,727
Apparel	\$1,124 M	\$139 M	\$1,263 M	\$326 M	\$5 M	7,703
Wood Products	\$3 M	\$23 M	\$26 M	\$9 M	\$0 M	228
Furniture	\$134 M	\$110 M	\$244 M	\$71 M	\$1 M	1,454
Pulp and Paper	\$23 M	\$408 M	\$431 M	\$100 M	\$5 M	1,245
Printing & Publishing	\$148 M	\$501 M	\$649 M	\$247 M	\$7 M	4,560
Chemicals	\$356 M	\$529 M	\$885 M	\$177 M	\$9 M	1,754
Petroleum & Coal Products	\$8 M	\$1,857 M	\$1,866 M	\$133 M	\$66 M	568
Rubber Products	\$176 M	\$15 M	\$191 M	\$44 M	\$1 M	578
Leather Products	\$12 M	\$18 M	\$30 M	\$10 M	\$0 M	296
Stone Clay & Glass Products	\$70 M	\$19 M	\$89 M	\$26 M	\$1 M	317
Primary Metals	\$304 M	\$45 M	\$349 M	\$71 M	\$4 M	767
Fabricated Metals	\$347 M	\$159 M	\$506 M	\$151 M	\$5 M	1,835
Industrial Machinery	\$1,263 M	\$148 M	\$1,411 M	\$438 M	\$11 M	4,809
Electrical Machinery	\$7,047 M	\$2,586 M	\$9,633 M	\$2,703 M	\$81 M	28,142
Transportation Equipment	\$4,454 M	\$63 M	\$4,517 M	\$1,549 M	\$42 M	12,280
Scientific Instruments	\$4,656 M	\$387 M	\$5,043 M	\$1,776 M	\$35 M	13,135
Miscellaneous Manufacturing	\$555 M	\$147 M	\$702 M	\$211 M	\$13 M	4,127
Railroads and Related Services	\$0 M	\$91 M	\$91 M	\$35 M	\$2 M	327
Local, Interurban Passenger Transit	\$388 M	\$54 M	\$442 M	\$263 M	\$5 M	7,947
Motor Freight Transport and Warehousing	\$0 M	\$599 M	\$599 M	\$194 M	\$9 M	2,845
Water Transportation	\$0 M	\$89 M	\$89 M	\$25 M	\$3 M	212
Air Transportation	\$17,792 M	\$496 M	\$18,289 M	\$7,650 M	\$572 M	108,084
Other Transportation	\$388 M	\$1,485 M	\$1,873 M	\$1,221 M	\$20 M	17,518
Communications & Public Utilities	\$0 M	\$2,234 M	\$2,234 M	\$514 M	\$157 M	5,020
Wholesale Trade	\$0 M	\$3,259 M	\$3,259 M	\$1,322 M	\$502 M	19,166
Other Retail Trade	\$1,957 M	\$9,000 M	\$10,957 M	\$1,875 M	\$1,764 M	60,043
Eating & Drinking	\$4,189 M	\$917 M	\$5,107 M	\$1,960 M	\$364 M	133,541
FIRE	\$0 M	\$5,415 M	\$5,415 M	\$806 M	\$551 M	14,080
Hotels and Lodging Places	\$6,236 M	\$415 M	\$6,650 M	\$2,543 M	\$432 M	88,804
Personal Services	\$0 M	\$284 M	\$284 M	\$134 M	\$8 M	5,536
Business Services	\$0 M	\$2,902 M	\$2,902 M	\$1,645 M	\$54 M	39,197
Automobile Rental and Leasing	\$1,138 M	\$116 M	\$1,254 M	\$356 M	\$88 M	9,687
Auto Repair Services	\$0 M	\$429 M	\$429 M	\$155 M	\$18 M	4,527
All Other Services	\$877 M	\$5,046 M	\$5,923 M	\$3,153 M	\$66 M	63,703
Amusement and Recreation Services, N.E.C.	\$1,110 M	\$129 M	\$1,239 M	\$445 M	\$58 M	17,593
Other State and Local Govt Enterprises	\$0 M	\$324 M	\$324 M	\$72 M	\$0 M	1,323
Other Federal Government Enterprises	\$0 M	\$21 M	\$21 M	\$6 M	\$0 M	81
Household Income*	\$0 M	\$0 M	\$0 M	\$2,002 M	\$0 M	7,044
Total Outlay	\$54,869 M	\$42,562 M	\$97,421 M	\$35,059 M	\$4,995 M	704,492

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1 SCENARIO #6
SCAG REGION 2020 AIR TRANSPORTATION SERVICES IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$9 M	\$9 M	\$2 M	\$0 M	45
Agriculture	\$0 M	\$5 M	\$5 M	\$2 M	\$0 M	54
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Agricultural Services	\$0 M	\$7 M	\$7 M	\$4 M	\$0 M	288
Mining	\$0 M	\$26 M	\$26 M	\$6 M	\$2 M	123
Construction	\$0 M	\$169 M	\$169 M	\$69 M	\$1 M	1,498
Food Processing	\$0 M	\$153 M	\$153 M	\$24 M	\$4 M	326
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$14 M	\$14 M	\$3 M	\$0 M	80
Apparel	\$0 M	\$23 M	\$23 M	\$6 M	\$0 M	143
Wood Products	\$0 M	\$3 M	\$3 M	\$1 M	\$0 M	30
Furniture	\$0 M	\$16 M	\$16 M	\$5 M	\$0 M	95
Pulp and Paper	\$0 M	\$54 M	\$54 M	\$13 M	\$1 M	156
Printing & Publishing	\$0 M	\$142 M	\$142 M	\$54 M	\$2 M	997
Chemicals	\$0 M	\$82 M	\$82 M	\$16 M	\$1 M	163
Petroleum & Coal Products	\$0 M	\$1,287 M	\$1,287 M	\$91 M	\$46 M	392
Rubber Products	\$0 M	\$2 M	\$2 M	\$0 M	\$0 M	5
Leather Products	\$0 M	\$5 M	\$5 M	\$1 M	\$0 M	45
Stone Clay & Glass Products	\$0 M	\$3 M	\$3 M	\$1 M	\$0 M	9
Primary Metals	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	2
Fabricated Metals	\$0 M	\$9 M	\$9 M	\$3 M	\$0 M	31
Industrial Machinery	\$0 M	\$9 M	\$9 M	\$3 M	\$0 M	30
Electrical Machinery	\$0 M	\$140 M	\$140 M	\$39 M	\$1 M	409
Transportation Equipment	\$0 M	\$16 M	\$16 M	\$5 M	\$0 M	42
Scientific Instruments	\$0 M	\$30 M	\$30 M	\$11 M	\$0 M	78
Miscellaneous Manufacturing	\$0 M	\$34 M	\$34 M	\$10 M	\$1 M	200
Railroads and Related Services	\$0 M	\$21 M	\$21 M	\$8 M	\$1 M	75
Local, Interurban Passenger Transit	\$0 M	\$15 M	\$15 M	\$9 M	\$0 M	324
Motor Freight Transport and Warehousing	\$0 M	\$113 M	\$113 M	\$36 M	\$2 M	534
Water Transportation	\$0 M	\$39 M	\$39 M	\$11 M	\$1 M	94
Air Transportation	\$16,187 M	\$328 M	\$16,515 M	\$6,908 M	\$516 M	97,603
Other Transportation	\$0 M	\$1,046 M	\$1,046 M	\$682 M	\$11 M	9,778
Communications & Public Utilities	\$0 M	\$568 M	\$568 M	\$131 M	\$40 M	1,277
Wholesale Trade	\$0 M	\$530 M	\$530 M	\$215 M	\$82 M	3,117
Other Retail Trade	\$0 M	\$1,512 M	\$1,512 M	\$259 M	\$244 M	8,288
Eating & Drinking	\$0 M	\$323 M	\$323 M	\$124 M	\$23 M	8,450
FIRE	\$0 M	\$1,404 M	\$1,404 M	\$209 M	\$143 M	3,649
Hotels and Lodging Places	\$0 M	\$105 M	\$105 M	\$40 M	\$7 M	1,398
Personal Services	\$0 M	\$68 M	\$68 M	\$32 M	\$2 M	1,321
Business Services	\$0 M	\$834 M	\$834 M	\$473 M	\$16 M	11,272
Automobile Rental and Leasing	\$0 M	\$26 M	\$26 M	\$7 M	\$2 M	199
Auto Repair Services	\$0 M	\$92 M	\$92 M	\$33 M	\$4 M	987
All Other Services	\$0 M	\$1,326 M	\$1,326 M	\$706 M	\$15 M	14,283
Amusement and Recreation Services, N.E.C.	\$0 M	\$40 M	\$40 M	\$14 M	\$2 M	669
Other State and Local Govt Enterprises	\$0 M	\$83 M	\$83 M	\$19 M	\$0 M	339
Other Federal Government Enterprises	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	24
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,193
Total Outlay	\$16,187 M	\$10,718 M	\$26,904 M	\$10,957 M	\$1,167 M	170,978

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-2 SCENARIO #6
SCAG REGION 2020 NON-RESIDENT AIR PASSENGER IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$24 M	\$24 M	\$6 M	\$0 M	113
Agriculture	\$0 M	\$12 M	\$12 M	\$4 M	\$0 M	119
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	1
Agricultural Services	\$0 M	\$24 M	\$24 M	\$15 M	\$1 M	974
Mining	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	36
Construction	\$0 M	\$316 M	\$316 M	\$130 M	\$2 M	2,800
Food Processing	\$0 M	\$383 M	\$383 M	\$60 M	\$9 M	818
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$16 M	\$16 M	\$4 M	\$0 M	88
Apparel	\$0 M	\$29 M	\$29 M	\$8 M	\$0 M	179
Wood Products	\$0 M	\$5 M	\$5 M	\$2 M	\$0 M	46
Furniture	\$0 M	\$14 M	\$14 M	\$4 M	\$0 M	84
Pulp and Paper	\$0 M	\$101 M	\$101 M	\$23 M	\$1 M	291
Printing & Publishing	\$0 M	\$153 M	\$153 M	\$59 M	\$2 M	1,079
Chemicals	\$0 M	\$94 M	\$94 M	\$19 M	\$1 M	187
Petroleum & Coal Products	\$0 M	\$202 M	\$202 M	\$14 M	\$7 M	61
Rubber Products	\$0 M	\$2 M	\$2 M	\$1 M	\$0 M	7
Leather Products	\$0 M	\$4 M	\$4 M	\$1 M	\$0 M	44
Stone Clay & Glass Products	\$0 M	\$4 M	\$4 M	\$1 M	\$0 M	15
Primary Metals	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	2
Fabricated Metals	\$0 M	\$11 M	\$11 M	\$3 M	\$0 M	41
Industrial Machinery	\$0 M	\$13 M	\$13 M	\$4 M	\$0 M	43
Electrical Machinery	\$0 M	\$136 M	\$136 M	\$38 M	\$1 M	398
Transportation Equipment	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	16
Scientific Instruments	\$0 M	\$36 M	\$36 M	\$13 M	\$0 M	94
Miscellaneous Manufacturing	\$0 M	\$38 M	\$38 M	\$12 M	\$1 M	226
Railroads and Related Services	\$0 M	\$19 M	\$19 M	\$7 M	\$0 M	68
Local, Interurban Passenger Transit	\$333 M	\$15 M	\$348 M	\$207 M	\$4 M	6,123
Motor Freight Transport and Warehousing	\$0 M	\$153 M	\$153 M	\$50 M	\$2 M	729
Water Transportation	\$0 M	\$18 M	\$18 M	\$5 M	\$1 M	43
Air Transportation	\$0 M	\$48 M	\$48 M	\$20 M	\$2 M	284
Other Transportation	\$333 M	\$186 M	\$520 M	\$339 M	\$5 M	4,859
Communications & Public Utilities	\$0 M	\$756 M	\$756 M	\$174 M	\$53 M	1,700
Wholesale Trade	\$0 M	\$598 M	\$598 M	\$243 M	\$92 M	3,516
Other Retail Trade	\$1,680 M	\$4,813 M	\$6,493 M	\$1,111 M	\$1,046 M	35,581
Eating & Drinking	\$3,602 M	\$235 M	\$3,837 M	\$1,473 M	\$274 M	100,334
FIRE	\$0 M	\$1,887 M	\$1,887 M	\$281 M	\$192 M	4,906
Hotels and Lodging Places	\$5,365 M	\$109 M	\$5,475 M	\$2,093 M	\$356 M	73,101
Personal Services	\$0 M	\$107 M	\$107 M	\$50 M	\$3 M	2,078
Business Services	\$0 M	\$886 M	\$886 M	\$502 M	\$16 M	11,984
Automobile Rental and Leasing	\$981 M	\$41 M	\$1,022 M	\$290 M	\$71 M	7,895
Auto Repair Services	\$0 M	\$115 M	\$115 M	\$42 M	\$5 M	1,216
All Other Services	\$753 M	\$1,537 M	\$2,291 M	\$1,219 M	\$25 M	24,637
Amusement and Recreation Services, N.E.C.	\$954 M	\$35 M	\$989 M	\$356 M	\$46 M	14,041
Other State and Local Govt Enterprises	\$0 M	\$100 M	\$100 M	\$22 M	\$0 M	406
Other Federal Government Enterprises	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	24
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	1,898
Total Outlay	\$14,003 M	\$13,298 M	\$27,300 M	\$9,577 M	\$2,221 M	303,164

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1 AND LEVEL-2 SCENARIO #6
SCAG REGION 2020 AIR SERVICES AND NON-RESIDENT AIR PASSENGER IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$0 M	\$33 M	\$33 M	\$8 M	\$0 M	159
Agriculture	\$0 M	\$18 M	\$18 M	\$6 M	\$0 M	173
Forestry & Forest Products	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	1
Commercial Fishing	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	2
Agricultural Services	\$0 M	\$32 M	\$32 M	\$20 M	\$1 M	1,261
Mining	\$0 M	\$33 M	\$33 M	\$8 M	\$2 M	158
Construction	\$0 M	\$484 M	\$484 M	\$199 M	\$4 M	4,298
Food Processing	\$0 M	\$536 M	\$536 M	\$84 M	\$13 M	1,144
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$0 M	\$30 M	\$30 M	\$7 M	\$0 M	168
Apparel	\$0 M	\$53 M	\$53 M	\$14 M	\$0 M	322
Wood Products	\$0 M	\$9 M	\$9 M	\$3 M	\$0 M	75
Furniture	\$0 M	\$30 M	\$30 M	\$9 M	\$0 M	179
Pulp and Paper	\$0 M	\$155 M	\$155 M	\$36 M	\$2 M	447
Printing & Publishing	\$0 M	\$295 M	\$295 M	\$113 M	\$3 M	2,076
Chemicals	\$0 M	\$176 M	\$176 M	\$35 M	\$2 M	350
Petroleum & Coal Products	\$0 M	\$1,489 M	\$1,489 M	\$106 M	\$53 M	453
Rubber Products	\$0 M	\$4 M	\$4 M	\$1 M	\$0 M	11
Leather Products	\$0 M	\$9 M	\$9 M	\$3 M	\$0 M	89
Stone Clay & Glass Products	\$0 M	\$7 M	\$7 M	\$2 M	\$0 M	24
Primary Metals	\$0 M	\$2 M	\$2 M	\$0 M	\$0 M	4
Fabricated Metals	\$0 M	\$20 M	\$20 M	\$6 M	\$0 M	72
Industrial Machinery	\$0 M	\$21 M	\$21 M	\$7 M	\$0 M	73
Electrical Machinery	\$0 M	\$276 M	\$276 M	\$77 M	\$2 M	807
Transportation Equipment	\$0 M	\$22 M	\$22 M	\$7 M	\$0 M	59
Scientific Instruments	\$0 M	\$66 M	\$66 M	\$23 M	\$0 M	172
Miscellaneous Manufacturing	\$0 M	\$72 M	\$72 M	\$22 M	\$1 M	426
Railroads and Related Services	\$0 M	\$40 M	\$40 M	\$16 M	\$1 M	144
Local, Interurban Passenger Transit	\$333 M	\$29 M	\$363 M	\$216 M	\$4 M	6,447
Motor Freight Transport and Warehousing	\$0 M	\$266 M	\$266 M	\$86 M	\$4 M	1,263
Water Transportation	\$0 M	\$57 M	\$57 M	\$16 M	\$2 M	137
Air Transportation	\$16,187 M	\$376 M	\$16,563 M	\$6,928 M	\$518 M	97,886
Other Transportation	\$333 M	\$1,232 M	\$1,565 M	\$1,020 M	\$16 M	14,637
Communications & Public Utilities	\$0 M	\$1,325 M	\$1,325 M	\$305 M	\$93 M	2,976
Wholesale Trade	\$0 M	\$1,128 M	\$1,128 M	\$458 M	\$174 M	6,833
Other Retail Trade	\$1,680 M	\$6,325 M	\$8,005 M	\$1,370 M	\$1,289 M	43,869
Eating & Drinking	\$3,602 M	\$558 M	\$4,160 M	\$1,597 M	\$297 M	108,784
FIRE	\$0 M	\$3,290 M	\$3,290 M	\$490 M	\$335 M	8,556
Hotels and Lodging Places	\$5,385 M	\$214 M	\$5,579 M	\$2,133 M	\$362 M	74,499
Personal Services	\$0 M	\$174 M	\$174 M	\$82 M	\$5 M	3,399
Business Services	\$0 M	\$1,720 M	\$1,720 M	\$975 M	\$32 M	23,236
Automobile Rental and Leasing	\$981 M	\$67 M	\$1,048 M	\$297 M	\$73 M	8,094
Auto Repair Services	\$0 M	\$207 M	\$207 M	\$75 M	\$9 M	2,183
All Other Services	\$753 M	\$2,864 M	\$3,617 M	\$1,925 M	\$40 M	38,900
Amusement and Recreation Services, N.E.C.	\$954 M	\$75 M	\$1,029 M	\$370 M	\$48 M	14,610
Other State and Local Govt Enterprises	\$0 M	\$183 M	\$183 M	\$41 M	\$0 M	745
Other Federal Government Enterprises	\$0 M	\$13 M	\$13 M	\$4 M	\$0 M	49
Household Income*	\$0 M	\$0 M	\$0 M	\$1,335 M	\$0 M	4,091
Total Outlay	\$30,189 M	\$24,015 M	\$54,205 M	\$20,534 M	\$3,388 M	474,141

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-3 SCENARIO #6
SCAG REGION 2020 AIR CARGO IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$15 M	\$11 M	\$26 M	\$7 M	\$0 M	124
Agriculture	\$16 M	\$9 M	\$24 M	\$8 M	\$1 M	240
Forestry & Forest Products	\$0 M	\$0 M	\$1 M	\$0 M	\$0 M	4
Commercial Fishing	\$15 M	\$0 M	\$15 M	\$7 M	\$0 M	201
Agricultural Services	\$0 M	\$15 M	\$15 M	\$9 M	\$0 M	585
Mining	\$0 M	\$18 M	\$18 M	\$4 M	\$1 M	85
Construction	\$0 M	\$278 M	\$278 M	\$114 M	\$2 M	2,464
Food Processing	\$20 M	\$149 M	\$169 M	\$27 M	\$4 M	361
Tobacco	\$0 M	\$0 M	\$0 M	\$0 M	\$0 M	0
Textiles	\$38 M	\$211 M	\$249 M	\$60 M	\$2 M	1,398
Apparel	\$1,022 M	\$72 M	\$1,094 M	\$282 M	\$4 M	6,675
Wood Products	\$3 M	\$12 M	\$15 M	\$5 M	\$0 M	129
Furniture	\$122 M	\$69 M	\$191 M	\$56 M	\$1 M	1,139
Pulp and Paper	\$21 M	\$211 M	\$232 M	\$54 M	\$3 M	669
Printing & Publishing	\$135 M	\$151 M	\$286 M	\$109 M	\$3 M	2,010
Chemicals	\$324 M	\$299 M	\$623 M	\$125 M	\$6 M	1,235
Petroleum & Coal Products	\$8 M	\$189 M	\$197 M	\$14 M	\$7 M	60
Rubber Products	\$160 M	\$10 M	\$170 M	\$40 M	\$1 M	514
Leather Products	\$11 M	\$7 M	\$18 M	\$6 M	\$0 M	178
Stone Clay & Glass Products	\$64 M	\$10 M	\$74 M	\$22 M	\$1 M	263
Primary Metals	\$277 M	\$39 M	\$316 M	\$64 M	\$4 M	693
Fabricated Metals	\$316 M	\$124 M	\$440 M	\$131 M	\$4 M	1,596
Industrial Machinery	\$1,149 M	\$112 M	\$1,261 M	\$392 M	\$10 M	4,300
Electrical Machinery	\$6,411 M	\$2,069 M	\$8,480 M	\$2,380 M	\$71 M	24,773
Transportation Equipment	\$4,052 M	\$36 M	\$4,088 M	\$1,401 M	\$38 M	11,112
Scientific Instruments	\$4,236 M	\$284 M	\$4,520 M	\$1,592 M	\$31 M	11,773
Miscellaneous Manufacturing	\$505 M	\$59 M	\$564 M	\$169 M	\$10 M	3,316
Railroads and Related Services	\$0 M	\$42 M	\$42 M	\$16 M	\$1 M	150
Local, Interurban Passenger Transit	\$0 M	\$19 M	\$19 M	\$11 M	\$0 M	426
Motor Freight Transport and Warehousing	\$0 M	\$270 M	\$270 M	\$88 M	\$4 M	1,283
Water Transportation	\$0 M	\$23 M	\$23 M	\$6 M	\$1 M	54
Air Transportation	\$0 M	\$73 M	\$73 M	\$30 M	\$2 M	429
Other Transportation	\$0 M	\$109 M	\$109 M	\$71 M	\$1 M	1,019
Communications & Public Utilities	\$0 M	\$664 M	\$664 M	\$153 M	\$47 M	1,493
Wholesale Trade	\$0 M	\$1,802 M	\$1,802 M	\$731 M	\$278 M	10,600
Other Retail Trade	\$0 M	\$1,578 M	\$1,578 M	\$270 M	\$254 M	8,648
Eating & Drinking	\$0 M	\$263 M	\$263 M	\$101 M	\$19 M	6,874
FIRE	\$0 M	\$1,527 M	\$1,527 M	\$227 M	\$155 M	3,970
Hotels and Lodging Places	\$0 M	\$157 M	\$157 M	\$60 M	\$10 M	2,096
Personal Services	\$0 M	\$78 M	\$78 M	\$37 M	\$2 M	1,518
Business Services	\$0 M	\$868 M	\$868 M	\$492 M	\$16 M	11,731
Automobile Rental and Leasing	\$0 M	\$36 M	\$36 M	\$10 M	\$3 M	278
Auto Repair Services	\$0 M	\$177 M	\$177 M	\$64 M	\$7 M	1,866
All Other Services	\$0 M	\$1,639 M	\$1,639 M	\$872 M	\$18 M	17,623
Amusement and Recreation Services, N.E.C.	\$0 M	\$40 M	\$40 M	\$15 M	\$2 M	573
Other State and Local Govt Enterprises	\$0 M	\$107 M	\$107 M	\$24 M	\$0 M	436
Other Federal Government Enterprises	\$0 M	\$6 M	\$6 M	\$2 M	\$0 M	24
Household Income*	\$0 M	\$0 M	\$0 M	\$667 M	\$0 M	2,207
Total Outlay	\$18,918 M	\$13,921 M	\$32,839 M	\$11,025 M	\$1,026 M	149,194

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

**LEVEL-1, LEVEL-2, AND LEVEL-3 SCENARIO #6
COMBINED SCAG REGION 2020 AIR TRANSPORTATION SERVICES, NON-RESIDENT AIR
PASSENGER IMPACTS, AND AIR CARGO IMPACTS**

Sector	Millions Of 1998 \$s					Employment Impacts
	Direct Impact	Indirect and Induced Impacts	Total Impacts	Income Impacts	Tax Revenue Impacts	
Livestock & Livestock Products	\$15 M	\$44 M	\$59 M	\$15 M	\$0 M	282
Agriculture	\$16 M	\$26 M	\$42 M	\$14 M	\$1 M	414
Forestry & Forest Products	\$0 M	\$0 M	\$1 M	\$0 M	\$0 M	5
Commercial Fishing	\$15 M	\$0 M	\$15 M	\$8 M	\$0 M	203
Agricultural Services	\$0 M	\$46 M	\$46 M	\$29 M	\$1 M	1,847
Mining	\$0 M	\$51 M	\$51 M	\$12 M	\$3 M	243
Construction	\$0 M	\$762 M	\$762 M	\$313 M	\$6 M	6,762
Food Processing	\$20 M	\$685 M	\$705 M	\$111 M	\$16 M	1,505
Tobacco	\$0 M	\$1 M	\$1 M	\$0 M	\$0 M	1
Textiles	\$38 M	\$241 M	\$279 M	\$67 M	\$2 M	1,567
Apparel	\$1,022 M	\$125 M	\$1,147 M	\$296 M	\$4 M	6,997
Wood Products	\$3 M	\$21 M	\$23 M	\$8 M	\$0 M	205
Furniture	\$122 M	\$99 M	\$221 M	\$65 M	\$1 M	1,318
Pulp and Paper	\$21 M	\$366 M	\$387 M	\$90 M	\$4 M	1,116
Printing & Publishing	\$135 M	\$447 M	\$581 M	\$222 M	\$6 M	4,086
Chemicals	\$324 M	\$476 M	\$800 M	\$160 M	\$8 M	1,585
Petroleum & Coal Products	\$8 M	\$1,678 M	\$1,686 M	\$120 M	\$60 M	513
Rubber Products	\$160 M	\$13 M	\$174 M	\$40 M	\$1 M	526
Leather Products	\$11 M	\$16 M	\$27 M	\$9 M	\$0 M	267
Stone Clay & Glass Products	\$64 M	\$17 M	\$80 M	\$24 M	\$1 M	287
Primary Metals	\$277 M	\$41 M	\$318 M	\$65 M	\$4 M	698
Fabricated Metals	\$316 M	\$144 M	\$460 M	\$137 M	\$5 M	1,667
Industrial Machinery	\$1,149 M	\$134 M	\$1,283 M	\$398 M	\$10 M	4,373
Electrical Machinery	\$6,411 M	\$2,345 M	\$8,756 M	\$2,457 M	\$74 M	25,580
Transportation Equipment	\$4,052 M	\$57 M	\$4,109 M	\$1,409 M	\$38 M	11,171
Scientific Instruments	\$4,236 M	\$350 M	\$4,586 M	\$1,615 M	\$32 M	11,944
Miscellaneous Manufacturing	\$505 M	\$131 M	\$636 M	\$191 M	\$12 M	3,742
Railroads and Related Services	\$0 M	\$82 M	\$82 M	\$32 M	\$2 M	293
Local, Interurban Passenger Transit	\$333 M	\$48 M	\$382 M	\$227 M	\$5 M	6,874
Motor Freight Transport and Warehousing	\$0 M	\$536 M	\$536 M	\$174 M	\$8 M	2,546
Water Transportation	\$0 M	\$80 M	\$80 M	\$22 M	\$3 M	191
Air Transportation	\$16,187 M	\$449 M	\$16,636 M	\$6,959 M	\$520 M	98,315
Other Transportation	\$333 M	\$1,341 M	\$1,674 M	\$1,091 M	\$18 M	15,656
Communications & Public Utilities	\$0 M	\$1,989 M	\$1,989 M	\$458 M	\$139 M	4,469
Wholesale Trade	\$0 M	\$2,930 M	\$2,930 M	\$1,189 M	\$451 M	17,233
Other Retail Trade	\$1,680 M	\$7,903 M	\$9,583 M	\$1,640 M	\$1,543 M	52,517
Eating & Drinking	\$3,602 M	\$821 M	\$4,423 M	\$1,697 M	\$316 M	115,658
FIRE	\$0 M	\$4,817 M	\$4,817 M	\$717 M	\$491 M	12,526
Hotels and Lodging Places	\$5,365 M	\$371 M	\$5,736 M	\$2,193 M	\$373 M	76,595
Personal Services	\$0 M	\$252 M	\$252 M	\$119 M	\$7 M	4,918
Business Services	\$0 M	\$2,589 M	\$2,589 M	\$1,467 M	\$48 M	34,967
Automobile Rental and Leasing	\$981 M	\$103 M	\$1,084 M	\$307 M	\$76 M	8,372
Auto Repair Services	\$0 M	\$384 M	\$384 M	\$139 M	\$16 M	4,048
All Other Services	\$753 M	\$4,502 M	\$5,256 M	\$2,798 M	\$58 M	56,523
Amusement and Recreation Services, N.E.C.	\$954 M	\$115 M	\$1,069 M	\$384 M	\$50 M	15,183
Other State and Local Govt Enterprises	\$0 M	\$289 M	\$289 M	\$65 M	\$0 M	1,181
Other Federal Government Enterprises	\$0 M	\$19 M	\$19 M	\$6 M	\$0 M	73
Household Income*	\$0 M	\$0 M	\$0 M	\$2,002 M	\$0 M	6,299
Total Outlay	\$49,107 M	\$37,937 M	\$87,044 M	\$31,559 M	\$4,415 M	623,336

* Note: Sales of household labor are not included in regional output totals, but are included in the household income totals.

Exhibit D

Airport Environmental Handbook



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● Airport Environmental Handbook

Order 5050.4A

October 8, 1985

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CHAPTER 1. INTRODUCTION AND DEFINITIONS

1. PURPOSE. This order provides instructions and guidance for preparing and processing the environmental assessments, findings of no significant impact (FONSI), and environmental impact statements (EIS) for airport development proposals and other airport actions as required by various laws and regulations.

2. DISTRIBUTION. This order is distributed in Washington headquarters to the branch level in the Offices of Airport Planning and Programming, Airport Standards, Environment and Energy, and the Chief Counsel; to all regional Airports divisions to the branch level; and to all Airports district/field offices and the Airports and Logistics Branch, AAC 960, FAA Aeronautical Center.

3. CANCELLATION. FAA Order 5050.4, Airport Environmental Handbook, dated March 21, 1980, is cancelled.

4. COUNCIL ON ENVIRONMENTAL QUALITY (CEQ) TERMINOLOGY. CEQ Regulations implementing the National Environmental Policy Act of 1969 (NEPA) were published in the Federal Register on November 29, 1978. (Hereinafter, references to the CEQ Regulations shall simply identify the section; e.g., CEQ 1508.1.) CEQ 1508.1 states "The terminology of this part shall be uniform throughout the Federal government."

5. AIRPORTS PROGRAM ENVIRONMENTAL DEFINITIONS. The following terms used for airport actions are in addition to those defined in CEQ 1508.

a. Federal Action. The Federal action as far as the Airports Program is concerned may be any of the following:

(1) Approval of an airport location.

(2) Approval of an airport layout plan or revisions to an airport layout plan.

(3) Approval of funding for airport development (including separate funding of plans and specifications for development).

(4) Requests for the conveyance of government land under Section 516 of the Airport and Airway Improvement Act of 1982 (hereinafter, the 1982 Airport Act) for development or improvement of a public airport.

(5) Approval of release of airport land.

b. Federal Environmental Approval. This is a determination by the approving official that the requirements imposed by applicable environmental statutes and regulations have been satisfied by a finding of no significant impact or a final environmental impact statement. It is not an approval of the Federal action. (A decision concerning the proposed Federal action takes place not less than 30 days after announcement of the approved final environmental impact statement in the Federal Register.)

c. Written Reevaluation. This is an evaluation prepared by the FAA responsible official of a draft or

final impact statement or a finding of no significant impact. This evaluation will either conclude that the contents of previously prepared environmental documents remain valid or that significant changes require the preparation of a supplement or new environmental document.

d. Approving Official. This is the FAA official who has the authority to approve findings of no significant impact or final environmental impact statements per Chapters 6 and 9.

e. Responsible Official. This is an FAA employee designated with overall responsibility to furnish guidance and participate in the preparation of environmental impact statements, to evaluate the statements, and to take responsibility for the scope and content of the statements. This person may be authorized to evaluate and accept environmental assessments prepared by airport sponsors and may direct scoping activities for the FAA.

f. Decisionmaker. This is the FAA official who has authority to approve airport layout plans, approve funding for airport development, or otherwise approve the Federal action.

g. Sponsor. This is any public agency or private owner of a public use airport, as defined in the 1982 Airport Act, paragraph 503(a)(17), which applies to receive Federal financial assistance under the 1982 Airport Act or anyone proposing an airport action for which a Federal authorization is required (see paragraph 5.a., above).

h. Major Runway Extension. This is a runway extension which results in impacts as specified in paragraph 22a(8) or which results in a 1.5 Ldn or greater increase in noise over any noise sensitive area located within the 65 Ldn contour. Instructions in paragraph 47e(1)(a) through (d) shall be used to determine the noise impact. Removal of a relocated threshold is considered a runway extension if it was indicated on an airport layout plan (ALP) as a permanently relocated threshold; removal of a displaced threshold is not considered a runway extension.

i. Design, Art, and Architectural Application. Design is the process of arranging physical spaces, materials, and objects to perform specific functions with emphasis on the relationship of the resulting product to human and environmental factors. Design quality is judged by broader criteria than functional performance alone. Design includes architecture, landscape architecture, graphics, interior design, and engineering. Art includes objects or works of art which are placed in or on an airport facility primarily for aesthetic reasons. Architectural application means the arrangement of structural materials, landscaping, or site development to produce an aesthetically pleasing and functional environment. (See Chapter 5, paragraph 41.c., for its application.)

j. NEPA Section 102(2)(D) States. Such states are those whose agencies or officials, having statewide jurisdiction and responsibility for implementing major Federal actions funded under a program of grants to states, prepare environmental impact statements required by NEPA, section 102(2)(C).

k. "NEPA Like" State or Local Agencies. Such states or agencies are those which are subject to state or local requirements comparable to NEPA requirements for environmental impact statements according to CEQ 1506.2(c). Such agencies, unless specifically barred by other law, shall, to the fullest extent possible, jointly prepare environmental impact statements and shall be considered a joint lead agency with the FAA.

l. Project Involving Airport Location. This is a project by a sponsor for land acquisition or other development at an airport which previously did not exist.

m. Noise Sensitive Areas. These are land uses which may be adversely affected by cumulative noise levels above 65 Ldn such as residential neighborhoods, educational, health or religious structures or sites and outdoor recreational, cultural and historic sites (also see paragraph 47e(2)(d)).

6. FEDERAL AVIATION ADMINISTRATION (FAA) TERMS. Order 1000.15A, FAA Glossary, dated December 18, 1975, (and subsequent updates) contains terms which recur most often in agency communications. This order includes several terms used in airport planning and development.

7. FUNDING. Resources to implement the provisions of this order shall be requested through the normal annual budget process.

8. 9. RESERVED.

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CHAPTER 2. GENERAL REQUIREMENTS AND RESPONSIBILITIES

10. GENERAL.

a. Airport sponsors and the FAA shall carefully consider and weigh environmental amenities and values in a timely manner in evaluating proposed Federal actions relating to airport planning and development, utilizing a systematic interdisciplinary approach and involving local and state officials and individuals having expertise. The environmental assessment and consultation process is to provide officials and decisionmakers, as well as members of the public, with an understanding of the potential environmental impacts of the proposed action. The final decision is to be made on the basis of a number of factors. Environmental considerations are to be weighed as fully and as fairly as non-environmental considerations. The FAA's objective is to enhance environmental quality and avoid or minimize adverse environmental impacts that might result from a proposed Federal action in a manner consistent with the FAA's principal mission to provide for the safety of aircraft operations.

b. Unless categorically excluded by this order (Chapter 3, paragraph 23), an environmental assessment and environmental impact statement or finding of no significant impact are required for proposed Federal actions related to airports. In accordance with Department of Transportation (DOT) policy and with the CEQ Regulations, it is intended that a single environmental document meet Federal, state, and local requirements.

11. OVERVIEW OF ENVIRONMENTAL PROCESS.

a. The process for consideration of the environmental effects of a proposed action involves a number of steps, beginning with the airport proprietor or sponsor. The relative responsibilities of the sponsor and the FAA are summarized in the following paragraphs. Integration of environmental considerations in early planning and involvement of the public are discussed in Chapter 5. Subsequent chapters present detailed instructions on content, processing, and approval of environmental documents.

b. To facilitate an understanding of the process, a flow diagram (Appendix 1) is presented at the end of this order. Appendix 1 is broken down into three sheets:

(1) Sheet 1 depicts the process from identification of the problem by the sponsor, through initial review of the sponsor prepared environmental assessment, to development of the environmental assessment as an FAA document. This sheet also identifies an early decision point on whether or not the action is categorically excluded per paragraph 23. If the FAA determines, after initial review of the sponsor's proposal, that the action is in this category, no environmental assessment is necessary.

(2) Sheet 2 begins with a key FAA determination based on the environmental assessment of whether the action requires preparation of an environmental impact statement. If this answer is yes, sheet 2 outlines the process of scoping, developing, and processing the draft environmental impact statement by FAA through review of comments and preparation of the proposed final document.

(3) Sheet 2 also describes the process if it is determined that an environmental impact statement is not necessary. In this case, a finding of no significant impact may be prepared and approved with limited or no coordination outside of FAA. A final decision on the action is then made after environmental approval.

(4) Sheet 3 is a continuation of Sheet 2. It represents the environmental and funding approval processes for actions which have required the preparation of an environmental impact statement. Environmental approval action is taken in either headquarters or the region depending on approval authority as described in paragraph 95. A final decision is subsequently made and includes a record of decision incorporating assurances and mitigation measures identified in the environmental impact statement (reference paragraph 98). The decision may also be made in headquarters or the region depending on approval authority. Note that environmental and funding approvals are not necessarily made at the same level or by the same official. These distinctions are made in the flow diagram and in the definitions in Chapter 1, paragraphs 5d and f.

12. SPONSOR'S RESPONSIBILITY. Sponsors of airport projects are responsible for identifying the problem, developing conceptual alternatives, and preparing an environmental assessment as more fully explained in Chapter 5. In the Airports Program, an environmental assessment prepared by the sponsor shall systematically examine each potential impact to determine if the impact is significant. The document shall be developed in coordination with appropriate local, state, and Federal agencies, with community involvement as described in this handbook, and in direct consultation with FAA. It is important that the material contained therein be objective, complete, and accurate in order for it to serve as the basis for the preparation of the FAA's environmental documents. The sponsor's responsibility also extends to providing additional data and information to the FAA when required to assist in its review of environmental impacts and in the preparation of environmental documents. The environmental assessment shall draw upon the appropriate disciplines of the natural and social sciences and the environmental design arts.

13. FAA RESPONSIBILITY. In brief, under the Airports Program the FAA is responsible for analyzing the environmental impacts and consequences of a proposed Federal action involving airports, for the environmental assessment and related documents, and ultimately for approving or disapproving the environmental documents and the Federal action. Although an environmental assessment submitted by an airport sponsor may be used in whole or in part, the FAA is responsible for the facts, opinions, and judgments upon which the environmental determination is based. It is, therefore, incumbent upon the FAA to assure that all documentation presents a full, accurate, and fair assessment of the environmental consequences of the proposed action.

14. USE OF CONTRACTORS. If contractors are to be involved, see paragraph 76 for details.

15. ROLE OF LEAD AND COOPERATING AGENCIES. The various roles of the lead agency are described in CEQ 1501.5 through 1501.8. CEQ 1501.5 generally describes the role of the lead agency when more than one agency is involved in an action. CEQ 1501.6 describes the relationship with cooperating agencies. CEQ 1501.7 and 1501.8 define the role of the lead agency in the scoping process and in setting time limits. More specific information on the involvement of the lead and cooperating agencies in the preparation of environmental impact statements is contained in paragraphs 74 and 75.

16. PREPARATION OF ENVIRONMENTAL DOCUMENTS. Responsibilities and authority of state and local agencies will vary depending upon the state or local requirements, jurisdictional responsibilities, and expertise. This is discussed in Chapter 7.

17. EARLY NEPA INVOLVEMENT IN PLANNING. In accordance with NEPA, environmental considerations shall be identified early in the planning process. Chapter 5 discusses the implementation of this requirement in airport planning.

18. PUBLIC INVOLVEMENT.

a. Citizen involvement, where appropriate, should be initiated at the earliest practical time and continued throughout the development of the proposed project in order to obtain meaningful input. Examples of citizen groups are: environmental, conservation, public service, education, labor, business, or aviation and airspace user organizations, and citizen advisory committees.

b. While requests for Federal airport actions originate with a local public agency, the involvement of the community at large is a necessary element in the decisionmaking process. An effective opportunity to comment at appropriate stages in the decisionmaking process shall be provided to communities, citizen groups, and other individuals affected by airport proposals submitted to the FAA. They shall also be provided an opportunity to review and comment on draft and final statements. In order to provide an effective opportunity for comment when significant portions of the affected public have a native language other than English, environmental documents may be provided or public hearings conducted in such native language.

c. In accordance with section 509(b)(6) of the 1982 Airport Act, the opportunity for public hearings shall be offered on any action involving airport location, location of a new runway, or major extension of a runway. For other actions, a public hearing shall be considered in accordance with the guidelines contained in paragraph 49. FAA Advisory Circular 150/5050 4, Citizen Participation in Airport Planning, has additional specific guidance on community involvement. Standard procedures for Federal agency public involvement are stated in CEQ 1506.6.

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CHAPTER 3. ENVIRONMENTAL ACTION CHOICES

20. GENERAL.

a. In the Airports Program, Federal actions which require environmental processing generally involve the approval of specific projects at specific airports. A series of projects may be grouped into an overall plan for development, with successive phases being contingent upon other events such as a projected increase in traffic or a change in the aircraft using the airport. Such programs for development will usually be the subject of tiered environmental actions (see paragraph 101 and CEQ 1508.28).

b. All Federal actions fall in one of three categories:

- (1) Those normally requiring an environmental impact statement (CEQ 1508.11).
- (2) Those requiring an environmental assessment (CEQ 1508.9).
- (3) Those which are normally categorically excluded (CEQ 1508.4).

21. ACTIONS NORMALLY REQUIRING AN ENVIRONMENTAL IMPACT STATEMENT.

a. The following Federal actions will normally require an environmental impact statement:

- (1) First time airport layout plan approval or airport location approval (see paragraphs 30 and 32) for a commercial service airport located in a standard metropolitan statistical area.
- (2) Federal financial participation in, or airport layout approval of, a new runway capable of handling air carrier aircraft at a commercial service airport in a standard metropolitan statistical area.

b. Even though these actions normally require an environmental impact statement, the preparation of the environmental impact statement will usually be preceded by an environmental assessment. If the environmental assessment demonstrates that there are no significant impacts, the action shall be processed as a finding of no significant impact instead of an environmental impact statement.

22. ACTIONS NORMALLY REQUIRING AN ENVIRONMENTAL ASSESSMENT.

a. Federal financial participation in, or airport layout plan approval of, the following categories of actions shall be subject to the analysis of an environmental assessment and subsequent decision as to whether to prepare an environmental impact statement or a finding of no significant impact.

- (1) Airport location.
- (2) New runway.

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(3) Major runway extension.

(4) Runway strengthening which would result in a 1.5 Ldn or greater increase in noise over any noise sensitive area located within the 65 Ldn contour.

(5) Construction or relocation of entrance or service road connections to public roads which adversely affect the capacity of such public roads.

(6) Land acquisition associated with any of the above items plus land acquisition which results in relocation of residential units when there is evidence of insufficient comparable replacement dwellings, major disruption of business activities, or acquisition which involves land covered under section 4(f) of the DOT Act (recodified 49 USC Subtitle I, section 303, January 12, 1983).

(7) Establishment or relocation of an instrument landing system, or an approach lighting system.

(8) An airport development action that falls within the scope of paragraph 24 or which involves any of the following:

(a) Use of section 4(f) land.

(b) Effect on property included in or eligible for inclusion in the National Register of Historic Places or other property of state or local historical, architectural, archeological, or cultural significance.

(c) Land acquisition for conversion of farmland, scoring over 160 on Form AD-1006, protected under the Farmland Protection Policy Act (FPPA) to nonagricultural use through Federal financial assistance or through conveyance of government land.

(d) Wetlands, coastal zones, or floodplains.

(e) Endangered or threatened species.

b. FAA requests for conveyance of government land for airport purposes under section 516 of the 1982 Airport Act, unless the proposed use of the land falls within the scope of paragraph 23 (see paragraph 34 for more detailed instructions).

c. The actions identified in this paragraph shall be supported through one of the following action choices based upon an environmental assessment:

(1) Environmental impact statements.

(2) Findings of no significant impact (see paragraph 27).

d. Actions identified in this paragraph may be the subject of written reevaluations of previously

approved environmental impact statements or findings of no significant impact. (See paragraph 103).

23. CATEGORICAL EXCLUSIONS.

a. Unless specifically covered by paragraphs 21, 22, 24, or 26, the items below are categorically excluded from the requirement for formal environmental assessment. Paragraphs 21 and 22 identify specific airport actions such as major runway extensions which require, as a minimum, an environmental assessment. Paragraph 24 identifies extraordinary circumstances which create a requirement for environmental assessment of actions otherwise excluded. Paragraph 26 deals with cumulative impact. For any of the following specific items, paragraphs 21, 22, 24, and 26 shall be reviewed.

- (1) Runway, taxiway, apron, or loading ramp construction or repair work including extension, strengthening, reconstruction, resurfacing, marking, grooving, fillets and jet blast facilities, and new heliports on existing airports, except where such action will create environmental impacts off airport property.
- (2) Installation or upgrading of airfield lighting systems, including runway end identification lights, visual approach aids, beacons and electrical distribution systems.
- (3) Installation of miscellaneous items including segmented circles, wind or landing direction indicators or measuring devices, or fencing.
- (4) Construction or expansion of passenger handling facilities.
- (5) Construction, relocation or repair of entrance and service roadway.
- (6) Grading or removal of obstructions on airport property and erosion control actions with no off airport impacts.
- (7) Landscaping generally, and landscaping or construction of physical barriers to diminish impact of airport blast and noise.
- (8) Projects to carry out noise compatibility programs.
- (9) Land acquisition and relocation associated with any of the above items.
- (10) Federal release of airport land (see paragraph 35).
- (11) Removal of a displaced threshold.

b. The following items are not subject to the paragraphs listed in a. above and are categorically excluded:

- (1) Acquisition of an existing privately owned airport, as long as acquisition only involves change of ownership.
- (2) Acquisition of: security equipment required by rule or regulation for the safety or security

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of personnel and property on the airport (14 CFR Part 107), safety equipment required by rule or regulation for certification of an airport (14 CFR Part 139) or snow removal equipment.

(3) Issuance of airport planning grants.

(4) Airport Improvement Program actions which are tentative and conditional and clearly taken as a preliminary action to establish a sponsor's eligibility under the Program.

(5) Retirement of the principal of bond or other indebtedness for terminal development.

(6) Issuance of airport policy and planning documents including the National Plan of Integrated Airport Systems (NPIAS), Airport Improvement Program (AIP) priority system, advisory circulars on planning, design, and development programs which are not intended for direct implementation or which are issued by FAA as administrative and technical guidance to the public.

(7) Issuance of certificates and related actions under the Airport Certification Program (14 CFR Part 139).

(8) Issuance of grants for preparation of noise exposure maps and noise compatibility programs per sections 103(a) and 104(a) of the Aviation Safety and Noise Abatement Act of 1979 and 14 CFR Part 150 determinations on noise exposure maps and approval of noise compatibility programs.

(9) Airspace determinations (see paragraph 25, Advisory Actions).

24. EXTRAORDINARY CIRCUMSTANCES. Proposed Federal actions which are normally categorically excluded but which have any of the following characteristics shall be the subject of an environmental assessment. The FAA will determine, in accordance with paragraph 51, whether the action will be the subject of an environmental impact statement or finding of no significant impact.

a. An action that is likely to have an effect on properties protected under section 106 of the Historic Preservation Act of 1966, as amended, or use section 4(f) lands (see paragraphs 47e(8) and 47e(7), respectively), or involve acquisition and conversion of farmland scoring over 160 on Form AD-1006 and protected under the FPPA to nonagricultural use through Federal financial assistance or through conveyance of government land (paragraph 47e(16)).

b. An action that is likely to be highly controversial on environmental grounds. A proposed Federal action is considered highly controversial when the action is opposed on environmental grounds by a Federal, state, or local government agency or by a substantial number of the persons affected by such action. If the responsible official has any doubt whether a given number of opposing persons is "substantial," that doubt shall be resolved by discussion with APP 600 to determine if the action should be processed as a highly controversial one.

c. An action that is likely to have a significant impact on natural, ecological, cultural, or scenic resources of national, state, or local significance (refer to appropriate subparagraphs under 47e, Chapter 5).

d. An action that is likely to be highly controversial with respect to the availability of adequate

relocation housing. In an action involving relocation of persons or businesses, a controversy over the amount of the acquisition or relocation payments is not considered to be a controversy with respect to availability of adequate relocation housing.

e. An action that is likely to:

- (1) Cause substantial division or disruption of an established community, or disrupt orderly, planned development, or is likely to not be reasonably consistent with plans or goals that have been adopted by the community in which the project is located; or
- (2) Cause a significant increase in surface traffic congestion.

f. An action that is likely to:

- (1) Have a significant impact on noise levels of noise sensitive areas;
- (2) Have a significant impact on air quality or violate the local, state, or Federal standards for air quality;
- (3) Have a significant impact on water quality or contaminate a public water supply system; or
- (4) Be inconsistent with any Federal, state, or local law or administrative determination relating to the environment.

g. Other action that is likely to directly or indirectly affect human beings by creating a significant impact on the environment.

25. ADVISORY ACTIONS. Some Federal actions, such as airspace determinations, are of an advisory nature and are neither permissive nor enabling. Such actions which do not fall within the definition of CEQ 1508.18 are not major Federal actions, and environmental assessments or statements are not required as a condition for accomplishing the action. If it is known or anticipated that some subsequent Federal action would require processing in accordance with environmental procedures, the FAA shall so indicate in the advisory action.

26. CUMULATIVE IMPACT.

a. In determining whether an environmental impact statement is required for a proposed Federal action, it is necessary to consider the overall cumulative impact of the proposed action and the consequences of subsequent related actions. CEQ 1508.7 states that "'Cumulative impact' is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

b. CEQ 1508.25 defines three types of actions to be considered in determining the scope of an EIS: "(a) Actions (other than unconnected single actions) which may be: (1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement.

Actions are connected if they: (i) Automatically trigger other actions which may require environmental impact statements. (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously. (iii) Are interdependent parts of a larger action and depend on the larger action for their justification. (2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement. (3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences (sic) together, such as common timing or geography. An agency may wish to analyze these actions in the same impact statement. It should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement."

c. For airport actions, the effect of a number of decisions about a complex of projects can be individually limited to the extent that a finding of no significant impact or categorical exclusion would appear to be appropriate for each project; however, when considered together, the projects may exceed the threshold values in paragraph 47e. In both environmental assessments and environmental impact statements, the total proposal must be considered. In the context of the CEQ Regulations, the total proposal includes the proposed action and all other actions reasonably related to it in time and probability. The following are some examples:

(1) Land acquisition and a future runway extension.

(2) Runway extension and road relocation, when the road needs to be moved to accommodate the extension.

(3) Grading for an Instrument Landing System and future installation of the ILS.

(4) Apron work for terminal area relocation which necessitates highway rerouting which in turn involves housing relocation. Terminal area relocation is the principal action justifying the project, but the effect on community disruption or other impacts due to the highway or housing relocation must be included in assessing the total proposal.

(5) An initial runway extension and a second phase extension which is part of a firm development program or reasonably foreseeable in the near future.

d. In determining when to consider the effects of actions by other agencies in the airport vicinity, the potential for combined significant impact shall be evaluated. For example, new highway construction and airport expansion in combination may create significant air quality impacts. Extensive earth moving from more than one project may combine to cause severe erosion or flooding.

e. For further detail on the treatment of present and related future actions, see Chapter 10.

27. FINDINGS OF NO SIGNIFICANT IMPACT. This action choice applies to those projects which do not have significant impacts and are not categorically excluded under paragraph 23. Content, processing, and approval of this action choice are described in Chapter 6.

28. SUPPLEMENTS. The choice of preparing a supplement to a previously prepared draft or final environmental impact statement is appropriate in some instances of tiering, or when significant

changes occur affecting the validity of previously prepared documents, or when significant new information is brought to light. Paragraph 104, Chapter 10, discusses requirements for supplements.

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CHAPTER 4. SPECIAL INSTRUCTIONS

30. AIRPORT LAYOUT PLAN APPROVALS.

a. **Applicability.** This paragraph applies to approvals of new or revised airport layout plans showing development actions identified in paragraphs 21 and 22a. It does not apply to development shown on an airport layout plan approved prior to January 1, 1970. However, new Federal actions involving the use of such development may require an environmental document. Other paragraphs of this handbook apply to Federal airport actions; FAA Order 1050.1D applies to Federal actions by other FAA offices.

b. **General.** Proposals to construct new runways, runway extensions, terminal buildings, or other major and supportive development are shown on an airport layout plan. Inclusion on the plan signifies that the proposed development has been identified by airport sponsors for planning purposes. It does not represent a commitment by the sponsor to implement the indicated development. FAA reviews the planned development with respect to safety, efficiency, utility, and environmental impact. FAA's approval does not represent a commitment to provide financial assistance to implement the proposed plan. Environmental documents for airport layout plan approvals are subject to tiering as explained in detail in paragraph 101b(4). Tiering results in either an unconditionally or a conditionally approved airport layout plan.

c. **Approval.**

(1) When all items of development covered by paragraphs 21 and 22a have been the subject of environmental approvals pursuant to the provisions of this order, the airport layout plan may be approved unconditionally.

(2) When such environmental action has not been completed, the airport layout plan may be approved subject to the following condition which shall be included in the airport layout plan approval letter:

"The approval indicated by my signature is given subject to the condition that the proposed airport development identified by item herein as requiring environmental processing shall not be undertaken without prior written environmental approval by the FAA."

(3) The approval letter shall identify, by item, those items shown on the airport layout plan which are covered by paragraphs 21 and 22a which have not yet been environmentally approved by FAA.

(4) The FAA approval of an airport layout plan shall be indicated as follows:

(a) The FAA unconditional approval shall be shown on the face of the airport layout plan by use of the term "approved."

(b) The FAA conditional approval shall be shown on the face of the airport layout plan by use of the term "conditionally approved," with a cross-reference to the airport layout plan approval letter.

31. PLANNING GRANTS.

a. Planning grants are not considered major Federal actions for purposes of section 102(2)(C) of

NEPA. Therefore, an environmental impact statement or finding of no significant impact is not required for issuance of the grant. However, environmental considerations are an integral part of master planning (see Chapter 5, paragraphs 40 and 41). The airport layout plan, which is one element of a master plan, is the vehicle through which the FAA acts with respect to airport planning and which is subject to the requirements of paragraph 30. Environmental actions may be taken to cover either the ultimate plan as developed by the study or stages of such development, depending on the independent utility of each stage and the certainty of ultimate development. Two major elements of an environmental assessment--noise and land use--are included in studies conducted under a grant for airport noise compatibility planning. See paragraph 41 for more information on the sponsor's planning process.

b. In the context of airport development, public meetings or other planning meetings held in conjunction with master planning may be expanded to incorporate some of the principles of scoping as described in paragraph 74, especially when it is reasonable to expect that the master plan will identify needed development which has the potential for significant environmental impacts.

32. AIRPORT LOCATION APPROVAL. The location of new airports is subject to the appropriate environmental approval prior to receiving first time Federal aid. If location selection is made as an initial phase of a master planning study, the environmental assessment shall take into account enough of the ultimate planned development to assure that, with the best available information, the selection is based upon considerations that the need for and benefits of future development of the site outweigh any adverse environmental impacts.

33. LAND ACQUISITION. Public sponsors may have the authority to acquire land adjacent to existing airports or for new airports without prior approval by the FAA. Such action could prejudice or preclude a favorable decision by the FAA on proposed changes in airport layout or development which would use the land thus acquired or on requests for reimbursement for the property. When FAA is notified or becomes aware of a possibility that such a situation may be occurring, FAA shall advise the public sponsor that such actions must be consistent with pertinent environmental policy as expressed in this order, that the manner in which the particular property was acquired will be carefully considered by the FAA prior to approval of future FAA action involving the property, and that particular attention will be given by the FAA to its responsibilities under section 4(f) of the DOT Act to insure that a special effort is made to preserve the natural beauty of the countryside, public parks and recreation lands, wildlife and waterfowl refuges, and historic sites. Particular attention shall also be given by the FAA to actions by a sponsor involving wetlands, floodplains, coastal zones, endangered species, properties in or eligible for inclusion in the National Register of Historic Places, and the provisions of Title VI of the Civil Rights Act of 1964 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. A sponsor which has acquired land without prior approval by the FAA shall demonstrate to the satisfaction of the FAA that the acquisition was consistent with the environmental policies expressed in this order and has not prejudiced full and objective consideration of alternatives or limited possible implementation of a preferable alternative.

34. CONVEYANCES OF LAND.

a. Airport sponsors may request conveyance of government owned land under section 516 of the 1982 Airport Act for the development, improvement, or future use of a public airport. This covers land for a new airport, expansion of an existing airport, protection of aerial approaches, and future airport projects. FAA Order 5170.1, entitled "Transfer of Federal Lands, Section 23, of the Airport and

Airway Development Act of 1970", (or subsequent revisions) contains FAA's procedures for such land transfers. The sponsor shall normally include with the request to FAA for the land an environmental assessment in accordance with Chapter 5. An environmental assessment is not required if the use of the land falls within the scope of paragraph 23, Categorical Exclusions. The FAA responsible official shall consult with the Federal agency controlling the land to assure that environmental documentation meets the needs of the controlling agency as well as of the FAA. If an environmental impact statement is required, the FAA may act as either joint lead agency with the controlling agency or as a cooperating agency with jurisdiction by law and may request further information from the sponsor in order to complete the analysis of significant impacts.

b. The FAA may include environmental mitigation measures as covenants in the deed or patent which transfers the land or in an Airport Improvement Program grant agreement for a project on the land.

c. FAA Order 5170.1 instructs "Where there is other Government land adjoining that which is being requested for an airport, an easement interest should be requested as necessary to protect the airport. This involves sufficient control to clear and protect the aerial approaches to the airport, to maintain freedom from electronic interference, or smoke-producing activities, and the right to overfly any land or any interest therein necessary to insure that such land is used only for purposes which are compatible with the noise levels of the operation of a public airport." The FAA responsible official shall pay particular attention to recommending that the FAA request such additional land as allowed and as determined necessary for compatible land use.

d. Public agencies may receive surplus property for public airport purposes. FAA's involvement in such process is set forth in FAA Order 5150.2A, "Federal Surplus Property for Public Airport Purposes." The General Services Administration (GSA) has primary responsibility for disposition of surplus federally owned or controlled property and therefore is the lead agency in meeting the requirements of NEPA. However, FAA has a key role in making recommendations to GSA as to the suitability and amount of property considered necessary for airport purposes. FAA should work closely with GSA and other agencies and become at least a cooperating agency in developing any environmental impact statement required.

35. RELEASES OF AIRPORT LAND.

a. When a sponsor accepts a Federal airport development grant or a conveyance of Federal surplus property for airport purposes, the sponsor incurs specific obligations with respect to the uses of the property. FAA action is required to release a sponsor from obligations in the event the sponsor desires to sell the airport land. This action is normally categorically excluded, but may require an environmental assessment in accordance with the provisions of paragraph 24. In this case, the assessment shall address the known and immediately foreseeable environmental consequences of the release action and, as with other Federal actions regarding land, appropriate coordination with Federal, state, or local agencies shall be completed for applicable areas of environmental consideration (e.g., historic and archeologic site considerations, section 4(f) lands, wetlands and coastal zones, endangered species). In such cases, coordination with the State Historic Preservation Officer is required.

b. In making the final determination, the responsible Federal official shall consider the effects of covenants which will encumber the title and the extent of Federal ability to enforce these covenants subsequent to the release action. The standard conditions of release relative to the right of flight, including the right to make noise from such activity and the prohibition against erection of

obstructions or other actions which would interfere with flight of aircraft over the land released, may be considered as mitigating factors and may be included in environmental assessments when required. When the intended use of released land is consistent with uses described and covered in a prior environmental assessment, the prior data and analysis may be used as input to the present assessment. When the conditions set forth in Chapter 10 apply, a written reevaluation may be used to support the property release.

c. In some cases, another Federal agency may be the lead agency that is responsible for the preparation of an environmental assessment and environmental impact statement, if required. In these circumstances, the FAA may be a cooperating agency. To support the release action, the FAA may then adopt the environmental document prepared by the other agency in accordance with the provisions of CEQ 1506.3.

d. Long term leases which are not related to aeronautical activities or airport support services (i.e., convenience concessions serving the public such as shelter, ground transportation, food and personal services) and which require the FAA's consent for the conversion of dedicated airport property to the status of revenue producing property have, for all practical purposes, the effect of a release and shall be treated the same as a release for purposes of this order. Long term leases are normally those exceeding 20 years.

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CHAPTER 5. EARLY PLANNING, PREPARATION OF ENVIRONMENTAL ASSESSMENTS, STATE AND LOCAL REVIEW, PUBLIC HEARINGS

40. INITIATION OF ENVIRONMENTAL PROCESS. The environmental process begins at the local level with the airport sponsor. An overview of the process is discussed in paragraph 11 and a flow diagram is presented in Appendix 1 of this order, with the steps numbered for ease of reference. CEQ 1501.2 states "Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts." At this early point in time, the sponsor may be engaged in any one of the following activities which may be expected to result in a Federal action:

- a. An airport master planning study (presumably leading eventually to approval of a new or revised airport layout plan or a grant for construction.)
- b. An airport site selection study.
- c. A new airport layout plan or revision.
- d. Formulation of an airport development project.
- e. Plans to obtain government land for airport purposes through a conveyance under section 516 of the 1982 Airport Act.

41. SPONSOR'S PLANNING PROCESS.

a. General. Steps 1, 2, and 3 in Appendix 1 indicate the minimum action expected from the sponsor to start the process. The sponsor identifies a problem and develops conceptual alternatives to solve it. These first three steps may involve a considerable amount of effort. In the case of a master planning study, for example, problem identification would involve inventory, forecasts, demand/capacity analysis, and the determination of facility requirements. The possible alternative ways to provide the required facilities would constitute the planning alternatives. From these alternatives, the sponsor may make a choice which is identified as the proposed action. In choosing among alternatives, environmental factors play a role. CEQ 1501.2(b) states "Identify environmental effects and values in adequate detail so they can be compared to economic and technical analysis." Consequently, in developing alternatives and in choosing a proposed course of action, environmental feasibility should influence choices, as should safety, economic, and technical feasibility. The amount of environmental detail at this early planning stage should be commensurate with other planning analyses being undertaken by the sponsor and will obviously vary greatly between a comprehensive master planning study, for example, and a small development proposal. When a master planning study is done, the sponsor is encouraged to incorporate airport noise compatibility planning and other environmental planning techniques in the study as a basis for subsequent environmental assessment. Whether it is possible at this stage for the sponsor to choose a proposed action among alternatives depends upon the type and complexity of the problem. If the identified problem is lack of sufficient airfield runway capacity or need for a new airport, the alternatives may be numerous and sufficiently complicated to preclude an obvious solution at this early stage. On the other hand, a problem such as providing additional apron space or locating a crash/fire/rescue building may be simple enough that relatively

little effort is required to identify the problem, explore the relatively limited options, and choose the proposed action.

b. **Airport Noise Compatibility Planning.** Noise compatibility planning may be subsequently incorporated in an environmental assessment for a specific project. The Aviation Safety and Noise Abatement Act of 1979 established provisions for submission of noise exposure maps and noise compatibility programs to carry out the purpose of the Act; i.e., to reduce existing noncompatible land uses and prevent the introduction of additional noncompatible uses. The 1982 Airport Act provides for the issuance of grants to airport sponsors for development of such maps and programs, and to sponsors and units of local government in the areas affected for implementation of projects to carry out noise compatibility programs. Grants for development of maps and programs are categorically excluded per paragraph 23b(8). However, grants for noise mitigation projects included in FAA approved noise compatibility programs may include items which require environmental assessment. For such projects, the noise analysis included in the approved FAR Part 150 program will be acceptable for purposes of the noise analysis described in paragraphs 47e(1) and 85a.

c. **Design, Art, and Architectural Application.**

(1) Design, art, and architectural considerations are applicable to: airport actions involving airport location, extensive earthmoving or other disruption of the natural environment or aesthetic integrity of an area, terminal and access road development, and to any development which may affect sensitive locations such as parks, historic sites, or other public use areas. Such considerations shall be reflected in any environmental assessment prepared to the extent relevant.

(2) Applicability may best be determined by early consultation with appropriate local or state art or architecture councils or other organizations having special interest or experience in design, art, and architecture. The environmental assessment shall reflect such consultation, if appropriate.

(3) Consideration of the design arts in the preliminary design stage of project development is encouraged and shall be reflected in the environmental assessment to the extent information is available. Emphasis should be placed on design factors which will complement and support establishment of functional, efficient, and safe airport facilities while reflecting local, cultural, and architectural heritage considerations.

(4) Examples of the application of design, art, and architecture in airport actions include the following:

(a) The adverse effects of encroachment into residential or recreational areas or disruption of scenic vistas may be minimized through appropriate design considerations. Architectural treatment of facilities can reflect and blend in with nearby architectural style. Painting or shielding of structures such as landing aid supports may reduce adverse visual impact as long as there is no interference with the safe performance of the facility.

(b) Actions which involve extensive earthmoving may create disruption of the landscape visible from great distances. Normal application of sound design and engineering principles will assure the control of erosion and provide adequate drainage. Extra care in slope design and plantings will help minimize adverse visual and other environmental

impacts.

(c) Relocation of streams or other water courses in channels which reflect the natural characteristics of the existing stream may be more aesthetically pleasing and cost less than replacement by concrete sluiceways. Bank stabilization by appropriate plantings may improve appearance as well as control erosion.

(d) New facilities or major terminal expansion may provide an excellent means to recognize and reflect notable architectural, cultural, or ethnic assets of the area. Such influences may be reflected in interior design, landscaping, or architectural treatment.

(5) Whether or not a particular airport action requires the preparation of an environmental assessment, the FAA shall encourage airport sponsors to apply the principles of good design, art, and architectural treatment in anything they do which affects interface between the airport facilities and the public. To facilitate a better understanding of such policy and to provide advice, the FAA has available through its regional offices a slide/sound presentation entitled "First and Lasting Impression" and a companion report, "Design, Art and Architecture A Study of Airports."

42. FAA'S INITIAL ADVICE AND REVIEW. FAA personnel in regional offices and airports district offices will advise sponsors during the planning process. The locations and phone numbers of these offices are contained in Advisory Circular 150/5000 3F (or subsequent updates). The FAA's first required environmental review is indicated in step 4 of Appendix I. This review has two basic objectives. The first objective is to determine whether the FAA agrees that a problem exists, that the problem has been correctly identified, and that appropriate alternative solutions have been proposed. In evaluating whether the proposal has been properly defined and whether the appropriate range of actions and alternatives is being considered, FAA will apply CEQ 1502.4 and 1508.25. If the FAA is not satisfied, further consultation with the sponsor will be undertaken to resolve areas of disagreement. The second objective of this review is to determine whether the proposed action may be categorically excluded. Unless the proposed action falls within the scope of paragraph 23b, paragraphs 21, 22, 23a, 24, and 26 shall be examined before a final determination is rendered by the FAA that a proposed action is categorically excluded. A categorical exclusion requires no further environmental processing, and the proposed Federal action may be approved by the FAA decisionmaker.

43. REQUIREMENT FOR ENVIRONMENTAL ASSESSMENT. All proposed actions which are not categorically excluded require an environmental assessment prepared by the airport sponsor. An environmental assessment is defined in CEQ 1508.9 and further elaborated on in 1501.3 and 1501.4. The completion of an environmental assessment shall normally precede the FAA's decision to prepare an environmental impact statement since the environmental assessment is a document used by the FAA to determine whether potential impacts appear to be significant. There are proposals, however, which normally require the preparation of an environmental impact statement per paragraph 21 or on which the FAA and the sponsor agree initially that impacts will be significant. In these cases, the FAA and sponsor agree initially that impacts will be significant. In these cases, the FAA and sponsor may determine that the scoping process should not await completion of the environmental assessment. For these proposals, the sponsor's preparation of the environmental assessment shall be done concurrently with scoping, as allowed in CEQ 1501.7(b)(3). If tiering is involved, sponsors should consult Chapter 10 and request special advice from the FAA prior to preparing an

environmental assessment.

44. FAA ROLE IN ENVIRONMENTAL ASSESSMENT. The environmental assessment process is shown in steps 7 through 12 of Appendix 1. The FAA has responsibility in four ways:

- a. Advice and assistance to the airport sponsor during the environmental assessment preparation.
- b. Review of the environmental assessment (per step 8, Appendix 1) to determine its adequacy for a public hearing and review by state and local officials per DOT Order 4600.13, Intergovernmental Review of Department of Transportation Programs and Activities (see paragraph 48, below). At this time, the FAA will insure that the cover page of the environmental assessment contains a notification that the environmental assessment has been prepared by the sponsor and that it will become a Federal document only after it is evaluated and signed on the cover page by the FAA responsible official.
- c. Final review of the environmental assessment (per step 12, Appendix 1) at which point the FAA independently evaluates and takes responsibility for the environmental assessment per CEQ 1506.5 (b). If not satisfied with the environmental assessment, the FAA may request the sponsor to correct deficiencies and resubmit it.
- d. The decision to prepare either an environmental impact statement or a finding of no significant impact (step 13, Appendix 1) based on final review of the environmental assessment and a complete assessment of certain impact categories as necessary to make judgments on the significance of anticipated impacts.

45. EARLY COORDINATION. CEQ 1501.4(b) states, "The agency shall involve environmental agencies, applicants, and the public, to the extent practicable, in preparing [environmental] assessments..." and in section 1506.2(b) "Agencies shall cooperate with State and local agencies to the fullest extent possible to reduce duplication between NEPA and State and local requirements, unless the agencies are specifically barred from doing so by some other law." The FAA encourages the sponsor to undertake early coordination with appropriate Federal, state, and local agencies, industry groups, environmental agencies, and the community in the environmental assessment process. Such coordination shall be initiated as appropriate during the sponsor's planning process and development of alternatives and continue during the preparation of the environmental assessment. Early coordination can serve a number of purposes. It is an aid in the identification of environmental impacts and can help trigger advance planning of measures to mitigate environmental effects, including changes in project design. The community can be provided with timely information and have its opinions heard at the earliest formative stage of the project, which may avoid serious controversy later on. The amount of early coordination advisable will depend on the complexity, sensitivity, and anticipated environmental impacts of the proposal. Information received during early coordination may be used in the environmental assessment.

46. PURPOSES OF ENVIRONMENTAL ASSESSMENT. CEQ 1508.9 indicates that the environmental assessment is a concise document. It is the FAA's intention to adhere strongly to this instruction and to require only enough analysis in the environmental assessment for the following purposes:

- a. To understand the problem and identify reasonable alternative solutions, including the proposed action, if the sponsor has chosen an action among alternatives.

- b. To determine whether any potential impacts are significant, which would trigger the environmental impact statement process.
- c. To provide the basis for the FAA's finding of no significant impact if the proposed action has no significant impacts.
- d. To identify and satisfy special purpose Federal laws, regulations, and executive orders (see paragraph 47e, below).
- e. To identify and satisfy state and local laws and regulations applicable to the proposal.
- f. To identify any permits, licenses, or other entitlements required by the proposal.
- g. In completing the above, to indicate agencies consulted (and to identify cooperating agencies for environmental impact statement preparation purposes).

47. FORMAT AND CONTENT OF ENVIRONMENTAL ASSESSMENT. The environmental assessment shall incorporate some selected items of information required for an environmental impact statement in CEQ 1502.10. The information in the environmental assessment will, however, be in more abbreviated form than in an environmental impact statement. The following information is required:

a. Cover Sheet. This page is labeled "Environmental Assessment," identifies the airport, indicates that the environmental assessment was prepared by the airport sponsor (or for the sponsor by a contractor), and has the following notification at the bottom:

"This environmental assessment becomes a Federal document when evaluated and signed by the responsible FAA official.
Responsible FAA Official Date"

b. Purpose and Need. This section shall identify the problem, the requested Federal action, and the timeframe for such action. Relevant statistical information supporting the fact that a problem exists shall either be included here or appended. Current and projected activity statistics shall be provided.

c. Alternatives (Including Proposed Action).

(1) The CEQ Regulations include specific directions on the consideration of alternatives. These directions are concerned with the environmental impact statement. However, they are to be considered in preparing an environmental assessment to the degree commensurate with the nature of the proposed action. Generally, the greater the degree of impacts, the wider the range of alternatives which should be considered to avoid or minimize these impacts. The test of reasonableness and practicality should be applied at appropriate stages to identify alternatives which warrant further study. Applicable CEQ sections are:

(a) Section 1502.1. The environmental impact statement "...shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment."

(b) Section 1502.2(e). "The range of alternatives discussed in environmental impact statements shall encompass those to be considered by the ultimate agency decisionmaker."

(c) Section 1502.14. The environmental impact statement "...should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public."

(d) Section 1502.14(a). Agencies shall "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated."

(e) Section 1502.14(b). Agencies shall "Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits."

(f) Section 1502.14(c). Agencies shall "Include reasonable alternatives not within the jurisdiction of the lead agency."

(g) Section 1502.14(d). Agencies shall "Include the alternative of no action."

(h) Section 1502.14(f). Agencies shall "Include appropriate mitigation measures not already included in the proposed action or alternatives."

(2) The FAA responsible official shall apply the above CEQ directions and shall judge whether the alternatives put forward by the sponsor are sufficient for the environmental assessment. The range of alternatives considered shall be commensurate with the identified problem and the anticipated impacts. In any case, the no action alternative shall be considered. Low capital or noncapital alternatives such as the development and upgrading of reliever airports and the use of pricing systems may be considered for proposed actions involving the addition of airfield capacity to high activity commercial service airports where there exists one or more of the following constraints safety, airspace limitations, land limitations, airport ground access, environmental impacts, financial limitations, political constraints.

(3) The Alternatives section of the environmental assessment shall include:

(a) A list of alternatives considered, including the proposed action, with only enough description to explain them. For each alternative, any connected or cumulative actions shall be included (CEQ 1508.25(a)(1) and (2)).

(b) Identification of the sponsor's proposed action if one has been chosen.

(c) A concise statement explaining why any initial planning alternatives have been eliminated from study.

(d) A listing under each alternative of any areas of potential significant impact or a

statement that the alternative has no significant impacts per the threshold analyses performed under paragraph 47e below. The environmental assessment shall indicate whether an alternative is being analyzed on the basis of mitigation measures assumed to be built into it.

(e) A listing under each alternative of any applicable Federal, state, or local special purpose laws and regulations and potentially required permits and licenses (reference CEQ 1502.25(a)).

(f) Graphics as appropriate to aid in understanding the alternatives. These would be of value in showing alternative runway configurations, for example, although not useful in dealing with alternative transportation modes.

d. Affected Environment. CEQ 1502.15 shall be followed, in particular the sentence in this section which directs that "The descriptions [of the affected environment] shall be no longer than is necessary to understand the effects of the alternatives." This section may highlight important background material, such as previous development and environmental actions which help to explain the present proposal. It may also include such items as bond actions, action by the community or citizen groups pertinent to the proposal, or any other unique factors associated with the project which do not properly belong in another section of the document. The Affected Environment section of the environmental assessment includes:

(1) A location map, vicinity map, and airport layout plan.

(2) Existing and planned land uses and zoning in the affected airport vicinity, including affected residential areas, public parks, wildlife and waterfowl refuges, wetlands, floodplains, farmlands, coastal zones, recreation areas, and historic facilities and archeological sites.

(3) Nearby schools and places of public assembly, hospitals, shopping areas, and adjacent political jurisdictions affected by the proposed development.

(4) Population, industrial and commercial growth characteristics, and assumptions used to justify the project and determine secondary impacts only if these are relevant to the proposal.

(5) Any contemplated future actions, including facility installations and procedural actions, which have not been included in the Alternatives section and which should be described to show their relationship to the proposal and to show the sponsor's intentions regarding their environmental assessment and development.

(6) Other planned and developed activities in the affected area (e.g., highways and other transportation projects, housing development and relocation, etc.) which are interrelated to the proposal and/or which would produce cumulative impacts.

e. Environmental Consequences Specific Impact Categories. A brief examination of each of the applicable potential impact areas below shall be done and documented to determine if the impact may be significant. During the environmental assessment process, required specific consultation such as historic and cultural resource consultation with the State Historic Preservation Officer shall be

accomplished. For the proposed action and reasonable alternatives, including the no action alternative, each of the following applicable impact categories shall be systematically examined. Each impact category identifies conditions under which further analysis is needed beyond that required for the environmental assessment. These conditions normally indicate a threshold beyond which the impact is considered significant and an environmental impact statement is required for the action. Under certain circumstances, as described in paragraph 51c, additional evaluation may be necessary before a final decision on action choice can be made. Furthermore, should sufficient mitigation measures be included as an integral part of the proposed project which would reduce all potentially significant impacts below threshold levels and the sponsor has made binding commitments to carry out mitigation measures, an environmental impact statement would not be necessary and the action may be concluded with a finding of no significant impact.

(1) Noise.

(a) No noise analysis is needed for proposals involving Design Group I and II airplanes on utility (reference AC 150/5300 4B) or transport (reference AC 150/5300 12) type airports whose forecast operations in the period covered by the environmental assessment do not exceed 90,000 annual adjusted propeller operations or 700 annual adjusted jet operations ("adjusted" as defined in Report No. FAA AS 75 1, Developing Noise Exposure Contours for General Aviation Airports). These numbers of propeller aircraft operations result in cumulative noise levels not exceeding 60 Day/Night Level (Ldn) more than 5,500 feet from start of takeoff roll or 65 Ldn on the runway itself. Adjusted jet operations of 700 or less do not produce a 60 Ldn contour using this method. Note that the Cessna Citation 500, the Gates Learjet 35A, and any other jet aircraft producing equivalent or less levels of noise are quieter than many propeller aircraft under 12,500 pounds and therefore may be counted as propeller aircraft rather than jet aircraft.

(b) If the proposal is the result of a recommended noise mitigation measure included in an FAA approved Part 150 noise compatibility program, the noise analysis developed in the program will be incorporated in the environmental assessment either directly or by reference per CEQ 1502.21, and will be considered sufficient for noise analysis purposes under this paragraph and paragraph 85.a.

(c) A noise analysis is needed for proposals not included in (a) or (b) which individually or cumulatively involve airport location, runway location, major runway extension, or runway strengthening at any airport which is either:

1. A transport airport accommodating Airplane Design Groups III VI,
2. A transport airport accommodating only Airplane Design Groups I and II or a utility airport, either of which have forecast operations in excess of those defined in (a) above,
3. Highly controversial because of noise impacts (reference paragraph 24b), or
4. May be frequently used by special aircraft such as helicopters in proximity to noise sensitive areas.

(d) When required by (c), an initial noise analysis during the environmental assessment process should be accomplished to determine whether further and more detailed analysis is necessary. This analysis is comprised of determining the most likely affected noise sensitive areas in relation to the resulting operation from the proposed development. Once the most likely affected areas have been identified, there are several steps to be taken and tools to be used in determining potential noise impact over the area(s).

1 For proposed actions which result in a general overall increase in daily aircraft operations or the use of a larger/noisier aircraft, as long as there are no changes in ground tracks or flight profiles, the FAA's Area Equivalent Method (AEM) can be used to determine if the single point analysis is necessary. AEM is a mathematical procedure that calculates the 65 or 75 Ldn contour area given the aircraft operations at a specific airport. It is a screening tool developed by FAA in conjunction with significance criteria established for the CAB under its Noise Screening Test (14 CFR Part 312, Appendix 1). Types of airport actions that AEM may be useful for are major runway extensions, runway strengthening, or construction or expansion of passenger handling facilities if this leads to an overall increase in aircraft operations. If AEM calculations indicate that the proposed action would result in less than a 17 percent (approximately 1 Ldn) increase in the 65 Ldn contour area, it may be concluded that there would be no significant impact over noise sensitive areas and that no further analysis is required.

2 If the AEM percent increase equals or exceeds 17 percent or if the proposed development is such that the AEM cannot be used, a single point analysis may be performed to test for the threshold of significance. The FAA's Integrated Noise Model (INM), or FAA approved equivalent, shall be used to perform the noise sensitive area analysis. FAA's threshold of significance has been determined to be a 1.5 Ldn increase in noise over any noise sensitive area located within the 65 Ldn contour. Therefore, if the proposed FAA action results in an increase within the 65 Ldn of 1.5 Ldn or greater on any noise sensitive area, it will be necessary to do further analysis using Ldn contours to express in more detail the impact on specific areas, as described in paragraph 85a.

(f) The text of the environmental assessment shall include a description of any mitigation measures existing or planned to minimize noise impacts. If a noise analysis is required, sufficient information shall be presented to permit lay and technical readers to relate the noise level data used to an understanding of its potential effects. The text and graphics shall support the conclusions reached on noise impacts. The graphics shall include map (s) of the existing airport, proposed airport development, and the airport vicinity. Existing and planned land uses shall be illustrated, including the location of impacted noise sensitive area(s). The addition of flight tracks is helpful in illustrating where the aircraft normally fly. The illustrations shall be large enough and clear enough to be readily understood. When noise contours are developed, they shall be superimposed on a land use map(s) by prominent, legible lines and be clearly labeled.

(g) The above paragraphs refer to Ldn as the methodology to use for noise analysis. An acceptable exception is use of the Community Noise Equivalent Level (CNEL) where

required to meet state requirements. The INM or equivalent model should be state of the art unless the responsible official, based on a request from the airport sponsor, determines that because an earlier version was used in an analysis document, it may be appropriate to expand or update the document in the short term with the earlier INM version.

(2) Compatible Land Use.

(a) The compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of noise impacts related to that airport. In this context, if the noise analysis described above concludes that there is no significant impact, a similar conclusion usually may be drawn with respect to compatible land use. However, if the proposal would result in other impacts exceeding thresholds of significance which have land use ramifications (for example, disruption of communities, relocation, induced socioeconomic impacts, wetlands, floodplains, coastal zones, critical habitat of endangered or threatened species), the effects on land use shall be analyzed in this context and described accordingly under the appropriate impact category with any necessary cross references to the Compatible Land Use section to avoid duplication.

(b) The Land Use section of the environmental assessment shall include documentation to support the required sponsor's assurance under section 511(a)(5) of the 1982 Airport Act that appropriate action, including the adoption of zoning laws, has been or will be taken, to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. The assurance must be related to existing and planned land uses.

(c) FAA officials shall contact the sponsor and representatives of affected communities to encourage the development of appropriate compatible land use controls early in the project planning stage. The environmental assessment shall document what is being done by the jurisdiction(s) with land use control authority, including an update on any prior assurance. It is recognized that not all airport sponsors have direct jurisdictional control. However, sponsors have a voice in the affairs of the community in which the airport development is under taken and should be required, as a minimum, to use their best effort to assure proper zoning or other land use controls near the airport. Depending on the sponsor's capability, "appropriate action" could range from extension of such influence to acquisition of land in fee. It is the FAA official's responsibility to determine that appropriate action constituting reasonable assurance, has been or will be taken.

(d) FAA's most recent compatible land use guidelines are contained in Appendix A of FAR Part 150. These guidelines indicate that FAA determinations are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses. FAA Advisory Circular 150/5050 6, Airport Land Use Compatibility Planning, presents guidance for airport sponsors and planners to help achieve compatibility between airports and their environs. AC 150/5020 1, Noise Control and Compatibility Planning for Airports, provides general guidance on noise compatibility planning under FAR Part 150. Paragraph 41b, above, has additional

information on noise compatibility planning.

(3) Social Impacts.

(a) The principal social impacts to be considered are those associated with relocation or other community disruption which may be caused by the proposal. If the proposal will not involve the need to relocate any residence or business; alter surface transportation patterns; divide or disrupt established communities; disrupt orderly, planned development; or create an appreciable change in employment, then no specific analysis is needed and a summary statement to this effect will be sufficient in the environmental assessment.

(b) If relocation of residences is involved, the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 must be met. Sufficient information is needed in the environmental assessment to assure that the relocation can be managed. Such information may have to be obtained from secondary or community sources. If the assessment indicates any insufficiency in available housing or a high degree of controversy with respect to availability (reference paragraph 24d), the action shall be construed as having potential significant social impacts and will require additional analysis as indicated in paragraph 85c. For purposes of the environmental assessment, the following information shall be provided.

1 Estimate of the numbers of individuals and families as well as the characteristics of the households to be displaced (e.g., minorities, income levels, renter or owner, tenure, elderly, large families).

2 Impact on the neighborhood and housing to which relocation is likely to take place.

3 Indication of ability to provide adequate relocation housing for the types of families to be displaced. Include a description of special relocation advisory services to be provided, if any, for the elderly, handicapped, or illiterate regarding interpretation of benefits or other assistance available.

(c) If relocation of any business (including farm operations) is involved, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 requires that the owner be offered assistance in finding a location and reestablishing the business. Evidence to this effect shall be included in the environmental assessment. If the business relocation will create a severe economic hardship on the community, additional analysis is required in an environmental impact statement.

(d) If the proposal would result in alteration of surface transportation patterns or otherwise divide or disrupt established communities or orderly, planned development, such disruption shall not be considered significant unless there is a noticeable increase in congestion or access time to community facilities, recreation areas, or places of residence or business or other disruption which cannot be prevented or minimized. The environmental assessment shall document, to the extent applicable, measures taken to

avoid significant disruption by such means as rerouting, street widening, or changes in land use patterns to minimize the effects of the project.

(e) The environmental assessment shall reflect the results of any consultation with local officials or with relocation or other social agencies or community groups regarding the social impacts of the proposed action.

(f) When displacement of persons is involved and a public hearing held as set forth in paragraph 49, information on relocation as set forth in paragraph 52 of Advisory Circular 150/5100 11, Land Acquisition and Relocation Assistance under the Airport Development Aid Program (or subsequent updates), shall be presented at the hearing.

(4) Induced Socioeconomic Impacts. For major airport development proposals there is the potential for induced or secondary impacts on surrounding communities. When such potential exists, the environmental assessment shall describe in general terms such factors as shifts in patterns of population movement and growth, public service demands, and changes in business and economic activity to the extent influenced by the airport development. Induced impacts will normally not be significant except where there are also significant impacts in other categories, especially noise, land use or direct social impacts. In such circumstances, a more thorough analysis of induced effects may be needed in an environmental impact statement.

(5) Air Quality.

(a) Section 176(c) of the Clean Air Act Amendments of 1977 states in part that no Federal agency shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to a State Implementation Plan after it has been approved or promulgated under section 110 of that Act. It is FAA's responsibility to assure that Federal airport actions conform to state Plans for controlling areawide air pollution impacts.

(b) If the proposed Federal action involves airport location, runway development or other physical airside and/or landside improvements which increase airport capacity, paragraph (c) below shall be reviewed to determine if an air quality analysis needs to be done for the environmental assessment. For other types of airport proposals, normally no air quality analysis is required for the environmental assessment; normally it may be assumed that there is no potential for significant air quality impacts. There may be exceptional actions, such as a proposed release of airport property for an industrial complex or construction or expansion of an airport power plant, which occur very infrequently and require FAA judgment on a case by case basis of how much and what kind of air quality information is needed.

(c) The procedures below shall be followed to determine if an air quality analysis is needed and, if so, what type of analysis may be necessary. The procedures are adopted from the handbook, "Air Quality Procedures for Civilian Airports and Air Force Bases," Report No. FAA EE 82 21 (hereinafter the Air Quality Handbook). These procedures are explained in detail in the Air Quality Handbook, Section II. The Exhibit II 1 flowchart from the Handbook is included as Appendix 2 of this order.

1 If the proposed Federal action is in a state which does not have applicable indirect source review (ISR) requirements, then the projected airport activity levels are examined. No air quality analysis is needed if the levels of activity forecast in the time frame of the proposed action are below those in either a or b below.

a If it is a commercial service airport and has less than 1.3 million passengers and less than 180,000 general aviation operations forecast annually.

b If it is a general aviation airport and has less than 180,000 operations forecast annually.

2 If the proposed Federal action is in a state which does have ISR requirements, but the ISR threshold criteria are not exceeded, no air quality analysis is needed. The Air Quality Handbook lists in its Technical Appendix those few states which have ISR criteria. The threshold criteria are expressed in terms of parking lot capacity, highway traffic volume and/or airport passenger or operations levels. This list may be used as a guide; however, contact with the state air quality agency should be made to verify the current ISR requirements, if any.

3 If ISR threshold criteria are exceeded, then the proposed action must be coordinated with the state to ascertain specific assessment requirements. Contact shall be made with FAA at this point to determine the level of analysis and documentation to be included in the environmental assessment. If further analysis does not readily support a conclusion that there is no significant air quality impact, see paragraph 85e.

4 If there is no ISR requirement, but the projected activity levels exceed those in 1 above, then an emissions inventory for the existing airport conditions and forecast conditions with and without the project shall be conducted. Data requirements and methodology are explained in Section III of the Air Quality Handbook. Contact with the state or regional air quality agency is necessary to determine if any specific forms are needed and to have them review the results. If, at this point, the state indicates that the project as proposed may either be in nonconformance with the State Implementation Plan (SIP) or there is potential for exceeding state or national carbon monoxide standards, further analysis is required as described in paragraph 85e. Otherwise it may be assumed that there is no potential for significant air quality impact. Document the results in the environmental assessment. No further air quality analysis is necessary.

(d) In any case, the environmental assessment shall include any measures to be incorporated in the action to minimize adverse air quality effects, including control of air pollution during construction.

(e) The 1982 Airport Act requires that Airport Improvement Program applications for projects involving airport location, runway location, or a major runway extension shall not be approved unless the governor of the state in which the project is located certifies that there is "reasonable assurance" that the project will be located, designed,

constructed, and operated in compliance with applicable air and water quality standards.

1 To establish a "reasonable assurance," applicable standards and implementation requirements must have been established and an official designated who has authority to enforce compliance with the standards. When standards have not been approved but applicable standards have been promulgated by the EPA, EPA's approval shall be obtained. Lack of objection to air and water quality considerations as set forth in the environmental assessment or environmental impact statement may be construed as EPA approval.

2 While the air and water quality certifications shall be included in the environmental assessment or environmental impact statement whenever possible, their inclusion is not a prerequisite to approval of a finding of no significant impact or final environmental impact statement if the document includes evidence from the governor or appropriate state official indicating a reasonable expectation that the certification will be given. The state's certification or the EPA's approval must be received, however, before the project can be approved by the FAA.

(6) Water Quality.

(a) The Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (commonly referred to as the Clean Water Act), provides the authority to establish water quality standards, control discharges into surface and subsurface waters, develop waste treatment management plans and practices, and issue permits for discharges (section 402) and for dredged or fill material (section 404). The environmental assessment shall include sufficient description of design, mitigation measures, and construction controls applicable to the proposal to demonstrate that state water quality standards and any Federal, state, and local permit requirements can be met. Such factors as storm and sanitary sewer design, requirements for additional water supplies or waste treatment capacity, erosion controls to prevent siltation, provisions for containing fuel spills and waste water from aircraft washing, designs to preserve existing drainage or to minimize dredge and fill, and location with regard to an aquifer or sensitive ecological area such as a wetlands area shall be considered to the extent applicable to the individual proposal.

(b) Early consultation with local, state, and Federal agencies charged with implementation of water quality regulations and issuance of permits will normally identify any deficiencies in the proposal with regard to water quality or any additional information necessary to make judgments on the significance of impacts. The environmental assessment shall reflect the results of consultation with regulating and permitting agencies and with agencies that must review permit applications, such as the U.S. Fish and Wildlife Service, which may have specific concerns. Such consultation should be started at an early stage of the environmental assessment and may be completed during review by state and local officials.

1 A water quality certification is required under the 1982 Airport Act for approval of an Airport Improvement Program application for a project involving airport location, a major runway extension, or a runway location. The requirement for

information in the environmental assessment concerning this certification is the same as for an air quality certification as described in paragraph 47e(5)(e) above.

2 Consultation with the EPA regional office shall be undertaken if there is the potential for contamination of an aquifer designated by the EPA as a sole or principal drinking water resource for the area pursuant to section 1424(e) of the Safe Drinking Water Act, as amended.

3 The Fish and Wildlife Coordination Act applies to any proposal which would affect water resources (i.e., wetlands; groundwater; impoundment, diversion, deepening, controlling, modifying, polluting, dredging or filling of any stream or other body of water). For this situation, instructions in paragraph 47e(9)(c) below apply.

4 A National Pollutant Discharge Elimination System permit under section 402 of the Clean Water Act is required for discharges into navigable waters, a section 404 permit is required for dredged or fill material in navigable waters, and a section 10 permit under the Rivers and Harbors Act of 1899 is required for obstruction or alteration of navigable waters. "Navigable waters" have been very broadly defined in EPA regulations (reference 40 CFR Part 230, Appendix A) and encompass most bodies of water (including wetlands) and their tributaries. EPA is charged with the overall responsibility for section 402 permits, and the U.S. Army Corps of Engineers for section 404 and section 10 permits. States, under specified conditions, have the authority to issue these permits. Other state and local permits pertaining to water quality may also be required. Consultation with appropriate officials is necessary to determine which permits apply; what information is needed to obtain permits; and whether a permitting agency anticipates a problem given the nature, location, and possible impacts of the proposal. For section 404 and section 10 permits, the procedures set forth in the "Memorandum of Agreement between the Department of Transportation and the Department of the Army on Permit Processing" effective January 18, 1983, shall be followed to the fullest extent possible.

(c) For most airport actions, significant impacts on water quality can be avoided by design considerations, controls during construction, and other mitigation measures. If the environmental assessment and the appropriate consultation as described in paragraph (b) above demonstrate that water quality standards can be met, that no special water related problem exists, and that no anticipated permit difficulty is indicated, it may be assumed that there would be no significant impact on water quality. The environmental assessment shall include documentation from regulating and permitting agencies and list required permits. No further analysis is necessary.

(d) If the environmental assessment and early consultation show the potential for exceeding water quality standards, identify water quality problems which cannot be avoided or satisfactorily mitigated, or indicate difficulties in obtaining required permits, an environmental impact statement may be required. Further analysis is described in paragraph 85f.

(7) Department of Transportation Act, Section 4(f), (recodified at 49 USC, Subtitle I, Section 303).

(a) Section 4(f) of the DOT Act provides that the Secretary shall not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance or land of an historic site of national, state or local significance as determined by the officials having jurisdiction thereof unless there is no feasible and prudent alternative to the use of such land and such program or project includes all possible planning to minimize harm resulting from the use.

1 Any part of a publicly owned park, recreation area, refuge, or historic site is presumed to be significant unless there is a statement of insignificance relative to the whole park by the Federal, state, or local official having jurisdiction thereof. Any such statement of insignificance is subject to review by the FAA.

2 Where Federal lands are administered for multiple uses, the Federal official having jurisdiction over the lands shall determine whether the subject lands are in fact being used for park, recreation, wildlife, waterfowl, or historic purposes. National wilderness areas may serve similar purposes and shall be considered subject to section 4(f) unless the controlling agency specifically determines that section 4(f) is not applicable.

3 Where property is owned by and currently designated for use by a transportation agency and a park or recreation use of the land is being made only on an interim basis, a section 4(f) determination would not ordinarily be required. The sponsor should indicate in any lease or agreement involving such use that this use is temporary.

4 Where the use of a property is changed by a state or local agency from a section 4(f) type use to a transportation use in anticipation of a request for FAA approval, section 4(f) shall be considered to apply, even though the change in use may have taken place prior to the request for approval or prior to any FAA action on the matter. This is especially true where the change in use appears to have been undertaken in an effort to avoid the application of section 4(f).

(b) If the action involves the taking or other use of any section 4(f) land as described in (a), the initial assessment shall determine if the requirements of section 4(f) are applicable. When there is an actual physical taking of section 4(f) land in conjunction with an airport proposal, there is no latitude for judgment regarding section 4(f) applicability. When there is no physical taking but there is the possibility of use of or adverse impacts to section 4(f) land, the FAA must determine if the activity associated with the proposal conflicts with or is compatible with the normal activity associated with this land. The proposed action is compatible if it would not affect the normal activity or aesthetic value of a public park, recreation area, refuge, or historic site. When so construed, the action would not constitute use and would not, therefore, invoke section 4 (f) of the DOT Act.

(c) If it is determined that section 4(f) is applicable and there are no feasible or prudent alternatives which would avoid such use under the criteria indicated in paragraph 83d, the effect on the section 4(f) land shall be described in detail. The description of the land shall include size, activities, patronage, access, unique or irreplaceable qualities, relationship to similarly used lands in the vicinity, or other factors necessary to determine the effects of the action and measures needed to minimize harm. Such measures may include replacement of land and facilities and design measures such as planting or screening to mitigate any adverse effects. Replacement satisfactory to the Secretary of the Interior is specifically required for recreation lands aided by the DOI's Land and Water Conservation Fund and for certain other lands falling under the jurisdiction of the DOI. The environmental assessment shall include evidence of concurrence or efforts to obtain concurrence of appropriate officials having jurisdiction over such land regarding actions proposed to minimize harm.

(d) If Federal grant money was used to acquire the land involved (i.e., open space under HUD, various conservation programs under DOI), the environmental assessment shall include evidence or reference to appropriate communication with the grantor agency.

(e) Whether or not Federal agency lands are involved, the documentation shall reflect consultation with the DOI and, as pertinent, HUD or USDA.

(f) The above instructions apply regardless of the extent of impact and shall be reflected in the environmental assessment. When section 4(f) applies and agencies which have jurisdiction agree that the effects of the action will be satisfactorily mitigated (e.g., by replacement "in kind" of a park or portion thereof), the action may be considered not to have significant section 4(f) impacts and no further analysis is needed. No objection by affected agencies may be construed as agreement for this purpose. If an agency which has jurisdiction advises that mitigation measures will not avoid significant effects, additional in-depth study and consultation may be necessary for inclusion in an environmental impact statement as described in paragraph 85g.

(8) Historic, Architectural, Archeological, and Cultural Resources.

(a) Two basic laws apply to this category of impact. Thresholds concerning both of these laws must be examined in the environmental assessment.

1 The first law is the National Historic Preservation Act of 1966, as amended, which established the Advisory Council on Historic Preservation to advise the President and the Congress on historic preservation matters, to recommend measures to coordinate Federal historic preservation activities, and to comment on Federal actions affecting properties included in or eligible for inclusion in the National Register of Historic Places. The Advisory Council's most recent procedures for the "Protection of Historic and Cultural Properties" (36 CFR Part 800) were published in the Federal Register on January 30, 1979. Subparagraph (b) below specifies requirements under the National Historic Preservation Act of 1966, as amended.

2 The second law is the Archeological and Historic Preservation Act of 1974 which provides for the survey, recovery, and preservation of significant scientific, prehistorical, historical, archeological, or paleontological data when such data may be destroyed or irreparably lost due to a Federal, federally licensed, or federally funded project. The DOI's "Standards and Guidelines" were published in the Federal Register on September 29, 1983 (48 FR 44716) to advise on the manner in which this latter law will be implemented. Subparagraph (c) specifies requirements under the Archeological and Historic Preservation Act of 1974.

(b) The following are requirements under the National Historic Preservation Act of 1966, as amended.

1 An initial review shall be made to determine if any properties in or eligible for inclusion in the National Register of Historic Places are within the area of the proposed action's potential environmental impact. The "area of the proposed action's potential environmental impact" is that geographic area within which direct and indirect impacts generated by the proposed action could reasonably be expected to occur and thus cause a change in the historic, architectural, archeological, or cultural qualities possessed by the property. The National Register criteria shall be applied to all such identified properties. The Secretary of the Interior will advise, upon request, whether properties are eligible for the National Register. If no properties in or eligible for inclusion in the National Register have been identified within the area of the proposed action's environmental impact, this information shall be documented in the environmental assessment with the letter from the State Historic Preservation Officer and a record of any other analysis or survey undertaken. No further analysis is needed.

a To aid in identifying properties, the National Park Service maintains the National Register and publishes a list of new entries once a year in the Federal Register. In addition, the State Historic Preservation Officer must be consulted for advice. Assistance may also be obtained from local officials, historical societies, museums, or academic institutions having jurisdiction or expertise with regard to such properties.

b If the State Historic Preservation Officer recommends the need for a professional cultural resource survey of the environmental impact area, the airport sponsor shall contact the FAA for a determination on whether such a survey is required for the environmental assessment. The FAA, in making this determination, should follow the recommendations of the State Historic Preservation Officer if the Officer provides good reason for believing that previously unidentified eligible historic, architectural, archeological, or cultural properties are within the area of the proposed action's environmental impact.

2 If any property in or eligible for inclusion in the National Register has been identified within the area of the proposed action's environmental impact, the

Advisory Council on Historic Preservation's Procedures for the Protection of Historic and Cultural Properties shall be used to determine if the proposed action will have any effect on the property. Initially the Criteria of Effect (36 CFR Part 800.3(a)) shall be applied in consultation with the State Historic Preservation Officer. If this criteria indicates and the Officer agrees that the proposal would not directly or indirectly affect those historic, architectural, archeological, or cultural characteristics of the property that qualified it to meet National Register criteria, a Determination of No Effect shall be documented in the environmental assessment with the relevant State Historic Preservation Officer letter. No further analysis is needed. If the airport sponsor and the State Historic Preservation Officer disagree on a proposed Determination of No Effect, the matter shall be referred to the FAA for resolution.

3 If the application of the criteria in 36 CFR Part 800.3(a) indicates an effect on properties, the Criteria of Adverse Effect (36 C.F.R. 800.3(b)) shall be applied. If it is determined and the State Historic Preservation Officer agrees that there would be no adverse effect, supporting documentation for a Determination of No Adverse Effect as specified in 36 CFR 800.13(a), together with the written views of the State Historic Preservation Officer, shall be forwarded to the Advisory Council on Historic Preservation for review by the Executive Director. Unless an objection is noted by the Executive Director within 30 days of receipt of adequate documentation, such documentation shall be included in the environmental assessment and no further analysis is needed. Disagreement on the Determination of No Adverse Effect between the sponsor and the State Historic Preservation Officer or the Advisory Council shall be referred to the FAA for resolution as provided for in 36 CFR 800.6(a)(2).

4 If an adverse effect on properties is indicated, a Determination of Adverse Effect shall be included in the environmental assessment with supporting documentation. A preliminary case report shall be prepared as specified in 36 CFR 800.13(b), either as part of the environmental assessment or as a separate document, and submitted to the FAA for the Advisory Council's consultation process. It cannot be assumed that impacts are insignificant on properties in or eligible for inclusion in the National Register of Historic Places. Further consultation and analysis under the guidance of the FAA will be necessary as described in paragraph 85h.

(c) The following are requirements under the Archeological and Historic Preservation Act of 1974.

1 If no information is made available through the National Register of Historic Places, the State Historic Preservation Officer, or other persons or organizations with expertise that there is reason to believe that significant scientific, prehistoric, historic, archeological, or paleontological resources will be lost or destroyed by the proposed action, no further analysis under this Act is needed for the environmental assessment. It may be assumed that there would be no impact on such resources.

2 If the above consultation indicates the need for a professional resource survey of the area to be impacted, the airport sponsor shall contact the FAA for advice as

described under subparagraph (b)1 above. If a survey is performed and indicates no significant resources within the area, the results of the survey shall be documented in the environmental assessment. The survey itself shall be appended to the environmental assessment or referenced if it is voluminous. No further analysis is necessary to show that the impact is not significant.

3 If consultation and/or a survey are inconclusive with regard to the location of resources or the significance of resources, the airport sponsor may include a commitment in the environmental assessment to halt construction if resources are uncovered in order for a qualified professional to evaluate the importance of the resources and for recovery activity to occur. Such a commitment may enable the environmental document to be approved and the action to proceed without more extensive preliminary investigation. It is a matter of FAA judgment on a case by case basis whether such an approach is reasonable. If the FAA agrees, no further analysis is necessary; it may be assumed for purposes of the environmental assessment that the impact is not significant.

4 If consultation and/or a survey identify significant resources within the area of the proposed action's potential environmental impact, the National Register criteria shall be applied and the steps outlined under subparagraphs (b)1 through 4 followed pursuant to the provisions of the National Historic Preservation Act of 1966, as amended. If a Determination of No Effect or No Adverse Effect can be made per subparagraph (b)2 or (b)3, respectively, it may be assumed that the impact is not significant. The environmental assessment shall document the appropriate determination. No further analysis is necessary.

5 If an adverse effect on significant resources is indicated, the sponsor shall consider project modifications that will avoid the loss or destruction of the resources and thereby not necessitate salvage. Resource salvage is generally less preferable than preservation in situ. If a commitment by the sponsor to preservation in situ reverses an adverse effect determination, the environmental assessment shall include the commitment and the supporting documentation of no adverse effect. No further analysis is necessary.

6 If a determination of adverse effect cannot be avoided, the instructions in subparagraph (b)4 apply and further consultation and analysis under the guidance of the FAA will be necessary as described in paragraph 85h.

(d) If the proposal involves the taking or use of any publicly or privately owned land from a historic or archeological site of national, state, or local significance which is included in or eligible for inclusion in the National Register of Historic Places, section 4 (f) of the DOT Act also applies. The section 4(f) instructions under paragraph 47e(7) above must be followed.

(9) Biotic Communities (including both flora and fauna).

(a) If the proposal would take or impact a publicly owned wildlife or waterfowl refuge of local, state, or national significance, the instructions in paragraph 47e(7) are to be

followed to prepare the appropriate documentation required by section 4(f).

(b) Consideration of endangered and threatened species is required for all proposals under the Endangered Species Act as Amended. Instructions in paragraph 47e(10) below relate specifically to this Act.

(c) If the proposal would affect water resources (i.e., wetlands; groundwater; impoundment, diversion, deepening, controlling, modifying, polluting, dredging, or filling of any stream or other body of water), the Fish and Wildlife Coordination Act applies. Consultation is to be initiated with the U.S. Fish and Wildlife Service and with the state agency having administration over wildlife resources. Letters are to be obtained from the Fish and Wildlife Service and the state agency on the wildlife aspects of the proposal for the purposes of determining the possible damage to wildlife resources and of determining means and measures that should be adopted to prevent the loss of or damage to wildlife resources as well as to provide concurrently for the development and improvement of such resources.

1 If the letters from the Fish and Wildlife Service and the state agency indicate substantial damage to wildlife attributable to the proposal which will not be mitigated to a minimal level, the proposal is considered to be one with potential significant impacts. Further evaluation shall be performed under FAA direction as described in paragraph 85i.

2 If the letters from the Fish and Wildlife Service and the state agency indicate only minimal impacts, it may be assumed that there would be no significant impact on biotic communities. The environmental assessment shall include the letters from the Fish and Wildlife Service and the state agency and shall also include such justifiable means and measures to mitigate wildlife impacts as should be adopted to obtain maximum overall project benefits. No further analysis as described below is needed.

(d) If the proposal would not affect water resources as described in subparagraph (c) above, the Fish and Wildlife Coordination Act does not apply. In this case, a series of thresholds are to be examined to determine if there is the potential for significant impact on biotic communities. The four subparagraphs below should be reviewed in the order given to determine which one applies to the proposal; e.g., if subparagraph 1 applies, the remainder do not and no further analysis is needed.

1 If the proposal would impact only man dominated areas such as previously disturbed airport property, populated areas, or farmland, it may be assumed that there would be no significant impact on biotic communities.

2 If the proposal would impact other than man dominated areas but the impacts would primarily be transient rather than permanent, such as dislocation or other impacts due to construction activities, it may be assumed that there would be no significant impact on biotic communities. The environmental assessment shall document the transient nature of the impacts and any mitigation measures. Mitigation measures may include:

- a Erosion controls to protect adjacent biotic areas and aquatic communities.
- b Phasing of construction to avoid breeding or nesting periods and to promote escape routes for mobile species.
- c Landscape restoration to reconstitute existing habitat or create new habitat.

3 If the proposal would cause only a minor permanent alteration of existing habitat, it may be assumed that there would be no significant impact on biotic communities. "Minor alteration" generally refers to the removal of a few acres of habitat which represent a small percentage of the area's inventory or which support a limited variety or number of common wildlife species. "Minor alteration" is not applicable if the action involves removal of relatively small areas which are sensitive tracts occupying a strategic position in the vicinity or which support rare (meaning not common) species or which constitute a large percentage of the remaining habitat of a particular kind. The environmental assessment shall not merely cite "minor alteration" but shall document the basis for the assumption of no significant impact and shall also document any mitigation measures.

4 If the proposal would involve the removal of a sizeable amount of habitat, of habitat which supports rare species, or of a small, sensitive tract but the accompanying loss of plant communities and displacement of wildlife do not result in a significant long term loss to the area, it may be assumed that there would be no significant impact on biotic communities. In this case consider that, although displaced wildlife may move to adjacent land areas, a long term loss will accrue by virtue of reduction of the wildlife carrying capacity of the overall area. When wildlife habitat is removed, the possibility that the remaining habitat is insufficient in size and quality to continue to support all resident species must be considered. The input from state and local review and other informal coordination as necessary is to be used to determine the significance of the impacts. The environmental assessment shall document the impacts and mitigation measures and shall include supporting letters. Mitigation measures may include:

- a Design adjustments to minimize impact on sensitive areas or species.
- b Purchase of contiguous habitat as a preserve for dislocated wildlife or as a buffer zone.

(e) If the evaluation, using the thresholds in subparagraph (d), does not lead to the assumption that there would be no significant impact on biotic communities, the proposal is considered to be one with potential significant impacts. Further evaluation shall be performed under FAA direction as described in paragraph 85i.

(10) Endangered and Threatened Species of Flora and Fauna.

(a) Section 7 of the Endangered Species Act as Amended requires each Federal agency to insure that "any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee....". Further, Section 7a(3) requires that "each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under Section 4 or results in the destruction or adverse modification of critical habitat proposed to be designated for such species."

(b) The procedure to be followed to determine impacts on endangered or threatened species and on critical habitat varies depending on whether the proposed action has a significant impact on the environment or not. Any major Federal action designed primarily to result in the building of manmade structures and which significantly affects the quality of the human environment is defined as a "construction project" by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. This includes Federal actions such as permits, grants, licenses, and other forms of Federal authorization or approval which may result in construction. As soon as it appears that a proposed action will have a significant impact and therefore result in the preparation of an environmental impact statement, the sponsor shall institute the procedure below. In order to minimize delay, sponsors are encouraged to initiate this procedure as soon as any thresholds in paragraph 47e are exceeded during the sponsor's assessment of the proposed action.

1 As required by section 7(c) of the Endangered Species Act as Amended information shall be requested by FAA or by the sponsor on behalf of FAA from the Regional Director of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, whichever has jurisdiction, on whether any species which is listed or proposed to be listed may be present in the area affected by the proposed action. If the reply from the Fish and Wildlife Service or National Marine Fisheries Service indicates that no such species are present, it may be assumed that there would be no significant impact on endangered or threatened species. The environmental assessment shall include the letter from the Fish and Wildlife Service or National Marine Fisheries Service. No further analysis is necessary.

2 If, however, the reply from the Fish and Wildlife Service or National Marine Fisheries Service indicates that endangered or threatened species may be present in the area affected by the proposed action, a biological assessment shall be prepared to identify whether the species or critical habitat are likely to be affected by the action and what those effects would be. If this biological assessment indicates no adverse effects on the species or critical habitat, it may be assumed that there would be no significant impact on endangered or threatened species. The environmental assessment shall include the biological assessment. No further analysis is necessary. The FAA shall forward the biological assessment to the Fish and Wildlife Service or the National Marine Fisheries Service for its records.

3 If the biological assessment indicates an adverse effect on endangered or

threatened species or on critical habitat, the proposal is considered to be one with potential significant impact. Consultation under section 7(a) of the Endangered Species Act as Amended and further evaluation shall be performed under FAA direction as described in paragraph 85j.

(c) For proposed actions which are not "construction projects," the procedure below shall be followed.

1 The list of Endangered or Threatened Wildlife and Plants shall be consulted to determine whether there are any such species in the area affected by the proposed action. If there are not, this information shall be included in the environmental assessment. No further analysis is necessary.

2 If there are endangered or threatened species in the area affected by the proposed action, the environmental assessment shall include an analysis of anticipated impacts on such species and their critical habitats. If this analysis shows that the proposed action would not affect endangered or threatened species or adversely modify their critical habitat, it may be assumed that impacts are not significant. No further analysis is necessary.

3 If the environmental assessment indicates an impact on endangered or threatened species or on critical habitat, the proposal is considered to be one with potential significant impact. Consultation under section 7(a) of the Endangered Species Act as Amended and further evaluation shall be performed under FAA direction as described in paragraph 85j.

(11) Wetlands.

(a) Wetlands are defined in Executive Order 11990, Protection of Wetlands, as "those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds." Wetlands also include estuarine areas, tidal overflows, and shallow lakes and ponds with emergent vegetation. Furthermore, the wetlands ecosystem includes those areas which affect or are affected by the wetland itself; e.g., adjacent uplands or regions upstream and downstream. Areas covered with water for such a short time that there is no effect on moist soil vegetation are not included within the definition of wetlands nor are the permanent waters of streams, reservoirs, and deep lakes.

(b) The importance of wetlands to the Nation is reemphasized in Executive Order 11990, issued May 24, 1977. DOT Order 5660.1A, Preservation of the Nation's Wetlands, implements E.O. 11990. The executive order provides that Federal agencies:

1 Avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect

support of new construction in wetlands wherever there is a practicable alternative, and

2 Avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds:

a that there is no practicable alternative to such construction, and

b that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. In making this finding the head of the agency may take into account economic, environmental and other pertinent factors.

(c) A proposal is considered to affect wetlands if it would involve development in a wetlands area; involve dredging, filling, draining, channelizing, diking, impounding, or otherwise directly impact a wetlands area; involve disturbing the water table of an area in which a wetland lies; or indirectly affect a wetland by impacting regions upstream or downstream or inducing secondary development. If there is uncertainty about whether an area is a wetland, the U.S. Fish and Wildlife Service or the local or state natural resource agency shall be contacted for further information.

(d) If the proposal does not affect a wetlands area, a sentence to this effect in the environmental assessment is sufficient. No further analysis is necessary.

(e) If the proposal would affect a wetlands area and there is a practicable alternative which solves the problem and avoids the wetlands impact, this alternative should become the proposed action. The term "practicable" means feasible. Whether another alternative is practicable depends on its feasibility in terms of safety, meeting transportation objectives, design, engineering, environment, economics, and any other applicable factors. Some additional cost alone does not necessarily make an alternative impractical since such cost may be recognized as necessary and justified to meet national wetlands policy objectives. If a practicable alternative is put forward as the new proposed action, no further wetlands analysis is necessary. The environmental assessment shall document that the initial proposed action was eliminated from further study because of wetland impacts.

(f) If the proposal would affect a wetland and there is no practicable alternative, the following instructions apply:

1 The environmental assessment shall include information on the location, types, and extent of wetland areas that might be affected by the proposed action. This information may be obtained from the Fish and Wildlife Service or state or local natural resource agency(ies).

2 Evaluations of other categories of impacts as described under paragraph 47e are to be used to determine whether impacts on wetlands appear to be significant. Consideration shall be given to impacts on water quality, including effects on water supply and recharge capability, interference with surface and subsurface

water courses, siltation and sedimentation, biotic community disruption, flood and storm hazards, development of secondary (induced) activities or services, and construction. The wetlands discussion in the environmental assessment may simply summarize and reference applicable discussions under other impact categories. Incorporate in an evaluation of impact on wetlands all practicable measures to minimize harm which will be implemented. These may include, but are not limited to:

- a Modification of the design, construction, or operation of the facility, including collection of pavement surface runoff to prevent direct discharge into sensitive areas.
- b Waste treatment.
- c Development of compatible land uses.
- d Special construction controls.

3 Early review of proposed actions shall be provided for agencies with special interest in wetlands. Such agencies include state and local natural resource and wildlife agencies, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the Corps of Engineers, and EPA. This review may be combined as much as possible with the state and local review process outlined in paragraph 48, below. Those agencies which have permitting actions described below shall be asked to advise if they foresee any difficulty issuing such permits based on the initial assessment that the proposal has no practicable alternative which would avoid the wetland and that all possible mitigation measures have been taken. Such advice should include recommendations regarding additional measures which could be taken to enable their subsequent favorable action on such permits. Letters from these agencies shall be incorporated into the environmental assessment and their opinions used to determine significance of impacts and to pinpoint potential problems in proceeding toward approval of the environmental document.

4 Specific consultation is required under the Fish and Wildlife Coordination Act with the U.S. Fish and Wildlife Service and the state agency having administration over the wildlife resources. For this analysis, documentation, and significance threshold, refer to paragraph 47e(9)(c) above.

5 The environmental assessment shall identify any permits that are required. Permit requirements for proposals affecting wetlands may include those identified below, which are further explained in paragraph 47e(6)(b) (Water Quality).

- a Section 402. Airport runoff into the surrounding environment may be considered to be a discharge subject to a Federal or state National Pollutant Discharge Elimination System permit pursuant to the Clean Water Act when the surrounding environment is a wetlands area.
- b Section 404. Most wetlands are considered to be "navigable waters" for

the purposes of the Clean Water Act. (For more specific information, refer to 33 CFR 329).

c Section 10 of the Rivers and Harbors Act of 1899. Under this Act, wetlands may also fall under the permit requirements of the Corps of Engineers due to obstruction or alteration of navigable waters.

d State Permit. The proposal may be required to comply with a state wetlands permit system.

6 An opportunity shall be provided for early public review of any proposals involving wetlands. This may be accomplished through early coordination by the sponsor per paragraph 45, use of the state and local review process per paragraph 48, or the opportunity to review the environmental assessment prior to a public hearing when one is held for proposed actions as described in paragraph 49.

7 A wetland which is in or adjacent to a coastal area may be subject to a state coastal zone management program. In this situation, applicable instructions in paragraphs 47e(13) and 47e(14) below shall also be followed.

8 Section 4(f) of the DOT Act may apply if wetlands are publicly owned lands as described in paragraph 47e(7). Wetlands subject to a publicly owned protective easement for provision of food and nesting to migratory waterfowl are considered to be publicly owned land of a wildlife and waterfowl refuge under section 4(f). The instructions in paragraph 47e(7) are to be followed for section 4(f) situations.

9 If the above analyses indicate any significant impacts on wetlands, the instructions under paragraph 85k are to be followed.

(12) Floodplains.

(a) Floodplains are defined in Executive Order 11988, Floodplain Management, as "the lowland and relatively flat areas adjoining inland and coastal waters including floodprone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year;" i.e., the area that would be inundated by a 100 year flood.

(b) Executive Order 11988 directs Federal agencies to "take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains...." DOT Order 5650.2, Floodplain Management and Protection, contains DOT's policies and procedures for implementing the executive order. The DOT order further defines the natural and beneficial values served by floodplains as including, but not limited to "natural moderation of floods, water quality maintenance, groundwater recharge, fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, and forestry." The executive order and the DOT order establish a policy to avoid taking an action within a 100 year floodplain where practicable. Every

effort must be made to minimize the potential risks to human safety and property damage and the adverse impacts on natural and beneficial floodplain values.

(c) If the proposed action and reasonable alternatives are not within the limits of a base floodplain (i.e., 100 year flood area) and would not indirectly support secondary development within a base floodplain nor otherwise significantly impact a base floodplain, it may be assumed that there are no floodplain impacts. No further analysis is necessary.

1 To determine the limits of base floodplains, the Federal Insurance Administration (FIA) maps are the primary reference. A Flood Insurance Rate Map or Flood Insurance Study Report shall be consulted first. If neither of these maps is available, a Flood Hazard Boundary Map may be used to determine if the proposed action and alternatives are clearly out of the base floodplain. If the proposed action or any alternative appears to be near or inside the approximate boundaries of the Flood Hazard Boundary Map, more detailed boundary information must either be obtained or developed using the best available method meeting acceptable professional engineering standards. The delineation of floodplain limits shall take proper account of previous alterations to the floodplain by flood retention works or other elements of the built environment. If a 100 year floodplain designation is in question, the FIA or the Corps of Engineers shall be contacted for information.

2 To determine whether other impacts are of concern to a base floodplain even though the proposed action is outside the floodplain, the evaluations of other categories of impacts as described in other subparagraphs of 47e are to be used, paying particular attention to potential effects on natural and beneficial floodplain values of water pollution, increased runoff from impermeable surfaces, alteration of hydrologic patterns, induced secondary development, and construction impacts. Consideration of impacts shall include proposed methods to minimize harm and to restore and preserve natural and beneficial floodplain values affected. In most cases, conceptual design as opposed to detailed engineering will be sufficient to help establish the adequacy of mitigation measures. Mitigation measures include:

- a Construction controls to minimize erosion and sedimentation.
- b Design of the facility to allow adequate flow circulation and preserve free, natural drainage.
- c Use of pervious surfaces where practicable.
- d Control of runoff.
- e Waste and spoils disposal so as not to contaminate ground and surface water.
- f Control of use of pesticides, herbicides, and fertilizer.
- g Maintenance of vegetative buffers to reduce sedimentation and delivery of chemical pollutants to the water body.

h Land use controls (Executive Order 11988 directs Federal agencies to take floodplain management into account in evaluating land use plans and to require land and water resource use appropriate to the degree of hazard involved).

(d) If the analyses performed in accordance with the preceding paragraph indicate significant impacts on a base floodplain, a statement to this effect shall be included in the environmental assessment. Instructions for further analysis appropriate for an environmental impact statement are contained in paragraph 85.1.

(e) If the proposed action and reasonable alternatives are within the limits of a base floodplain, this is considered by DOT Order 5650.2 to be a floodplain encroachment. If the proposed action includes relocation housing built or moved to a new site within a base floodplain, this also constitutes encroachment. It is not encroachment if the only step being taken in the floodplain is the relocation of persons into existing housing units. In this latter situation, potential occupants shall be advised if the relocation housing is located in a base floodplain and be offered alternative comparable housing at their option.

(f) It is DOT policy, in accordance with Executive Order 11988, to avoid where practicable encroachments in base floodplains by DOT actions. If there is a practicable alternative which solves the problem and avoids the encroachment, this alternative shall become the proposed action. The term "practicable" is defined under Wetlands impact in paragraph 47e(1)(e) above. If a practicable alternative is put forward as the new proposed action, no further analysis is necessary if the new proposed alternative does not otherwise significantly impact the base floodplain. The environmental assessment shall document that the initial proposed action was eliminated from further study because of base floodplain encroachment.

(g) If the proposed action and reasonable alternatives would encroach within the limits of a base floodplain, the following instructions apply:

1 The environmental assessment shall indicate briefly why the action is proposed to be located in a floodplain and why there are not considered to be any practicable alternatives outside the base floodplain.

2 The environmental assessment shall include the map information, analyses, and proposed mitigation measures described under subparagraph (c) above and shall also consider any risk to, or resulting from, the airport action in the base floodplain, including long term loss of available flood storage volume. In addition to measures listed under subparagraph (c), mitigation measures for base floodplain encroachments may include:

a Commitments to special flood related design criteria.

b Elevation of facilities above base flood level.

- c Location of nonconforming structures and facilities out of the floodplain.
- d Minimizing fill in floodplains.

3 The environmental assessment shall indicate if the encroachment would result in one or more of the construction or flood related impacts listed below. If so, the encroachment is considered by DOT Order 5650.2 to be a significant encroachment. It is not contemplated that detailed design would be necessary in order to determine whether there is a significant encroachment. (A significant encroachment will require a Federal finding as part of any favorable decision on the action that there is no practicable alternative and that the action conforms to applicable state and/or local floodplain protection standards.) A significant encroachment involves:

- a A considerable probability of loss of human life.
- b Likely future damage associated with the encroachment that could be substantial in cost or extent, including interruption of service on or loss of a vital transportation facility.
- c A notable adverse impact on natural and beneficial floodplain values.

4 The environmental assessment shall indicate if the proposed action is in a special flood hazard area designated by the FIA or proposed to be so designated. Special flood hazard areas are shown as zones A or V on Flood Hazard Boundary Maps. Under the Flood Disaster Protection Act of 1973, Federal agencies are prohibited from providing financial assistance for acquisition or construction of buildings in areas which have been designated by the FIA as special flood hazard areas for at least one year and which are in communities that are not participating in the national flood insurance program.

5 The environmental assessment shall identify any state and local floodplain regulations and standards that must be adhered to, indicate whether the proposed action will conform, and name the state and local agencies having jurisdiction.

6 An opportunity shall be provided for early public review of base floodplain encroachments. This may be accomplished through existing public involvement procedures as indicated in paragraphs 45, 48, and 49. Any public hearing presentations shall include identification of encroachments. If one or more of the alternatives under consideration include significant floodplain encroachments, any public notices, notices offering the opportunity for a public hearing, public hearing notices, and notices of the availability of environmental assessments shall make reference to that fact.

(h) If no significant encroachment within a base floodplain is involved as defined in

subparagraph (g)3 above, it may be assumed that there would be no significant floodplain impact. No further analysis and no special floodplains findings are necessary.

(i) If a significant encroachment is involved which could result in either loss of life or substantial future damage or both but would not result in notable adverse impacts on natural and beneficial floodplain values, these circumstances do not by themselves require the preparation of an environmental impact statement. CEQ 1508.14 states that "...economic or social effects are not intended by themselves to require preparation of an environmental impact statement." While further consideration on the floodplains aspects of the proposed action would be prudent on the part of the sponsor and the FAA before proceeding, a finding of no significant impact is the appropriate action choice in this circumstance assuming there are no other significant environmental impacts associated with the action. The findings delineated in paragraph 94b(6) would be required for the project decision.

(j) If a significant encroachment is involved which would result in notable adverse impacts on natural and beneficial floodplain values, this would require the preparation of an environmental impact statement and further analysis as described in paragraph 85.1.

(13) Coastal Zone Management Program.

(a) Detailed procedures for determining Federal consistency with approved coastal zone management programs are contained in the National Oceanic and Atmospheric Administration (NOAA) Regulations (15 C.F.R. Part 930). The sections most relevant to airport actions are subpart D, Consistency for Activities Requiring a Federal License or Permit, and subpart F, Consistency for Federal Assistance to State and Local Governments. If there is no approved state program, the instructions below do not apply. However, the environmental assessment shall in any case consider impacts on coastal areas. This may be done through analyses performed under other impact categories (e.g., coastal barriers, water quality, biotic communities, construction impacts) as appropriate, using the thresholds established under these respective categories. (For any action affecting coastal areas along the Atlantic or Gulf Coasts, include a statement regarding applicability of the Coastal Barriers Resources Act per paragraph 47e(14), below.) If thresholds of significance are exceeded, a more detailed coastal area and/or marine analysis may be necessary in an environmental impact statement. Coastal areas may also be designated as wetlands and require the special treatment described in paragraph 47e (11) above.

(b) The principal means used to determine if a proposed Federal action is consistent with an approved coastal zone management program is through the state and local review process as described in paragraph 48. To the extent possible, the information provided shall include a detailed description of the proposed action and any associated facilities sufficient to permit an assessment of their probable coastal zone effects and consistency with the provisions of the approved coastal zone management program. If the state coastal zone management agency does not object to the proposed action, no further action is necessary. The environmental assessment shall document the result of such coordination.

(c) Approval of airport layout plans could by definition in the NOAA Regulations be a Federal permitting action subject to subpart D. Unless this activity has specifically been identified in a given state's coastal zone management program or unless a state coastal zone management agency specifically advises the sponsor and FAA that an airport layout plan approval action would significantly affect a coastal zone, subpart D of the NOAA regulations will not apply and no further action is needed. If subpart D applies, the applicant must provide more specific information including a consistency certificate, and the state agency has up to six months within which to register objection.

(d) If the state coastal zone management agency objects to the proposed action on the basis of failure to provide sufficient information, it must describe the nature of the information needed to determine consistency with the coastal zone management program. Otherwise, any objection must identify how the proposed action is inconsistent with specific elements of the management program and alternative measures which, if adopted, would permit consistency. The objection shall also provide information on the right to appeal to the Secretary of Commerce pursuant to subpart H of the NOAA Regulations. Such appeal must be made within 30 days of notice of the objection. When an objection has been raised which cannot be satisfied by providing additional information or otherwise be resolved through informal discussions to avoid the need for an appeal as provided in subpart H, the sponsor may file a notice of appeal as soon as possible and notify the FAA accordingly. The action shall not be approved unless such an objection is successfully appealed.

(e) As a result of an appeal, the Secretary of Commerce may find that the action is "consistent with the objectives and purposes of the [Coastal Zone Management] Act" and permissible even though it is inconsistent with a state's management program. Such a finding by the Secretary of Commerce shall become part of the environmental documentation prior to any approval action. Such finding may be made on the basis that the action:

- 1 Furthers one or more of the competing national objectives or purposes defined in the Act;
- 2 Will not cause adverse impacts on the natural resources of the coastal zone substantial enough to outweigh its contribution to the national interest;
- 3 Will not violate the requirements of the Clean Air Act or Clean Water Act; and
- 4 No reasonable alternative exists which permits the action to be consistent with the management program.

(f) The nature and timing of the requirements related to actions affecting a coastal zone are such that any issues raised should normally be resolved by the sponsor during the environmental assessment process. Successful resolution will usually mean that any impact with respect to an approved coastal zone management program is not significant and no further information is needed.

(14) Coastal Barriers.

(a) The Coastal Barriers Resources Act of 1982, PL 97 348 (CBRA), prohibits, with some exceptions, Federal financial assistance for development within the Coastal Barrier Resources System which consists of undeveloped coastal barriers along the Atlantic and Gulf coasts. Maps specifically identifying lands included in this System are available for inspection in appropriate offices of the U.S. Fish and Wildlife Service. DOI issued CBRA Advisory Guidelines (43 CFR Subtitle A, reference 48 FR 45664).

(b) New financial assistance for specific types of construction or purchase, including airports, is prohibited by the CBRA. Exceptions, identified in section 6 of PL 97 348, include maintenance, replacement, reconstruction, or repair of publicly owned or operated roads, structures, or facilities and establishment, operation, and maintenance of air and water navigation aids and devices and access thereto as long as the expenditure is consistent with purposes of PL 97 348.

(c) If the proposed Federal action on a coastal barrier covered by CBRA could qualify as an exception to the funding prohibition, consultation with the U.S. Fish and Wildlife Service is required. Results of consultation shall be incorporated in the environmental assessment. The environmental assessment shall also include analysis under other impact categories such as water quality, biotic communities, and construction impacts.

(15) Wild and Scenic Rivers

(a) The Wild and Scenic Rivers Act (PL 90 542 as amended) describes those river areas eligible to be included in a system afforded protection under the Act as free flowing and possessing "...outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values." DOI maintains a National Inventory of river segments which appear to qualify for inclusion in the National Wild and Scenic River System.

(b) As soon as it appears that the proposed action could affect an Inventory river, contact DOI for verification. If DOI indicates that an Inventory river could be affected, refer to the "Procedures for Interagency Consultation to Avoid or Mitigate Adverse Effects on Rivers in the National Inventory" and appended "Guide for Identifying Potential Adverse Effects" circulated by the Council on Environmental Quality in August 1980, for guidance. (References in these documents to the Heritage Conservation and Recreation Service of DOI are no longer current. Functions related to the National Inventory are now conducted by the National Park Service of DOI.)

(c) Conditions of the proposed action which could adversely affect an Inventory river include:

1 Destruction or alteration of the free flowing nature of the river.

2 Introduction of visual, audible or other sensory intrusions which are out of character with the river or alter its setting.

3 Deterioration of water quality.

4 Transfer of property interests without adequate restrictions for protecting the river or its surrounding environment.

(d) If no Inventory river is adversely affected or the impact is not considered severe enough to preclude inclusion of the affected river segment in the Wild and Scenic River System or downgrade its classification (e.g. from wild to recreational), no further analysis is necessary. The environmental assessment shall document consultation with DOI in making this determination and describe any measures taken to avoid or minimize any adverse effect.

(e) If, in consultation with DOI, it is determined that the impact on any Inventory river is significant, further analysis is needed as described in paragraph 85n.

(16) Farmland.

(a) General. The Farmland Protection Policy Act (FPPA), P.L. 97 98, authorizes the Department of Agriculture (USDA) to develop criteria for identifying the effects of Federal programs on the conversion of farmland to nonagricultural uses. Federal agencies are directed to use the developed criteria; to identify and take into account the adverse effects of Federal programs on the preservation of farmland; to consider appropriate alternative actions which could lessen adverse effects; and to assure that such Federal programs, to the extent practicable, are compatible with state, unit of local government, and private programs and policies to protect farmland.

(b) Applicability. The guidelines developed by the USDA became effective August 6, 1984, and apply to Federal activities or responsibilities that involve undertaking, financing or assisting construction or improvement projects or acquiring, managing, or disposing of Federal lands and facilities. For Airports Program actions, this includes proposed Airport Improvement Program projects and requests for conveyances of government land. The guidelines do not cover permitting or licensing programs for activities on private or nonfederal lands. Airport Layout Plan (ALP) approval, involving only development shown on an ALP which is not to be federally funded, even if farmland is involved, is exempt from FPPA. Some categorically excluded actions which are exempt from NEPA will still require coordination under the FPPA.

(c) Determining FPPA Lands. If the proposed project involves acquisition of farmland which will be converted to nonagricultural use, it must be determined whether any of that land is protected by the FPPA. Farmland protected by the FPPA is either prime farmland which is not already committed to urban development or water storage, or unique farmland, or farmland which is of state or local importance as determined by the appropriate state or local government agency with the concurrence of the Secretary of Agriculture. During the early planning stages, the sponsor may be able to make a determination that the Act definitely is not applicable. If there is any doubt as to its applicability, the sponsor shall coordinate with the Soil Conservation Service (SCS) per

paragraph (c)2, below.

1 The FPPA is not applicable and no formal coordination with the SCS is required if any of the conditions below apply. Document in the environmental assessment (if one is otherwise required) the determination made.

a The land was purchased prior to August 6, 1984, for purposes of being converted.

b Acquisition does not directly or indirectly convert farmland (e.g., land acquired for clear zones or noise compatibility). Indirect conversion includes any use of land or operation of the facility which would prohibit the land from being farmed. Farmland which is proposed to be kept in farm use in the short term but is planned to be converted within the foreseeable future constitutes an indirect conversion.

c The land is not prime farmland as defined in the FPPA. "Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber...without intolerable soil erosion as determined by the Secretary [of Agriculture]. Prime farmland includes land that possesses the above characteristics but is being used currently to produce livestock and timber. It does not include land already in or committed to urban development or water storage." (FPPA, P.L. 97 98) "Prime farmland 'already in' urban development includes all such land with a density of 30 structures per 40 acre area. Prime farmland 'committed to urban development' includes all such land that has been designated for commercial or industrial use or residential use that is not intended at the same time to protect farmland in a (1) zoning code or ordinance adopted by a state or unit of local government or (2) a comprehensive land use plan which has expressly been either adopted or reviewed in its entirety by the unit of local government in whose jurisdiction it is operative within 10 years preceding implementation of the particular federal project." (1984 FPPA Regulations).

d The land is not unique farmland. "Unique farmland is land other than prime farmland that is used for production of specific high value food and fiber crops, as determined by the Secretary. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods. Examples of such crops include citrus, tree nuts, olives, cranberries, fruits, and vegetables." (FPPA)

e The land has not been determined by a state or local government agency, with concurrence of the Secretary of Agriculture, to be of statewide or local importance. Such land is "Farmland, other than prime or unique farmland, that is of statewide or local importance for the production of food, feed, fiber, forage, or oilseed crops, as determined by the appropriate State or unit of local government agency or agencies, and that the Secretary determines

should be considered as farmland for purposes of this subtitle." (FPPA)

2 If it is determined that the farmland conversion includes or may include land protected by the FPPA, formal coordination per 7 CFR Part 658 is required.

a Send Form AD 1006 (copies available from the SCS) to the SCS county field office which has responsibility for the area in question. Sponsors are authorized to complete the sections of the form which are required "To be completed by the Federal Agency" (FAA). If more than one jurisdiction is involved, contact should be made with the State Conservationist. Parts I and III should be filled in, and a location map of the area in question should be attached. If sponsors are considering several alternatives which involve farmland protected by the FPPA, information on the preferred alternative should be listed under "Site A" in Part III of the form, with Sites B, C, and D columns used for any other alternatives which involve the use of farmland protected by the FPPA. The SCS has 45 days in which to respond on the form. SCS will evaluate the land and indicate whether a local (SCS approved) site assessment system is available (Parts II, IV, and V). If SCS fails to respond within 45 days and if further delay would interfere with construction activities, the project may proceed as though the site were not farmland protected by the FPPA. The sponsor shall document a "no response" by the SCS.

b When a local site assessment system is identified by SCS (Part II of AD 1006), the subsequent site assessment shall be done by the sponsor using the local criteria instead of the Federal criteria in Part VI of AD 1006. If site assessment criteria exist at both the state and the local levels, the local criteria should be used unless the project is multi county, regional, or statewide, in which case the state criteria should be used. (A list of site assessment systems within each state that have been placed on the SCS State Conservationist's list is available from the State Conservation Office.) If no criteria exist at these levels, use the national criteria contained in 7 CFR Part 658.5(b) (Federal Register dated July 5, 1984, page 27726) to complete Part VI of AD 1006.

(d) Determining significance of impact. Scoring of the relative value of the site for preservation as farmland will be done first by SCS (Form AD 1006, Parts IV, V), and subsequently by the sponsor using either the local or state site assessment criteria or, if none exists, using the point values contained in 7 CFR 658.5(b) to complete Part VI of AD 1006. The sponsor shall then score the site under Part VII of Form AD 1006.

1 If the total combined score (Part VII) is less than 160, no further action is required. It may be assumed there is no significant impact caused by the taking of farmland at the proposed site. If impact on farmlands was the only potential impact of a proposed project which is categorically excluded, no environmental assessment is required. Form AD 1006, including the site selection information at the bottom of the form, shall be submitted to the FAA with the project documentation.

2 If the total score is above 160, but below 200, there is potential adverse impact. An environmental assessment must consider the following alternatives where applicable:

- a Acquiring land that is not farmland protected by the FPPA,
- b Using existing airport owned land instead of acquiring new land,
- c Alternate sites or airport layouts that would serve the proposed purpose but convert either fewer acres of farmland or other farmland with a lower relative value. (When considering alternative sites, discuss special siting requirements of the proposed project and the extent to which an alternate site fails to satisfy the special siting requirements.)

3 If the total score in Part VII is below 200, no further analysis is necessary. The completed Form AD 1006 (or local site assessment where applicable), shall be submitted as part of the environmental assessment to the FAA. If the score is above 200, it is necessary to give further consideration to factors involving the percentage of farmland to be converted, the protection provided by state or local government, the effects of conversion on the continued viability of farm support services in the area, and the degree of incompatibility of the proposed project with the remaining surrounding farmland (Form AD 1006, Part IV, C., and Part VI, 4, 11, and 12, or similar state or local site assessment criteria). High scores in these areas indicate a potential significant loss of farmland. Consideration should first be given to an alternative which would avoid this loss. If there is no such reasonable alternative, further analysis is needed in an environmental impact statement according to instructions in paragraph 85.o.

(17) Energy Supply and Natural Resources.

(a) Energy requirements associated with the action fall generally into two categories:

1 Those which relate to changed demands for stationary facilities (e.g., airfield lighting and terminal building heating). For purposes of the environmental assessment, the proposal shall be examined to identify any proposed major changes in stationary facilities which would have a measurable effect on local supplies. If there are major changes, power companies or other suppliers of energy shall be contacted to determine if projected demands can be met by existing or planned source facilities.

2 Those which involve the movement of air and ground vehicles. Increased consumption of fuel by aircraft need only be examined if average ground movement or runup times are increased substantially without offsetting efficiencies in operational procedures or if the action includes a change in flight patterns, such as from noise abatement procedures, which adds noticeably to flight times. Ground vehicles' fuel consumption shall be examined only if the action would add appreciably to access time or if there would be a substantial change in

movement patterns for on airport service or other vehicles.

(b) Use of natural resources other than for fuel need be examined only if the action involves a need for unusual materials or those in short supply.

(c) For most airport actions, changes in energy or other natural resource consumption will not result in significant impacts. If the environmental assessment identifies problems with demands exceeding supplies, changes in aircraft or ground vehicle use which would greatly increase fuel consumption, or the proposed substantial use of natural resources in short supply, additional analysis will be required in an environmental impact statement per paragraph 85p. Otherwise, it may be assumed that impacts are not significant.

(18) Light Emissions.

(a) The sponsor shall consider the extent to which any lighting associated with an airport action will create an annoyance among people in the vicinity of the installation. The following information shall be included in the environmental assessment whenever the potential for annoyance exists:

1 Site location of lights or light systems.

2 A brief description of the light system as to its purpose, method of installation (pole or ground mounted), beam angle, intensity, color, flashing sequence, and other pertinent characteristics of the particular system and its use.

3 Measures to lessen any annoyance, such as shielding or angular adjustments.

(b) Only in unusual circumstances, as for example when high intensity strobe lights would shine directly into people's homes, will the impact of light emissions be considered sufficient to warrant special study and a more detailed examination of alternatives in an environmental impact statement. Normally, it may be concluded that no significant impact would occur.

(19) Solid Waste Impact.

(a) Airport actions which relate only to airfield development (runways, taxiways, and related items) will not normally include any direct relationship to solid waste collection, control, or disposal other than that associated with the construction itself (reference paragraph 47e(20)).

(b) Terminal area development may involve circumstances which require consideration of solid waste impacts. Preliminary review should indicate if the projected quantity or type of solid waste generation or method of collection or disposal will be appreciably different than would be the case without the action. If there is an appreciable difference, consultation with local officials shall determine if there is any potential problem with either capacity of available disposal facilities or location which may violate any local,

state, or Federal regulations. Special attention shall be given to the control of hazardous waste.

(c) Consultation with local officials shall also determine the location of all solid waste disposal facilities within or planned to be within 1500 meters (approximately 4921 feet) of all runways planned to be used by piston type aircraft and within 3000 meters (approximately 9843 feet) of all runways planned to be used by turbojet aircraft. A preliminary study of disposal sites within the above distances should determine if a potential bird hazard exists and if the affected planned runways need to be modified. (Use meters in lieu of feet.) FAA Order 5200.5, FAA Guidance Concerning Sanitary Landfills On or Near Airports, states that "sanitary landfills will be considered as an incompatible use" if located within the distances cited above. (Reference paragraph 5 of that Order and EPA's 1979 "Criteria for Classification of Solid Waste Disposal Facilities", 40 CFR Part 257, specifically section 257.3 8, Safety.)

(d) The environmental assessment shall document the results of the consultation; the nature of any potential problems, including the siting of runways in the vicinity of active or planned solid waste disposal facilities; and the manner in which waste products will be controlled to comply with any applicable regulations. If it is necessary to explain a problem concerning solid waste system loading resulting from terminal development, an estimate of current and projected quantities of waste production and disposal capacity shall be included. Only if there are significant unresolved issues will additional analysis be needed in an environmental impact statement.

(20) Construction Impacts.

(a) Specific effects during construction which may create adverse environmental impacts include noise of construction equipment on the site, noise and dust from delivery of materials through residential streets, creation of borrow pits and disposal of spoil, air pollution from burning debris, and water pollution from erosion. The extent to which any of these effects are subject to local, state, or Federal ordinances or regulations shall be discussed as applicable together with measures to be taken to conform with such requirements.

(b) In general, impacts during construction are of lesser magnitude than long term impacts of the proposed action. Many of the specific types of impacts which could occur will be covered in the descriptions of other impact categories. To the extent not discussed elsewhere, this item shall include a general description of the type and nature of the construction and measures to be taken to minimize potential adverse effects. As a minimum, reference shall be made to the incorporation in project specifications of the provisions of Advisory Circular 150/5370 10 Standards for Specifying Construction of Airports, (change 10), Item P 156 Temporary Air and Water Pollution, Soil Erosion, and Siltation Control.

(c) Only in unusual circumstances, as for example construction in an ecologically sensitive area or construction involving substantial urban effects, would this impact category be considered to create significant consequences which may not be adequately mitigated. It is a matter of FAA judgment to determine if such circumstances exist and

require the preparation of an environmental impact statement.

f. Environmental Consequences Other Considerations. To the extent not covered in the Specific Impact Categories under paragraph 47e, the Environmental Consequences section of the environmental assessment shall include discussion of the following:

(1) "Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned" (CEQ 1502.16(c)). If the proposal is not reasonably consistent with plans, goals, policies, or controls that have been adopted for the area in which the airport is located, an environmental impact statement is required.

(2) "...[A]ny inconsistency of a proposed action with any approved State or local plan and laws (whether or not federally sanctioned)" (CEQ 1506.2(d)). If the proposal is inconsistent with a Federal, state, or local law or administrative determination relating to the environment, an environmental impact statement is required.

(3) "Means to mitigate adverse environmental impacts..." (CEQ 1502.16(h)) which were not included in the Alternatives section and are important in judging the significance of an impact or in supporting particular alternatives findings as elaborated on in paragraph 83.

(4) Degree of controversy on environmental grounds. If the proposal is highly controversial with regard to an impact that is determined to be significant according to the thresholds in paragraphs 47e and 85, an environmental impact statement is required. Otherwise, no further analysis is needed and a finding of no significant impact may be prepared.

g. Preparers. The preparers of an environmental assessment shall be identified, and the qualifications and other information on the preparers per paragraph 87a shall be made available to the FAA.

h. Appendices. The environmental assessment shall have appended to it the following:

(1) Any documentation supporting statements in the body of the environmental assessment, including methodologies and sources used. Such documentation should be minimal in an environmental assessment.

(2) An air and water quality certification pursuant to section 509(b)(7) of the 1982 Airport Act (or evidence that it will be given, per paragraph 47e(5)(e), above) if one is required and has been obtained at this stage.

(3) A listing of agencies and persons consulted and any responses.

(4) Evidence that coordination with affected state and local officials has taken place (either through the state point of contact or individually, per paragraph 48, below), comments and recommendations received, and responses to such comments.

(5) A summary of citizen involvement, evidence of the opportunity for a public hearing if required under section 509(b)(6) of the 1982 Airport Act, and a summary of issues raised at any

public hearing held.

(6) Any cost benefit analysis that the sponsor has done. CEQ 1502.23 contains more specific guidance to be used when a cost benefit analysis is being considered for the proposed action.

48. STATE AND LOCAL REVIEW PROCESS.

a. Review of proposed Airport Improvement Program actions by state and local officials occurs through procedures set forth in DOT Order 4600.13, Intergovernmental Review of Department of Transportation Programs and Activities, included with implementing FAA Order 1200.21B, Intergovernmental Review of FAA Programs and Activities. The DOT order implements 49 CFR Part 17 and Executive Order 12372. These procedures replace those set forth in OMB Circular A 95. Under new regulation, each state may adopt its own process for review, including delegation to local officials, and choose which non excluded programs and activities of DOT it wishes to review.

b. OMB has encouraged states to establish a "single point of contact" to facilitate review and coordination of the programs it selectll include the commitment and the supporting documentation of no adverse effect. No further analysis is necessary.

6 If a determination of adverse effect cannot be avoided, the instructions in subparagraph (b)4 apply and further consultation and analysis under the guidance of the FAA will be necessary as described in paragraph 85h.

(d) If the proposal involves the taking or use of any publicly or privately owned land from a historic or archeological site of national, state, or lo

c. Sponsors should notify the appropriate single point of contact or make independent contacts as soon as project planning has developed in sufficient detail to describe the nature and scope of the development proposed and for which Federal assistance will be sought. This contact should take place at least 60 days prior to the date the sponsor submits its preapplication form requesting Federal assistance.

d. During the initial review period, the preapplication for Federal aid may be completed. This period may also be used to complete the requirement for public hearings, if applicable. This review process should provide for consideration of the project's probable impact on the environment and input from areawide and local agencies authorized to develop and enforce environmental standards or which have expertise or jurisdiction with respect to environmental impacts. An appropriate vehicle to solicit such input is the environmental assessment.

e. The point of contact should be asked to inform known interested groups of the project. If either the sponsor or FAA has knowledge of such groups, this information should be given to the contact point. During this same period, the contact point should be encouraged to act as liaison between the agencies affected and the sponsor, arranging meetings and such other forms of consultation as may be necessary to work towards resolution of any problem raised by the proposed project.

f. The comments and recommendations received through state and local review become input to the sponsor's environmental assessment and ultimately must be reported and appropriately addressed in the FAA's environmental documentation. When a single point of contact transmits recommendations, DOT Order 4600.13 provides for consideration of state and local concerns by either accepting the

comments, reaching a mutually agreeable solution with the parties which prepared the recommendations, or providing a timely explanation to the point of contact for not accepting the recommendations or reaching agreement. If the comments cannot be accepted and there are unresolved issues at the time the environmental assessment is completed and submitted to FAA, the FAA responsible official shall try to reach a mutually agreeable solution or provide written explanation to the point of contact as to why the comments cannot be accepted, with a copy to the Assistant Secretary for Administration, M 1 (see Order 4600.13). No final action may be taken for at least 15 days after the explanation is sent.

49. PUBLIC HEARING.

a. If a new airport location, a new runway, or a major runway extension is involved, the sponsor must afford the opportunity for public hearings as required by section 509(b)(6) of the 1982 Airport Act. The public hearing opportunity shall normally be afforded prior to formal submission of a sponsor's environmental assessment.

b. In deciding whether a public hearing is appropriate in other cases, the FAA and sponsor shall consider the provisions of CEQ 1506.6(c)(1) and (2); i.e., whether there is:

"(1) Substantial environmental controversy concerning the proposed action or substantial interest in holding the hearing.

"(2) A request for a hearing by another agency with jurisdiction over the action supported by reasons why a hearing will be helpful..."

c. In preparing for a public hearing, the sponsor is required to comply with the requirements of Federal Aviation Regulations Part 156 (or Part 152 prior to issuance of Part 156). Notice of the hearing is required to be published in an areawide or local newspaper of general circulation and shall conform to (1) or (2) below, as applicable:

(1) For notices of an opportunity for a public hearing:

(a) The intent to undertake the proposed airport development, with a concise description of the proposed development and a statement that the hearing is for the purpose of considering the economic, social and environmental effects of the development and its consistency with the goals and objectives of such urban planning as has been carried out by the community.

(b) The availability and location of an environmental assessment if one is required by paragraph 21, 22, or 24 or a statement that: "In accordance with FAA Order 5050.4A, Airport Environmental Handbook [or subsequent updates], the proposed development will not have a significant effect on the environment and is categorically excluded from the requirement to prepare an environmental assessment." An environmental assessment, if required by the FAA, is to be made available for public examination at least 30 days prior to the hearing and so indicated in the hearing notification.

(c) A statement that anyone interested has up to at least 30 days from the date of the notice of opportunity to request a hearing.

(2) For notices of hearings to be held, in addition to the information in (1)(a) and (b) add:

(a) Notice that a hearing will be held (in the same paper as the notice of opportunity, if such was given).

(b) The scheduling of a public hearing (time, date, and place). If the schedule is announced in response to a request for a hearing after an initial notice of opportunity, the schedule must be published at least 15 days prior to the hearing. In any event, the hearing may not take place any sooner than 30 days after the initial notice of a hearing or hearing opportunity is published.

d. Hearings may be held by the sponsor simultaneously with the state and local review described in paragraph 48, above. Comments received from state and local review should be made available at the public hearing if this process has been completed.

e. A detailed summary of issues raised in public hearings is to be included in an environmental assessment. A hearing transcript need not be included, but at least one copy of the transcript must be obtained by the sponsor for the record. The sponsor must furnish a copy of the transcript to the FAA upon request.

f. If a hearing opportunity was required per paragraph a. above and none was held, the sponsor must submit with his preapplication a certification that a notice of opportunity was provided per FAR Part 156 (or Part 152 prior to issuance of Part 156) and that no hearing was requested.

50. FAA SUBMISSION.

a. The sponsor shall revise the environmental assessment as necessary as a result of the state and local review process, any public hearing, and other input and shall submit to the FAA an assessment completed per paragraph 47 of this order. The environmental assessment shall be submitted, depending upon the type of action proposed, at any time in the project formulation but not later than at the time the sponsor submits a preapplication for Federal aid or a request for: FAA approval of a new or revised airport layout plan or approval of an airport location; FAA conveyance of government lands for airport purposes under section 516 of the 1982 Airport Act; or other FAA action requiring an environmental assessment.

b. The FAA may require corrections or additional information from the sponsor before accepting the environmental assessment. The FAA's acceptance of the environmental assessment will be indicated on the cover page by the signature of the responsible FAA official. From this point on, the environmental assessment is a Federal document for which the FAA is responsible. The number of copies of the environmental assessment submitted to the FAA shall be determined by consultation with the FAA and, for findings of no significant impact, shall include a copy designated as a reproducible master which must be of good quality.

c. If no environmental assessment is required by the FAA and a public hearing is held, the sponsor shall submit a written report to the FAA which summarizes the issues raised, alternatives considered, conclusion reached, and reasons for the conclusion. The sponsor must furnish a copy of the transcript

to the FAA upon request. The responsible official shall review the written report to determine whether the action should remain a categorically excluded action or whether it appears to be covered by conditions set forth in paragraph 21, 22, or 24.

51. FAA COMPLETION OF ENVIRONMENTAL ASSESSMENT AND DECISION.

- a. The FAA is responsible for making the judgment, based on the environmental assessment and any other known information, of whether the action choice will be an environmental impact statement or a finding of no significant impact and shall inform the sponsor of this decision.
- b. If no thresholds indicating the potential for significant impact are exceeded for the proposed action, the environmental assessment, when evaluated and accepted by the FAA, will have been completed. The FAA decision will be to prepare a finding of no significant impact.
- c. If some thresholds are exceeded, the environmental assessment may not be complete when it is evaluated and accepted from the sponsor, and the FAA may not be able to make a decision on the appropriate action choice until completing further evaluation and consultation. This situation may occur for two reasons. One is that a number of thresholds of significance may produce borderline cases which require further FAA evaluation, in consultation with appropriate officials having jurisdiction and expertise, in order to make a final judgment on whether impacts are significant. The second reason is that there are some consultations, such as the section 7(a) consultation under the Endangered Species Act as Amended or the consultation with the Advisory Council on Historic Preservation, which are required when specific categories of impacts may be of significant concern and for which the FAA, rather than the sponsor, must take the lead. When enough evaluation and application consultations have been completed by the FAA to judge for each category of impact whether or not the impact is significant, the FAA shall complete the documentation of the environmental assessment and make its decision on the action choice.
- d. In order to minimize overall environmental processing time, sponsors should inform the FAA as soon as they find that any initial analysis exceeds a threshold of significance. Consultations can then be initiated without delay and FAA can offer advice on what additional information is likely to be needed for more detailed analyses. These further actions need not be delayed until the sponsor's final submission of the environmental assessment but can be pursued simultaneously with preparation of the environmental assessment.
- e. To assist in resolving uncertainties on whether impacts are significant, it may be prudent to initiate scoping prior to a firm final decision to prepare an environmental impact statement and prior to issuing a Notice of Intent per CEQ 1501.7. Scoping, under these circumstances, may eliminate from detailed study all issues as insignificant and thereby lead the responsible FAA official to determine that a finding of no significant impact is the appropriate action choice. If the FAA has announced a decision to prepare an environmental impact statement and issued a Notice of Intent to this effect, CEQ 1501.7(c) provides the authority to revise previous determinations on the significance of impacts when applicable.

52. AVAILABILITY OF ENVIRONMENTAL ASSESSMENTS. After the FAA has evaluated and accepted the environmental assessment, this document shall be made available to the public pursuant to CEQ 1506.6. Public notice of this availability is not necessary if the environmental assessment, in essentially its same form, is to be included in an approved finding of no significant impact or a draft environmental impact statement and made available to the public within a

reasonable time frame generally less than 60 days.

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CHAPTER 6. FINDING OF NO SIGNIFICANT IMPACT

60. REQUIREMENT FOR FINDING OF NO SIGNIFICANT IMPACT. CEQ 1501.4(e) provides that the Federal agency shall "Prepare a finding of no significant impact (section 1508.13), if the agency determines on the basis of the environmental assessment not to prepare a statement." Section 1508.13 defines a finding of no significant impact as "...a document by a Federal agency briefly presenting the reasons why an action, not otherwise excluded (section 1508.4), will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared." The FAA shall evaluate the environmental assessment to determine if an alternative which provides a good solution to the problem has no significant impacts. Unless there is an overriding reason for not selecting such an alternative, the FAA shall then proceed with the preparation of a finding of no significant impact. This decision point is identified as step 13 in Appendix 1. The process for a finding of no significant impact is shown in steps 14 through 20 of Appendix 1.

61. SPECIAL CONSIDERATIONS. There are several special assurances, conclusions, and findings which apply to Airport Improvement Program projects, to projects involving the use of section 4(f) lands, to projects involving the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and to other environmental areas. If any of these special assurances, conclusions, or findings apply to a proposed action, they must be based on appropriate analyses and evidence in the finding of no significant impact, although the findings themselves will not be made until the decision on the Federal action per paragraph 67c.

62. FORMAT AND CONTENT.

- a. The CEQ Regulations do not specify a format for the finding of no significant impact. CEQ 1508.13 does briefly indicate content of the document: "It [the finding of no significant impact] shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it (section 1501.7(a)(5)). If the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference."
- b. Findings of no significant impact shall use the following documentation.
 - (1) A heading which shall read:
"DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Finding of No Significant Impact"
 - (2) The airport name, location, and proposed Federal action.
 - (3) Reasons why the FAA has determined that the proposed action will have no significant impacts, referencing the environmental assessment. CEQ 1502.2(b) states "...there should be only enough discussion to show why more study is not warranted."
 - (4) Mitigation measures which are a condition of Federal approval.
 - (5) The environmental assessment with its appendices.
 - (6) For Airport Improvement Program projects, a letter from the sponsor giving specific land use assurances if the FAA is not satisfied that the information in the environmental assessment provides a satisfactory basis for making a standard assurance, pursuant to

section 511(a)(5), in the grant.

63. COORDINATION.

- a. General. Appropriate Federal, state, and local coordination shall be completed as described in Chapter 5 for applicable areas of environmental consideration. In all cases where there is a reasonable potential for an effect on historic or archaeological resources, coordination with the State Historic Preservation Officer is required. In addition, other informal coordination as may be considered prudent by the region may be carried out to satisfy the FAA regarding the extent of specific impacts. All proposed findings of no significant impact shall be reviewed by affected FAA program divisions and staff officials at the regional level before presentation for approval. Findings of no significant impact may be approved without headquarters level review or other formal Federal review unless such review is required under some special purpose law, regulation, or executive order or unless requested by the region.
- b. Headquarters Review. If the region desires headquarters review, one copy of the document shall be sent to the Office of Airport Planning and Programming (Attention: APP 600). Such review shall normally not exceed 30 days. Unless specifically advised otherwise within this time frame, the region may assume that APP 600 has no comments. No concurrence is required by the Office of Airport Planning and Programming. No further distribution is made within FAA or DOT headquarters.
- c. Review by other Federal agencies. Copies shall be sent to other Federal agencies for comment only if those agencies have a specific involvement by law or regulation (e.g. if section 4(f) land is affected and falls within the jurisdiction of the Department of the Interior or Department of Agriculture). Numbers of copies to be sent shall be determined by contact with the agencies affected. If more than one agency within DOI is likely to be involved, the same number of copies as required for draft environmental impact statements shall be sent to the DOI Washington address given in paragraph 91. A 30 day review period may be established in the transmittal letter. However, FAA shall normally respond positively to any request for up to a 15-day extension and shall consider extensions beyond that time upon demonstration of unusual and compelling circumstances by the requesting agency.
- d. Special Circumstances. CEQ 1501.4(e)(2) provides that "In certain limited circumstances...the agency shall make the finding of no significant impact available for public review (including State and areawide clearinghouses) for 30 days before the agency makes its final determination whether to prepare an environmental impact statement and before the action may begin." The circumstances in CEQ 1501.4(e)(2) are: "(I) the proposed action is, or is closely similar to, one which normally requires the preparation of an environmental impact statement..." (see paragraph 21(b) "(ii) The nature of the proposed action is one without precedence." The responsible official shall determine if the circumstances in CEQ 1501.4(e)(2) apply. The 30-day public review period may run concurrently with any Federal review.

64. APPROVAL.

- a. The decision to approve a finding of no significant impact may be made by the FAA approving official. In addition to the information on format and content provided in paragraph 62, the final document shall include other material which contributes to the finding, including documentation of any Federal coordination.
- b. If the proposal involves section 4(f), the finding of no significant impact shall be reviewed for legal sufficiency by the regional counsel (step 16, Appendix 1).
- c. The Federal approval shall include the following:

"After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and that it will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to section 102(2)(C) of NEPA.

APPROVED: _____ DATE: _____

DISAPPROVED: _____ DATE: _____"

65. FINAL DISTRIBUTION. After a finding of no significant impact involving Federal coordination is approved, the region shall send one copy of the approved package to any reviewing agency which had substantive comments, and one copy to AEE-1 for FAA records. Otherwise, distribution of an approved finding of no significant impact outside the region is not required. However, the document shall be made available upon request per CEQ 1506.6.

66. PUBLIC AVAILABILITY. CEQ 1501.4(e)(1) states "The agency shall make the finding of no significant impact available to the affected public as specified in section 1506.6." The regional office shall comply with section 1506.6 and shall formulate a system for announcing the availability of the finding of no significant impact through appropriate media in the area affected and in cooperation with the sponsor of the project. The announcement shall indicate locations at which the finding of no significant impact is available and shall include FAA regional and district offices, the sponsor's office, and other appropriate locations of general public access. Copies of findings of no significant impact shall be provided, on request, free of charge or at a fee commensurate with the cost of reproduction.

67. DECISION AND IMPLEMENTATION.

- a. Immediately following the approval of a finding of no significant impact, the decision may be made on the Federal action (step 20, Appendix 1).
- b. Mitigation measures which were made a condition of approval of the finding of no significant impact shall be included in the decision as well as the steps taken to assure appropriate commitment and follow-up of mitigation measures. Proposed changes in or deletions of mitigation measures which were a condition of approval of the finding of no significant impact must be reviewed by the same FAA offices which reviewed the original finding of no significant impact and must be approved by the same approving official.
- c. A record of decision is not required for findings of no significant impact. However, prior to the Federal action and based upon the data presented in the approved finding of no significant impact, the decisionmaker must reach and document the appropriate conclusions, findings, or assurances. These findings or assurances shall be incorporated in a letter or other documentation attached to the Federal action and signed by the FAA decisionmaker.
- d. If the decisionmaker wishes to take an action which was included as a alternative in the finding of no significant impact and which involves a special interest (e.g., section 4(f) land, endangered species, wetlands, historic site, or others), the FAA shall first complete any required evaluation and consultation that has not been done, supplementing the original finding of no significant impact, prior to taking the action. Supplements to findings of no significant impact shall be reviewed and approved in the same manner as the original document.
- e. If the alternative on which the decisionmaker now wishes to take action has potential

significant impacts, the FAA shall issue a notice of intent to prepare an environmental impact statement and commence scoping.

68. 69. RESERVED.

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CHAPTER 7. ENVIRONMENTAL IMPACT STATEMENT PREPARATION

70. GENERAL. This chapter and the subsequent two chapters describe the preparation, content, and processing of an environmental impact statement pursuant to section 102(2)(C) of NEPA. The process leading to a decision by FAA to prepare an environmental impact statement is described in Chapter 5. The circumstances of the proposed action which warrant the preparation of an environmental impact statement are contained in paragraphs 47e, 47f, and 85. This chapter explains the purpose of an environmental impact statement and the manner in which it is to be prepared. It describes the scoping process, the assignment of responsibilities for input, and contracting for environmental impact statement preparation (see steps 21 through 26, Appendix 1).

71. PURPOSE. CEQ 1502.1 states that "The primary purpose of an environmental impact statement is to serve as an action forcing device to insure that the policies and goals defined in the Act [NEPA] are infused into the ongoing programs and actions of the Federal Government. It shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment. Agencies shall focus on significant environmental issues and alternatives and shall reduce paperwork and the accumulation of extraneous background data. Statements shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses. An environmental impact statement is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions."

72. IMPLEMENTATION.

- a. To achieve the purpose in CEQ 1502.1, environmental impact statements are to be prepared in the manner prescribed in CEQ 1502.2.
- b. CEQ 1502.6 provides that "Environmental impact statements shall be prepared using an inter disciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts (section 102(2)(A) of the Act). The disciplines of the preparers shall be appropriate to the scope and issues identified in the scoping process...."
- c. Other sections of the CEQ Regulations which apply generally to the preparation of environmental impact statements and their application to airport actions include sections 1502.4(a) and (b), 1502.5, and 1502.8.
 - (1) CEQ 1502.4(a) states in part that "Agencies shall make sure the proposal which is the subject of an environmental impact statement is properly defined" and that "Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement."
 - (2) CEQ 1502.4(b) provides that "Agencies shall prepare statements on broad actions [such as the adoption of new agency programs or regulations] so that they are relevant to policy and are timed to coincide with meaningful points in agency planning and decisionmaking."
 - (3) CEQ 1502.5 provides that "An agency shall commence preparation of an environmental impact statement as close as possible to the time that the agency is...presented with a proposal...." For airport actions, formal preparation shall normally commence with the scoping process immediately after it is determined by the FAA

responsible official at the region or airports district office level that an environmental impact statement is necessary. This decision point is identified in the flow diagram (Appendix 1) as step 13. Nothing in this order shall preclude earlier commencement of the gathering of information and preparation for the scoping process as described in paragraph 74, below.

(4) CEQ 1502.8 states that "Environmental impact statements shall be written in plain language and may use appropriate graphics so that decision makers and the public can readily understand them." (5) CEQ 1501.8 describes the circumstances when the setting of time limits for the NEPA process may be appropriate and the factors which should be considered.

73. LIMITATIONS. CEQ 1506.1 deals with limitations on actions during the NEPA process. Key provisions of CEQ 1506.1 which relate to proposals for airport actions include the following:

- a. "(a) Until an agency issues a record of decision [described in paragraph 98 of this order]...no action concerning the proposal shall be taken which would:
 - (1) "(1) Have an adverse environmental impact; or
 - (2) "(2) Limit the choice of reasonable alternatives."
- b. "(b) If any agency is considering an application from a non Federal entity, and is aware that the applicant is about to take an action within the agency's jurisdiction that would meet either of the criteria in paragraph (a) of this section, then the agency shall promptly notify the applicant that the agency will take appropriate action to insure that the objectives and procedures of NEPA are achieved."
- c. "(d) This section does not preclude development by applicants of plans or designs or performance of other work necessary to support an application for Federal, State or local permits or assistance."

74. SCOPING.

- a. The general requirement for scoping is contained in CEQ 1501.7 which provides that "there shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. This process shall be termed scoping." The responsible official shall assume a key role in managing the preparation of an environmental impact statement. (In the context of scoping, the responsible official is the official in charge of preparation of the environmental impact statement for the lead agency. Where joint lead agencies are involved, the other agency(s) may share in the responsibility for scoping with the FAA.) Scoping is a major element. The responsible official shall take the lead in the scoping process, including issuing the notice of intent, inviting the participation of other agencies and interested persons pursuant to CEQ 1501.7(a)(1), determining the issues to be analyzed in depth, and assigning responsibilities for inputs to the environmental impact statement. CEQ 1501.7 further describes these steps in detail.
- b. (1) The first step is described in section 1501.7 as follows: "As soon as practicable after its decision to prepare an environmental impact statement and before the scoping process the lead agency shall publish a notice of intent (section 1508.22) in the FEDERAL REGISTER...." Regions shall follow regional counsel procedures for filing notices in the Federal Register through the Office of the Chief Counsel, Rules Docket. In addition to the formal required notice in the Federal Register, it is recommended that a similar notice be placed in the local media.
- (2) The notice of intent in section 1508.22 "...means a notice that an environmental

impact statement will be prepared and considered. The notice shall briefly: (a) Describe the proposed action and possible alternatives, (b) Describe the agency's proposed scoping process including whether, when, and where any scoping meeting will be held, (c) State the name and address of a person within the agency who can answer questions about the proposed action and the environmental impact statement." In addition, the notice shall provide information on the availability of the environmental assessment, if one was prepared.

(3) A scoping meeting, per se, is not required for every action requiring an environmental impact statement. Depending on the nature and complexity of the project, some or all of the information needed during the scoping process may be obtained by letter or telephone.

(4) If for some reason there is a lengthy period between the time a decision is made to prepare an environmental impact statement and the actual preparation, section 1507.3(e) provides that "...the notice of intent...may be published at a reasonable time in advance of preparation of the draft statement."

c. (1) Section 1501.7 further provides that the lead agency shall "Determine the scope (section 1508.25) and the significant issues to be analyzed in depth in the environmental impact statement." Scope as defined in CEQ 1508.25 "...consists of the range of actions, alternatives, and impacts to be considered...."

(a) To determine the range of actions, the problem as described in the environmental assessment shall be carefully reviewed. The proposed action and any actions functionally related to it (see paragraph 26) must be clearly understood.

(b) Alternatives shall be reviewed in this context, identifying those which need to be rigorously explored and objectively evaluated as well as those which can be eliminated (see paragraph 47c).

(c) The range of impacts and areas requiring further study shall be determined by review of the environmental assessment and the criteria set forth in paragraphs 47e, 47f, and 85. Those impact categories which fall below the threshold of significance in the environmental assessment normally do not need further study or description in the environmental impact statement.

(2) Establishing a clear definition of the Federal action, the alternatives, and the impacts needing detailed study (as well as those which do not) early in the scoping process should help considerably in managing the environmental impact statement preparation process.

d. An effective scoping process should result in both a refinement and focus of material presented in the EIS as well as a means to explain to subsequent reviewers why certain items were addressed in detail and others dismissed with little or no discussion. For this reason, it is recommended that the EIS contain a brief summary of the scoping results, as further described in paragraph 81c.

75. ASSIGNING RESPONSIBILITIES.

a. An integral part of the scoping process is the allocation of assignments for preparation of the environmental impact statement by the responsible official among the lead and cooperating agencies (step 23, Appendix 1). This process is intended to assure, among other things, that applicable environmental permits, licenses, and other consultation requirements are identified in the environmental impact statement.

b. Federal agencies which shall be invited by the responsible official to be cooperating agencies

are those with jurisdiction by law in areas which may be affected by airport development.

c. Federal agencies with special expertise may also be asked to be cooperating agencies.

d. If a Federal agency that is requested to be a cooperating agency replies pursuant to CEQ 1501.6(c) that it will not participate, a copy of such letter shall be sent to APP 600. A copy of the draft environmental impact statement shall be sent to such agency. If that agency has adverse comments on the draft, the matter shall be referred to APP 600 for subsequent discussion with CEQ.

e. The definition of a cooperating agency in CEQ 1508.5 includes the provision that "A State or local agency of similar qualifications [i.e., jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal] or, when the effects are on a reservation, an Indian Tribe, may by agreement with the lead agency become a cooperating agency." To the extent that such agencies have not provided sufficient information during earlier consultation, their use as cooperating agencies in the environmental impact statement preparation is encouraged. Their inputs may be especially important in areas which have been identified as significant environmental issues and where specific environmental laws and regulations are involved. The respective roles of Federal and state or local agencies in given areas (e.g., impacts on fish and wildlife resources) shall be clearly identified and understood in the assignment of responsibilities for environmental impact statement inputs.

f. The airport sponsor shall be one of the key participants in the scoping process and shall be kept abreast of the areas of impact being studied, especially those which have a direct effect on the operation of its airport. The sponsor shall be apprised of mitigation measures or alternatives being proposed and shall be consulted regarding its ability or willingness to carry out provisions which may subsequently be imposed as grant conditions or other means to reduce environmental harm. The sponsor may also be the principal linkage with the affected communities in assuring, for example, that all reasonable measures have been or will be taken to provide compatible land uses in the airport environs.

g. It is incumbent upon the responsible official, in assigning responsibilities and managing the environmental impact statement preparation, to assure that those providing input appreciate the need for a timely submittal and that the analysis focus on the pertinent issues at hand. The responsible official shall monitor progress and coordinate efforts in order to avoid duplication or misunderstanding among the parties involved and to assure that necessary areas are covered. The schedule for preparation of each item of information shall take into consideration any dependencies that may exist. For example, it may not be possible to complete analysis in one area without having obtained information from another. The objective of the responsible official is the production of a draft environmental impact statement which will deal sufficiently with the critical and significant issues in order to avoid or minimize critical comments during the required review period which follows.

76. JOINT LEAD AND COOPERATING AGENCIES AND CONTRACTING.

a. Chapter 2 describes in general the requirements and responsibilities of the FAA and state and local agencies in meeting the requirements of NEPA and the CEQ Regulations. The degree to which state and local agencies can be involved is dependent upon whether a state agency has statewide jurisdiction or what type of state or local environmental laws or regulations exist. These distinctions are important in determining what roles agencies may play in the preparation of or contracting for the preparation of an environmental impact statement, as discussed below.

b. (1) A state agency with statewide jurisdiction pursuant to section 102(2)(D) of NEPA may act as a joint lead agency in the preparation of the environmental impact statement as long as the FAA furnishes guidance and participates in such preparation and independently evaluates

the statement prior to its approval and adoption (reference NEPA, section 102(2)(D)(ii) and (iii)). (Also, see paragraph 5j for the definition of NEPA 102(2)(D) states.)

(2) FAA shall cooperate with state and local agencies which are subject to state or local requirements comparable to NEPA. Such cooperation "...shall to the fullest extent possible include joint environmental impact statements." Where a joint EIS is being prepared, FAA and the state or local agency shall be joint lead agencies (refer to CEQ 1506.2(b) and (c) for further guidance).

(3) State or local agencies which do not qualify as joint lead agencies under the conditions given in (1) and (2) above may not be joint lead agencies, but may be cooperating agencies if they have jurisdiction by law or special expertise with respect to environmental impacts involved.

c. CEQ 1506.5(c) provides that "...any environmental impact statement prepared pursuant to the requirements of NEPA shall be prepared directly by or by a contractor selected by the lead agency or where appropriate under section 1501.6(b), a cooperating agency." Further, it is intended that "...the contractor be chosen solely by the lead agency, or by the lead agency in cooperation with cooperating agencies, or where appropriate by a cooperating agency to avoid any conflict of interest."

d. (1) Under the provisions set forth above and when a determination has been made to have a contractor prepare the environmental impact statement, the contractor shall be selected either by the FAA or:

(a) A state agency with statewide jurisdiction and responsibility for action per section 102(2)(D) of NEPA.

(b) A state or local agency which is subject to state or local requirements comparable to NEPA ("NEPA like" state or local agency).

(2) A cooperating agency may also select contractors. However, its role is limited to providing information and analyses within its own area of special expertise or jurisdiction (CEQ 1501.6(b)). It may obtain such data by contract under its own selection procedures. A cooperating agency would not be expected to select a contractor to prepare the entire FAA environmental impact statement.

e. In any case where a contractor prepares an environmental impact statement, section 1506.5 (c) requires that "Contractors shall execute a disclosure statement prepared by the lead agency, or where appropriate the cooperating agency [for its portion], specifying that they have no financial or other interest in the outcome of the project." Furthermore, "...the responsible Federal official shall furnish guidance and participate in the preparation and shall independently evaluate the statement prior to its approval and take responsibility for its scope and contents."

f. When an agency as defined in paragraph d. above elects to use a contractor to prepare an environmental impact statement, the contractor may be under contract either to that agency or the sponsor as long as the contractor is selected by the lead agency. The selection processes to be used will be based on principles in Advisory Circular 150/5100-14A. This advisory circular was written to provide guidance to airport sponsors in the selection and employment of architectural, engineering, and planning consultants under the FAA airport grant programs. However, its principles apply to the selection of contractors to prepare environmental impact statements. The selection criteria and procedures therein shall be used to the fullest extent applicable. The statements in paragraphs 12a(3) and 12b(3) of the advisory circular indicating that FAA would not participate in the selection or in the negotiation process do not apply when FAA is the lead agency making the selection.

g. The selecting agency must advise potential contractors of the requirement to sign the disclosure statement described in paragraph e above. The disclosure statement shall include language equivalent to the following: "We, (name of firm), do hereby certify that we have no

financial or other interests in the execution or outcome of the proposed development at (airport)." Note that this statement precludes engaging the same contractor in subsequent phases of the program covered in the EIS without further comparative evaluation, which is in contrast with the provision in AC 150/5100 14A, paragraph 7. This prohibition does not prevent this selected contractor from being considered for subsequent phases provided the subsequent selection is made as a result of free and open competition with no implied or suggested guarantee of favored consideration to the initial contractor.

h. The term "contractor" as used above applies to any member of a joint venture or conglomerate. If a prospective contractor is part of such a group which is expected to do planning or engineering work on the proposed project, such contractor cannot compete for selection to prepare the EIS for the project unless first agreeing to sever all ties with the joint venture or conglomerate and not rejoin that group during the life of the project (from EIS preparation through completion of the action for which the EIS was prepared).

77. USE OF INFORMATION.

a. CEQ 1506.5(c) specifically provides "Nothing...is intended to prohibit any agency from requesting any person to submit information to it or to prohibit any person from submitting information to any agency."

b. The use of information obtained in this manner may obviate the need for extensive contractual efforts in preparing an environmental impact statement. It must be cautioned, however, that any information received from the airport sponsor or others shall be used only after evaluation and acceptance of its contents by the FAA. Further, to the extent that the information represents a significant background paper, the names and qualifications of those persons primarily responsible for its preparation, together with the identification of persons responsible for particular analyses, shall be identified for incorporation in the list of preparers of the environmental impact statement (see paragraph 87).

78. PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT STATEMENT. As a result of the scoping process, the FAA responsible official should have a detailed analysis of the significant issues and impacts from the various cooperating agencies and others who were assigned responsibilities as described in paragraph 75. The responsible official's task of preparing the environmental impact statement at this point involves collating the results, conducting a detailed evaluation, and adding the necessary cover sheet, summary, etc. as may be needed to complete the document and prepare it for circulation. If a contractor has been hired to prepare the environmental impact statement, the responsible official is still required to independently evaluate the statement and be responsible for its scope and contents. When in house expertise is insufficient to evaluate independently, it may be necessary to supplement FAA expertise with either cooperating agency or independent contractor assistance. A detailed description of the environmental impact statement contents and processing of the completed document are given in Chapters 8 and 9.

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CHAPTER 8. ENVIRONMENTAL IMPACT STATEMENT CONTENTS

80. FORMAT.

- a. CEQ 1502.10 recommends a standard format, which is to be followed for Airports Program environmental impact statements, as follows: "(a) Cover Sheet. (b) Summary. (c) Table of Contents. (d) Purpose of and Need for Action. (e) Alternatives Including Proposed Action.... (f) Affected Environment. (g) Environmental Consequences.... (h) List of Preparers. (i) List of Agencies, Organizations, and Persons to Whom Copies of the Statement are Sent. (j) Index. (k) Appendices (if any)."
- b. CEQ 1502.11 through 1502.18 require the inclusion of specific information in respective sections of the environmental impact statement. The following paragraphs provide additional instructions.

81. COVER SHEET, SUMMARY, AND TABLE OF CONTENTS.

- a. The cover sheet shall include the information required in CEQ 1502.11 plus a heading as follows:

"DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Draft [or Final] Environmental Impact Statement

This statement is submitted for review pursuant to the following public law requirements: [List those applicable; e.g., section 102(2)(C) of the National Environmental Policy Act of 1969, section 509(b)(5) of the Airport and Airway Improvement Act of 1982, section 4(f) of the Department of Transportation Act of 1966 (recodified at 47 USC Subtitle I, section 303, dated January 12, 1983)]."

b. In addition to the requirements of CEQ 1502.12, Airports Program environmental impact statement summaries shall highlight evidence in the environmental impact statement which supports required assurances and indicate mitigation measures which are proposed. The summary of the final environmental impact statement shall specify any mitigation measures which are a condition of approval and identify any monitoring to be done. In addition, the final environmental impact statement summary shall identify the environmentally preferable alternative or alternatives and the FAA's preferred alternative (in most cases, the proposed action), including reasons for these choices.

c. For the reasons given in paragraph 74d, it is recommended that the summary include a brief description of the scoping process, containing information on time and place of any meetings, numbers in attendance, major areas of concern, items identified for detailed analysis, range of alternatives considered and manner of resolution including assignment of responsibilities and allocation of resources.

82. PURPOSE OF AND NEED FOR THE ACTION. CEQ 1502.13 states "The statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing alternatives including the proposed action." Normally, the purpose and need as described in the environmental assessment will suffice for purposes of the environmental impact statement.

83. ALTERNATIVES, INCLUDING THE PROPOSED ACTION.

- a. CEQ 1502.14 states that "This section is the heart of the environmental impact statement." Further, it is to be "Based on the information and analysis presented in the sections on the Affected Environment [paragraph 84]...and the Environmental Consequences [paragraph 85]...." Paragraph 47c includes key references and extent of analysis of alternatives in the environmental assessment. During scoping, the environmental assessment shall be reviewed for those alternatives which should be dropped from further consideration. However, eliminated alternatives are to be identified in the environmental impact statement with a simple explanation of why no further investigation was necessary. Alternatives covered in the environmental assessment may require expansion of certain portions. During the scoping process (paragraph 74), those areas needing additional work shall be identified.
- b. Both section 509(b)(5) of the 1982 Airport Act and section 4(f) of the DOT Act require a finding that "no feasible and prudent alternative" exists. The terms "feasible" and "prudent" are separate criteria and refer to sound engineering principles and sound judgment, respectively. A construction alternative, for example, may be feasible if, as a matter of sound engineering principles, it can be built. It may not be prudent, however, because of safety, policy, environmental, social, or economic consequences. The environmental documentation must show that no feasible and prudent alternative exists when all factors (safety, national policy, efficiency, economic, social, and environmental) are considered.
- c. When section 509(b)(5) of the 1982 Airport Act is applicable, the FAA shall authorize no project under the Airport Improvement Program involving airport location, a major runway extension, or runway location found to have a significant adverse effect unless the agency shall render a finding in writing, following a full and complete review, that no feasible and prudent alternative to the project exists and that all possible steps have been taken to minimize such adverse effect. The environmental impact statement must include sufficient information to support such a conclusion where applicable. However, the section 509(b)(5) finding is not made until the final decision on the action is rendered (see paragraph 98).
- d. Project development involving section 4(f) does not necessarily fall within the processing requirements of NEPA, section 102(2)(C). However, regardless of which action choice is appropriate, the documentation must contain an assessment of alternatives and evidence of planning to minimize harm to the section 4(f) land. To comply with section 4(f), it is necessary to show that a rejected alternative to a proposed action presents unique problems or that the costs or community disruption it entails reach extraordinary magnitudes. For additional guidance relative to section 4(f), see paragraphs 47e(7) and 85g.
- e. A "no practicable alternative" finding is required for construction activity in a wetland area and for significant encroachment on a floodplain. This finding is further explained in paragraphs 47e(11)(e) and 47e(12)(g)3.
- f. CEQ 1505.2 requires that an agency's record of decision specify the alternative or alternatives which were considered to be environmentally preferable. Whether an alternative is "environmentally preferable" is a matter of judgment on the part of the responsible official when considering the potential environmental impacts of the various alternatives considered.

84. AFFECTED ENVIRONMENT. CEQ 1502.15 states that "The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall

avoid useless bulk in statements and shall concentrate effort and attention on important issues. Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement." The description of the affected environment as contained in the environmental assessment (reference paragraph 47d) will usually suffice for the environmental impact statement, unless there is a particular significant impact area for which additional data may be necessary to understand the effects.

85. ENVIRONMENTAL CONSEQUENCES. Per CEQ 1502.16, "This section forms the scientific and analytic basis for the comparisons under section 1502.14 [alternatives, as described in paragraph 83 above]. It shall consolidate the discussions of those elements required by sections 102(2)(C) (i), (ii), (iv), and (v) of NEPA which are within the scope of the statement and as much of section 102(2)(C)(iii) [alternatives] as is necessary to support the comparisons. The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short term uses of man's environment and the maintenance and enhancement of long term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. This section should not duplicate discussions in section 1502.14. It shall include discussions of:

"Direct effects and their significance [reference section 1508.18 for definition of 'effects' both direct and indirect]...

"Indirect effects and their significance...

"Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned. (See section 1506.2(d)[Elimination of duplication with State and local procedures].)

"The environmental effects of alternatives including the proposed action. The comparisons under section 1502.14 will be based on this discussion."

"Energy requirements and conservation potential of various alternatives and mitigation measures.

"Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures.

"Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures.

"Means to mitigate adverse environmental impacts (if not fully covered under section 1502.14(f))."

Specific environmental impact areas to be discussed "as much as is necessary to support the comparisons [of alternatives]" are described in detail in the following subparagraphs. Impacts shall be analyzed for each alternative, including the proposed action which is treated in detail in the environmental impact statement. The draft statement shall include, under appropriate impact categories, all applicable permit or license requirements and shall indicate any known problems with obtaining them. The draft statement shall also report on the status of any special consultation required (such as consultation under the Endangered Species Act Amendments, the National Historic Preservation Act, the Fish and Wildlife Coordination Act, etc.).

a. Noise.

(1) Paragraph 47e(1) presents the requirements for a noise analysis and the information needed in an environmental assessment. Analyses for projects in an FAA-approved Part 150 program are sufficient for the noise analysis in an EIS. For all projects

other than those included in an approved Part 150 noise compatibility program, when an initial analysis indicates that the circumstances in 47e(l)(d) are exceeded, equal noise exposure contours shall be developed for each alternative (including the no action alternative) considered in detail in the environmental impact statement, including any associated land use planning or noise abatement procedures. Such contours shall include the 65, 70, and 75 Ldn (or CNEL).

(2) The FAA may require, on a case-by-case basis, the inclusion of "time above threshold" analysis. This is a judgment made based upon the desirability of additional description of the noise impact on particular sensitive areas and the degree of community concern about those areas. If required, additional analysis shall be developed using the same data base as used to develop the Ldn contours and using a methodology approved by the FAA. Time above data may include a range of information from time above a single dB(A) level at a specific point to time above multiple levels in 10 dB(A) increments over a specified grid. FAA's selection of analyses and alternatives subject to the analyses will depend upon the circumstances of each particular case.

(3) The text and graphics developed for the environmental assessment shall be reviewed and refined as necessary. Aerial photographs, when available, may be very helpful in illustrating the relationship of the airport to surrounding land uses and development. When the proposal will result in an increase in noise sensitive areas or numbers of people exposed to noise impacts and is highly controversial on this basis, the analysis shall include, directly or by reference, discussion of potential effects of noise on hearing, communication, and sleep interference, both for outdoor and indoor activities giving proper consideration to the effects of construction, climate, and lifestyles. Inclusion of data on background or ambient noise levels is helpful in this regard. Selective noise measurement based on approved FAA procedures as described in FAR Part 150 to obtain such data is encouraged when such data is not otherwise available. Other discussion such as effects of noise on animals shall be included only to the extent relevant to the situation and based on available and reliable source data, which may be referenced.

(4) The analysis shall include noise from sources other than aircraft operations when the effects are comparable with or exceed aircraft noise. The result of any monitoring done to verify or refine noise data shall be included.

(5) Mitigation measures which are in effect or proposed, including noise abatement procedures and land acquisition, shall be described and their relationship to the proposal explained.

b. Land Use. When significant noise impacts occur over noise sensitive areas, the analysis shall include a discussion of the noise impact over each such area under various alternatives compared to existing conditions. This includes size and location of residential areas exposed to specific noise levels, numbers of people and schools affected, and such other information as may be appropriate. Any mitigation measures to be taken in addition to those associated with noise impacts or relocation, such as noise attenuation, changes in zoning, or other land use controls, shall be discussed. The greater the degree of existing and potential impacts over noise sensitive areas, the closer attention shall be paid to the requirements of section 511(a)(5) of the 1982 Airport Act, as described in paragraph 47e(2). The development and adoption of airport noise compatibility programs may be helpful in this regard.

c. Social Impacts. As set forth in paragraph 47e(3), when the environmental assessment indicates the potential for significant impact because of relocation or other community disruption, additional analysis is needed in the environmental impact statement to describe the degree of impact and measures to minimize such adverse effects. If an insufficiency of available relocation housing is indicated or has engendered a high degree of

controversy, a thorough analysis of efforts made to remedy the problem shall be reflected in the environmental impact statement including if necessary provision for housing of last resort as authorized by section 206(a) of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. If business relocation would cause appreciable economic hardship on the community, if significant changes in employment would result directly from the action, or if community disruption is considered substantial, the environmental impact statement will include a detailed explanation of the effects and the reasons why significant impacts cannot be avoided.

d. Induced Socioeconomic Impacts. When the environmental assessment pursuant to paragraph 47e(4) indicates substantial induced or secondary effects directly attributable to the proposal, a detailed analysis of such effects shall be included in the environmental impact statement. As pertinent and to the extent known or predictable, such factors as effects on regional growth and development patterns, spin off jobs created, and induced impacts on the natural environment shall be described.

e. Air Quality.

(1) Paragraph 47e(5) describes the procedures for determining the extent and type of air quality analysis which may be needed. If indirect source review requirements are exceeded and additional analysis indicates a potentially significant air quality issue, it may be necessary to consult further with state or regional air quality officials and/or with EPA. It is also advisable to include such officials in the EIS scoping process to represent cooperating agencies with air quality expertise. These officials should help identify specific analyses needed, alternatives to be considered and/or mitigation measures to be incorporated in the action. Similar steps would be necessary if nonconformance with the State Implementation Plan is indicated.

(2) If the proposed development may cause the carbon monoxide (CO) standards to be exceeded, dispersion modeling is necessary. Modeling techniques and methodologies for computing emission concentrations are described in Section III of the Air Quality Handbook referenced in paragraph 47e(5)(c). If CO standards are exceeded, further investigation of alternatives and mitigation measures will be necessary to provide the support for issuance of the required air quality certificate as described in paragraph 47e(5)(e).

f. Water Quality.

(1) Paragraph 47e(6) deals with the examination of potential water quality impacts in an environmental assessment. When the thresholds identified in paragraph 47e(6)(c) indicate the potential for significant water quality impacts, additional analysis in consultation with affected agencies will be necessary. Specific information or studies may be required by state or Federal officials with specific water quality types of jurisdiction or permit responsibility. The type of analysis required depends on the particular situation and may be determined through agreements reached during scoping.

(2) In the "Memorandum of Agreement between the Department of Transportation and the Department of the Army on Permit Processing" referenced in paragraph 47e(6)(b)4, there is provision for elevation of cases within the Department of the Army when a District Engineer proposes to deny or condition a permit in a manner which is substantial and unacceptable. If such a circumstance arises, the region shall advise APP 600, which shall provide whatever follow up action may be necessary at the Washington level to resolve differences.

(3) The water certification requirement for projects involving airport location, runway location, or a major runway extension is discussed in paragraph 47e(5)(e).

g. Department of Transportation Act, Section 4(f) (Recodified at 49 USC Subtitle

I, Section 303). Application of paragraph 47e(7) will identify if section 4(f) is involved in the proposal. The environmental assessment will reflect the results of early consultation, including identification of the effects and acceptable mitigation measures. When the threshold in paragraph 47e(7)(f) is exceeded, the FAA shall consult with the officials having jurisdiction over the section 4(f) lands, and other agencies as necessary. The environmental impact statement shall thoroughly analyze and document alternatives that would avoid the section 4(f) land and provide detailed measures to minimize harm.

h. Historic, Architectural, Archeological, and Cultural Resources.

(1) The initial requirements for the evaluation of historical, architectural, archeological, and cultural resources are presented in paragraph 47e(8). If the thresholds in paragraphs 47e(8)(b)4 or 47e(8)(c)6 are exceeded, further examination is necessary as indicated below under the appropriate law to which the threshold applies. If section 4(f) is involved, as determined according to the instructions in paragraph 47e(8)(d), analysis per paragraph 85g will apply if the impact on section 4(f) land is significant. The section 4(f) portion of the environmental impact statement may cross reference the historical/archeological analysis.

(2) National Historic Preservation Act of 1966, as amended.

(a) When a determination of adverse effect has been made, the consultation procedures of the Advisory Council on Historic Preservation (36 CFR Part 800.4(d)) shall be followed. Two weeks prior to a formal request for review to the Advisory Council, the FAA responsible official shall notify APP 600, which shall in turn notify the Office of the Assistant Secretary for Policy and International Affairs. The responsible official shall submit a preliminary case report and request comments from the Advisory Council, notify the State Historic Preservation Officer, and proceed with the consultation. (If the FAA is already preparing a draft environmental impact statement because of other significant impacts, this draft statement can be submitted as the preliminary case report, appropriately identified as such. Circulation of the draft statement will constitute a request for Council comments if the FAA so requests in the cover letter transmitting the draft.) The sponsor shall provide information and participate in the consultation process with and under the guidance of the FAA.

(b) The consultation process includes consideration of feasible and prudent alternatives to avoid the adverse effects on National Register or eligible property, of mitigation measures, and of accepting adverse effects. The FAA has the final judgment on whether the appropriate action choice is an environmental impact statement or a finding of no significant impact. Advice from the Advisory Council and the State Historic Preservation Officer may assist the FAA in making this judgment.

1 If the consulting parties agree on an alternative to avoid or satisfactorily mitigate adverse effects, a memorandum of agreement shall be executed specifying how the proposed action will proceed to avoid or mitigate the adverse effects. In this case, the FAA may complete the environmental assessment by including in it the memorandum of agreement and may prepare a finding of no significant impact.

2 If the consulting parties determine that there are no feasible and prudent alternatives that could avoid or satisfactorily mitigate the adverse effects but that it is in the public interest to proceed with the proposed action, a memorandum of agreement shall be executed. This memorandum may specify recording, salvage, or other measures that shall be taken to minimize adverse effects before the proposed action proceeds. It

is likely that, in this circumstance, the impact on National Register or eligible properties will be considered significant and require the preparation of an environmental impact statement.

(c) The Advisory Council on Historic Preservation may be a cooperating agency in the preparation of an environmental impact statement. Information developed for and during the consultation process will be sufficient for purposes of environmental impact statement documentation. The final impact statement shall include comments of the Advisory Council and a copy of any memorandum of agreement. (If a memorandum of agreement has been executed prior to circulation of a draft environmental impact statement, the memorandum shall be included in the draft.) Within 90 days after carrying out the terms of a memorandum of agreement, the FAA is required to report to all signatories on the actions taken.

(3) Archeological and Historic Preservation Act of 1974.

(a) When a determination of adverse effect has been made, the instructions in subparagraphs (2)(a), (b), and (c) apply except that the National Park Service may be a cooperating agency for purposes of environmental impact statement preparation.

(b) If the FAA finds, in the course of project construction, that significant resources will be irrevocably lost or destroyed, the FAA must notify the National Park Service of this situation and include information relevant to the matter. The FAA then has a responsibility to take action in accordance with the Archeological and Data Preservation Act to recover, protect, and preserve such resources.

i. Biotic Communities (including both flora and fauna).

(1) Paragraph 47e(9) presents the requirements for the analysis of biotic community impacts and the information needed in an environmental assessment. When the initial analysis indicates that the thresholds in subparagraph (c) or (d) are exceeded, the FAA shall make the judgment on the significance of potential impacts. The FAA will consult with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, state or local wildlife agencies, and others as necessary in order to make this judgment.

(2) If impacts are judged to be significant, further detailed analysis may include:

(a) Use of aerial photographs and field reconnaissance to verify biotic community types and to observe wildlife or its traces.

(b) Determining the significance of various habitats proposed for removal and species that would be displaced, including the importance of flora and fauna species inhabiting the area, the range of various species, and the location of nesting and breeding areas.

(c) A more detailed analysis of other impact areas (e.g., noise, air quality, water quality, induced development) as may be necessary to determine biotic impacts.

(d) Mitigation measures.

(e) A judgment as to what extent the proposed action and its alternatives will alter ecological systems.

(3) If the proposed project affects water resources and thereby invokes the Fish and Wildlife Coordination Act, the FAA shall give full consideration to the recommendations of the Fish and Wildlife Service and the state wildlife agency and shall assure that the project plan includes such justifiable means and measures for wildlife purposes as the FAA finds should be adopted to obtain maximum overall project

benefits.

(4) If significant biotic community impact relates either to use of section 4(f) lands or to endangered or threatened species, those sections of the environmental impact statement may incorporate or cross reference the biotic community analysis as appropriate.

j. Endangered and Threatened Species of Flora and Fauna.

(1) Paragraph 47e(10) presents the requirements for the analysis of potential impacts on endangered and threatened species and the information needed in an environmental assessment. When the threshold in paragraph 47e(10)(b)3 or (c)3 is exceeded, the FAA shall forward the environmental assessment (or separate biological assessment) to the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, whichever has jurisdiction, together with a request to initiate consultation under section 7(a) of the Endangered Species Act as Amended.

(2) If the biological opinion from the Fish and Wildlife Service or the National Marine Fisheries Service concludes that the proposed action is not likely to jeopardize the continued existence of listed species or destroy or adversely modify critical habitat, the FAA may conclude that impacts are not significant. On the other hand, the biological opinion may conclude that the proposed action does pose jeopardy and may suggest reasonable and prudent alternatives to avoid jeopardizing species or adversely modifying critical habitat. In this case, if the FAA and the airport sponsor accept an alternative proposed by the Fish and Wildlife Service or the National Marine Fisheries Service or propose another alternative which proves acceptable to these Services, the FAA may also conclude that impacts are not significant.

(3) If neither of the above conditions in paragraph (2) apply, the potential impact is considered significant. In the preparation of an environmental impact statement, the FAA shall request the Fish and Wildlife Service or National Marine Fisheries Service to be a cooperating agency on the basis of its jurisdiction. Further detailed analysis may consider:

(a) Any previously unconsidered mitigation measures or project modifications which would lessen impacts so as not to jeopardize species or destroy or modify critical habitat.

(b) Whether further biological assessment would be profitable to pursue in terms of likelihood of changing the biological opinion.

(c) Whether the FAA or the airport sponsor will request an exemption under section 7(g) of the Endangered Species Act Amendments.

k. Wetlands.

(1) Paragraph 47e(11) presents the requirements for the analysis of impacts on wetlands and the information needed in the environmental assessment. When the initial analysis indicates that the applicable thresholds are exceeded or when an agency having special interest in a wetlands area indicates the proposal has potential significant impacts, the FAA shall examine all relevant factors and make the judgment on the significance of the impacts. The FAA will consult as necessary with the U.S. Fish and Wildlife Service,

the National Marine Fisheries Service, the Corps of Engineers, the EPA, and state and local natural resource and wildlife agencies in order to make this judgement. Any of these agencies may become cooperating agencies on the basis of their jurisdiction or expertise. Permitting agencies may become joint lead agencies. The FAA shall make every effort to assure that any environmental document prepared by the FAA meets the needs of permitting agencies. (References paragraphs 75b and 75c).

(2) If impacts are judged to be significant, further detailed analysis shall include the following as applicable to the proposal:

(a) Considerations specified in Executive Order 11990, Protection of Wetlands:

1 "public health, safety, and welfare, including water supply, quality, recharge and discharge; pollution; flood and storm hazards; and sediment and erosion;"

2 "maintenance of natural systems, including conservation and long term productivity of existing flora and fauna, species and habitat diversity and stability, hydrologic utility, fish, wildlife, timber, and food and fiber resources;"

3 "other uses of wetlands in the public interest, including recreational, scientific, and cultural uses."

(b) An opinion, based on the above considerations, of the proposal's overall effect on the survival and quality of the wetlands.

(c) Aeronautical safety, transportation objectives, economics, and other factors bearing on the problem.

(d) Further consideration of the practicability of any alternatives.

(e) Inclusion of all practicable measures to minimize harm.

(3) Pursuant to the Fish and Wildlife Coordination Act, the FAA shall apply the instructions contained in paragraph 85i above.

(4) If a state Coastal Zone Management Program or section 4(f) of the DOT Act are significantly involved, the instructions under paragraphs 85m and 85g respectively, are to be followed.

1. Floodplains.

(1) Paragraph 47e(12) presents the requirements for the analysis of impacts on floodplains and the information needed in the environmental assessment. When the initial analysis indicates that the applicable thresholds established in paragraph 47e(12) (d) or 47e(12)(j) are exceeded, the FAA shall prepare an environmental impact statement. Federal, state, or local agencies with floodplain jurisdiction and expertise may become cooperating agencies.

(2) Further analysis shall include the following as applicable to the proposal:

(a) A more detailed analysis of other impact areas (e.g., water quality, induced development, construction impacts) as may be necessary to determine more precisely the impacts on the natural and beneficial floodplain values, including alterations to the present flood storage volume and flooding cycle.

(b) A more detailed assessment of the risk to human life and potential future damage to the transportation facility or other property within the floodplain.

(c) Aeronautical safety, transportation objectives, economics, and other factors bearing on the problem.

(d) Further consideration of the practicability of any alternatives.

(e) Inclusion of all practicable measures to minimize harm and to restore and preserve the natural and beneficial floodplain values affected. Commitments to later compliance with special flood related design criteria or the imposition, in advance, of protective conditions may be warranted in some situations.

(f) Evidence that the action conforms to applicable state and/or local floodplain protection standards.

m. Coastal Zone Management Program and Coastal Barriers.

(1) The procedures for determining consistency with approved state coastal zone management programs are outlined in paragraph 47e(13). If a state which has such a program raises an objection based on inconsistency of the proposed action with its program, FAA shall not approve such action unless the objection is satisfied or successfully appealed by the sponsor to the Secretary of Commerce. The process will normally be completed prior to a determination by the FAA whether or not an environmental impact statement is needed for the proposal. If any issues remain that have not been resolved regarding the relationship of the action to an approved coastal zone management program, such issues shall be identified in the scoping process and resolved in the environmental impact statement. In this situation, the state coastal zone management agency shall be invited to participate in the scoping process.

(2) If there is no approved state program for a coastal area and there appear to be significant impacts per paragraph 47e(13)(a), the FAA shall consult as necessary with state and Federal agencies with jurisdiction and expertise to determine any additional needs for detailed coastal and marine studies.

(3) Information regarding CBRA application and funding exceptions, including consultation with Fish and Wildlife Service, shall be sufficient for EIS purposes. Any significant impacts shall be reported under other appropriate impact categories.

n. Wild and Scenic Rivers. Conditions which would adversely affect river segments listed in the National Inventory are identified in paragraph 47e(15)(c). If consultation with DOI leads to a determination that the effects on the Inventory river are significant, or would preclude inclusion in the Wild and Scenic River System or downgrade its classification, the the

FAA shall invite the National Park Service (NPS) and any affected land management agencies to be cooperating agencies. If NPS does not respond to such request for assistance within 30 days, then FAA shall proceed as otherwise planned, taking care as best it can to minimize adverse effects on the Inventory river.

o. Farmland. If upon review of the environmental assessment it is found that potential environmental impacts exist according to the threshold established in paragraph 47e(16)(d)3, additional analysis is needed in the environmental impact statement. The analysis shall evaluate the impacts on agricultural production in the area, compatibility with state, local and private programs and policies to protect farmland, any disruption of the farming community either as a direct result of the construction or by changes in land use associated with the action, and nonviability of farm support services in the area as a result of farmland conversion. Measures to minimize harm shall be considered. Such measures may include adjustments in the action to reduce the amount of farmland taken out of production or retaining as much of the land as possible for agricultural use by incorporation into compatible land use plans

p. Energy Supply and Natural Resources. Additional analysis in an environmental impact statement is needed if the examination as described in paragraph 47e(17) indicates that the thresholds are exceeded. Such analysis shall include additional detail as needed to fully explain the degree of the problem and measures to be taken to minimize the impact. Measures such as more efficient airfield design, ground access improvements, or energy efficient building design shall be considered and described where applicable and incorporated in the action to the extent possible. The Department of Energy may be a cooperating agency and be of assistance in determining additional specific analysis needed and in judging the seriousness of impacts.

q. Light Emissions. The description of potential annoyance from airport lighting and measures to minimize the effects as contained in an environmental assessment per paragraph 47e(18) will usually be sufficient for an environmental impact statement, in which case no further analysis is necessary. Further consideration may concentrate on previously unconsidered mitigation measures and alternatives. It is possible that the responsible FAA official will judge that a special lighting study is warranted.

r. Solid Waste Impacts. The information in the environmental assessment as discussed in paragraph 47e(19) will usually be sufficient to describe any solid waste impacts related to the action. Only if significant problems are anticipated with respect to meeting any applicable local, state, or Federal regulations on solid waste management will any additional information or analysis be needed. Additional data may include results of any further consultation with affected agencies and measures to be taken to minimize the impacts. Disposal which would adversely affect water quality or other impact categories may be discussed under those categories or appropriately cross-referenced.

s. Construction Impacts. The environmental assessment shall usually contain sufficient discussion of construction impacts, per paragraph 47e(20), to obviate the need for any further information in the environmental impact statement. In an unusual circumstance where a construction impact would create significant consequences which cannot be mitigated, a more thorough discussion is needed, including the results of contacts with those agencies which have concerns and the reasons why such impacts cannot be avoided or mitigated to insignificant levels.

t. Design, Art, and Architectural Application.

(1) The environmental assessment will normally include appropriate discussion of the application of design, art, and architecture in mitigating adverse visual and other environmental impacts and encouraging enhancement of the environment. In this context, the determination of "significant" impacts in this category sufficient of itself to require preparation of an environmental impact statement is usually not relevant nor is there need for more extensive detailed analysis in an environmental impact statement. The environmental assessment shall be reviewed, however, to assure that appropriate consideration has been given as discussed in paragraph 41c.

(2) FAA can encourage but cannot impose application of design, art, and architectural principles on an airport sponsor. Therefore, if additional information or analysis is needed in an environmental impact statement, it shall be discussed with and agreed upon by the sponsor. It should be noted that extensive detailed design concepts are not usually developed until after the environmental action has been completed. FAA's Airport Improvement Program handbook prescribes guidelines for treating and promoting design, art, and architectural objectives in airport aid projects.

86. ADVERSE IMPACTS WHICH CANNOT BE AVOIDED, SHORT TERM USES AND LONG TERM PRODUCTIVITY, AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES.

These subjects shall be covered under the heading "Environmental Consequences" in the environmental impact statement and need not be repeated in separate sections. The various impact categories described in paragraph 85 shall normally include and identify those adverse impacts which cannot be avoided. These discussions shall also examine, as applicable, the extent to which the proposal involves tradeoffs between short term environmental gains at the expense of long term losses or long term gains at the expense of short term losses and the extent to which the proposal forecloses or broadens future options. The extent to which the proposal would irreversibly and irretrievably curtail the range of beneficial uses of the environment shall be identified where significant. If new, unusual, or limited sources or types of materials are involved in a project, a quantitative estimate and description shall be included. Normally, labor and materials required to accomplish an airport development project do not significantly curtail the range of beneficial uses of the environment. Depletion of materials in short supply or significant irreversible changes in natural and cultural resources shall be covered.

87. LIST OF PREPARERS, LIST OF PARTIES TO WHOM SENT.

a. CEQ 1502.17 requires that "The environmental impact statement shall list the names, together with their qualifications (expertise, experience, professional disciplines), of the persons who were primarily responsible for preparing the environmental impact statement or significant background papers, including basic components of the statement.... Where possible the persons who are responsible for a particular analysis, including analyses in background papers, shall be identified. Normally the list will not exceed two pages."

b. CEQ 1506.5(a) states "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement then...the agency shall independently evaluate the information submitted and shall be responsible for its accuracy. If the agency chooses to use the information submitted by the applicant in the environmental impact statement, either directly or by reference, then the names of the persons responsible for the independent evaluation shall be included in the list of

preparers."

c. CEQ 1506.5(c) states with regard to environmental impact statements: "If the document is prepared by contract, the responsible Federal official...shall independently evaluate the statement prior to its approval and take responsibility for its scope and contents." The names of the persons responsible for the independent evaluation shall be included in the list of preparers.

d. A list of agencies and organizations and persons to whom copies of the statement have been sent shall also be included.

88. INDEX AND APPENDICES.

a. An index shall be included at the end of an environmental impact statement to assist the reader and facilitate review.

b. When an appendix is used, CEQ 1502.18 requires that it: "(a) Consist of material prepared in connection with an environmental impact statement (as distinct from material which is not so prepared and which is incorporated by reference....(b) Normally consist of material which substantiates any analysis fundamental to the impact statement. (c) Normally be analytic and relevant to the decision to be made. (d) Be circulated with the environmental impact statement or be readily available on request."

89. MISCELLANEOUS. CEQ 1502.21, .22, and .24 discuss in detail "Incorporation by reference," "Incomplete or unavailable information," and "Methodology and scientific accuracy," respectively. These sections should be reviewed for appropriate treatment of these instructions in an environmental impact statement.

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CHAPTER 9. ENVIRONMENTAL IMPACT STATEMENT PROCESSING

90. GENERAL.

- a. This chapter applies to proposed Federal actions requiring an environmental impact statement. The process for an environmental impact statement is shown in steps 27 through 42 of Appendix 1.
- b. Environmental impact statements shall be reviewed by affected FAA program divisions and staff officers at the regional level prior to filing or public review. This internal review is to assure that related foreseeable agency actions by other FAA elements are properly covered in the draft statement and are coordinated with the appropriate action office so that commitments which are the responsibility of other divisions or offices will be carried out.
- c. For adoption of another agency's environmental impact statement, refer to CEQ 1506.3.

91. DISTRIBUTION FOR FEDERAL REVIEW OF DRAFT ENVIRONMENTAL IMPACT STATEMENTS. The FAA region or airports district office shall distribute the draft environmental impact statement, as follows:

- a. Distribution for Headquarters Review. Five copies of the draft environmental impact statement, including state and local review comments and the summary sheet, are to be forwarded to the Office of Airport Planning and Programming, APP 600, which shall be responsible for further distribution within the FAA and the Office of the Secretary of Transportation.
- b. Distribution and Coordination for Intergovernmental Review.
 - (1) Per CEQ 1503.1, comments on the draft environmental impact statement shall be obtained from or requested of appropriate Federal, state, and local agencies including affected local jurisdictions.
 - (2) Federal agencies with jurisdiction by law or special expertise shall be asked to comment.
 - (3) For instructions on circulation of the summary in lieu of the full environmental impact statement, see CEQ 1502.19.
 - (4) Draft statements shall be coordinated with the appropriate regional offices of other Federal agencies having jurisdiction by law or special expertise except that statements to be coordinated with any component of DOI, DOC, or the Department of Energy (DOE) shall be sent directly to their Washington headquarters at the following addresses:
 - (a) Assistant Secretary Program Policy, Attention: Director, Environmental Project Review, U.S. Department of the Interior, Washington, D.C. 20240.

(b) Director, Office of Ecology and Conservation, NOAA, Room 5813, Department of Commerce, 14th and Constitution NW., Washington, D.C. 20230.

(c) Division of NEPA Affairs, Department of Energy, Room 4G064, 1000 Independence Avenue, SW., Washington, D.C. 20585 (send to DOE only if the proposed airport action may have major energy related consequences).

(5) Agencies will normally receive one copy of the draft environmental impact statement except as follows:

(a) Five copies of draft statements shall be sent to the appropriate regional office of the EPA.

(b) DOI shall receive:

1 Twelve copies (seven of the final) for projects in each state except those listed in 2 and 3 below.

2 Thirteen copies (eight of the final) for projects in North and South Dakota, Nebraska, Kansas, Oklahoma, and Texas.

3 Fourteen copies (nine of the final) for projects in Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

(c) Two copies shall be sent to the appropriate regional office of the Department of Housing and Urban Development.

c. Availability to the Public. The draft environmental impact statement shall be made available for public review per CEQ 1506.6. Notices of availability shall specifically identify the person in the FAA to contact for status or other information on the environmental impact statement. Normally, this person will be the same as the one listed on the cover sheet per CEQ 1502.11(c) (also see paragraph 81a).

d. Filing with EPA. The draft environmental impact statement shall be filed with EPA per CEQ 1506.9. The EPA will subsequently publish a notice in the Federal Register per CEQ 1506.10 which will begin the 90 day period after which the Federal action can be taken. Five copies of the draft statement shall be sent to: Office of Federal Activities, Management Information Unit (A 104), Environmental Protection Agency, Room 2119, Waterside Mall, 401 M Street, SW., Washington, D.C. 20460 (Telephone: (202) 382 5074).

e. Establishing Time Limits. Pursuant to CEQ 1506.10(c), in seeking comments FAA regional airports divisions may establish a time limit of not less than 45 days from publication of the notice by EPA per d. above and receipt by other agencies for reply after which, if no comments are received, it may be presumed that the agency consulted has no comments to make. Fifteen day extensions will normally be granted when requested by other agencies. When section 4(f) is involved, a 60 day review period is normally required by DOI. Time limits shall take into account the magnitude and complexity of the statement and degree of public interest in the proposal.

92. COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT.

a. CEQ 1503.3 addresses specificity of comments. If the responsible official considers that the comments received by a commenting agency have not been made in accordance with the intent of this section, consultation with that agency may be undertaken to rectify discrepancies.

b. It is expected that the extent of comments on the draft will be reduced commensurate with the degree of involvement of the commenting agencies in the scoping process. Problems raised by commenting agencies in the draft review which were thought to have been resolved during scoping may be discussed with or assigned to those agencies for resolution.

c. Comments from EPA are categorized by impact and statement adequacy according to the following criteria:

(1) The impact is rated by EPA as: LO Lack of Objections; ER Environmental Reservations; or EU Environmentally Unsatisfactory.

(2) The statement adequacy is categorized by EPA as: 1 Adequate; 2 Insufficient Information; or 3 Inadequate.

93. RECIRCULATION OF THE DRAFT. CEQ 1502.9(a) instructs that "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion. The agency shall make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action."

94. PREPARATION AND REVIEW OF FINAL ENVIRONMENTAL IMPACT STATEMENTS.

a. Final environmental impact statements shall be prepared in accordance with CEQ 1503.4 (step 33 in Appendix I). The contents of a final environmental impact statement shall be those described for the environmental assessment in paragraph 47 as expanded and elaborated on during the more detailed analyses of significant issues, as discussed in paragraphs 80 through 86, and as revised following review of the draft statement. The final statement shall contain a concise status report (which may be included in the summary or an appendix) on the compliance or anticipated compliance with permit or license requirements.

b. The environmental impact statement shall include evidence and required consultation to support any determinations applicable to the Federal action. The determinations themselves will not be made until the record of decision.

(1) For all airport development there shall be evidence to support the following Airport Improvement Program grant assurances as required by the 1982 Airport Act.

(a) The project is reasonably consistent with existing plans of public agencies for development of the area (section 509(b)(1)(A));

(b) Fair consideration has been given to the interest of communities in or near the

project location (section 509(b)(4));

(c) Appropriate action has been or will be taken to restrict, to the extent reasonable, the use of land in the vicinity of the airport to purposes compatible with airport operations (section 511(a)(5));

(d) Appropriate air and water quality certificates have been or will be obtained for projects involving airport location, runway location, or a major runway extension (section 509(b)(7)).

(2) For actions involving an airport location, runway location, or major runway extension pursuant to section 509(b)(5) of the 1982 Airport Act and found to have a significant adverse effect, there shall be evidence to support a conclusion that:

(a) There is no feasible and prudent alternative, and

(b) All reasonable steps have been taken to minimize adverse effects.

(3) For actions involving the use of lands subject to section 4(f) of the DOT Act, there shall be evidence to support a conclusion that:

(a) There is no feasible and prudent alternative to the use of such land, and

(b) The project includes all possible planning to minimize harm to such lands resulting from such use.

(4) For actions involving the displacement and relocation of people, there shall be statements to support assurances that:

(a) Fair and reasonable relocation payments and assistance have been or will be provided pursuant to provisions in Title II of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

(b) Comparable decent, safe, and sanitary dwellings are available for occupancy on the open market or will be built if necessary prior to actual displacement.

(5) For actions involving new construction directly or indirectly affecting wetlands, there shall be evidence to support a finding that:

(a) There is no practicable alternative to such construction, and

(b) The proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

(6) For actions involving a significant encroachment on a flood plain, there shall be evidence to support a finding that:

(a) There is no practicable alternative, and

(b) The action conforms to applicable state and/or local floodplain protection

standards.

(7) For actions within or affecting land or water uses in an area covered by an approved state coastal zone management program, there shall be evidence to support a determination that the action is consistent with the approved state coastal zone management program to the fullest extent practicable. (If the action is determined to be inconsistent with the state's approved program, the Federal agency shall not approve the action except upon a finding by the Secretary of Commerce that the proposed action is consistent with the purposes or objectives of the Coastal Zone Management Act or necessary in the interest of national security.)

c. CEQ 1504 establishes procedures for "environmental referrals" to CEQ by Federal agencies with disagreements on the environmental effects of a proposal. When a notice of intended referral has been received on an Airports Program environmental impact statement, a copy of the notice shall be forwarded to APP 600 which will advise P 10. Every effort shall be made to resolve the issues prior to processing the final environmental impact statement. Resolution of issues shall be documented in the final statement including, if possible, notification in writing to the FAA from the referring agency indicating that its objections have been resolved. In the event of an actual referral, FAA's response to CEQ will require P 1 concurrence.

95. APPROVAL OF FINAL ENVIRONMENTAL IMPACT STATEMENTS.

a. Delegation to FAA. Final approval authority on environmental impact statements for airport actions has been delegated to the FAA. Concurrence by the Assistant Secretary for Policy and International Affairs, P 1, is required only if that office requests an opportunity to review and concur in the final statement or if FAA requests review and concurrence by that office, but see paragraph 95d, below.

b. Airports Program Approval Authority (steps 34 thru 41 in Appendix 1).

(1) The Associate Administrator for Airports has final impact statement approval authority for any action specified below, unless specifically delegated to the region by APP-600 on a case by case basis:

(a) Any new airport in a metropolitan area (construed as a standard metropolitan statistical area (SMSA) unless specifically directed otherwise).

(b) Any new runway or major runway extension at a commercial service airport located in an SMSA.

(c) Any action for which a Federal, state or local government agency has expressed opposition on environmental grounds.

(2) Those actions in (1) above for which the Office of the Associate Administrator for Airports has delegated approval authority and all other environmental impact statements may be approved by the regional director or his designee.

(3) All actions in (1) above are subject to prior review for legal sufficiency by the Chief Counsel; in (2) above, by regional counsel.

c. Headquarters Review. When final approval of an environmental statement is retained in headquarters, the headquarters coordination is initiated when statements are received in the Office of Airport Planning and Programming. Copies are forwarded by APP 600 to the Office of Environment and Energy and to the Office of the Chief Counsel for review for legal sufficiency, and then to appropriate elements of the Office of the Secretary of Transportation when required for review and concurrence, with a request for response within 15 to 30 days, depending upon the complexity of the statement. For highly controversial EISs, P 1 and General Counsel (C 1) will be notified at Airports headquarters level that the EIS is being reviewed, and shall be provided a copy of the EIS summary. During headquarters review, the statement is revised as necessary or information added. The statement, with any comment, is then submitted to the Associate Administrator for Airports for approval (steps 35 through 38, Appendix I). P 1 and C 1 will be given two weeks' notice before approval of the EIS.

d. Approval Declaration. As the mechanism for approval of a final statement, a declaration approximately as follows shall be added to the summary. Signature and date blocks shall be added for the concurrence of appropriate offices and approval or disapproval of the approving official (step 38 or 41, Appendix I).

"After careful and thorough consideration of the facts contained herein and following consideration of the views of those Federal agencies having jurisdiction by law or special expertise with respect to the environmental impacts described, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in section 101(a) of the National Environmental Policy Act of 1969."

96. NOTIFICATION AND DISTRIBUTION OF APPROVED FINAL ENVIRONMENTAL IMPACT STATEMENT.

a. General. Distribution by the region or airports district office of approved final statements to EPA, other agencies and organizations, and the public shall, insofar as possible, be simultaneous so as to avoid unnecessary inquiries and insure that all interested parties have a fair opportunity to review the documentation (step 42, Appendix I). If there have been only minor changes to the draft, the procedure in CEQ 1503.4(c) may be used for circulation of less than the entire document. The region shall notify APP 600 when distribution has been completed.

b. Distribution to EPA. The FAA regional office preparing the final environmental impact statement shall forward to the appropriate EPA regional office one copy of the final statement if it was categorized LO I. Otherwise, five copies shall be sent to the EPA regional office. In the event that EPA has comments on a final impact statement, the FAA regional office shall make every reasonable effort to resolve any conflicting issues. If the issues cannot be resolved, the matter shall be referred to APP 600.

c. Distribution to Washington Headquarters. The region shall send one copy to P 10 and one copy to AEE I for information.

d. Distribution to DOI. The region shall send, to the DOI address listed in paragraph 91a(4)(a), the number of copies listed in paragraph 91a(5)(b).

e. Other Distribution by the Region. A copy of the final environmental impact statement shall also be sent to each Federal agency, state and local agency or point of contact, and private organization which made substantive comments on the draft statement, and to individuals who requested a copy of the final statement or who made substantive comments on the draft. A copy of the approved final statement shall be sent to APP 600 for information unless the document was approved by the Associate Administrator for Airports. When the number of commentors is such that distribution in this manner is impractical, alternative arrangements shall be made after consultation with APP 600.

f. Availability to the Public.

(1) Additional copies shall also be made available by the region for review by the public through distribution to appropriate locations accessible to the general public.

(2) The availability of the final statement shall be announced by the region in the appropriate local media in a manner similar to the announcement method for the draft environmental impact statement.

g. Filing with EPA. The region shall distribute to EPA the required five copies of the final statement for Federal Register notification. The region shall forward the copies directly to the address listed in paragraph 9ld. A copy of the transmittal to EPA shall be forwarded to APP 600 for record purposes.

h. Timing of Decision. In accordance with CEQ 1506.10(b) "No decision on the proposed action shall be made or recorded [see paragraph 98]...until the later of the following dates: (1) Ninety (90) days after publication of the notice described above [by EPA per paragraph 9ld]...for a draft environmental impact statement. (2) Thirty (30) days after publication of the notice described above [by EPA per paragraph 96g above]...for a final environmental impact statement."

i. Comments Before Decision. CEQ 1503.1(b) provides that "An agency may request comments on a final environmental impact statement before the decision is finally made. In any case other agencies or persons may make comments before the final decision...."

97. OTHER AVAILABILITY OF FINAL STATEMENTS. In addition to the availability and distribution of approved final environmental impact statements, final statements proposed for approval shall normally be made available upon request in FAA offices for inspection by the public and by Federal, state, or local agencies prior to final approval and filing with EPA. Such statements shall carry a notation that they have not been approved and filed. If a Clean Water Act Section 404 permit is involved, a copy shall be provided to the Corps of Engineers if necessary to facilitate resolution of any disagreement before final action is taken and to expedite the Corps' final action on the permit.

98. DECISION.

a. Following the review periods prescribed in CEQ 1506.10, the FAA decisionmaker may make a decision on the Federal action (see steps 43 and 44 of Appendix I). The environmental impact statement and other environmental documents shall be included in the administrative record and made available to the decisionmaker. CEQ 1505.2 requires a record of this decision and

specifies information to be included in the record of decision. CEQ 1505.2(b) states "An agency may discuss preferences among alternatives based on relevant factors including economic and technical considerations and agency statutory missions." The Airports Program's statutory mission is to promote the development of a safe and efficient nationwide airport system adequate to meet the current and projected growth in aviation, and this mission is to be given appropriate weight in any final decision on an action. Based upon the data presented in the environmental impact statement and other relevant considerations, the record of decision shall also include the appropriate assurances, conclusions, or findings as delineated in paragraph 94b.

b. The record of decision shall include any mitigation measures which were made a condition of the approval of the environmental impact statement. Proposed changes in or deletions of mitigation measures which were a condition of approval of the environmental impact statement shall be reviewed by the same FAA offices which reviewed the final statement and must be approved by the environmental impact statement approving official.

c. If the decisionmaker wishes to take an action which was included within the range of alternatives of an approved environmental impact statement but was not the agency's preferred alternative as identified in the final statement, the decisionmaker shall first coordinate the draft record of decision for concurrence of the same FAA and DOT offices whose concurrence was required for approval of the final statement. These offices may concur without comment, may concur on the condition that specific mitigation measures be incorporated in the record of decision, may request that a supplement to the environmental impact statement be prepared and circulated, or may nonconcur. The decisionmaker shall not approve the Federal action over a nonconcurrence.

d. If the alternative the decisionmaker now wishes to take action on involves a special interest (e.g., section 4(f) land, endangered species, wetlands, historic sites, or others), the FAA shall first complete any required evaluation and consultation that has not been done, supplementing the original environmental impact statement, prior to taking the action. Supplements to environmental impact statements shall be reviewed and approved in the same manner as the original document.

99. IMPLEMENTATION OF ENVIRONMENTAL COMMITMENTS.

a. In accordance with CEQ 1505.3, "Mitigation...and other conditions established in the environmental impact statement or during its review and committed as part of the decision shall be implemented by the lead agency or other appropriate consenting agency." This section of the CEQ Regulations further specifies actions which the lead agency shall take to implement environmental commitments. The FAA shall take steps as appropriate to the action, through special conditions in grant agreements, airport location approvals, property conveyance deeds, releases, airport layout plan approvals, and contract plans and specifications and shall monitor these as necessary to assure that representations made in the environmental documentation with respect to mitigation of impacts will be carried out.

b. Generally, the following guidelines apply to the inclusion of special environmental assurances in grant agreements, property conveyance deeds, releases, and airport layout plan approvals:

- (1) Include actions or commitments by the airport sponsor, if any, which are critical to the decision.
 - (2) Include significant measures for mitigation of adverse impacts.
 - (3) Include actions to be taken by the sponsor to identify mitigating measures or to encourage others to take mitigating measures.
 - (4) Include special commitments to ensure compatibility of the airport with the surrounding area.
 - (5) Do not include in grant agreements standard items that are incorporated in project plans and specifications.
 - (6) Do not include assurances which are found to derogate safety. APP 600 shall be contacted to discuss disposition of any previously approved environmental commitments which appear to fall into this category.
- c. Any significant deviation from prescribed action that may reduce protection to the environment must be submitted to APP 600 for concurrence if the statement was approved in Washington headquarters.

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CHAPTER 10. TIERING, TIME LIMITATIONS, WRITTEN REEVALUATIONS, SUPPLEMENTS

100. GENERAL. After a draft or final environmental impact statement or a finding of no significant impact has been prepared, there are circumstances which involve further environmental documentation. These are discussed in the following paragraphs.

101. TIERING.

a. Tiering is defined in CEQ 1508.28 and further discussed in CEQ 1500.4 (i), 1502.4(d), and 1502.20. CEQ 1508.28 states that tiering is appropriate when the sequence of analyses is:

- (1) "From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site specific statement or analysis."
- (2) "From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe."

b. In the Airports Program, tiering is most applicable in the circumstances listed below. Care must be exercised when tiering not to separate actions which are functionally related and have no independent utility.

- (1) Program statements (as for new legislation) followed by site specific statements as required.
 - (2) Environmental documents resulting from master planning covering specific short term projects, in a long term development context, to be followed at a later time by further specific projects which become ripe for decision.
 - (3) Environmental documents for airport location approvals to be followed at a later time by specific development projects as the need develops. The subsequent environmental analysis or statement will then focus on the development which is proposed for decision and exclude from consideration the issue of airport location (including other airport sites as reasonable alternatives to the proposed action) since this has already been decided.
 - (4) Environmental documents for airport layout plan approvals (see paragraph 30).
- Tiering for airport layout plan approvals may work in either of two ways:

(a) All of the development on an airport layout plan may be environmentally approved (i.e., an unconditionally approved airport layout plan) if appropriate analyses have been completed and applicable assurances can be made (such as for section 4(f), relocation, wetlands, floodplains, coastal zone management programs). The appropriate environmental action choice for any future Federal actions involving development on an unconditionally approved airport layout plan would be either a written reevaluation or a supplement (see paragraphs 103 and 104, respectively). Tiering is more likely to be applied in this manner to airport layout plans which have resulted from master planning as described in subparagraph (2) above.

(b) More immediate range development shown on an airport layout plan may be environmentally approved with deferral of environmental action on later stages of development because the time is not ripe for decision on these stages. This

situation may occur either with or without master planning having been done. The latter method of tiering will result in conditionally approved airport layout plans. At the time that the later development is proposed for decision, a new environmental analysis or statement will be required.

- c. For instructions relative to summarizing, referencing, and making available previously tiered environmental documents, see CEQ 1502.20.

102. TIME LIMITATIONS FOR ENVIRONMENTAL DOCUMENTS. The time limitations below have been established for all DOT environmental impact statements.

a. A draft environmental impact statement may be assumed valid for a period of 3 years. If the final impact statement is not submitted to the approving official within 3 years from the date the draft statement was circulated, a written reevaluation of the draft shall be prepared by the responsible official to determine whether the considerations of alternatives, impacts, existing environment, and mitigation measures set forth in the draft statement remain applicable, accurate, and valid. If there have been changes in these factors which would be significant in the consideration of the proposal, a supplement to the draft statement or a new draft statement shall be prepared and circulated.

b. With regard to approved final impact statements, three sets of conditions have been established:

(1) If major steps toward implementation of the proposed action (such as the start of construction, substantial acquisition, or relocation activities) have not commenced within 3 years from the date of approval of the final statement, a written reevaluation of the adequacy, accuracy, and validity of the final statement shall be prepared. If there have been significant changes in the proposed action, the affected environment, anticipated impacts, or proposed mitigation measures, a new or supplemental environmental impact statement shall be prepared and circulated.

(2) If the proposed action is to be implemented in stages or requires successive Federal approvals, a written reevaluation of the continued adequacy, accuracy, and validity of the final statement shall be made at each major approval point which occurs more than 3 years after approval of the final statement and a new supplemental statement prepared, if necessary.

(3) If the proposed action has been restrained or enjoined by court order or legislative process after approval of the final statement, the 3 year period may be extended by the time equal to the duration of the injunction, restraining order, or legislative delay.

103. WRITTEN REEVALUATIONS. In addition to the requirement for a written reevaluation due to circumstances arising under paragraph 102, the responsible official should exercise judgment on when a written reevaluation is appropriate in other circumstances to evaluate the continued validity of an environmental document. The preparation of a new EIS, FONSI, or supplement is not necessary when it can be documented that: the proposed action conforms to plans or projects for which a prior EIS or FONSI has been filed; the data and analyses contained in the previous EIS or FONSI are still substantially valid; and that all pertinent conditions and requirements of the prior approval have been or will be met in the current action. This evaluation, signed by the FAA responsible official, will either conclude the contents of previously prepared environmental documents remain valid or that significant changes require the preparation of a supplement or new environmental document. The written reevaluation has no standard format and no circulation or publication requirements. It becomes part of FAA's file and may be made available upon request.

104. SUPPLEMENTS.

- a. CEQ 1502.9(c) defines two circumstances requiring the preparation of supplements to draft or final impact statements, as follows:
- (1) "The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or
 - (2) "There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts."
- b. A change in the proposed action, in the environmental circumstances, or in the agency's decision (reference paragraph 98) may cause a supplement to a draft or final impact statement or to a FONSI to be prepared soon after the original document. If a reasonable alternative which is significantly different from alternatives considered is identified, a supplement shall be prepared. A supplement is not required if the only change is the development of additional data, provided such data are not in conflict with the environmental document. In other cases, a supplement may be required because the time limitation on an environmental document has been exceeded and a written evaluation has indicated that the contents of the original document are no longer applicable, adequate, accurate or valid per paragraph 102.
- c. The format and contents of a supplement are not specified and are expected to vary depending on the extent of the changes. A supplement is likely to be in the form of either:
- (1) A separate document which discusses the changed circumstances, identifies the parts of the original environmental document which have been affected, and presents the new data.
 - (2) Changes to the original environmental document in the form of new pages to replace existing pages and/or new pages to be added.
- d. Supplements are subject to the same circulation and filing requirements as the original environmental document and to the same approval level (unless a new element is present which would raise the required approval level). Scoping is not required. A supplement is considered part of the documentation for decisionmaking. If a supplement changes a record of decision, a new record of decision must be issued after the required 30 day review period (see paragraph 98).

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Exhibit E

**EVALUATION AND IDENTIFICATION OF KEY AIR POLLUTION AND
RELATED ISSUES IN THE LAX MASTER PLAN DRAFT EIR/EIS**

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EVALUATION AND IDENTIFICATION OF KEY AIR POLLUTION AND RELATED ISSUES IN THE LAX MASTER PLAN DRAFT EIR/EIS

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I. INTRODUCTION AND BACKGROUND INFORMATION

Background Setting

Los Angeles International Airport (LAX), the fourth largest airport in the world is planning to update its Master Plan to accommodate a continued increase in growth of passengers and cargo over the next fifteen years. Three major alternatives have been identified and a Draft Environmental Impact Report/Statement (DEIR/EIS) has been prepared for public comment. This paper reviews the DEIR/EIS, particularly the favored Alternative C by the Los Angeles World Airports (LAWA), for its consideration of air quality related impacts upon the City of Inglewood and its immediate vicinity.

LAX lies entirely within the City of Los Angeles. However, it is also immediately adjacent to the cities of Inglewood, Hawthorne, and El Segundo as well as the unincorporated town of Lennox. Within the City of Los Angeles, the community of Westchester is also directly impacted by LAX. Inglewood has a population of 121,000, up from 109,000 in 1990. Another 174,000 reside in the other communities adjacent to the airport and noted above, bringing to 295,000 the number of residents immediately adjacent to the LAX.

A larger, South Bay Subregion consists of fifteen cities (including Inglewood) having a population of about 764,000. In addition, the Subregion includes portions of the harbor area of the City of Los Angeles, which brings the total population of the area to slightly over one million persons. The area contains some of the most densely populated areas of the Los Angeles region as well as many manufacturing and industrial facilities that contribute greatly to the air pollution emission burden of the South Coast Air Basin. A major segment of California's interstate highway system, I-405 (the San Diego Freeway) runs the length of the Subregion, and I-110 (the Harbor Freeway) also transverses the southern portion and is a major heavy-duty transport corridor from the Port of Los Angeles to the downtown area. Finally, I-105 (the Century Freeway) terminates at the southern entrance to LAX and will play a major role in the proposed expansion of the highway network serving LAX in the Master Plan. The Master Plan proposal also includes a new, Los Angeles Airport Expressway to supplement the traffic circulation system.

Objectives for Phase 1

The objective of this Phase 1 investigation is to provide City of Inglewood officials an evaluation of the LAX Master Plan Draft EIR/EIS for direct and secondary air quality impact identification within the document. Based on these findings, the City can decide whether to pursue one or more of the major air quality concerns in greater detail. At a minimum, the findings of this initial phase should provide material for the City's official comments on the DEIR/EIS, due to LAWA no later than July 25, 2001. They will also provide useful information for potential testimony at the June 9, 2001 public hearing on

the project. The findings contained in Phase 1 should not be construed as conflicting in any way with the recent MOU between Inglewood and Los Angeles; indeed, they only serve as a basis for constructive comments for LAWA and the U.S. Department of Transportation to consider in the final Master Plan document.

Related Planning Requirements

There are several major planning efforts, mandated by Federal and State law that affect the expansion of LAX as described in the Master Plan. The following discussion highlights these requirements as a foundation for considering the recommended detailed analysis contained later in this report.

Air Quality Planning

The City of Inglewood lies wholly within the South Coast Air Basin and is thus directly affected by the Air Quality Management Plan (AQMP) for this basin. The South Coast Air Quality Management District (SCAQMD) has prime responsibility to develop and revise the AQMPs for the basin, with input from the Southern California Association of Governments (SCAG) and its respective constituents such as Inglewood. The adopted AQMP is then forwarded to the California Air Resources Board and on to the US Environmental Protection Agency for approval under the Clean Air Act (CAA) as a State Implementation Plan (SIP). For Ozone, the currently approved State Implementation Plan (SIP) for the South Coast is the 1999 Amendments to the 1997 AQMP. Inglewood would be prudent to insure that airport mitigation measures are included in the current efforts to develop a 2001 AQMP by the end of this year. For Particulate Matter (PM10), the EPA has never approved any South Coast SIP. This was generally the result of problems with the Ozone portion of the submitted AQMPs, and the SCAQMD has requested that EPA now await the more comprehensive 2001 AQMP for taking action on PM10. For Carbon Monoxide (CO), the EPA gave Final Interim Approval to the South Coast CO SIP in 1998. In addition to the 2001 AQMP for the South Coast, the CARB is developing a Clean Air Plan to identify strategies that represent the State and federal contributions to the regional plans for ozone, particulates, and carbon monoxide (CO).

Transportation Planning

The U.S. Department of Transportation (DOT), under the Transportation Equity Act for the 21st Century (TEA-21), requires that metropolitan planning organizations such as SCAG update every three years the Regional Transportation Plan (RTP) for the area. The RTP is a 20-year vision of the area's commitment to transportation improvements and must closely link to other related Federal mandates such as the Clean Air Act. The current update is scheduled to be adopted by the end of April 2001. One of the five major changes to the previous (1998) RTP is that of the Regional Aviation System. Several scenarios are evaluated in the draft 2001 RTP and one of these, Scenario 9, examines the impact of expanding LAX similarly to that proposed in the EIR. The key concern on the RTP from the 2001 air quality planning effort is its affect on the on-road mobile source emission budgets that will evolve from the AQMP. While the RTP update

will be adopted in advance of the AQMP update, decisions made in both plans and the incorporation of various ground access mitigation strategies will be of great concern to the cities of the South Bay. If these plans cannot "conform" to the air quality emissions budget, potential loss of funding for all Federal transportation programs may occur.

CEQA/NEPA Process

California Environmental Quality Act (CEQA)

The *California Environmental Quality Act (CEQA)* was adopted in 1970 and incorporated in the Public Resources Code §§21000-21177. Its basic purposes are to: inform governmental decision makers and the public about the potential significant environmental effects of proposed activities; identify ways that environmental damage can be avoided or significantly reduced; require changes in project through the use of alternatives or mitigation measures when feasible; and disclose to the public the reasons why a project was approved if significant environmental effects are involved. CEQA applies to projects undertaken, funded or requiring an issuance of a permit by a public agency. The analysis of a project required by CEQA usually takes the form of an Environmental Impact Report (EIR), Environmental Impact Statement (EIS), Negative Declaration (ND), or Environmental Assessment (EA).

National Environmental Policy Act (NEPA)

The *National Environmental Policy Act (NEPA)* of 1969 established national policies and goals for the protection of the environment. NEPA directs all federal agencies to give appropriate consideration to the environmental effects of their decision making and to prepare detailed environmental impact statements (EIS) on recommendations or reports on proposals for legislation and other major federal actions significantly affecting the quality of the environment. NEPA is divided into two titles. Title I outlines a basic national charter for protection of the environment. Title II establishes the Council of Environmental Quality (CEQ) which monitors the progress made toward achieving NEPA goals, advises the president on environmental issues and provides guidance to other federal agencies on compliance with NEPA.

It was determined that the LAX Master Plan expansion must meet the requirements of both the CEQA and the NEPA, and thus the document that this report reviews is the Draft EIR and EIS developed by LAWA and its consultants to address these requirements.

Comment Process and Deadlines

The DEIR/EIS has a relatively long comment period of 180 days. Since it was released for public comment on January 18, the deadline to send formal comments to the LAWA will be July 25, 2001. The LAWA website has forms for making comments that can be downloaded. However, most agencies will probably submit the information in much more extensive fashion. Three, simultaneous, public hearings will occur on June 9 including one held at The Pavilion at Hollywood Park in Inglewood. This will provide an

opportunity for the City to provide direct comments to LAWA; although it is not necessary to comment at this hearing in addition to providing written comments. Finally, there are several other reviews of the DEIR/EIS underway by other cities in the area, including a SCAG-assisted project with the 16-city South Bay Cities Council of Governments.

Following receipt of the public comments, a Final EIR/EIS will be prepared by LAWA. It should incorporate changes found acceptable to LAWA from the comment process as well as additional input on mitigation measures developed in partnership with the SCAQMD, CARB, U.S. EPA, and the Federal Aviation Administration (FAA). The resulting Action Plan will be a part of the Final EIR/EIS. The FAA, along with the Los Angeles City Council and Mayor, will make the ultimate decision on the Master Plan. U.S. DOT, represented by the FAA and the Federal Highway Administration, will then provide the Record of Decision (ROD) that reflects their final approval of the EIS/EIR and allows construction to commence.

An important process that must be satisfied prior to final approval is the conformity process under the 1990 Clean Air Act. The DEIR/EIS notes that the Master Plan expansion will be significant enough to require a conformity determination by the FAA with SCAQMD's latest, approved Air Quality Maintenance Plan (AQMP) for the pollutants of NOx, CO, PM-10, and Ozone (1-hour). Although a revised AQMP is underway and expected to be completed by the end of this year, the latest approved AQMP (State Implementation Plan) is the 1999 amended version of the 1997 AQMP and will likely be the plan for use in the conformity determination. The airport expansion will fall under the General Conformity provisions while the highway improvements (State Highway 1 and the LAX Expressway) will have to apply the Transportation Conformity provisions of the Act.

II. OVERVIEW OF THE PHASE ONE REPORT

Cursory Review of Full Draft EIR/EIS for Air Pollution Issues

The initial step of the Phase 1 effort was to perform a cursory review the entire 12,000 page DEIR/EIS to identify all comments and statements regarding air quality. While this was a potentially very time-consuming process, the DEIR/EIS is organized in a manner that allows the reviewer to quickly skim large sections of the document that are unlikely to contain any reference to air pollution. This was especially true for Chapter 4, which contains 24 subparts organized by specific areas such as residential relocation, geology, schools, etc. In some cases, however, there was no mention of air pollution despite the topic seemingly quite related. A listing of those chapters, and sub-chapters of the DEIR/EIS that were found to contain little or no significant mention of air quality are listed as a part of Appendix A.

In-Depth Review of Air Pollution Portions of DEIR/EIS, Appendices, and Related Studies

Upon completion of the cursory review of the document, those chapters and appendices found to contain some discussion of air quality or related issues were reviewed in much greater detail. The most extensive discussion of air issues, of course, were contained in Chapter 4.6 (Air Quality), Appendix G (Air Quality Impact Analysis), and Technical Report 4 (Air Quality Technical Report). The latter contains extensive listing of the 150 potential mitigation measures. Other sections of the document having considerable relationship to air quality included Chapter 4.24.1 (Human Health Risk Assessment) and Chapter 4.20 (Construction Impacts). Appendix K (Supplemental Environmental Evaluation for LAX Expressway and State Route 1) was also reviewed in-depth as it outlined the details of proposed roadway improvements that might have significant impacts on Inglewood's traffic circulation.

In addition to the DEIR/EIS document, the actual Draft Master Plan of November 2000 for LAX was examined as well as the LAWA Environmental Overview which highlights the airport's air quality programs. The Technical Workplan for LAWA's extensive new study on the air pollution levels (criteria pollutants and air toxics) and emissions in the vicinity of LAX was examined to see if additional input by the City would be useful during the study program. Finally, a series of other reports, memorandums, and related letters were examined in this review for possible relevance to the study objectives. The findings of each of these documents are briefly summarized in Chapter III of this report.

Identification of Key Air Pollution Issues for Further Consideration

Using the information found in the in-depth review of those portions of the DEIR/EIS containing air quality-relevant statements, the findings were listed under several basic topics. Examples of these topics are health-related impacts, air emissions determinations, mitigation measures, conformity to the AQMP, etc. This process allowed a better synthesis of the mass of air quality information scattered throughout the DEIR/EIS into key issue areas. For each category of information, a description of the potential issue for further consideration by the City of Inglewood was developed. These descriptions are contained in Chapter IV of this report.

Cites for the data categorized by specific location within the document are listed by category and page in Appendix A.

Recommended Four Significant Issues for Detailed Analysis

Finally, the consultant has selected four significant issues for the City of Inglewood to consider further analysis to determine the level of concern and necessity to include in the overall comments on the DEIR/EIS to the LAWA in June. The four issues are 1) mitigation measures, 2) conformance to 2001 RTP and AQMP, 3) analysis of the new LAWA air study for deficiencies and potential roles, and 4) impacts of road

improvements identified in the DEIR/EIS. These four issues are analyzed in detail in Chapter V of this report.

III. SUMMARY OF THE FULL REVIEW FOR AIR QUALITY ISSUES

Organization of the Draft EIR/EIS Document

The Draft EIR/EIS is an extremely detailed and extensive analysis of the various Master Plan alternatives under consideration by the City of Los Angeles and the Los Angeles World Airports (LAWA). It is approximately 12,000 pages in length, containing seven chapters including a 1,233 page Chapter 4 which contains much of the technical analysis of the environmental consequences and mitigation measures for the various alternative plans. In addition to the main body of the document, there are eleven appendices that have specific documentation and additional technical analysis of the impacts of the alternatives. Finally, there are seventeen special technical reports, 251 tables and 183 figures in the main body of the report.

Briefly, the DEIR/EIS proposes three "build" alternatives for expanding LAX in addition to the mandated "No Action/No Project Alternative." Alternative A would add a new runway on the north field portion of LAX and could accommodate the full, projected aviation demand of 97.9 million annual passengers (MAP) and 4.2 million tons of air cargo by 2015. Alternative B would add, instead, a new runway on the south field portion of LAX and could accommodate the full demand as well. Finally, Alternative C (the preferred alternative by LAWA), would not add any new runways but move two of the existing runways, extend three of them, and widen one of them. This would accommodate the projected air cargo demand but "only" 86.9 MAP in 2015.

The reviewer can obtain a fairly detailed sense of the topics covered by reviewing the Table of Contents to the DEIR/EIS as each chapter is broken down into up to three additional sub-levels. In addition to the detailed Chapter 4 noted above, the other key chapters cover 1) Regional Context, 2) Purpose and Need for the Proposed Action, 3) Alternatives, 4) the Environmental Action Plan, 5) Other NEPA/CEQA Topics, and 6) Lists of Preparers, Persons/Agencies Consulted, Recipients of the DEIR/EIS, References, Glossary, Abbreviations and Acronyms, and an Index. The following section will discuss those portions that identified significant air quality issues.

Sections Identified for Potential Air Quality/Transportation Issues

In addition to the specific Air Quality sections (Chapter 4.6, Appendix G, and Technical Report 4), several other chapters were found informative on air pollution and related issues. Included in this list were portions of the Chapter 1 (Regional context), Chapter 2.3 (Consequences of Not Improving LAX), Chapter 3 (Alternatives), Chapter 4.2 (Land use), Chapter 4.3 (Surface Transportation), 4.4 (Social Impacts), Chapter 4.5 (Induced Socio-Economic Impacts), Chapter 4.17.1 (Energy Supply), Chapter 4.20 (Construction Impacts), Chapter 4.24.1 (Human Health Risk Assessment), Chapter 5 (Action Plan),

Chapter 6 (Other NEPA/CEQA Topics), and Appendix K (Supplemental Environmental Evaluation for LAX Expressway and State Route 1).

Chapter 4.6, Air Quality, contains the “meatiest” compilation of findings on air quality in the entire document. It contains a description of the air basin and pollution sources context, the mitigation process, and describes how each alternative is analyzed. Key findings are grouped by On-Airport emissions, Off-Airport emissions, construction emissions, and an overall Environmental Action Plan. It does not cover health risks in any detail – those are covered in Chapter 4.24.1, Human Health Risk Assessment.

Appendix G, Air Quality Impact Analysis, is essentially a technical support document for Chapter 4.6. It includes detailed information on the methodology used for the emission estimates, dispersion modeling, and future background ambient air quality concentrations. Finally, it outlines the climatology, regulatory setting, and existing air quality for the LAX area. The report concludes with the modeling results conducted by the LAWA consultants. Thirty-four tables present findings on the air quality impact analysis.

Technical Report 4, Air Quality, provides even more technical details and data to support LAWA’s air quality impact analysis of the DEIR/EIS. Included are an airport emission inventory, a regional traffic emissions inventory, roadway intersection analyses, a construction emissions and dispersion analysis, and a quantitative assessment of potential air quality mitigation measures. The latter, contained in Attachment X to the report, has about 150 potential air quality mitigation measures for consideration and will be a foundation for future analysis if a second phase to this study is requested.

Identification of Findings from the cursory Review (Enumerated in Appendix A)

The categorization of the many references to air quality throughout the DEIR/EIS involved listing the key points of each comment under various topics related to air quality and/or related subject areas. The following summarizes the key findings from this review in each of these topics. Appendix A will provide specific page references to these and other findings, also organized by the key topic areas.

Air Pollution Impacts from the Various Alternatives Contained in the DEIR/EIS

The DEIR/EIS is up front regarding the fact that air quality will deteriorate with all four alternatives, including the No Action/No Project alternative. Appendix G begins with the following quote “With or without implementation of the proposed LAX Master Plan, the amount of air traffic, surface traffic, and airport activities would increase at LAX as compared to the environmental baseline. As a consequence of the increase in airport activities, emissions of criteria air pollutants from mobile, stationary, and area sources associated with LAX are expected to increase.”

On-Airport emissions were found to increase in all three alternatives, though Alternative C (no added runway) has lowest increases for NOx that is perhaps the most important

concern in the South Coast air basin. Interestingly, all three build alternatives had lower overall emissions than the No Action/No Project (NA/NP) alternative due to the proposed mitigation measures. Further analysis of this claim may be in order as many of the on-airport mitigation measures in the build alternatives may, in fact, eventually be mandated by other Federal and state pollution requirements in the AQMP and thus would have also reduced the NA/NP alternative emissions. Emissions of CO, PM-10, and VOCs were found "less than significant" in all three build alternatives, but emissions of NOx and SO2 were found "significant" under the definitions of CEQA/NEPA and thus must be mitigated to the extent possible.

Off-Airport emissions in 2015 are "significant" for all five criteria pollutants for all three build alternatives. VOC emissions would decrease in relation to the NA/NP alternative, but increased traffic in all three build scenarios would cause significant increases for each of the pollutants or their precursors. Alternative C, due to its lower passenger projection, would perform best among the three build alternatives.

Construction emissions, deemed "temporary" in nature, would peak in 2004 and exceed significance levels for all criteria pollutants under any build alternative. Peak emissions would be 2 to 10 times greater than the NA/NP alternative. NOx emissions from diesel-powered construction equipment would be the most significant construction pollutant unless mitigated. Alternative B would have highest construction emissions and Alternative A the lowest. It is not clear whether the full impact of the serious traffic congestion from construction activities was fully considered in the air quality analysis.

Evaluation of the Health Risks and Air Toxic Impacts

CEQA requires that whenever a project emits toxic air pollutants during and/or after construction, an assessment on the impacts on human health must be conducted. The DEIR/EIS states that it "fulfills the requirements of CEQA" to make this assessment and the results of "part" of this assessment can be found in Chapter 24.1, Human Health Risk Assessment. While this chapter attempts to assess the cancer risks and non-cancer health impacts, it is clear that a major gap resulted from the lack of a comprehensive, air toxic baseline study in advance of the DEIR/EIS. The document states "The HHRA did not evaluate impacts of toxic air pollutants associated with current airport operations." While a new study is now underway, the DEIR/EIS admits that the impact of toxic air pollutants associated with the current airport operations until 2002 and thus only the incremental changes can be projected in their document. This study, *Air Quality and Source Apportionment Study of the Area Surrounding LAX*, prepared a Technical Workplan on November 17, 2000 which contained a proposed schedule of tasks ending in a final study report in December 2002. Clearly, these findings will be available for public consumption long after the final decisions on the LAX Master Plan are made.

No baseline?

It is a somewhat difficult task to assess human health impacts of various alternative expansion proposals without having finalized the mitigation measures and not having a current airport operations database. Under CEQA, significant impacts occur if incremental increases greater than that of the regulatory thresholds over the established

environmental baseline are predicted for the maximally exposed individual. The DEIR/EIS found that even without mitigation measures, cancer health risks were less than the CEQA threshold in 2015. However, "other health hazards" were found significant under CEQA for all three build alternatives. Implementation of potential mitigation options brought the health hazard level to less than significant. Some of the reasons for this finding are 1) Federal mandates for less polluting aircraft engines and ground service vehicles, 2) Runway additions or modifications will result in more efficient aircraft operations, 3) circulation system improvements will improve vehicle flow and reduce congestion, 4) new configurations of runways and the new West Terminal will place off and on-site residents further from the aircraft sources, and 5) the various mitigation proposals, if fully implemented, would reduce overall air emissions.

It should be noted, however, that Chapter 4.24.1 has a small section (pg. 4-1000) that indicates areas immediately east of LAX, i.e., Inglewood, would experience a "slight increase in potential cancer risk and non-cancer hazard." This increase was still believed to be less than established thresholds of significance and that Alternative C would have the smallest amount of area experiencing these increases.

A map of the study area for the potential health risk impacts is shown in Figure 4.24.1-1. It notes the sensitive receptor locations, most of which are in Inglewood, Hawthorne, El Segundo, and Westchester. The findings of health risk assessment modeling are presented for the preferred alternative C on page 4-1034.

Identification and Analysis of Potential Mitigation Measures

One of the most important aspects of the DEIR/EIS is the identification, analysis, and selection of measures to mitigate the impact of the increased air emissions from the expansion of LAX. While the document conducts a fairly extensive effort to identify potential measures, the specific impacts of implementing such measures upon the surrounding communities does not appear adequate. While most of Inglewood is within the Land Use Study Area noted in Figure 4.2-1, there was little or no analysis of the impacts on Inglewood from the mitigation measures and roadway improvements. In fact, the seventeen intersections modeled in connection to the LAX Expressway proposal, shown in Table 5.5-3 of Appendix K are all west of the San Diego Freeway. Furthermore, emission reductions from the select measures identified are somewhat questionable. At a minimum, LAWA should provide some analysis of the impacts of the mitigation measures and roadway re-configurations upon the City of Inglewood. As will be seen in the Chapter 5 recommendations in this report, analysis and selection of mitigation measures constitute a very important area for further study. Since LAWA has not made a final determination on which measures to adopt, input by cities such as Inglewood through the DEIR/EIS comment process could be quite successful in shaping the final set of measures.

Nearly 150 air quality mitigation measures were identified for potential inclusion in the final Environmental Action Plan and approximately thirty of those were analyzed (modeled) for their emission benefits. Although not listed as a "mitigation measure," the

construction of the LAX Expressway, the “ring road,” and the extension of I-105 and the Green Line to the new West Terminal is the basis for many of the Environmental Action Plan emission reductions. This assumption of increasing capacity to improve traffic flow to reduce air pollution is one of continuing controversy in the environmental community and should be examined further in light of other potential mitigation measures. Recent research by the University of California at Riverside and Georgia Tech has raised questions on the concept that freeway expansion relieves congestion *and* air pollution. Another paper by Hansen and Huang for the Transportation Research Association on road supply and traffic in California urban areas found that within four years of providing new road capacity 90% had been used up with new traffic.

The DEIR/EIS recommends a specific measure to reduce airport-related air quality impacts both inside, and adjacent to LAX. It is titled “MM-AQ-1. Implement Revised Air Quality Mitigation Programs.” The following is quoted from page 4-512 of the report: “LAWA shall expand and revise the existing Air Quality Mitigation Programs at LAX in coordination with the FAA, USEPA, CARB and SCAQMD. The expanded programs shall reduce air quality impacts associated with implementation of the Draft LAX Master Plan. LAWA shall implement technologically/legally feasible and economically reasonable methods to reduce air pollutant emissions from aircraft, GSE, traffic, and construction equipment both on and off the airport. The overall effect of implementing the expanded programs should be substantial reductions in the South Coast Air Basin of NO_x, VOC, and CO by 2015.” It then lists fifteen mitigation measures that would be included, but not limited to, in MM-AQ-1. Caveats on LAWA’s limited day-to-day management responsibility for many of these airport emissions are also added to the discussion.

A preliminary modeling analysis is presented for several of the mitigation measures included in MM-AQ-1. Mitigation measures are categorized under On-Airport (airside and landside mitigation), Off-Airport, and Construction mitigation. Table 4.6-17 provides the findings for each mitigation measure of the modeling effort, by pollutant and each of the three build alternatives, in 2005. Table 4.6-18 provides similar information for 2015. Another useful table provides an emission inventory for on-airport sources if all the operational mitigation measures were adopted. Similarly, a table provides the estimated operational concentrations by pollutant if all the measures were adopted. Adoption of all the off-airport traffic mitigation measures would result in 5% reduction in vehicle miles traveled (VMT) in 2005 and 10-11% VMT reduction in 2015.

Finally, the significance of mitigation measures for the preferred alternative C are as follows:

- On-airport emissions from operational sources would remain significant for NO_x and SO₂.
- Off-airport traffic emissions would remain significant for CO, VOC, NO_x, SO₂, and PM₁₀.
- Concentrations from on-airport operational sources would remain significant for NO₂ and PM₁₀.

- Construction emissions would remain significant for CO, VOC, NO_x, SO₂, and PM₁₀.
- Construction-related concentrations would remain significant for NO₂ and PM₁₀.

Conformance of the Master Plan to 2001 Regional Transportation Plan and 2001 AQMP revisions

Major projects that receive Federal funding must comply with several aspects of national transportation and air quality legislation. Section 176 [c] of the 1990 Clean Air Act links the transportation and air quality planning efforts through the requirements that the activity must demonstrate conformity to the State Implementation Plan or AQMP. The approving agency for the LAX Master Plan, which in this case is the FAA, must make a general conformity finding that the expansion is consistent with the AQMP's strategy and emission budgets to achieve expeditious attainment of the National Ambient Air Quality Standards (NAAQS). Since several of the elements of the LAX Master Plan include transportation programs requiring federal funds, a similar conformity finding must be made for transportation conformity. The LAX Expressway, State Highway 1 improvements, extension of I-105 and the Green Line light rail transit all affect the air quality of the South Coast basin and thus must be incorporated into the AQMP analysis and strategies. The SCAG region's Regional Transportation Plan and Regional Transportation Improvement Program must be shown to conform to the air quality plan and thus the airport impacts must be included in their updated plans. Currently, the 2001 RTP is to be adopted in late April and the 2001 AQMP be completed by the end of the year.

Review of Chapter 4.6 found several inconsistencies in LAWA's reference to the conformity and SIP planning process. Selection of proper year for emission inventory updates and milestone/attainment years may not be fully consistent with the AQMP. In reviewing the DEIR/EIS text, it would appear that some of the most recent mobile source regulations of CARB and the SCAQMD may not have been included in accounting for airport emission reductions. A CARB regulation of September 2000 on reducing the risk from diesel-fueled engines and vehicles was noted but it was also indicated that this study did not have enough lead time to analyze what is expected to be a major impact. The Final EIR/EIS should examine these impacts. Use of latest conformity general guidance needs to be verified. LAWA does commit to the Master Plan's conformity requirements under the Clean Air Act. The most extensive commitment to working with SCAG and the SCAQMD on emission budgets is found on page 50 of Appendix G.

Air Pollution Emission Inventories

A critical factor in determining the air quality impacts of a project is possessing an accurate and current air emission inventory. Chapter 4.6.2.1 describes the process that LAX utilized to obtain such an inventory. The report identified several adjacent, large stationary sources but chose not to quantify their emissions growth. Current emissions were assumed to be in the baseline, however. The inventory of aircraft emissions did not

assume any fleet turnover. As noted earlier, the emission reductions from on-road vehicles also omitted consideration of CARB's September 2000 risk reduction plan for diesel-fueled engines and vehicles. It is also not clear how the No Action/No Project emissions were calculated. Since this is an information document, calculation of the No Action/No Project emissions and their assumptions should be clearly available to the public. Finally, the SCAQMD's CEQA Air Quality Handbook of 1993 is frequently cited in the DEIR/EIS as the basis for much of the emission inventory calculations. That document has been found to be greatly outdated and the District is in the process of updating many portions of the handbook. The revised version should be used in the Final EIR/EIS.

In addition to the description of the emission inventory methodology contained in Chapter 4.6, there is also considerable information and findings in both Appendix G and Technical Report 4. Page 10 of Appendix G references an effort by USEPA, CARB, SCAQMD, and the airlines and airports of the South Coast Basin to conduct a consultative process to convert Ground Support Equipment (GSE) to clean fuels. As this process is incomplete at the present, expected emission reductions were not included in the emission inventory of the DEIR/EIS.

Air Pollution Modeling

The modeling of future air pollution concentrations as a result of the Master Plan expansion was performed through a complex combination of three separate modeling processes. The On-Airport modeling used the basic Emissions and Dispersion Modeling System (EDMS 3.2) as required by the FAA. This was supplemented using the Industrial Source Complex - Short-Term (ISCST3) model, which is an USEPA-preferred dispersion model. It was primarily used to estimate PM-10 concentrations from aircraft engines as they cannot be modeled with EDMS 3.2. Finally, the Off-Airport motor vehicle emissions at intersections were modeled with the basic CAL3QHCR dispersion model. Results from all three of these models were refined by use of EPA's CALM Processor (CALMPRO) and the Tier 2 Ambient Ratio Method (ARM) using site-specific ratios.

The Technical Report 4, Air Quality, provides the results of this complex modeling program. The results are also summarized in Table 22 of Appendix G. A deficiency in the overall impact analysis is that of not including an analysis for the new 8-hour ozone standard. While the validity of that standard was in question at the time of the analysis (since, then, upheld by the U.S. Supreme Court), the data was available to perform analysis on the 8-hour basis. In fact, the nearby Hawthorne monitoring station of the South Coast AQMD has data on 8-hour ozone dating back to at least 1995 and shows 9 exceedance days in the 1995-98 period. This standard may be more crucial than 1-hour ozone standards since LAX operates on such a continuous basis. It would be useful if the new LAWA study of air emissions and concentrations in the vicinity of the LAX would include 8-hour ozone and PM-2.5 sampling and analysis.

Impact of Roadway Improvements Identified in the DEIR/EIS upon Inglewood

As noted several times earlier, according to LAWA the proposed Ring road (LAX Expressway, I-105 extension, and connecting expressways) will play a major role in reducing traffic congestion and air quality emissions in the vicinity of LAX. Accordingly, this study reviewed Appendix K in-depth to learn more about those projects and their impact on air quality. Unfortunately, Appendix K focussed primarily on the “northside” roadway improvements – the LAX Expressway and the State Route 1 improvements with little mention or analysis of the extension of I-105 and the Green Line on the southside.

Chapter 5.5 of Appendix K focused on the air quality aspects of the LAX Expressway and State Route 1 Improvements. It notes that the projects *were* included in the 1998 SCAG Regional Transportation Plan, which “barely” passed the conformity determination of FHWA and EPA. Actual conformance with the SIP for these individual projects will occur at the time the projects proceed to the RTIP stage. The estimated construction emissions are examined in some detail in Appendix K. State Route 1 has two key alternatives focusing on the choice of diamond interchanges versus urban interchanges. It appears from Table 5.5-1 of Appendix K that construction emissions from both options are identical, which would be highly unusual. The LAX Expressway also has two options – a split viaduct on each side of I-405, or a single, four-lane viaduct along the western side of I-405. Emissions would be lesser on the split viaduct alternative. Mitigation measures all refer to reducing the construction impacts of these two projects. They include 1) use of low-NOx construction equipment, 2) use of reformulated (cleaner) diesel fuel, 3) equipment use phasing, 4) watering surface before grading, and 5) watering exposed surfaces at least twice daily to maintain surface crust.

The largest gap in the analysis of these two projects, and in several of the other mitigation analyses in the entire DEIR/EIS, were impacts on adjacent communities such as Inglewood and El Segundo. This lack of analysis on surrounding community impacts has been an unfortunately deficiency throughout the DEIR/EIS. Even Chapter 4.4.4, Community Disruption and Alteration of Surface Transportation Patterns, there was little discussion beyond the immediately adjacent neighborhood construction disruption on areas that would be affected by the LAX Master Plan alternatives.

Other Important Issues affecting Air Quality

The Phase I evaluation of the DEIR/EIS for air quality matters identified several other areas of related-concerns in addition to those just mentioned above. A major question that those reviewing the overall decision on how and whether to expand LAX is the inter-relationship between LAX and the other major airports in Southern California. It would appear that much of the population growth of the past several decades, and certainly future population growth will result in other airports (Ontario, Orange County, Palmdale, March, Oxnard, etc.) being closer to the growing population and thus more accessible. Much of the discussion of alternative airport options occurs in Chapter 1, Regional Context.

Another issue is that of population and economic projections for the South Coast Basin. Several recent reports have raised doubts over whether the past 60 years of growth in Southern California can possibly continue due to land availability, transportation, energy consumption, and changing attitudes about urban sprawl. A recent study by the Brookings Institute questioned the availability of developable land remaining in the Basin. If these concerns become trends in the next ten years, the passenger and cargo needs for the LAX may need revision.

A concern that has been raised in conversations with other cities in the South Bay Region is the incremental growth that has been occurring at LAX since the last major expansion (early 1980s), apparently without a major environmental impact report or assessment. This leads to questions on the proper baseline to consider for the current Master Plan assessment.

Another concern is whether the roadway improvements identified in Appendix K have a solid funding foundation or will they need to compete with other important highway projects and possibly be delayed beyond completion of the other direct airport expansion construction? Considerable skepticism has also been made of the strong position that SCAG is taking regarding the construction of high-speed rail with the possible use of Maglev technology to connect airports and cities in the Region. The DEIR/EIS discusses these options on pages 27-28 of Chapter 1, Regional Context.

Finally, in discussions about Alternative C it was noted on page 510 of Chapter 4.6 that it would have higher aircraft operations at night than the other alternatives. This raises concerns for noise and air quality.

Other Related Reports Reviewed in this Effort

In addition to the Draft EIR/EIS, several other reports and position papers were deemed relevant to the Phase I evaluation effort. Due to the limited budget and timeframe, most of these documents could only be scanned for determining their usefulness if further analysis of all or some of the recommend measures occur. The following are brief descriptions of each of the key air-related material in those reports found to contain useful information.

LAWA's Technical Workplan for the Air Quality and Source Apportionment Study of the Area Surrounding LAX, November 17, 2000

The Technical Workplan describes in great detail the study plan for this important analysis of air pollution in the communities surrounding LAX. The study was committed to by LAWA in late 2000 and has the cooperation of US EPA, the SCAQMD, and CARB. The purpose of the study is to collect comprehensive data on air quality around LAX and then examine the key criteria and toxic pollutants that are present. This will include both the concentrations in the air and the source of the emissions.

The objective of the study is to collect data and examine the key pollutants both in terms of exposure and source location. This study differs from the DEIR/EIS analysis of air quality in that it is designed to look at current operations instead of future impacts. The study area is much larger than that of the Master Plan DEIR/EIS. LAWA will collect at least one year of continuous and discrete air quality data from a large number of monitoring sites within and in the adjacent communities to LAX. A comprehensive characterization of emission sources and their associated mass emissions for chemical composition will identify marker compounds for subsequent study. More extensive modeling than that performed in the DEIR/EIS is planned, including chemical composition receptor modeling and air dispersion modeling will be conducted. Other techniques will include spatial gradient analysis, time series analysis, and emission inventory development.

The study will be overseen by a technical advisory group from the above mentioned agencies as well as two outside consultants. The same firm that oversaw the DEIR/EIS studies, Camp, Dresser, and McKee (CDM) will also oversee this project. Sub-contractors are Tracer, ES&T, and Dr. Henry of USC and Dr. John Watson of the Desert Research Institute.

SCAQMD's Draft Final Report, *MATES-II*, November 1999

This extensive effort by the South Coast AQMD might be characterized best as a predecessor to the upcoming LAWA Air Quality and Source Apportionment Study described previously. The Multiple Air Toxics Exposure Study known as MATES-II was a comprehensive expansion of a study conducted over ten years previously by the SCAQMD (MATES-I). MATES-II was initiated as part of the District's Environmental Justice Initiative of 1997. It focused on monitoring air toxic contaminants in two separate processes. First, there was a network of ten permanent sites that monitored every six days over the period lasting from April 1998 to March 1999. The sites were throughout the South Coast Air Basin, with Compton and Huntington Park being the closest areas affected by LAX activities. Second, a microscale study using three mobile platforms sampled in 14 additional communities. Sites in Torrance and Hawthorne were closest to LAX. However, there were no sites immediately adjacent to LAX and thus the LAWA study will provide much needed and more representative data. Over 30 pollutants were measured. The key findings were that the carcinogenic risk averaged about 1,400 per million persons, but ranged to about 1,740 per million in the ten permanent sites. Greatest risks were in the south-central and east-central portion of Los Angeles County. Risks were dominated by mobile sources, with 70% of all risk coming from diesel particulate emissions. The microscale sites generally had lower risks.

SCAQMD's *CEQA Air Quality Handbook*, 1993

This guidebook represents the recommended approach for lead agencies to provide CEQA air analyses for projects in the South Coast Air Basin. It was used extensively in the preparation of the LAX Master Plan DEIR/EIS. However, with the extensive revisions and improvements to the on-road mobile source emission factors as a result of

EMFAC7G, the District recommends avoiding using the screening tables and on-road emission factors contained in the document. The District is currently revising the document and if it is available before the DEIR/EIS comments are due it might be useful to check several of the emission inventory values and mitigation measure calculations. A more accurate model to use in the interim is CARB's URBEMIS7G.

LAWA's Comments on SCAG's Draft Regional Transportation Plan, March 14, 2001

As noted earlier in this report, SCAG is in the process of completing a revised Regional Transportation Plan (RTP) for submittal to the US DOT by the end of April 2001. Affected agencies and cities were invited to provide comments on the draft RTP. The City of Los Angeles provided SCAG with comments from its various departments, and LAWA comments were sent to SCAG on March 12, 2001. The comments were quite critical of SCAG's technical approach to determining the impacts of the RTP. LAWA felt that the modeling and forecasting models lack sufficient technical data to allow sufficient analysis and comment. Assumptions on passenger levels and redistribution between airports were unrealistic, dates for reaching maximum capacity were in error, aircraft fleet mix forecasts seem questionable, and use of the RADAM model by SCAG for cargo demand redistribution was "unique." A major concern was SCAG's priority given to high-speed rail and the assumptions that passengers and cargo would change airport destinations as a result of such a system. LAWA believed that the draft RTP did not accurately portray the extensive ground transportation improvements committed to in the DEIR/EIS. LAWA questioned the aviation scenario that resulted from the high-speed rail system as well as the RTP use of EMFAC7G rather than the new EMFAC2000. Several specific comments focused on LAX capacity assumptions, air quality emission growth, noise, and Master Plan identified transportation projects that were apparently omitted from the RTP

CARB's Comments on SCAG's Draft Regional Transportation Plan, March 15, 2001

CARB submitted comments on March 15, 2001 to SCAG on its Draft RTP. Their comments were relevant to the AQMP and conformity needs within the RTP but less relevant to the airport air quality concerns. The key concern related to SCAG's reduction of commitments to mobile source emission reductions (TCMs), lack of details on the schedule to implement the high-speed rail (Maglev) project, lessening of transit improvement programs, outdated modeling, and other mobile source programs.

SCAQMD's Rule 1194 – Commercial Ground Access

In August of 2000, the SCAQMD adopted Rule 1194 that directly affects commercial airports in the South Coast Air Basin. It requires that all passenger car, light duty truck, medium duty transit vehicles, and heavy duty transit vehicle operators acquire cleaner burning or alternative-fueled vehicles when procuring or leasing such vehicles. The requirements are phased in during 2001. This regulation will stimulate and support

programs such as identified as mitigating measures in the DEIR/EIS on cleaner fleets. However, analysis of projected emission reductions by LAWA must take care not to “double-count” emission reductions claimed for Rule 1194 in the 2001 AQMP.

IV. AIR POLLUTION ISSUES FOR CONSIDERATION OF FURTHER ANALYSIS

In Chapter III of this report, seven distinct air pollution topics as well as several “other, related” topics were described in some detail based on the findings in the cursory review of the LAX Master Plan DEIR/EIS. This chapter discusses the potential to consider each of these air pollution issues for more detail evaluation in Phase II. The actual selection of any of these items for such detailed evaluation will be made by Inglewood city officials and staff. This consultant recommends four of these issues in Chapter V of this report.

Air Pollution Impacts from the Various Alternatives Contained in the DEIR/EIS

The DEIR/EIS devoted over seventy pages to evaluating the air pollution consequences of the various alternatives in what appears to be a comprehensive manner. While more detailed analysis might show slightly different air pollution emissions or concentrations using more current models, it would unlikely change the findings that the project will cause increased levels of air pollution for all alternatives and pollutants. Therefore, I do not believe Inglewood’s limited resources to evaluate the DEIR/EIS would be best spent conducting more technical analysis of the air quality calculations by LAWA’s consultants.

Evaluation of the Health Risks and Air Toxic Impacts

While the DEIR/EIS does assess the cancer risks and non-cancer health impacts, it is clear that a major gap resulted from the lack of a comprehensive, air toxic baseline study in advance of the LAWA analysis. The City of Inglewood has attempted to play a role in encouraging, and now participating in the LAWA *Air Quality and Source Apportionment Study of the Area Surrounding LAX* to remedy several gaps or deficiencies in the MATES-II study by the SCAQMD. This extensive study poses an immediate opportunity for Inglewood to secure accurate information on the status of air quality throughout the City since it is fully within the study area. To assure that it plays an active role over the next two years, it would be prudent to have a consultant independently examine the Technical Workplan of the LAWA study and identify specific inputs for the City.

Identification and Analysis of Potential Mitigation Measures

As noted in the Chapter III discussion, identification of potential mitigation measures is probably the air pollution issue that Inglewood can have its greatest impact on the Final EIR/EIS. The DEIR/EIS specifically asks for assistance by agencies at all levels on the potential for successfully implementing mitigation measures identified in the document. It also encourages new, innovative mitigation measures that it can consider in the final

document. An important issue not addressed in the DEIR/EIS is whether the emission reductions secured by the mitigation measures would be “donated” to the AQMP or retained as credits by the implementing agency such as Inglewood. I would encourage the City to consider more detailed analysis of the 150 identified air quality mitigation measures and their affect upon Inglewood. They should be examined for implementation feasibility, costs, political acceptability, timing, enforceability, and, of course emission and congestion reduction characteristics.

Conformance of the Master Plan to 2001 Regional Transportation Plan and 2001 AQMP revisions

The potential expansion of LAX under the Master Plan must conform to areawide transportation and air quality plans. The cursory review of the DEIR/EIS identified several potential deficiencies in this process. Failure to conform could lead to potential funding sanctions and other Federal restrictions that would affect Inglewood and surrounding communities. Perhaps of great importance, though, is that such deficiencies be identified and corrected in future updates of these plans. While it is probably too late to seriously impact SCAG’s 2001 RTP, this 20-year visionary document will be revised again in 2004 and deficiencies identified can be corrected at that time. The 2001 update of the South Coast AQMP, however, will be actively ongoing through the remainder of this year. Further evaluation of the air pollution impacts of the DEIR/EIS will likely provide valuable information for Inglewood to consider as it participates in the air quality planning process through the South Bay Cities COG, SCAG, and the SCAQMD. Therefore, I encourage consideration of this issue for Phase II detailed evaluation.

Air Pollution Emission Inventories

Emission inventories are often considered the “weak link” in the analysis of air pollution problems in an area. This is particularly true for transportation-related control measures and others that require public involvement or are of a voluntary nature. Several deficiencies have been identified in the DEIR/EIS as noted in Chapter III. However, examination of the document’s emission inventory process would be quite expensive, time-consuming, and likely not lead to any significant changes in the findings. Therefore, I would not recommend use of Inglewood’s scare resources to investigate the Master Plan’s emission inventory work. The one exception might be as a part of evaluating the effectiveness of individual mitigation measures.

Air Pollution Modeling

Similar to the previous discussion on emission inventories, detailed duplication of the various models used in the DEIR/EIS would not likely provide any substantial new material to use in the City’s comments on the document. Furthermore, it is likely that other agencies with more substantial resources will examine the modeling approach used in the DEIR/EIS. Therefore, it is not recommended to pursue more detailed evaluation of the modeling.

Impact of Roadway Improvements Identified in the DEIR/EIS upon Inglewood

This issue is not as directly related to air pollution as the ones previous identified. However, it may have equally important impacts on traffic circulation within Inglewood, both positive and negative. The proposed improvements to the Century Boulevard corridor through Inglewood, as part of the recent MOU, make better understanding of the impacts of the LAX Master Plan roadway improvements all the more important. I would propose that if this issue is selected for further analysis, it be performed in close coordination with Inglewood's City Transportation staff.

Other Important Issues affecting Air Quality

Chapter III discussed several other air pollution and planning topic areas that were identified during the cursory evaluation of the DEIR/EIS. While it is not recommended that any of these issues be examined in greater detail by the consultant, they may well be areas that should be listed as concerns in the City's formal comments on the DEIR/EIS. Those issues are listed here for consideration:

- Choice of LAX versus other Southern California airports for increased capacity
- Validity of population and economic projections for the South Coast Basin
- Impacts of "growth creep" of LAX activity since last environmental review
- Funding of road improvements associated with LAX Master Plan
- Increase in night operations under Alternative C

V. Recommendation of Four Major Air Issues for Potential Detailed Analysis in Phase II

The following four air issues are suggested for further evaluation in Phase II:

- Identification and Analysis of Potential Mitigation Measures
- Conformance of Master Plan to 2001 Regional Transportation Plan and the 2001 South Coast Air Quality Management Plan
- Evaluation of the Health Risks and Air Toxic Impacts
- Impact of Road Improvements Identified in the Draft EIR/EIS upon Inglewood and Immediately Adjacent Areas

Each of these issues are summarized in Chapter IV and discussed in greater detail in Chapter III.

Appendix A

Complete listing of air quality issues and location within the Draft EIR/EIS

Appendix A is organized by the air pollution topics noted in Chapter IV. Within each issue, the page-reference and short description of “data” found at that site is noted.

Air Pollution Impacts from the Various Alternatives Contained in the DEIR/EIS

- 4-460: Only NO_x and SO₂ “significant” for on-airport emissions; Off-airport increases are lowest for “C” (but, still less with NA/NP); Construction emissions – peak in 2004, and exceed CEQA thresholds for all NAAQS
- 4-461: Peak construction for all build scenarios have emissions 2-10 times greater than NA/NP alternative
- 4-503: Summary of overall exceedances and No action, no project alternatives
- 4-510: Summary of Alternative C
- 4-864: Air quality hot spot from construction on Aviation Blvd.

Evaluation of the Health Risks and Air Toxic Impacts

- 4-999: Cancer risks <significant threshold in all scenarios for 2015. Other health hazards significant without mitigation
- 4-1002: The 3 stationary sources categories of Toxic Air Pollutants
- 4-1005: Figure 4.24.1-1, study area for HHRA
- 4-1007: Process for estimating future air quality impacts
- 4-1034: Conclusions on Alt. C impacts

Identification and Analysis of Potential Mitigation Measures

- 4-224: Land use mitigation measures for Alternative C
- 4-273: Off-airport surface transportation – key conclusions, C has lowest traffic impacts
- 4-274: ITS and ATCS traffic mitigation measures
- 4-459: Final EIS/EIR will identify and be developed with the Federal agencies and the SCAQMD
- 4-460: Will limit increases through building LAX expressway, Ring Road, and extending the Green Line. All alternatives were better than No Action alternative.
- 4-461: 150 measures identified, with 30 potentially significant and modeled. Measures summarized here.
- 4-481: Environmental consequences of phased in, low-NO_x construction equipment
- 4-513: List of mitigation measures
- 4-514: Quantifiable mitigation measures
- 4-521: All measures equal 5% VMTR in 2005 and 10-11% in 2015.
- 4-529: Alternative C – mitigation of emission inventory impacts
- 4-892: Air quality mitigation measures for construction impacts
- 4-894: Level of significance for air quality after implementation of construction mitigation measures

- 5-4: Construction truck mitigation routes
- 5-6: Air Quality specific construction equipment mitigation measure
- 5-16: Off-airport surface mitigation measures for air quality and congestion
- 5-17: MM-AQ-1 – LAWA commitment to revising the air quality mitigation program with 15 specific measures
- App. K-85: Construction mitigation for LAX Expressway & State 1 construction
- Tech.Report 4 – Attachment Z: Lists all 150 potential air mitigation measures

Conformance of the Master Plan to 2001 Regional Transportation Plan and 2001 AQMP revisions

- 1-20: SCAG RTP forecasts
- 1-27, 28: Discussion of Maglev options
- 2-4: SCAG RTP forecasts
- 4-7: Environmental baseline and adjustments
- 4-460: Commitment to do conformity analysis
- 4-463: Only the preferred alternative need be analyzed under EPA rules
- 4-464: On-airport vs. off-airport conformity budgets
- 4-473: Appears to have used wrong milestone/attainment years (97 AQMP)
- 4-476: Note the 2000 E.I. Use of 1997 EI in AQMP.
- 4-477: CARB & SCAQMD – Recent regulations to reduce airport emissions – not used!
- 4-510: Are they using latest general conformity guidance?
- 4-511: Working with SCAQMD
- G-50: Working with SC on 2001 AQMD and SCAG on 2001 RTP

Air Pollution Emission Inventories

- 4-460: Check why VOC emissions reduced (new vehicle mix)
- 4-463: Did NOT quantify emissions from adjacent, non-LAX sources (in the baseline)
- 4-465: No fleet turnover assumed
- 4-466: Did not consider CARB’s new (9-28-00) HD diesel particulate regulations
- 4-467: Used SCAQMD factors for construction emissions
- 4-480: Only on-airport emissions
- 4-481: How was No Action project emissions calculated?
- 4-857: Overview of construction impacts on air quality plan
- G-1: Emission estimation procedures
- G-11: MOU on GSE reductions
- G-12: Emission forecasts are “conservative”
- TR4-Attachment C: Baseline emissions

Air Pollution Modeling

- 4-469: Integrated results of on, off, and construction (different models) into one new model.
- Fig. 4.6-4: Why same value, location for all three alternatives in 2005?
- G-4: Models used for mobile sources/aircraft engines

G-16: Used version 1.99 of EMFAC 2000
G-24: Dispersion modeling discussion
G-29: CAL3QHCR discussion
G-45: Future background concentrations (no use of 8-hour data)
TR4-Attachment A: Air Quality Modeling Protocol.

Impact of Roadway Improvements Identified in the DEIR/EIS upon Inglewood

3-55: Discusses traffic/parking/circulation facilities tied to roadway improvements under Alternative C
4-235: Overview of current congestion causes & management needs
4-295: Description of full “ring road” for all three build alternatives
5-2: Landside traffic congestion improvements under Environmental Action Plan
K-30: Air quality discussion related to Roadway Improvements
K-76: Air quality and conformity requirements – State 1 and LAX Expressway were in the SCAG 1998 RTP. Will include in RTIP when individual projects are ready to build.
K-78: Table 5.5-1 shows identical before & after emissions for each of the two State Route 1 intersection design options.
K-85: Five construction air mitigation measures identified

Choice of LAX versus other Southern California airports for increased capacity

1-25: Table 1-13 provides three scenarios for 2015 passenger activity for all Southern California airports. Scenarios do match three DEIR/EIS build alternatives.
1-30: SCAG 1998 sensitivity analysis on impact of reducing LAX international travel status
3-2: Discussion on alternative airport locations
4-10: Acknowledgement that LAX Master Plan meets EPA’s General Conformity criteria requiring a finding.

Validity of population and economic projections for the South Coast Basin

1-6: Population growth in Los Angeles Region, including REMI analysis
1-9: Nature of the demand for air transportation and passenger characteristics
1-13 to 1-21: Allocation of air service among the regional airports
4-445: Regional economic benefits from LAX under different alternatives
4-453: Discussion of growth-inducing impacts of LAX and finding that its impacts a small proportion of region’s overall forecasted growth
4-457: Estimate of job creation by distance from LAX of Alternative C

Increase in night operations under Alternative C

4-510: Alternative C has higher nighttime aircraft operations than other alternatives

Energy/Air Quality Impacts of LAX Master Plan

- 4-777: Air quality mitigation measures cause increased energy usage
- 4-780: Ground support system impacts on energy-usage
- 4-782: Basin air quality compliance requirements will result in cleaner and more efficient power generating equipment
- 4-794: Energy consumption table for all three alternatives (and NA/NP) for 2005 and 2015
- 4-806: Conclusion that none of the three build alternatives will significantly impact energy consumption and thus no mitigation measures needed for energy.

Appendix B

Background of Report's Author, David Calkins

Mr. David Calkins, an independent environmental consultant, retired in 1995 from his position as Air Programs Branch Chief for U.S. EPA Region 9 after serving 31 years with the EPA and its predecessor agencies. Since that time, he has worked for a variety of firms and agencies. He has also worked for the Bay Area Air Quality Management District, the World Health Organization, United Nations Development Programme, U.S. A.I.D., various environmental organizations, and has directed policy analysis and research studies for the National Commission on Air Quality (a congressional commission). Mr. Calkins has special expertise in evaluating the relationship between transportation systems changes and the effects such changes have on air quality. In addition, Mr. Calkins was personally involved in the last three Clean Air Acts (1970, 1977, and 1990), both in providing direct assistance in writing and reviewing mobile source and land use measures for congressional staffs. At EPA, Mr. Calkins worked closely with the US DOT officials to implement the conformity program under the federal CAA and ISTEA. He represented EPA on the review of SCAG's annual transportation plan and budget proposals in his role on DOT's Intermodal Planning Group (IPG). In 1989, he worked closely with SCAG in developing conformity guidance that later was partially incorporated into the 1990 CAA. Finally, Mr. Calkins was the Director of Region 9's Office of External Relations for three years at EPA and responsible for public participation and outreach programs at the agency.

During his many years at the San Francisco Regional Office of the US EPA, Mr. Calkins oversaw the strategy development and approval of the numerous State Implementation Plans required under the various Clean Air Acts. These included the Ozone and PM-10 SIPs for the South Coast Air Basin, working closely with planners from the Air District and SCAG. Mr. Calkins is extremely familiar with the 1994, 1997, and 1999 amendments to the South Coast AQMP. He also directed the EPA effort to respond to litigation in 1993 that mandated a Federal Implementation Plan for the Southern California region.

In 1999, Mr. Calkins served as Expert Witness on litigation related to failure the SCAQMD to implement various portions of its EPA-approved State Implementation Plan. The work consisted of evaluating 32 stationary and indirect control measures,

including the airport ground access measure, for the minimum time and resources to develop, adopt, and implement under a potential court order.

He is currently consulting to ENVIRON International on developing a PM-10 Maintenance SIP for the Boise, Idaho area and the Sacramento Area Council of Governments to implement a \$70 million program to reduce emissions from heavy duty diesel trucks and public transit vehicles. He is working Earth Matters on assisting eight transportation planning agencies in the San Joaquin Valley coordinate air quality plans and conformity determinations. Among his previous projects with ENVIRON was work on the St. Louis Airport Expansion DEIS review and assistance to the Rogue Valley Council of Governments on public participation and transportation plans.

Mr. Calkins, a native of Southern California, has a B.S. in Civil Engineering from the University of California at Berkeley and a M.S. in City and Regional Planning from the University of Southern California. He is the Chair of the Air and Waste Management Association's Golden West Section and an Associate Member of the Transportation Research Board's Transportation & Air Quality Committee.

Exhibit F

**FURTHER EVALUATION OF SELECTED AIR POLLUTION RELATED
ISSUES IN THE LAX MASTER PLAN DRAFT EIR/EIS**

Phase II Report

Prepared for

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AL00017

**EVALUATION AND IDENTIFICATION OF KEY AIR POLLUTION AND
RELATED ISSUES IN THE LAX MASTER PLAN DRAFT EIR/EIS**
{revise, revise}

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I. INTRODUCTION

Phase I Study Findings

In March 2001, this consultant conducted an evaluation and identification of key air pollution and related issues from a review of the LAX Master Plan Draft EIR/EIS. Based on these findings, the City of Inglewood and their legal counsel, Radcliff Frandsen & Dongell LLP, selected several of the Phase I study findings for further detailed evaluation by the consultant. These further findings on air pollution-related issues, as well as concurrent consultant studies on the noise impacts and policy analysis choices of the DEIR/EIS, should provide support material for the City's official comments on the DEIR/EIS, due to LAWA no later than July 25, 2001. They will also provide useful information for potential testimony at the June 9, 2001 public hearing on the project. The findings contained in Phase II should not be construed as conflicting in any way with the recent MOU between Inglewood and Los Angeles; indeed, they only serve as a basis for constructive comments for LAWA and the U.S. Department of Transportation to consider in the final Master Plan document.

The Phase I study suggested four air issues for further evaluation in Phase II:

- Identification and Analysis of Potential Mitigation Measures
- Conformance of Master Plan to 2001 Regional Transportation Plan and the 2001 South Coast Air Quality Management Plan
- Evaluation of the Health Risks and Air Toxic Impacts
- Impact of Road Improvements Identified in the Draft EIR/EIS upon Inglewood and Immediately Adjacent Areas

The City elected to accept these recommendations for further study, as well as added a review of the air aspects of the Environmental Justice portions of the DEIR/EIS.

Objectives for Phase II

As noted above, the City generally agreed with these specific air issues as well as employed additional consultants to review the noise impacts and need to improve available policy choices in the Final EIR/EIS. Priorities were provided to the consultant to further focus his investigation of key air issues in the DEIR/EIS. These priorities are listed below:

1. Conformance with current air quality and transportation plan development
2. Consideration of impacts upon Inglewood and adjacent communities as contrasted to those areas immediately around the LAX boundaries
3. Evaluation of health risks and air toxics impacts
4. Identification and analysis of potential air mitigation measures
5. Environmental Justice issues resulting from the air impacts of the LAX expansion

The consultant conducted his Phase II analysis by more detailed review of the DEIR/EIS in relation to the above priorities; extensive review of the SCAG 2001 RTP, Program EIR, and comments to the Draft 2001 RTP; interviews with EPA-Region 9 staff and South Coast AQMD planning managers; and securing various reports on airport mitigation measures, environmental justice studies, and technical work plans for LAWA's Source Apportionment Study. Documentation for key findings is either available in this report or from the author's files.

Related Activities and Studies (Noise, Health and Risk Analysis)

As mentioned earlier, two separate consultant contracts are concurrently underway to assist the City of Inglewood in its recommended actions on the DEIR/EIS for the LAX Master Plan. Mr. Jack Freytag of Charles M. Salter Associates is evaluating the adequacy of the DEIR/EIS noise evaluation upon Inglewood and adjacent areas. Dr. Dale Hattis of Clark University's Center for Environment, Technology and Development is looking at the LAX Master Plan for needed improvements in assessing available policy choices. Special emphasis will be placed upon the risk analysis portion of the DEIR/EIS. In addition, the professional staffs of the City's Public Works, Airport Programs Management, Aircraft Noise Mitigation, and Planning departments are evaluating the DEIR/EIS for a variety of potential issues affecting Inglewood.

II. CONFORMANCE TO THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS' (SCAG) 2001 REGIONAL TRANSPORTATION PLAN

Introduction

Federal law requires that metropolitan areas update, at least every three years, a Regional Transportation Plan (RTP) that establishes a roadmap for future transportation funding within the region. It should provide a balanced, multi-modal transportation system that reflects projected population and economic growth. Among the required components of the RTP is assurance that the funding and construction of transportation projects over the following 25 years will not interfere with current air pollution control programs to meet the National Ambient Air Quality Standards. Additionally, the relationship of the transportation program to environmental justice issues must be addressed.

In April 2001, SCAG adopted a new, updated RTP to replace the existing 1998 RTP. The major areas of change from the 1998 RTP were in growth forecasts (lower), financial assumptions (alternative funding strategy), regional aviation (aviation scenario that constrained LAX to lower passenger capacity than in the DEIREIS), transit services (increased per capita ridership and focus on new transit corridors), and air quality conformity (need for new conformity finding by June 9, 2001).

The consultant focused his efforts on examining the assumptions contained in the LAX Master Plan DEIR/EIS and the 2001 RTP adopted on April 12, 2001 by the SCAG Regional Council. Although this review was made somewhat difficult as the Final 2001 RTP has not been formally released pending the various changes to the earlier Draft RTP, several important differences between this document and DEIR/EIS were identified and discussed later in this section. The key implication of the lower passenger projection in the final RTP will be impacts on air quality around the LAX as well as throughout the Basin, assuming that the South Coast AQMD Board accepts SCAG's new growth mix into the revised AQMP that they are developing this year. While LAWA believes the SCAG decision will not affect any federal funding for the next three years (when a revised RTP will be needed), the Final EIS must make a conformity finding based on the most current AQMP.

The SCAG 2001 RTP, as noted earlier, must be determined by the US Department of Transportation (DOT) to fully conform to the "applicable SIPs" for the SCAG region by June 9, 2001. Applicable refers to a plan that has been approved by the US Environmental Protection Agency (EPA) with a mobile source emission budget found adequate for transportation conformity determinations. SCAG has five ozone non-attainment areas in its region (South Coast, Ventura County, Antelope Valley, Mojave Desert, and the Coachella Valley) as well as several smaller PM10 non-attainment areas. As the updated, 2001 AQMP will not be adopted before June 9, the applicable SIP for the South Coast air basin will be the 1997 Ozone SIP approved by EPA in early 2000. SCAG did include a conformity determination (Appendix H, pp. 14-97) in its Draft 2001 RTP. EPA conformity regulations require three tests to pass conformity: (1) Regional emission analysis (consistency with motor vehicle emission budgets in the 1997 Ozone SIP); (2) Timely implementation of Transportation Control Measures (TCMs), which is a finding that TCM project categories in the 1997 Ozone SIP were given funding priority and on schedule for implementation; (3) Financially constraint test (all projects in the Regional Transportation Improvement Plan – RTIP – are identified for funding in all fiscal years. Finally, the conformity rule requires that construction activity-caused PM10 as a result of the transportation projects in the RTP be identified. SCAG's analysis of the 2001 RTP for meeting these tests concludes a positive finding. It will now require the DOT to confirm these findings prior to June 9.

The general conformity finding that will be made by LAWA for the Master Plan is not scheduled to occur until about the time of the Final EIR/EIS. This is of concern as it will not provide an opportunity for public review during the DEIR/EIS process (unlike SCAG's Program EIR for the Draft 2001 RTP) and will likely be controversial in terms of which AQMP version will be applicable at that time.

Finally, it should be noted that SCAG is designated under federal law as the Regional Clearinghouse to review all plans, plan changes, projects, and programs for consistency with adopted regional plans. Airport plans are included under this definition. SCAG also publishes an annual "State of the Region" report that tracks indicators on major issues in the region. This includes total passenger trips for the major transit operators and airport activity (passenger trips, cargo, and aircraft operations) for all the major airports.

General Description of Draft RTP

SCAG's 2001 RTP contains ten chapters and fourteen appendices, examining all aspects of transportation and environmental planning in the five county SCAG region. The two major portions examined for Phase II were the basis for transportation conformity findings (described previously) and the Aviation section (primarily covered in Technical Appendix B). That appendix contained considerable discussion regarding general aviation and a special aviation industry impact analysis for Southern California.

The existing 1998 RTP used a medium scenario for future growth which assumed that all the airports in the region were unconstrained and could expand to meet future demand. Future demand was estimated at 158 million annual passengers (MAP) in 2020 and 172 MAP in 2025. In developing the 2001 Draft RTP, SCAG used this scenario as a "placeholder" while numerous alternative scenarios were modeled and debated. An aviation task force was established and nine initial regional aviation scenarios were recommended for modeling using the Regional Airport Demand Allocation Model (RADAM) and results were compared with the 1998 Medium Scenario RTP Baseline. Scenarios focussed on different growth alternatives such as expanding Inland Empire airports, use of High Speed Rail connecting airports, limiting all capacity growth at LAX and extending "no fly" times over Inglewood from 11 p.m. to 7 a.m., adding large capacity airport at El Toro, and the LAWA preferred Alternative C Master Plan improvement. Four of the nine scenarios include various market enhancement strategies to focus growth to certain locations. After review of the results of the RADAM model, the task force narrowed the scenarios for consideration by the SCAG Regional Council committees to three. Scenario 2 constrained LAX at 70 MAP in 2020 and provided high speed rail (HSR) incentives to increase use of Palmdale and Ontario airports. Scenario 8 was similar to Scenario 2 except that LAX was constrained at its estimated physical capacity of 78 MAP. Finally, Scenario 9 allowed expansion of LAX to 86.4 MAP in 2020, similar to Alternative C in the Master Plan of 86.9 MAP in 2015. A table on page B-62 of the Draft RTP contains RADAM-modeled MAP data for each of the 9 scenarios and the 1998 RTP baseline for each major airport in the region as well as information on incentives and HSR assumptions.

Finally, the 1998 RTP adopted twenty major transportation policies and objectives that continue to guide regional transportation decisions in the region. Three of these policies directly affect airport expansion and are relevant to Phase II:

- Policy #18: Each county should provide environmentally acceptable airport capacity **within its own market area** to meet local and domestic air passenger demand
- Policy #19: Airports shall be expanded and added to the system to reinforce regional growth patterns and to make regional communities more **livable**
- Policy #20: International facilities should be developed at **other** commercial airports in the SCAG Region in addition to LAX

These policies and goals are important and in no small way led to the decision of the Regional Council in its selection of its preferred scenario as described in the next section.

Current Status of 2001 RTP

The Draft 2001 RTP was made available for public review in December 2000. As required by CEQA, a companion Program Environmental Impact Report (PEIR) was published and comments were received for a 45-day period ending March 15, 2001. Eighty-four comment letters, including 21 from government agencies, were received and responded to by SCAG staff and contractors in April 2001. This consultant reviewed and identified significant concerns raised by the letters to help identify issues for consideration by the City of Inglewood in addressing the issues prioritized for Phase II. Issues relating to conformance with the LAX Master Plan DEIR/EIS will be discussed later in this chapter.

On March 1, the Transportation and Communications Committee of SCAG met and voted 23-9 to approve Scenario 8. This scenario constrains LAX to 78 MAP in 2020, and regional demand of 156 MAP in 2020 and 167 MAP in 2025. The full SCAG Regional Committee met in special session on April 12 and adopted the entire 2001 RTP, including Scenario 8, by a vote of 38-2. The final 2001 RTP, along with its conformity finding, will now be forwarded to the Federal Highway Administration (FHWA) in San Francisco for approval prior to the June 9 conformity deadline.

Key findings and actions related to LAX Master Plan

The following is a discussion of several key findings and issues identified by the consultant and other reviewers of the Draft 2001 RTP and PEIR, and the Draft LAX Master Plan DEIR/EIS that raise concerns over the conformance of the latter document to the adopted final 2001 RTP. As the 2001 RTP was in the development stage during the creation of LAWA's DEIR/EIS, much of their efforts to conform were based on the 1998 RTP's Aviation Scenario. That scenario projected a 92.4 MAP in 2015 for LAX versus the 86.9 MAP in the recommended alternative C of the DEIR/EIS and the adopted 78.01 constrained MAP in the final 2001 RTP. Since the new RTP is now in effect, LAWA will now have to examine this substantial inconsistency and re-look at the many conclusions reached in the DEIR/EIS. This will likely prove to be the most important plan conformance issue identified in the Phase II report.

Numerous other issues have been identified and are briefly noted below. The cites are listed in parenthesis following each item. They include the page reference (where readily available) and the source "code." Codes are "R:" for items in the Draft RTP; "P:" for items in the Draft Program EIR; "C:" for comments and response to the Draft PEIR for the RTP; and "E:" for references in the Master Plan DEIR/EIS. These codes are used throughout the Phase II report references.

1

Key findings:

- The 2001 RTP PEIR is a program EIR, and project specific analysis not required under CEQA. (C: 4-46). The PEIR doesn't perform detailed facility calculations such as individual airport analysis and surrounding area health impacts (P: C-49)
- The RTP uses EMFAC7G as it was based on the 1997 AQMP (C: 4-47). The 2001 AQMP Update by the SCAQMD will use EMFAC 2000 or 2001 and thus the 2004 RTP will also need to use those emission factors for conformity. However, the LAWA DEIR/EIS used EMFAC2000 for on-road vehicle emission calculations (E: 4-466). This inconsistency makes it quite difficult to compare the air quality impacts of the DEIR/EIS upon the 2001 (and 1998) RTP.
- TCMs and source controls were the basis for decreases in transportation-related emissions despite growth of population and VMT. (C: 4-47)
- Scenario 8 (adopted by SCAG) contains High Speed Rail (HSR) as incentive to use alternate airports to LAX, and overall emissions in the SCAG region in 2025 are lower for each criteria pollutant than those for the 2001 RTP Update using the RTP Medium scenario (LAWA) without HSR (P: AQ-41). LAWA questioned use of HSR in any scenarios without more specification (C: 3-219)
- RTP used different market incentives for differing levels of use by non-LAX airports in their RADAM demand modeling. This is different than those used by LAWA (C: 4-76)
- RTP assumes LAX reaches capacity, in all scenarios, by 2015. The DEIR/EIS identifies considerable changes in passenger characteristics between 2015-2025 (C: 4-77)
- RTP doesn't account for the extensive increase in larger capacity aircraft (stretch jets) as assumed in DEIR/EIS. Thus, SCAG's aircraft mix gives more conservative impact forecasts. (C: 4-77)
- The cargo projections in DEIR/EIS are considerably higher than SCAG projects for that airport (E: 1-8, 2-4). SCAG assumes use of HSR and truck lanes to move cargo about the region and thus allow other airports such as March or Ontario to assume part of the cargo load that is part of the LAWA DEIR/EIS. (C: 4-79 and P: B-46)
- DEIR/EIS doesn't consider HSR (Maglev) impacts upon LAX demands, while RTP bases its inclusion in the adopted scenario on the technical feasibility and support by public opinion polls. (C: 4-79, E: 1-28)
- RTP doesn't consider most of the LAWA ground access improvements since no funding has been identified by LAWA (C: 4-79, 82)
- Comments raised on the PEIR question why SCAG is taking credit for "non-viable" projects in its air quality calculations C: 3-303). With the HSR (Maglev) project out of competition for the Federal seed money grant, and MTA not including truck lanes and the I-710 gap closure in its RTP input, there is valid questions on their inclusion into the air emission impacts of the various scenarios (may also provide support to LAWA concerns over HSR as well). SCAG defends use as it not being in the scope of the PEIR to determine which of the projects may not be completed – it just analyzes the impacts to air quality of the proposed RTP (C: 4-126).
- The air traffic distribution in adopted Scenario 8 is much different than LAX Master Plan Scenario 9. This will require airspace redesign, segregation of flows, or creation

of an additional LAX departure scheme. (Presentation by MITRE to SCAG, March 14, 2001)

- The RADAM model only considers maximum 280 seat aircraft, while the DEIR/EIS bases much of its reduced increase in aircraft operations by introduction of the new generation of large, 600-passenger wide-bodied aircraft (R: B-57, E: 2-11)
- SCAG's Aviation chapter of 2001 RTP discusses various parking incentives through pricing, and discounted airfares for outlying airport flights. Various parking assumptions use cost as disincentive and at current value (R: B-57). It also assumes High Speed Rail runs every 30 minutes with unconstrained load factors (R: B-58)
- The DEIR/EIS used three different scenarios as the basis of comparison of the off-airport surface transportation alternatives (E: 4-276, 4-7). These included the "environmental baseline as required by CEQA" which looks at 1996 traffic decisions, an "adjusted" environmental baseline assuming continued development of "non-airport" projects but current airport use, and a No Action/No Project alternative showing what would happen if the Master Plan was not adopted (appears to be the eventual 2001 RTP scenario constraining LAX to 78 MAP).

Identification on Non-conformance to RTP by DEIR/EIS

The following are the most significant areas on non-conformance with SCAG's Regional Transportation Plan:

- DEIR/EIS based on scenario in 1998 RTP projecting approximately 92 MAP in 2015 for LAX, while the adopted 2001 RTP constrains LAX to 78 MAP
- DEIR/EIS on-road vehicle emission factors based on EMFAC2000 while 2001 RTP based on EMFAC7G
- DEIR/EIS modeled years 2005 and 2015, while 2001 RTP uses 2025 as horizon year as required by TEA21 rules.
- Considerable differences in choice of market incentives between DEIR/EIS and 2001 RTP. This impacts choice and success of mitigation measures.
- Aircraft and passenger characteristics differ between RTP and DEIR/EIS assumptions, since latter assumes growth and changes through 2025 and RTP caps expansion at 2015. Projected aircraft types differ and thus affect emission estimates.
- Cargo projections higher at LAX in DEIR/EIS than in adopted 2001 RTP.
- Projections of HSR not used in DEIR/EIS while a key component of the adopted RTP
- RTP does NOT include funding for the Ring Road, I-105 westward extension, and I-405 (Connector) projects and thus not credited in emission reduction and other analysis. The DEIR/EIS includes them as an integral part of its calculations.
- Use of the *adjusted* environmental baseline for off-airport traffic impacts (i.e., adjusted for non-airport growth in 2005 and 2015) does not allow for comparing the DEIR/EIS project alternatives with current conditions, and seems in conflict with CEQA requirements. It actually compares project alternatives to a *future* condition, and even concludes that the adjusted off-airport traffic baseline has greater impacts than the project alternatives (E: 4-281).

III. CONFORMANCE TO SOUTH COAST AQMD'S 2001 AIR QUALITY MAINTENANCE PLAN UPDATE

Introduction

The 1990 Clean Air Act (CAA) mandates that all areas the nation that have monitored air pollution levels in excess of the National Ambient Air Quality Standards (NAAQS) prepare a strategy, known as the State Implementation Plan (SIP) and termed Air Quality Maintenance Plan (AQMP) in Southern California, that provides a legal roadmap toward meeting the health standards by a deadline as set in the 1990 CAA. In California, a similar strategy under State law must be developed and revised every three years. The LAX is located in the South Coast Air Basin and, as a major generator of emissions, must be an active partner in all planning activities under the federal and state air quality laws. For Ozone, the currently approved State Implementation Plan (SIP) for the South Coast is the 1999 Amendments to the 1997 AQMP. The DEIR/EIS uses emissions projected at the time of the 1997 AQMP as part of the baseline for its alternative project analysis.

An important concept of the CAA is that all major projects in an area that is not attaining the NAAQS must assure EPA and DOT that their construction and operation will conform to the existing, approved strategies to clean up the air. This process is known as General Conformity and, for transportation aspects of the facility development, Transportation Conformity. The LAX Master Plan will require federal funding to fully construct and thus must be analyzed in terms of the "applicable" federal SIP, i.e., the 1999 AQMP. Furthermore, LAWA should be a major player in the on-going development of revisions to the AQMP as future conformity findings on its multi-year construction process will need to assure continuing conformity with the new AQMP emission budgets and strategies.

General Description of Currently Approved (1999) SIP

EPA took final action in early 2000 to approve revisions submitted in 1999 to the 1997 Ozone AQMP. The revised ozone plan consisted of the ozone portion of the 1997 South Coast Air Quality Management Plan (AQMP), as modified by an amendment adopted by the South Coast Air Quality Management District (SCAQMD) on December 10, 1999. The 1999 amendment adds in new control measures and successfully addresses EPA's concerns with the 1997 plan. On January 12, 1999, EPA proposed to disapprove key elements of the 1997 plan because the it represented backsliding from the federally approved 1994 ozone State Implementation Plan (SIP). Final approval of the revised ozone plan, as modified by the 1999 amendment, means that the 1999 plan becomes the federally enforceable ozone plan for the South Coast. The 1999 amendments did not substantially affect the treatment of LAX emissions and air quality programs from those contained in the 1997 AQMP. An Indirect Source measure affecting Ground Access vehicles in the 1994 AQMP, was not included in the 1997 AQMP and its reductions replaced in the 1999 amended plan by other measures. This measure would have reduced airport passenger vehicle trips and congestion in the vicinity of LAX and other major

airports. Several of the suggested strategies are contained in some fashion in the DEIR/EIS and others have been implemented under other programs.

In August of 2000, the SCAQMD adopted Rule 1194 that directly affects commercial airports in the South Coast Air Basin. This was a rule included in the 1999 AQMP. It requires that all passenger car, light duty truck, medium duty transit vehicles, and heavy duty transit vehicle operators acquire cleaner burning or alternative-fueled vehicles when procuring or leasing such vehicles. The requirements are phased in during 2001. This regulation will stimulate and support programs such as identified as mitigating measures in the DEIR/EIS on cleaner fleets.

Measure M-15 in the 1997 AQMP is a federal measure to set nationwide aircraft emission standards.

The 1997 AQMP projected aircraft emissions from all airports in the South Coast Air Basin to be approximately 14.4 tons per day of VOCs and 93.1 tons per day of NO_x in 2020 (Appendix III, Table A-33 of 1997 AQMP). The DEIR/EIS purportedly uses data from the SCAQMD in their baseline and projected impacts, though validation of these numbers was not a part of the Phase II study.

The 2001 AQMP will include updated growth projections, improved emissions inventories and air quality modeling, and revised control measures as appropriate.

Current Status of 2001 AQMP

The current processes to develop a new 2001 AQMP will be considering various strategies in early summer and provide a final, revised AQMP in October. Following adoption by the Board, it will be sent to the CARB and EPA for approval. While the DEIR/EIS could not during its drafting stage consider the 2001 AQMP, various measures will be evaluated over the next several months and certainly need to be addressed in the Final EIR/EIS. For example, in reviewing the DEIR/EIS text, it would appear that some of the most recent mobile source regulations of CARB and the SCAQMD may not have been included in accounting for airport emission reductions. A CARB regulation of September 2000 on reducing the risk from diesel-fueled engines and vehicles was noted but it was also indicated that this study did not have enough lead time to analyze what is expected to be a major impact. The Final EIR/EIS should examine these impacts. A major change could well occur should the SCAQMD Board accept the emissions inventory resulting from the revised SCAG 2001 RTP as it uses a much different growth scenario and input data than contained in the DEIR/EIS.

Currently, SCAQMD planning staff does not expect any new rules in the 2001 AQMP directed specifically at airports, though those related to transportation controls may still be submitted as part of SCAG's responsibility in the plan development.

Key relationships to LAX Master Plan

As noted earlier, the expansion of LAX under the Master Plan must be fully integrated into the AQMP planning process. The Draft EIR/EIS generally follows the currently the 1999 amended AQMP, which is the “applicable SIP.” However, the Final EIR/EIS may well need to be adjusted to the emissions included in the 2001 AQMP including the different scenarios resulting from the adoption this April of a 2001 RTP. Accordingly, review of measures identified during the 2001 AQMP discussion period in respect to the DEIR/EIS would not be productive.

Identification on Non-conformance to AQMP by DEIR/EIS

- Since spatial projected emission inventory of applicable (1999) AQMP is currently used in the DEIR/EIS for growth distribution, changes in aviation scenarios in the 2001 AQMP will require revision to the emission inventory of the Final EIR/EIS. This could also require reorientation of 1999 AQMP emission control strategy to place more emphasis on new, higher-growth areas due to RTP changes (R: B-54)
- The failure to commit to specific mitigation measures in the DEIR/EIS is of concern since it delays the inclusion of such measures into the 2001 AQMP update process as well as prohibits reviewers of the DEIR/EIS to comment on such measures (E: 4-459). At the time of this report, LAWA’s commitment to meet with EPA, CARB, and the SCAQMD to refine and select air mitigation measures has not occurred.
- The lack of a common baseline for comparing alternatives in the DEIR/EIS, discussed earlier in the RTP Conformance section, is of equal concern for AQMP conformance.
- The DEIR/EIS appears to assume that under all alternatives, including the No Action/No Project alternative, will have a similar aircraft mix with predominance of large, wide-bodied “jumbo jets” (E: G-6). This seems highly unlikely as consumer demand will depend on the type of facility and purpose. This lack of variation in the aircraft mix, particularly since it conflicts with the adopted 2001 RTP calculations, will likely cause problems in estimating the LAX emissions in the 2001 AQMP projections.
- The increase in nearby, off-airport stationary (commercial and industrial) source emissions do not appear to have been considered in the emission projections for the various alternatives (E: 4-463, 4-480, G-23). The DEIR/EIS asserts that they are included in the baseline emissions, but then refers to a table on “ambient” concentrations for future levels.
- DEIR/EIS assumed that there would be no future Ground Support Equipment air emission since all gates will be electrified, making GSE obsolete (E: G-6, 11). The GSE emission factors were derived from the EDMS instead of CARB’s latest off-road emission model (E: 4-465).
- There does not appear to be mention of the requirement that the Governor issue “certification” that any new runway, or major extension of a runway receive CARB’s

blessing re. “insignificant” air impacts. This may need further investigation to determine if, and when this certification should occur.

In addition to the potential conformance problems documented above, other reviewers have found deficiencies in the DEIR/EIS air quality findings. These include the following issues:

- Assumption that there will be 100% compliance with 2005 off-road emission standards, highly unlikely compliance level for any regulation or standard
- Emissions, especially NOx, not considered from aircraft reverse thrust operations. These emissions, even for short periods, are generally quite high and occur nearby airports
- Aircraft delays, such as taxi delay, is not discussed or quantified
- Entrained road dust – it was included in the “baseline” for 1996, but may not be included in the 2005 and 2015 emission inventories based on preliminary EPA staff evaluations

IV. IMPACTS OF LAX MASTER PLAN ON SURROUNDING COMMUNITIES

Note: This chapter limits its coverage to air quality and transportation impact upon the surrounding communities. Noise and Environmental Justice impacts are discussed elsewhere or by other consultant studies.

Identified impacts in DEIR/EIS by LAX expansion on “nearby” areas

The DEIR/EIS contains considerable discussion on the relationships between the demands of commercial air service in Southern California and the proposed expansion of LAX under the Master Plan. It also identifies the impacts on the immediate or “nearby” areas to the airport. Review of the DEIR/EIS indicated that LAWA used a number of different approaches to distinguish areas bordering or in close proximity to LAX. This reviewer adopted an approach that attempted to distinguish such areas in a clear, straightforward manner. To that end, I have defined “immediate areas” to LAX as bounded by Manchester Avenue to the north, I-405 to the east, Imperial Highway to the south, and the Pacific Ocean on the west. With one small exception, this area lies primarily within the City of Los Angeles.

The airport-related impacts on this immediate area are very briefly acknowledged in a two-paragraph section, Chapter 2.3.9. Positive impacts include tax revenue, increased employment, and air service. Negative impacts include congestion, noise, and air pollution. The major benefit suggested by the DEIR/EIS would be the creation of a commercial “village” development in Westchester, known as the “Southside Project.” Ironically, the Southside Project is located on the northside of the LAX expansion.

Chapter 4.3.2 evaluates the Off-Airport Surface Transportation impacts of the three build alternatives and the No Action/No Project alternative. The No Action/No Project

alternative estimates traffic levels at intersections in 2005 and 2015 resulting from the growth of surrounding projects (see next section) and all the growth from airport projects that would normally occur without the Master Plan adoption. It then compares impact with that alternative on intersections under each of the three "build" alternatives. It is very important to note, however, that credit for the various mitigation measures and associated construction projects of the build alternatives are included when estimating their impacts. A serious inconsistency is the major credit claimed from the construction of the new LAX freeway off of I-405, the Ring Road around the north and western portions of LAX, State Highway 1 improvements, and the extension of I-105 and the Green Line to the new western terminal of LAX. *None* of these projects are constrained, i.e., expected to be funded, in the 2001 RTP and as such should not be credited with traffic (and emission) reductions.

The preferred Alternative C negatively impacts two intersections within the City of Inglewood in both 2005 and 2015: La Cienega at Arbor Vitae and La Cienega at Century. Similarly, in 2005 (only), La Cienega at Florence and La Cienega at Manchester are impacted by Alternative C. A mitigation plan, developed by the Los Angeles Department of Transportation, includes various street widening, turn lanes, and signal enhancement to offset Alternative C's impacts (Tables 4.3.2-27 and 28).

The DEIR/EIS describes in some detail the construction impacts on the "nearby" area and suggests a list of mitigation measures to enact during the expansion of LAX as part of its Environmental Action Plan (4-436 and 438). However, these are primarily limited to the nearby area as defined above and the impacts on the surrounding communities such as Inglewood are not detailed.

The DEIR/EIS appears to do an adequate job of conducting emission inventories, air quality monitoring, and dispersion modeling within the boundaries of LAX. Intersection modeling for CO hot spots was conducted for 17 intersections, 13 of which were within the defined "nearby" areas.

Identified impacts in DEIR/EIS by LAX expansion on Inglewood and surrounding communities

The impact of the proposed Master Plan to expand LAX on Inglewood and the surrounding communities is not as well documented in the DEIR/EIS and appears to be a major deficiency in the report. The key chapter of the DEIR/EIS on surrounding community impact, Chapter 4.4.4 "Community Disruption and Alteration of Surface Transportation Patterns," only examines a study area west of the San Diego Freeway and limited to Westchester and El Segundo. For purposes of this section, I have defined "surrounding areas" to LAX as bounded by the Marina Freeway (State Route 90) and Slauson Avenue on the north, the Harbor Freeway (I-110) on the east, Artesia Blvd. (State Route 91) to the south, and the Pacific Ocean on the west. This is slightly larger than the LAX Master Plan Land Use Study Area as shown in Figure 4.2-1 of the DEIR/EIS.

In Chapter 2.6, the DEIR/EIS notes the NEPA and CEQA requirements that cumulative impacts be analyzed. The “non-airport” projects were derived from SCAG’s regional and area-wide projections of major new projects through 2015. They also separately consulted with the various cities in the surrounding areas to identify projects for cumulative impact consideration. Two hundred projects, including 18,000 dwelling units, 5 million square feet of retail space, and 21 million square feet of office/commercial space were identified and included in the No Action/No Project Alternative as well as the three build alternatives. This growth, along with the associated traffic increases, was a major factor in the frequently cited deterioration of air quality without expanding the airport. Twelve major projects were highlighted in the DEIR/EIS, but none of these were located in the City of Inglewood. However, several large projects noted that were relatively close and would affect the city included the Westchester Square, Lincoln Apartments, Hawthorne Gateway Center, Fox Hills Mall expansion, Howard Hughes Center, the El Segundo Media Center, and the 13,000 unit Playa Vista development.

The DEIR/EIS notes that the above developments, and Playa Vista in particular, will convert undeveloped land into intensified usage and thus impact the environment unless offset by mitigation measures. However, the increase in employment and household population growth from the Build alternatives were felt to be within the regional growth projections (representing less than 1% of the regional growth) and thus the cumulative effect on land use was considered less than significant (4.2.7.2).

Another analysis of the impacts upon the surrounding communities in the DEIR/EIS focused on off-airport surface transportation. The DEIR/EIS subdivides the area I defined above for Off-Airport Surface Transportation Study as Tier 1 (generally the area west of the San Diego Freeway) and Tier 2 (corridors radiating out from that area) (Figure 4.3.2-1). Once again, the emphasis was on the “nearby” areas even though the traffic impacts will be greatly seen throughout the surrounding communities. Approximately two-thirds of the 61 intersections examined for impact and mitigation were located what I defined in the first section as “nearby” areas. Indeed, only two of the 61 evaluated intersections were within Inglewood’s “surrounding” area definition (east of the San Diego Freeway). These were the intersections of La Cienega Blvd. with La Tijera Blvd. and with Centinela Avenue. Three short corridor evaluations of about ¼ mile each were performed on Century Blvd, Arbor Vitae St., and Manchester Avenue west of Hawthorne-La Brea. Finally, corridor analysis was performed on several blocks of Centinela east of La Brea Avenue. This limited evaluation of the impact of a major expansion of LAX upon the City of Inglewood would appear to be extremely deficient.

Other intersection analysis in the “surrounding” communities included nine intersections south of LAX, mainly in the City of El Segundo, and a large number of intersections in the northern Westchester, Playa Vista, and Marina Del Rey areas.

The growth inducing aspects of the LAX expansion are not identified for Inglewood or other specific communities in the surrounding area, thus making it difficult to plan for additional housing, schools, or other facilities. The DEIR/EIS estimates population and

house growth in 10-mile radius tiers from the airport. In the first tier, which would encompass all of my defined "surrounding" community areas as well as cities such as Santa Monica, Beverly Hills, and Torrance, the preferred Alternate C would add 7,200 persons and 2,640 households. However, since the No Action/No Project alternative would result in declining population, the net impact would be 17,600 more people and 6,500 more households (4-457). Because the DEIR/EIS does not focus in detail beyond the immediate, adjacent area to LAX it is difficult for the surrounding communities to plan accordingly.

While much of the air quality analysis focussed on the immediate LAX area, the study area for the Human Health Risk Assessment did much of the larger "surrounding area."

Projects in identified in the 2001 RTP as affecting Inglewood

The recently adopted SCAG 2001 RTP was reviewed to determine projects affecting Inglewood and surrounding communities. Projects are defined in the RTP as either constrained (high-performing, cost-effective funded projects) or unconstrained (no funding identified at present). Unconstrained projects are identified in RTP's to have a potential list of projects that, should funding suddenly develop, be ready to advance through the amendment process and be a part of the official RTP. A reason to identify both constrained and unconstrained projects in this analysis is to determine if certain transportation improvements might either be accelerated in their implementation or added to the constrained list through future mitigation funding as part of the Final EIR/EIS.

Constrained Projects in the Surrounding Communities to LAX

Route	Type	Completion Year	Cost
Maglev: LAX to March	Maglev (HSR)	2010/2025	\$16,000,000,000
Green Line Extension (to Central LAX Terminal)	Light Rail	2010	\$10,000,000
Crenshaw Blvd. Corridor	Rapid Bus	2010	\$92,000,000
Florence Avenue Corridor	Rapid Bus	2010	\$108,000,000
Hawthorne Blvd. Corridor	Rapid Bus	2010	\$76,000,000
Vermont Avenue Corridor	Rapid Bus	2010	\$83,000,000
I-405 Corridor	Rapid Bus	2010	\$185,000,000
I-405 HOV, Rte. 90 to I-10	TCM	On-going	
I-405 HOV, Rte. 90 to I-105	TCM	On-going	
El Segundo Green Line Shuttle	TCM	On-going	
Green Line Shuttle, Crenshaw	MTA-Shuttle	2002	
Sepulveda & I-105	Offramp, widen	2002	
LAX	ITS for airport		
Westchester Tranp. Imprments.	Upg. TrafficSurv.	2004	
Sepulveda, Centinela-Lincoln	Bus/CP lane	2004	

Unconstrained Projects in the Surrounding Communities to LAX

Route	Description	Year
San Diego Fwy, I-605 to I-5	HOV lanes, with LAX connector	
Century Fwy, Sepulveda Blvd to new LAX West Terminal	Freeway, mixed-flow and HOV	
San Diego Fwy to Century Fwy	HOV Connector	
Arbor Vitae Ave., La Brea to Airport Blvd	Arterial	2015
Sepulveda Blvd, Howard Hughes Pkwy to Century Blvd.	Arterial	2010
Slauson Ave, Western to Jefferson	Arterial	2010
Culver Blvd, Route 90 to I-405	Arterial	
I-405 Airport Connector, HH Pkwy to Arbor Vitae St.	Arterial	
Rosecrans Ave., Sepulveda to Hawthorne	Arterial	
Sepulveda Blvd. & Centinela Ave	Intersection	
Century Fwy. & Western Ave.	Interchange and ramps	
Route I/Lincoln Blvd., LAX to I-10	Corridor Development	

The two tables above are taken from information found in the 2001 RTP. They identify important transportation programs and projects that the cities surrounding LAX may wish to pursue as part of any negotiated mitigation of traffic congestion impacts resulting from the Master Plan.

Deficiencies in LAX Master Plan DEIR/EIS in evaluating impacts on Inglewood

- In general, much of Inglewood and the surrounding communities are not given adequate impact evaluation for the DEIR/EIS proposed expansion of LAX. This is especially true for air quality measurements and traffic impacts. The final EIR/EIS should include more information on the cumulative impact on the City of Inglewood
- The comparison of the No Action/No Project alternative and “build” alternatives is seriously flawed as it fully assigns future growth impacts, including non-Master Plan expansions and growth of LAX, to the No Action/No Project alternative. Conversely, the build alternatives take credit for mitigation measures and the construction of five major arterials to ease traffic, which have no identified funding in the 2001 RTP.
- Growth-inducing impacts upon surrounding communities difficult to determine because of the broad nature of the socio-economic impact analysis of the DEIR/EIS.

V. EVALUATION OF HEALTH RISKS AND AIR TOXICS IN THE DEIR/EIS

Summary of impacts identified for air quality in the DEIR/EIS

The health risks associated with the Master Plan are assessed in Chapter 4.24.1 of the DEIR/EIS. While this chapter attempts to assess the cancer risks and non-cancer health impacts, it is clear that a major gap resulted from the lack of a comprehensive, air toxic baseline study in advance of the DEIR/EIS. The document states "The HHRA did not evaluate impacts of toxic air pollutants associated with current airport operations." While a new study is now underway, the DEIR/EIS admits that the impact of toxic air pollutants associated with the current airport operations until 2002 and thus only the incremental changes can be projected in their document. The Workplan for the LAWA study that has just begun on air quality and source apportionment is summarized in the following section.

A more in-depth review of the health risks approach taken in the DEIR/EIS is being conducted of the City of Inglewood separately by Dr. Dale Hattis of Clark University's Center for Environment, Technology and Development. He is looking at the LAX Master Plan for needed improvements in assessing available policy choices. The following is a brief summary highlighting major findings and mitigation measures identified in the DEIR/EIS that relate to air quality.

Under the No Action/No Project alternative, which assumes no new mitigation measures will occur, both cancer risks and non-cancer health hazards will increase from the 1996 environmental baseline. The risks will be greatest along the eastern boundary (I-405) of LAX and extending about 3-½ miles northeast over the center of Inglewood and into vicinity of Crenshaw and Slauson Avenue. Under the three "build" alternatives, taking advantage of the potential but yet-unselected mitigation measures, risk of cancer and non-cancer health hazards actually decline. The DEIR/EIS found the following reasons for this decline:

- Anticipated reduction in older, more polluting engines in aircraft and vehicles resulting from federal mandates to phase-in cleaner engines (all alternatives).
- Improved efficiencies in aircraft operations due to the addition of a new runway (Alternatives A and B) or runway modifications (Alternative C).
- Improved vehicle traffic flows associated with proposed transportation system improvements (all build alternatives).
- Changes in airport fence line and runway configurations that would place greater distances between emission sources and off-site residents (Alternatives A and C).
- Development of the West Terminal Area that would shift airport activities west and away from the population. This shift to the west helps spread emissions from east to

west and reduces the impact of emissions on air quality in off-airport areas (mostly for Alternative A and, to a lesser degree, Alternatives B and C).

- Potential reduction in overall air pollutant emissions that could occur from implementation of preliminary air quality mitigation options proposed in Section 4.6, *Air Quality* (all build alternatives).

As part of the DEIR/EIS, a Human Health Risk Assessment (HHRA) was performed. It involved estimating future emission under the four alternatives, predicting incremental human health risks that might result from breathing toxic air pollutants (TAP) at various locations in the surrounding communities, and then evaluating the broader-scale, cumulative impacts of LAX emissions on air quality as part of the SCAQMD's Multiple Air Toxics Exposure Study (MATES-II). The HHRA included the following analysis:

- Identification of emissions sources for TAPs at LAX and quantification of TAP emissions for baseline conditions.
- Selection of TAPs of concern through evaluation of toxicity and release quantities.
- Analysis of exposure pathways of concern for TAPs emitted during LAX operations.
- Identification of an area (referred to as the health risk study area) and human populations around LAX likely to be affected by airport operations.
- Toxicity characterization for TAPs of concern.
- Estimation of future TAP emissions associated with the No Action/No Project Alternative and with implementation of the three build alternatives.
- Air dispersion modeling to predict air quality impacts on- and off-airport.
- Estimation of incremental impacts to air quality of the No Action/No Project Alternative and the three build alternatives through comparison with baseline emissions.
- Characterization of potential for incremental human health impacts based on changes in air concentrations for TAPs of concern within the health risk study area.

Twenty-eight different toxic air pollutant substances were identified in the process. As mentioned earlier, a large study area was established to examine the potential impact of TAPs. Future air quality impacts were estimated but did not consider several proposed or recently adopted regulations of the SCAQMD, CARB, or the US EPA. As these rules most frequently deal with diesel-fueled vehicles, this appears to be a flaw that should be remedied in the Final EIR/EIS.

It is a somewhat difficult task to assess human health impacts of various alternative expansion proposals without having finalized the mitigation measures and not having a current airport operations database. Under CEQA, significant impacts occur if incremental increases greater than that of the regulatory thresholds over the established environmental baseline are predicted for the maximally exposed individual. The DEIR/EIS found that even without mitigation measures, cancer health risks were less than the CEQA threshold in 2015. However, "other health hazards" were found significant under CEQA for all three "build" alternatives. Implementation of potential mitigation options brought the health hazard level to less than significant. Some of the reasons for this finding are 1) Federal mandates for less polluting aircraft engines and

ground service vehicles, 2) Runway additions or modifications will result in more efficient aircraft operations, 3) circulation system improvements will improve vehicle flow and reduce congestion, 4) new configurations of runways and the new West Terminal will place off and on-site residents further from the aircraft sources, and 5) the various mitigation proposals, if fully implemented, would reduce overall air emissions.

Summary of LAWA's Technical Workplan and Potential Roles for City of Inglewood

A major effort is now underway to examine the air quality in vicinity of LAX. The study was suggested early in the development of the LAWA Master Plan but only began to form in late 2000. There is considerable interest in getting a well-documented study by the US EPA, both in the San Francisco regional office and in the Office of Research and Development in EPA Headquarters. The Technical Workplan for this study, "Air Quality and Source Apportionment Study of the Area Surrounding Los Angeles International Airport," was released on November 17, 2000 and describes in great detail the study plan for this important analysis of air pollution in the communities surrounding LAX. The study was committed to by LAWA in late 2000 and has the cooperation of US EPA, the FAA, the SCAQMD, and CARB. The purpose of the study is to collect comprehensive data on air quality around LAX and then examine the key criteria and toxic pollutants that are present. This will include both the concentrations in the air and the source of the emissions. The study will build upon information gathered in the SCAQMD's MATES-II study that was completed in November 1999.

The objective of the study is to collect data and examine the key pollutants both in terms of exposure and source location. This study differs from the DEIR/EIS analysis of air quality in that it is designed to look at current operations instead of future impacts. The study area is much larger than that of the Master Plan DEIR/EIS. LAWA will collect at least one year of continuous and discrete air quality data from a large number of monitoring sites within and in the adjacent communities to LAX. A comprehensive characterization of emission sources and their associated mass emissions for chemical composition will identify marker compounds for subsequent study. More extensive modeling than that performed in the DEIR/EIS is planned, including chemical composition receptor modeling and air dispersion modeling will be conducted. Other techniques will include spatial gradient analysis, time series analysis, and emission inventory development.

The data from this study will be used to examine the various criteria and toxic pollutants, both in terms of concentration and sources. The difference in the scope of this study is that it extends to a much larger area around LAX and considers all sources of pollution. These include freeway, surface traffic, industrial facilities and a major refinery. LAWA believes that this will be the most exhaustive study undertaken by any airport authority in the nation.

The study will collect at least 12 months of continuous and discrete measurements of a variety of pollutants and toxic air compounds. The latter includes trace metals, semi-

volatile and volatile organic compounds, and various inorganic compounds. Three monitoring stations will have a full complement of sampling equipment. Two of them will be within LAX property and the third at Jefferson School, 2 km. ENE of south runways of LAX. Seven satellite monitoring sites in the surrounding area will all measure a selected subset of compounds.

The study is currently in the pilot study phase and should begin the 12 month data collection and sampling by early summer. Analyzing the data results will be on going as the data is collected, and the final report should be finished by the end of 2002.

The source apportionment study will look at emissions data to determine what sources caused the emissions, based standard techniques of emissions scaling and dispersion modeling. The air quality measurements will then be combined with the source apportionment findings to evaluate time-series correlation, spatial gradients, and chemical markers. The results will allow researchers to determine the relative contributions at a site from the airport-caused activities versus other non-airport sources in the surrounding community.

The study will be overseen by a technical advisory group from the above mentioned agencies as well as two outside consultants. The same firm that oversaw the DEIR/EIS studies, Camp, Dresser, and McKee (CDM) will also oversee this project. Sub-contractors are Tracer, ES&T, and Dr. Henry of USC and Dr. John Watson of the Desert Research Institute. This consultant suggests that the City of Inglewood have representation and play a very active role in any policy and technical committees formed during the lifetime of this important health assessment.

Deficiencies (only for air quality since Dr. Hattis performing more extensive analysis)

- The most obvious deficiency in LAWA's Health Risk and Air Toxics evaluation is the failure to organize and complete a study, such as the Air Quality and Source Apportionment Study described above, prior to the release of the DEIR/EIS. The findings of the study may prove very instrumental in determining the health impacts upon the surrounding community as well as identify mitigation priorities. The DEIR/EIS claims it "fulfills the requirements of CEQA" in assessing the health risks, yet without the Source Apportionment study it cannot assess the incremental impact of LAX operations on local air quality. This study will determine the contribution of various airport-related activities on selected air pollutant concentrations in relation to those pollutants caused by other, non-airport sources in the surrounding community. However, the current study will not be completed until at least the end of 2002.
- There appears to be no tables or data on cancer and non-cancer health risks for any year after 2015, yet the operation of the expanded airport during those latter years may well have continuing impacts on the residents of the surrounding communities. Health impacts are often seen in the resident population over a much longer time span than the 15 - 20 years assessed in the DEIR/EIS tables. Other major planning

assessments, such as the RTP (2025) and the AQMP Maintenance Plan (2030), examine impacts of their action over a much longer time frame.

- The criteria used to determine net change in chronic and acute hazard indices for LAX may not include the criteria pollutants. The results of the Source Apportionment study would have provided valuable input to assessing criteria (NAAQS) as well as various toxic air pollutant impacts on health. The DEIR/EIS may also ignore the incremental cancer and non-cancer risks to people whom do not “receive a certain hazard level criterion.” (See the Dr. Hattis paper for further clarification)

VI. AIR MITIGATION MEASURES

Introduction

One of the most important components of an Environmental Impact Statement or Report is the identification of ways to reduce or avoid the possible environmental impacts of the project. These are known as “mitigation measures” and are often a key element of an Environmental Action Plan for the project. The Master Plan DEIR/EIS has an exhaustive list of potential mitigation measures to address the significant impacts on air quality by the project. Several of these mitigation measures have specific implementation details including dates and estimated reductions in air emissions. *Unfortunately*, even a preliminary selection of mitigation measures did not occur in the DEIR/EIS and thus the public cannot comment on the impact of the mitigation measures as a package. LAWA merely commits to initiating discussions with EPA, FAA, CARB, and SCAQMD during the review period of the DEIR/EIS. At the time of writing this report, such meetings had not commenced. Furthermore, the affected cities should be a part of those discussions in addition to the formal comment process. To summarize, it would be helpful to have had LAWA’s draft recommendations on the air mitigation measures in the DEIR/EIS but it also provides the commenting public and governmental agencies an opportunity to shape the final set of mitigation measures.

The DEIR/EIS groups the approximately 150 mitigation measures into three categories:

- (1) **On-airport** includes “airside” mitigation such as conversion to electric GSE, reduced engine taxi, clean aircraft landing fees and, “Landside” mitigation includes traffic and parking options, clean motor vehicle fleets, and cargo vehicle options
- (2) **Off-Airport** options include remote terminals, smart shuttles, traffic congestion controls, free parking at outlying terminals, parking pricing, etc,
- (3) **Construction** include clean fueled vehicles for construction delivery and on-site rock crushing to minimize truck hauls

Priority mitigation measures identified for air quality

The DEIR/EIS recommends a specific measure to reduce airport-related air quality impacts both inside, and adjacent to LAX. It is titled “MM-AQ-1. Implement Revised Air Quality Mitigation Programs. The measure commits LAWA to implement

technologically and legally feasible and economically reasonable methods to reduce air pollutant emissions from aircraft, GSE, traffic, and construction equipment both on and off the airport. Finally, it lists 15 potential mitigation measures that can be divided between expansion and implementation of current measures, and development of new measures. The DEIR/EIS makes it very clear that this is a preliminary list that will serve as a discussion area with the FAA, regulatory agencies, and general public in determining the final list of committed mitigation measures in the Final EIR/EIS. It also notes the limited ability of LAWA to implement on a day-to-day basis many of the measures. Where possible, the DEIR/EIS also has estimated the range of emission reductions from each or a combination of measures, and the impact in 2005 and 2010 (Table 4.6-17).

The measures are listed as follows:

Currently implemented measures:

- Continued conversion of ground transportation vehicles to alternative fuels through LAWA's fleet purchasing program and installation of electric vehicle charging stations. Acceleration of the program by incorporating necessary infrastructure into the Master Plan.
- Continued use and encouragement of the LAWA carpool and rideshare program. Development of methods and incentives to promote ridesharing for all LAX tenant employees.
- Ongoing implementation of the traffic management programs, including door-to-door van conversions to alternative fuels, installation and operation of the LAX Intelligent Transportation System and Traffic Management Center, modifications to curbside operations, improvements to public parking and fee schedule, and improved roadway intersections, signage and pedestrian walkways.
- Ongoing expansion of the FlyAway Bus service between LAX and the Van Nuys Airport. Implementation of FlyAway Bus service to at least five other locations in the South Coast Air Basin. Use of alternative-fueled buses for transporting riders between LAX and the FlyAway stations.
- Continued addition of 400-Hertz electrical ground power and preconditioned air systems to existing aircraft passenger gates.
- Continued conversion of GSE to alternative-fuels. Acceleration of the program through incorporation of necessary infrastructure into the LAX Master Plan.

New measures:

- Incorporation of remote terminal services at the FlyAway stations allowing airline passengers to get tickets and check baggage before riding to LAX.
- Development of methods and/or incentives to encourage and promote alternative-fueled vehicles or SULEV/ZEV emission engines in commercial vehicles using the terminal areas, in cargo vehicles entering the airport, and in rental cars using on-airport RAC facilities.
- Development of methods and/or incentives to encourage and promote reduced-engine taxiing by aircraft moving between runways and terminal gates.

- Implementation of clean-fueled “smart shuttles” for trips between local businesses and LAX.
- Development of parking pricing policies to discourage single vehicle trips to the airport or minimizes idle time at the curb.
- Specification of clean-fueled construction equipment for use on LAX Master Plan construction projects.
- Development of methods and/or incentives to encourage and promote alternative-fueled vehicles or SULEV/ZEV emission engines in commercial/cargo vehicles delivering construction material and equipment to LAX Master Plan construction projects.
- Use of soil stabilization and/or water to reduce fugitive dust emissions from LAX Master Plan construction sites.
- Use of on-site rock crushing facility to reuse rock/concrete and minimize haul truck trips.

Other mitigation measures of value listed in DEIR/EIS

Attachment X of the DEIR/EIS contains an extensive listing of air quality mitigation measures that were identified by LAWA, the Master Plan Team, SCAQMD, AAA, LADOT, CARB, and various other cities and organizations during the planning stages. While those measures identified in the previous section probably represent most of the more feasible and quantifiable types of mitigation, there are several measures in Attachment X that may bear further consideration. Examples include the following:

- Minimize use of local streets to access LAX
- Use of larger aircraft, more seats, and scheduling of flights to avoid airport congestion and aircraft queuing
- Establish network of strategically located, off-airport intermodal check-in terminals serviced by LAX-dedicated clean fuel buses
- Promote “best engine” technology for rental cars
- Pricing incentives to replace older aircraft engines with cleaner ones such as emission fees
- Implement parking pricing mechanisms to reduce SOV use and encourage HOV (3+ passengers) or shuttle use
- Parking pricing policies to encourage single trips (use of long term lots by travelers) or minimize idle time at curb (by using short term lots)
- Reduce speed limit on Ring Road to maintain optimum NOx emissions levels (about 35 mph)
- Ban SOV access to Central Terminal Area (CTA) and West Terminal
- Installation of toll booths at entrances to CTA and West Terminal
- Include “airport-friendly” cars on the Long Beach-Los Angeles Blue Line to promote transfers of airport riders to use the Green Line to LAX
- Provide free Green Line entry from the LAX station to promote use of Green Line
- Do not allow private vehicles on the curb (handicap exemptions, of course)

- Charge fee for additional looping of terminal areas, or just don't allow looping to occur

Recommendations on additional or modified mitigation measures for consideration

In addition to the air mitigation measures identified in the DEIR/EIS and highlighted above, several other air mitigation measures are suggested for further consideration by the City of Inglewood in its comments on the Master Plan. They were the result of discussions with other agency staff such as EPA, review of the literature on aircraft mitigation measures, and knowledge of other airport programs by this consultant. Some of these measures include:

- Develop a Parking Cashout program for employees at LAX. Parking Cashout is a concept developed initially by Professor Donald Shoup of UCLA and later incorporated into the Clinton Administration's Global Warming strategy. Legislation in California also encourages parking cash out programs. Simply defined, the program requires employers (such as those at LAX) to offer cash to their employees equivalent to the fair price of parking at the employment site. Surveys have found that employees will often find alternative forms of transportation more cost-effective than driving their cars and paying high parking costs.
- Encourage the FAA to consider use of emission fees to help mitigate air pollution increases from expansion of LAX and other regional airports. Consider allowing only planes with lower emissions per passenger to land in severe and extreme ozone non-attainment areas such as the South Coast Air Basin.
- An incentive to encourage use of alternate airports was included in the Aviation Appendix B of the 2001 RTP. This measure suggested providing discount (10%) on airfare for using outlying airports. Also, HSR (Maglev) would be subsidized at 20% less than the assumed cost for use of Palmdale airport. Fare incentives might be examined as possible mitigation measures.
- Free transit access, rather than free parking, should be stressed in determining combinations of mitigation measures
- Construction mitigation measures should stress use of fees or other mechanisms to minimize the construction area and extend of soil disturbance, rather than just mitigating the impacts. Fees might work well here as well.
- For all unmitigated impacts, establish a fee or penalty system for air emissions over an acceptable limit. Use of fees could be for air monitoring or other environmentally supportive community improvements.

VII. ENVIRONMENTAL JUSTICE

Summary of discussion in DEIR/EIS on the Environmental Justice air impacts

Chapter 4.4.3, and the accompanying Appendix F of the DEIR/EIS provide discussion of the Environmental Justice impacts and mitigation programs of the proposed LAX Master Plan. Understandably, noise is generally identified as the most serious Environmental

Justice (EJ) issue resulting from the proposed build alternatives of the Master Plan. The air quality discussion has a focus upon increased emissions on the areas east of LAX if mitigation measures are not taken. It also discusses the potential levels of toxic air pollutants in the region. Construction impacts are covered in another section of the EJ sub-chapter of the DEIR/EIS. Finally, the DEIR/EIS discusses potential mitigation measures and the formation of an Environmental Justice Community Outreach Program. Review of Appendix F, Environmental Justice, and provided little new information on air quality not contained in Chapter 4.4.3.

The EJ study area defined in the DEIR/EIS appears quite appropriate to determine the impacts on surrounding communities to LAX (Figure 4.4.3-1). While the report acknowledges that air pollutant levels in the study area exceed national health standards, it also strongly emphasizes that 60% of all the criteria pollutant emissions in the South Coast Air Basin come from on-road motor vehicles and that the study area has many major power plants and refineries that contribute to the pollution levels. Aircraft operating at LAX contribute under 1% of the basin-wide emissions of the NAAQS. Assessment of the impacts of the three build alternatives on the EJ study area are clouded, as are other air quality assessments in the DEIR/EIS, by the improper selection of the emission baselines. Even unmitigated on-airport emissions resulting from the Master Plan alternatives were found lower than No Action/No Project levels in 2005. However, unmitigated emissions on-airport in 2015 would increase for NO_x and SO_x as aircraft operations and passengers continued to increase. All of the off-airport emission scenarios would show increased unmitigated emissions in the study area in 2005 and 2015 as VMT increased. Construction emissions would add to those totals as well. Establishing the mitigation program (MM-AQ-1) discussed in the previous chapter of this report would decrease CO and VOC emissions by 25-30%, though both off and on airport emissions for most pollutants would remain significant.

More specific to the EJ issues and residents of the study area, the DEIR/EIS notes that ozone levels might increase as result of increased NO_x emissions from the aircraft operations. Studies show that minority and low-income populations are more severely affected by higher ozone levels, especially those suffering from asthma and other chronic respiratory illnesses. However, the DEIR/EIS then proceeds to note that studies to determine the health effects of the pollutants in the area around LAX are beyond the scope of the DEIR/EIS and requiring a long-term effort. The study that LAWA is only presently initiating, the Air Quality and Source Apportionment Study discussed in the previous chapter, is once again needed to adequately address the air impacts upon the residents of the EJ study area.

The DEIR/EIS does note three census tracts just northeast of the LAX that will have cancer risk thresholds of significance in 2005. They are generally between Airport Blvd. and the San Diego Freeway but extend into downtown Inglewood as well. Nearly 60% of the 1,100 residents of that three-census tract area are minority and 14% low-income. Cancer risks would be reduced by 2015 due to the various mitigation measures such as GSE conversions, more aircraft activity in the West Terminal area, and the Ring Road.

Non-cancer health hazards for children would reach significance thresholds in 2005 and exceed thresholds in 2015 for all three-build alternatives. Employment of mitigation measures suggested in the Air Quality and Human Health and Safety chapters of the DEIR/EIS reduce these levels to less than significant.

Construction noise is discussed in detail, and is generally a surrogate for air quality impacts and surface transportation disruptions. The Preliminary Findings (4.4.3.6) notes, again, that in the absence of background health data, "it is unknown whether air quality impacts associated with the LAX Mater plan could have a disproportionate severe human health effect on minority or low-income populations." Finally, the DEIR/EIS discussed an Environmental Justice Community Outreach Process that will be developed and implemented in the study area. The nature and type of benefits from various mitigation measures will be the initial focus of the effort.

SCAG RTP discussion on Environmental Justice air impacts of Aviation Scenarios

The SCAG 2001 RTP notes that since the 1998 RTP was adopted, it has become FHWA and Federal Transit Administration (FTA) policy to assure that EJ is in full compliance with the 1994 Executive Order on EJ. The RTP establishes a two-part program to assess the geographic distribution of environmental impacts and calculation of the net benefits of the RTP, including issues such as accessibility and mobility. SCAG established an Equity/Environmental Justice performance indicator of having the benefit of transportation investments equitably distributed among all ethnic, age, and income groups. Appendix B of the Draft 2001 RTP included a table analyzing the priority aviation scenarios on the number of household affected by poverty levels. The SCAG Aviation Task Force concluded in March 2000 that EJ differences between its airport expansion scenarios were not large.

Another examination of EJ and the expansion of LAX was conducted by Occidental College for the Communities for a Better Environment environmental group. This study, as are most of the other airport-related EJ studies, focused on noise impacts and assumes that air quality or transportation congestion would be proportional. The study calculated the percentage of the total regional burden faced by residents near LAX (and other airports) and adding up the number residents affected and the intensity of their impact to determined a "person-impact". This found that a very large expansion of LAX and/or a failure to convert El Toro Marine Base to commercial use greatly shifted burdens to minority populations in Southern California. Most equitable option for EJ is capping demand at LAX and shifting the traffic to Ontario.

Recommendations on additional considerations in Final EIR/EIS

- LAWA should make commitments in Final EIR/EIS to adjust/mitigate/offset the negative impacts on minority and low income residents identified in the DEIR/EIS through specific measures

- LAWA should strive to assure that the new Source Apportionment study is fully integrated, and has community input, from those residents in the EJ study area.
- LAX should consider initiating a model EJ program to address many of the impacts of air quality from airport operations that would occur in other areas of the South Coast air basin
- Since LAX employs nearly 60,000 workers, it should try to use the proposed EJ Community Outreach Process to also include those workers who may also reside beyond the study area identified in the DEIR/EIS

VIII. CONCLUSIONS

Procedural Relationships

This further evaluation of the LAX Master Plan Draft EIR/EIS, deemed the Phase II report, focused on several priority topic air quality areas to determine how adequate they were addressed in the subject document. An important CEQA/NEPA concept is that of “conformance to larger area plans.” Accordingly, the current regional air quality and transportation planning efforts were examined against the DEIR/EIS. The impact of LAX upon not just the immediate areas outside the “fence line,” but surrounding communities and impacted residents was studied. Finally, the report examined the various mitigation measures either strongly suggested or merely listed to determine which measures might warrant further pursuit in the Final EIR/EIS.

CEQA guidance on full disclosure, substantial evidence, and sufficiency of the EIR in light of what is reasonable feasible was applied throughout this investigation. Whether the EIR fully examined the environmental effects of future expansion or whether the identified impacts were found too speculative to evaluate was investigated. The NEPA requires, under an Executive Order by the Council on Environmental Quality on July 28, 1999, that agencies must actively solicit participation of state, tribal, and local governments in the EIS process. It is under this guidance that the State and local air agencies are encouraged to meet with the FAA and EPA at the earliest convenience to begin identifying specific air mitigation commitments for the Final EIR/EIS. Similarly, at the State level under CEQA a lead agency must utilize the Caltrans’ Airport Land use Planning Handbook for projects within the boundaries of a comprehensive airport land use plan.

Priority areas to consider commenting upon by the City

This report notes many areas that should be revised or strengthened in the Final EIR/EIS. The following listing highlights several of the more important concerns:

- Inconsistencies between the preferred alternative in the DEIR/EIS and SCAG's adopted 2001 RTP's Aviation Scenario. Projected size of LAX is much different.
- Different emission factors and modeling year selection between RTP and DEIR/EIS
- Selection of different market incentives and rail scenarios between RTP and DEIR/EIS
- Use of three different baseline scenarios in the DEIR/EIS makes it difficult to compare impacts on air quality both on and off airport.
- No commitment in DEIR/EIS to specific air mitigation measures
- Questionable assumptions of future aircraft operations mix
- Optimistic assumptions on industry compliance and performance with future regulations.
- Inadequate impact evaluation in the DEIR/EIS proposed expansion of LAX upon the surrounding communities
- DEIR/EIS bases much of the mitigation on major highway and transit improvements which are not included in the 2001 RTP constrained (funds expected) project list
- Question whether Final EIR/EIS should be issued without some health impact results from the Air Quality and Source Apportionment Study
- Suggest further evaluation of selected additional air mitigation measures identified in Chapter VI of this report
- LAWA should make commitments to address Environmental Justice issues in areas affected by airport activities including specific air and traffic congestion mitigation projects.

APPENDICES

Exhibit G

IDENTIFICATION AND EVALUATION OF KEY TRAFFIC
AND TRANSPORTATION RELATED ISSUES
IN THE LAX MASTER PLAN DRAFT EIR/EIS

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May, 2000

I INTRODUCTION

This analysis was commissioned by the law firm of Radcliff Frandsen & Dongell LLP, Counsel for the City of Inglewood. The scope of work was to review various chapters and appendices of the Draft EIR/EIS for the LAX Master Plan in order to identify and evaluate issues relating to traffic and transportation which may affect the citizens of the City of Inglewood.

Paul Cook is the president of Paul E. Cook and Associates. He has over 40 years of professional and management experience with private business and governmental agencies at the state, county and municipal levels.

Mr. Cook is a recognized expert in the field of transportation and traffic engineering having served with Caltrans and the County of Orange Road Department as well as being the City Traffic Engineer for three southern California cities including the City of Inglewood from 1970 to 1973.

Mr. Cook has served as City Manager of Huntington Beach, California and Executive Director of the Huntington Beach Redevelopment Agency. He has also previously served as the Director of Public Works for the cities of Huntington Beach, Pomona and Claremont, California.

Mr. Cook holds a Master of Public Administration from the University of Southern California and a Bachelor of Science in Civil Engineering from the University of Maine. He is a registered civil engineer and traffic engineer in the State of California.

Objective

The objective of this analysis is to provide City of Inglewood officials an identification and preliminary evaluation of the LAX Master Plan Draft EIR/EIS for impacts relating to traffic and transportation. Based on the preliminary evaluation, the City can determine whether to pursue one or more of the issues in greater detail. At a minimum, the findings of this report should provide material for the City's official comments on the Draft EIR/EIS, due to the Los Angeles World Airports (LAWA) no later than July 25, 2001. They will also provide useful information for potential testimony at the June 9, 2001 public hearing on the project.

Transportation Planning

The U.S. Department of Transportation (DOT) under the Transportation Equity Act for the 21st Century (TEA-21) requires that metropolitan planning organizations (MPO) such as SCAG update the Regional Transportation Plan (RTP) for the area every three years. The RTP is a 20-year vision of the area's commitment to transportation improvements. The current update was adopted in April, 2001. One of the major changes to the previously adopted RTP in 1998 should include the impacts of expanding operations at LAX. Decisions made on the RTP update and the incorporation of various transportation mitigation strategies is of great concern to the City of Inglewood and other South Bay cities.

Alternatives

The LAX Master Plan Draft EIR/EIS proposes three "build" alternatives in addition to the required "no build" alternative. Briefly, Alternative A would add a new runway on the north field portion of LAX and could accommodate the full projected demand of 97.9 million annual passengers and 4.2 million tons of air cargo by 2015. Alternative B would add a new runway on the south field portion of LAX and could also accommodate the full projected demand. Alternative C would not add any new runways but move two of the existing runways, extend three of them, and widen one of them. This would accommodate the projected air cargo demand but only 86.9 million air passengers in 2015. Alternative C is the preferred alternative by LAWA.

Because of time restrictions to complete this analysis and because it is the preferred alternative, the impacts of Alternative C are the subject of this report. Alternative C is identified as producing the smallest off-airport impact of all the alternatives.

II OVERVIEW OF THE DRAFT EIR/EIS

The Draft EIR/EIS is an extremely detailed and extensive analysis of the LAX Master Plan alternatives under consideration by LAWA. It is approximately 12,000 pages in length containing seven chapters and eleven appendices which have specific documentation and additional technical analysis of the impacts of the alternatives. Finally, there are seventeen special technical reports, 251 tables and 183 figures in the main report.

This analysis of the traffic and transportation issues required the review of Chapter 4.3, Surface Transportation and, specifically, Chapter 4.3.1, On-Airport Surface Transportation, Chapter 4.3.2, Off-Airport Transportation, and Chapter 4.20, Construction Impacts. Technical Report 3b, Off-Airport Ground Access Impacts and Mitigation Measures, completed by Barton-Aschman Associates, Inc in January, 2001, was the main focus of the potential long term impacts on the citizens of the City of Inglewood.

Approach and Methodology

The Barton-Aschman study used the standard approach and methodology including those required by the U.S. Department of Transportation for environmental documents to analyze the impacts of the various alternatives.

The basics are:

- Establishing existing conditions
- Forecasting LAX trips and assigning them to the area road system
- Adding future traffic demand for background (non-airport) trips and assign them to the road system
- Adding trips that will be generated by future non-airport projects in the region
- Comparing significant impacts
- Developing preliminary mitigation measures

Because the base year for analysis purposes is 2005, assumptions were made that future transportation system improvements with programmed funding were added to the model networks. Improvements are assumed to the freeways, high-occupancy (HOV) lanes, surface streets, and to the transit system. The roadway improvements are shown in the attached Table 2.3. The validity of the model depends on these improvements being in place.

Six intersections in the City of Inglewood were analyzed. They are:

- Aviation at Arbor Vitae, Intersection No. 7
- La Cienega at Arbor Vitae, Intersection No. 8
- La Cienega at Century, Intersection No. 26
- La Cienega at Florence, Intersection No. 40
- La Cienega at Manchester, Intersection No. 72
- La Cienega at I-405 SB ramp n/o Century, Intersection No. 111

Table 2.3

MODEL UPDATE INFORMATION - REGIONAL ROADWAY IMPROVEMENTS

No.	Street/Highway	Improvement	Limits	1996	2005	2015
1	Admiralty	Extend at 4 lanes	Fiji to Culver			Y
2	Admiralty Way	Widening to 5 lanes	Via Marina to Fiji Way (in conn. w/ Playa Vista)		Y	Y
3	Arbor Vitae	4 and 2-way left turn lane	La Brea to Inglewood	Y	Y	Y
4	Arbor Vitae	4 lanes	Inglewood to I-405		Y	Y
5	Arbor Vitae	4 lanes and 1 2-way left turn lane	I-405 to Airport			Y
6	Aviation	3 lanes NB	Marine to Manhattan	Y	Y	Y
7	Aviation	Widen to 6 lanes	Imperial to Arbor Vitae		Y	Y
8	Aviation	Widening to 6 Lanes	S/O Rosecrans to Manhattan Bch. Blvd.			Y
9	Aviation	4 to 6 lanes	1000 ft south of Rosecrans to Imperial		Y	Y
11	Bay	2 lanes each way	Teale to Culver			Y
12	Centinela	Remove pkg. to prov. 6 lanes	Jefferson to just south of Ballona Bridge		Y	Y
13	Centinela	Widen to 6 lanes	Ballona Bridge		Y	Y
14	Centinela	Extend at 4 lanes	Jefferson into Playa Vista		Y	Y
15	Cloverfield	2 to 3 lanes NB	Around I - 10		Y	Y
16	Culver	Widen to 4 lanes	Lincoln to SR-90			Y
17	Culver	6 lane overcrossing	@ Lincoln			Y
18	Del Arno Blvd	4 lane over-crossing	@ I-405		Y	Y
19	Douglas	Convert to one-way NB	Imperial Highway to El Segundo	Y	Y	Y
20	Douglas	Delete RR Grade Separation	Between Rosecrans to Alaska		Y	Y
21	E St. (Playa Vista)	Internal Roadway	Alla to Centinela 1 lane each way		Y	Y
22	Foothill Blvd (SR 30)	Widening	SR-66 (Foothill Blvd) to Williams Ave			Y
23	Foothill Blvd (SR 30)	Widening	Williams Ave. to College Way			Y
24	Foothill Blvd (SR 30)	Widening	College Way to Towne Ave			Y
25	Foothill Blvd (SR 30)	Widening	Towne Ave to S.B. County Line			Y
26	Imperial	@ I-105 WB on/off	Opposite Continental widen to inc. 2nd WB LT lane		Y	Y
27	Jefferson	4 lanes EB	Lincoln to Alla		Y	Y
28	Jefferson	4 lanes EB	Centinela to Mesmer		Y	Y
29	La Cienega	1 add'l SB lane	Florence to Olive	Y	Y	Y
30	Lincoln	Widen to 7 lanes. 4 NB 3 SB	La Tijera Blvd. to Hughes Terrace		Y	Y
31	Lincoln	4 lanes NB & 4 lanes SB	Hughes Terrace to Jefferson		Y	Y
32	Lincoln	4 lanes NB & 3 lanes SB	Jefferson to Ballona Creek Bridge			Y
33	Lincoln	3 lanes NB & 2 lanes SB	Ballona Creek to Fiji		Y	Y
35	Lincoln/Culver	Grade-separated ramps	NW Quadrant-WB to SB and SB to WB			Y
36	Lincoln/Culver	Grade-separated ramps	SE Quadrant-EB to NB and NB to EB		Y	Y
37	Manchester	WB 2 left turn lanes added	At Manchester and La Cienega Intersection	Y	Y	Y
38	Manchester	1 reversable lane	I-405 to Prarie		Y	Y
39	Manchester	@ Lincoln	New EB right-turn lane	Y	Y	Y
40	Nash	Convert to one-way SB	Imperial Highway to El Segundo	Y	Y	Y

Table 2.3 (cont.)

MODEL UPDATE INFORMATION - REGIONAL ROADWAY IMPROVEMENTS

No.	Street/Highway	Improvement	Limits	1996	2005	2015
41	Prarte	1 reversable lane	I-105 to 1/2 mile N. of Manchester		Y	Y
42	Rosecrans	6 to 8 lanes	1000 ft each direction from Aviation Blvd.		Y	Y
43	Rosecrans	6 to 8 lanes	From Aviation, east to I - 405 (Henry Ave.)			Y
44	Sepulveda	Right and left turn lanes	At Rosecrans in all directions	Y	Y	Y
45	Sepulveda	1 left turn to 2 left turn lanes	At Marina, Southbound	Y	Y	Y
46	Sepulveda	SB to EB I-105	1 SB thru, 1 thru and right, 1 right turn only	Y	Y	Y
47	Sepulveda	@ Manchester	NB and SB left-turn phasing	Y	Y	Y
48	Teale	3 lanes each way	Centinela to Lincoln			Y
49	I-10	HOV	Baldwin Ave to I-605		Y	Y
50	I-10	HOV	Puente Ave to Citrus Ave		Y	Y
51	I-10	HOV	Citrus Ave to SR-57		Y	Y
52	I-10	HOV	SR-57 to S.B. County Line		Y	Y
53	I-10	HOV	I-605 to Puente Ave		Y	Y
54	I-10 / I-605	HOV to HOV Connectors	Interchange - Single linked Fwy.			Y
55	I-105	New EB On-Ramp	Ramp and new conn. Rd. between Nash / Douglas	Y	Y	Y
56	I-105	Widen WB off-ramp to 2 lanes	From Nash to Sepulveda		Y	Y
57	I-105 / I-605	HOV to HOV Connectors	Interchange - Single linked Fwy.			Y
58	I-110	HOV	SR-91 to Adams Blvd (open to MLK Jr.)	Y	Y	Y
59	I-110	Widening Connectors	I-5		Y	Y
60	I-210	HOV	SR-134 to E. Sunflower	Y	Y	Y
61	I-405	Widen SB Ramp (PM 22.5)	La Cienega Blvd.	Y	Y	Y
62	I-405	HOV	Orange County Line to I-710		Y	Y
63	I-405	HOV	I-710 to I-110		Y	Y
64	I-405	HOV	I-110 to El Segundo	Y	Y	Y
65	I-405	HOV	El Segundo to Century Blvd	Y	Y	Y
66	I-405	HOV	Century Blvd to SR-90		Y	Y
67	I-405	HOV	SR-90 to I-10 (Wilshire)		Y	Y
68	I-405	HOV	US-101 to I-5	Y	Y	Y
69	I-405	Interchange	Arbor Vitae-South half of interchange			Y
70	I-405	HOV	SR-101 to Waterford SB only	Y	Y	Y
71	I-405	HOV	I-10 to SR-101; NB; portion of remaining SB			Y
72	I-5	HOV	SR-134 to SR-14		Y	Y
73	I-5	HOV	SR-134 to I-10			Y
74	I-5	HOV	Orange County Line to I-605		Y	Y
75	I-5	HOV	I-605 to I-710			Y
76	I-5 / I-405	HOV to HOV Connectors	Interchange		Y	Y
77	I-5 / SR-110	Widen Connection	Northern I-5 to/from Southern I-110		Y	Y
		Add S.B. lane	L.A. River to Hill St.			
78	I-5 / SR-14	HOV to HOV Connection	Interchange			Y

Table 2.3 (cont.)

MODEL UPDATE INFORMATION - REGIONAL ROADWAY IMPROVEMENTS

No.	Street/Highway	Improvement	Limits	1996	2005	2015
79	I-605	HOV	Orange County Line to South Street		Y	Y
80	I-605	HOV	South Street to N. of Telegraph		Y	Y
81	I-605	HOV	N. of Telegraph Rd to I-10		Y	Y
82	I-710	Gap Closure	Valley Blvd to SR-134 (Court Delay and No EIR)			Y
83	SR-90 (Marina)	Restripe to 6 lanes	Centinela to Culver		Y	Y
84	SR-90 (Marina)	Total 3 EB lanes & 3 WB lanes	West of Culver to Mindanao		Y	Y
85	SR-90 (Marina)	Grade separation @ Culver	Second bridge to provide 3 lanes each way			Y
86	SR-90 (Marina)	Grade separation @ Culver	First Grade sep.fwy. bridge w/ EB & WB on-off ramps. Provide 2 WB & 2EB lanes		Y	Y
87	SR - 90 (Marina)	Flyover Lincoln	Extend to connect to Wash. Blvd. via Admiralty Wy. add a new WB lane to Admiralty Wy. for conn.			Y
88	SR-1	Add 2 MF Lanes	Marine Ave to Grand Ave (Widen from 6 to 8 lanes)		Y	Y
89	SR-118	HOV	Ventura County Line to I-5		Y	Y
90	SR-126	Widening	W of I-5 to Ventura County Line		Y	Y
91	SR-126	Widening	15th St to Lyons Ave		Y	Y
92	SR-134	HOV	US-101 / SR-170 to I-5	Y	Y	Y
93	SR-134	HOV	SR-2 to I-210	Y	Y	Y
94	SR-134	HOV	I-5 to SR-2	Y	Y	Y
95	SR-138	Widening	Avenue T to 90th			Y
96	SR-138	Widening	90th East to Longview			Y
97	SR-14	HOV	I-5 to SR-126 (San Fernando Rd)		Y	Y
98	SR-14	HOV	SR-126 (San Fernando Rd) to Sand Canyon		Y	Y
99	SR-14	HOV	Sand Canyon to Escondido Canyon		Y	Y
100	SR-14	HOV	Escondido to Pearblossom		Y	Y
101	SR-14	HOV	Pearblossom to P-8		Y	Y
102	SR-170	HOV	US101 to I-5	Y	Y	Y
103	SR-30	HOV	I-210 to Foothill			Y
104	SR-30	Widening to Freeway	SR-66 (Foothill Blvd) to S.B. County Line		Y	Y
105	SR-57	HOV	Orange County to SR-60		Y	Y
106	SR-57 / SR-60	HOV to HOV Connectors	Interchange - Single linked Fwy.		Y	Y
107	SR-60	HOV	I-605 to Brea Canyon			Y
108	SR-60	HOV	Brea Canyon to SR-57N		Y	Y
109	SR-60	HOV	SR-57N to S.B. County Line		Y	Y
110	SR-60 / SR-71C	Freeway Connector	SR-71 / Reservoir St - Single linked Fwy. No S/B 71 to W/B 60 & No N/B 71 to E/B 60		Y	Y
111	SR-60 / I-605	HOV to HOV Connectors	Interchange - Single linked Fwy.			Y
112	US-101	Interchange	Valley Circle Drive		Y	Y
113	US-101	Interchange	Parkway Calabasas Rd	Y	Y	Y

Source: Barton-Aschman Associates, Inc. - PTG (2000)

Roadway links identified as being analyzed in the City of Inglewood are:

- Manchester Avenue west of La Brea
- Arbor Vitae Street west of La Brea
- Century Boulevard west of La Brea

Significant Issues

Four significant issues were identified for the City of Inglewood to consider including in the overall comments on the Draft EIR/EIS and to consider for further analysis. These issues are: 1) impacts of the proposed "congestion relief package"; 2) impacts on level of services (LOS) changes caused by the project (Alternative C); 3) mitigation measures; and 4) conformance to the 2001 RTP.

Construction traffic would cause main roads around the airport to be intermittently subject to temporary detours and congestion during construction of airport related improvements. This, in turn, would temporarily impact access to businesses, residences, community facilities and services. Implementation of numerous mitigation measures to reduce construction impacts would serve to minimize significant community disruption impacts. It is felt that construction traffic will not be a significant issue for the City of Inglewood.

III DISCUSSION OF SIGNIFICANT ISSUES

This section will discuss the four significant issues affecting the City of Inglewood.

Impact of the Proposed Congestion Relief Package

The proposed "congestion relief package" consists of three major transportation improvement projects as follows:

- On the north, an expressway would provide direct freeway access to LAX for motorists traveling south on the 405 Freeway and for exiting the airport heading north.
- From the east, the 105 Freeway would be extended approximately 1.5 miles so that it terminates directly onto the airport.
- A ring road would be constructed that provides direct access to all parts of the airport and to the above freeway connections.

According to LAWA, these highly touted improvements will play a major role in reducing traffic congestion in the vicinity of LAX. Unfortunately, the gap in the analysis of these projects were impacts on adjacent communities including the City of Inglewood. This lack of analysis on surrounding communities has been a deficiency throughout the DEIR/EIS. Even Chapter 4.4.4, Community Disruption and Alteration of Surface Transportation Patterns, there was little discussion past the immediate neighborhoods surrounding LAX.

Another concern is whether the roadways improvements described above have a solid funding base or will they have to compete with other vitally needed projects in the region. For example, SCAG is vying with six other states for a \$950 million federal grant to construct a high-speed rail demonstration project that would connect LAX to downtown Los Angeles and other communities and air facilities. If the "congestion relief" projects are not constructed in conjunction with the expansion of LAX, surrounding cities could be impacted significantly.

SCAG has adopted a new Regional Transportation Plan (RTP) for 2001. Affected cities were invited to provide comments on the draft RTP. LAWA comments through the City of Los Angeles were quite critical of SCAG's technical approach to determining the impacts of the RTP. A major concern was SCAG's priority given to high-speed rail and the assumptions that passengers and cargo would change airport destinations as a result of a high-speed rail system. LAWA believed that that the draft RTP did not accurately portray the extensive ground transportation committed to the LAX DEIR/EIS.

Impacts on Levels of Service (LOS) Caused by the Project (Alternative C)

Level of Service (LOS) measures the effectiveness of an intersection or roadway segment in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. The attached Table 4.3.1-2 describes and depicts various levels of service from LOS A to LOS F.

Of the six intersections in the City of Inglewood analyzed by Barton-Aschman, all were adversely impacted by the project in the Year 2005 and five in the Year 2015 as shown on the attached Tables 4.3.2-15 and 4.3.2-16.

The attached Table 4.3.2-23 shows the LADOT Levels of Service for Alternative C for 2005 under existing conditions, base conditions (2005), 2005 with Alternative C, and 2005 with Alternative C with mitigation in place. Table 4.3.2-24 shows the same for 2015 conditions under Alternative C.

Mitigation Measures

One of the most important aspects of the Draft EIR/EIS is the identification, analysis and selection of measures to mitigate the impacts of increased traffic volumes resulting from the expansion of LAX. While the document conducts an extensive effort to identify potential mitigation measures, the specific impacts of implementing these measures upon the City of Inglewood does not appear adequate. While most of the City of Inglewood is within the Land Use Study Area as shown in the attached Figure 4.2-1, the analysis on the impacts of the project on intersections and roadway segments east of the 405 freeway are minimal.

Mitigation measures at intersections include addition of through and/or turning lanes. They also include two Intelligent Transportation System (ITS) Mitigation Measures which make it possible to adjust the flow of traffic. An Adaptive Traffic Control System (ATCS) would continuously electronically adjust traffic signal timing based on real-time conditions. Automated Traffic Surveillance and Control (ATSAC) makes it possible for manual remote control of traffic signals.

Analysis of additional intersections and roadway segments east of the 405 freeway is appropriate and necessary to determine the need for additional mitigation measures other than those already included in the DEIR/EIS. Since LAWA has not made a final determination on which measures to adopt, input by the City of Inglewood through the DEIR/EIS comment process could be helpful in settling on the final set of mitigation measures.

Conformance to the 2001 RTP

The potential expansion of LAX must conform to areawide transportation plans. A review of the Draft EIR/EIS showed potential deficiencies in this area. Failure to conform could lead to potential funding sanctions and other Federal restrictions that could affect the City of Inglewood. It is important that such deficiencies be identified and corrected.

IV EVALUATION OF ISSUES AND RECOMMENDATIONS

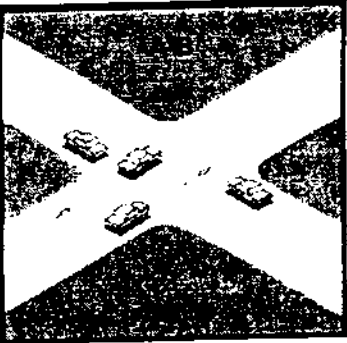
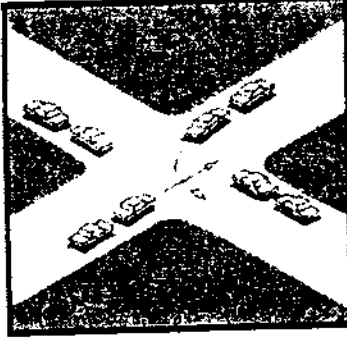
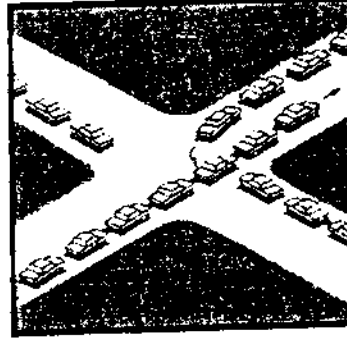
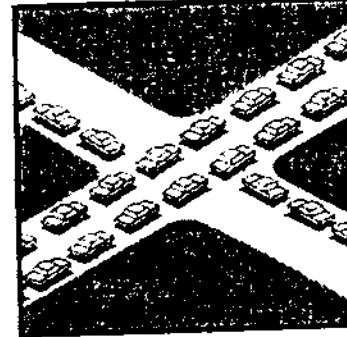
Impact of the Proposed Congestion Relief Package

The proposed "congestion relief package" consists of three major transportation improvement projects as described in the previous section.

4.3.1 On-Airport Surface Transportation

Table 4.3.1-2

Level-of-Service Definitions Relative to Intersections and Roadway Links

LOS ¹	Interpretation	V/C ²	
A	Uncongested operations; for intersections, all vehicles clear in first green light opportunity.	0.000-0.600	
B	Uncongested operations; for intersections, all vehicles clear in first green light opportunity.	0.601-0.700	
C	Light congestion; for intersections, occasional backups on critical approaches.	0.701-0.800	
D	Moderate congestion; for intersections, vehicles required to wait through more than one green light opportunity during short peaks.	0.801-0.900	
E	Severe congestion; for intersections, some long-standing lines on critical approaches, with blockage occurring if traffic signal does not provide for protected turning movements.	0.901-1.000	
F	Total breakdown with stop-and-go operations.	1.001+	

¹ Level of Service

² Volume to Capacity Ratio

Source: Transportation Research Board, Highway Capacity Manual, 1994.

4.3.2 Off-Airport Surface Transportation

Table 4.3.2-15

Year 2005 Alternative C Levels of Service (Adjusted Environmental Baseline Comparison)

Facility Number	Facility Name	Peak Hour ¹	Direc.	Adj. Env.		Alternative C		Impact
				V/C	LOS	V/C	LOS	
Intersection 3	Airport at Arbor Vitae	AM	N/A	0.629	B	0.761	C	Yes
		PM	N/A	0.815	D	0.675	B	No
		AP	N/A	0.929	E	0.645	B	No
Intersection 6	Airport at Manchester	AM	N/A	0.690	B	0.811	D	Yes
		PM	N/A	0.712	C	0.568	A	No
		AP	N/A	0.885	D	0.771	C	No
Intersection 7	Aviation at Arbor Vitae	AM	N/A	0.715	C	1.969	F	Yes
		PM	N/A	0.770	C	1.719	F	Yes
		AP	N/A	0.717	C	1.702	F	No
Intersection 8	La Cienega at Arbor Vitae	AM	N/A	0.732	C	1.129	F	Yes
		PM	N/A	0.696	B	0.952	E	Yes
		AP	N/A	0.793	C	1.217	F	Yes
Intersection 11	Aviation at Century	AM	N/A	0.828	D	1.431	F	Yes
		PM	N/A	1.006	F	1.012	F	No
		AP	N/A	1.804	F	1.553	F	No
Intersection 12	Aviation at El Segundo	AM	N/A	0.951	E	1.062	F	Yes
		PM	N/A	0.959	E	1.021	F	Yes
		AP	N/A	0.903	E	1.033	F	No
Intersection 13	Aviation at Imperial	AM	N/A	0.935	E	1.457	F	Yes
		PM	N/A	1.305	F	1.353	F	Yes
		AP	N/A	1.243	F	1.109	F	No
Intersection 14	Aviation at Manchester	AM	N/A	0.980	E	1.093	F	Yes
		PM	N/A	0.787	C	0.721	C	No
		AP	N/A	1.399	F	1.214	F	No
Intersection 15	Aviation at Rosecrans	AM	N/A	1.179	F	1.408	F	Yes
		PM	N/A	1.475	F	1.474	F	No
		AP	N/A	1.336	F	1.385	F	No
Intersection 18	Centinela at Jefferson	AM	N/A	1.077	F	1.025	F	No
		PM	N/A	1.100	F	1.037	F	No
		AP	N/A	0.911	E	1.006	F	No
Intersection 26	La Cienega at Century	AM	N/A	0.716	C	0.718	C	No
		PM	N/A	0.721	C	0.827	D	Yes
		AP	N/A	0.535	A	0.694	B	No
Intersection 35	Sepulveda at El Segundo	AM	N/A	1.007	F	1.025	F	Yes
		PM	N/A	1.135	F	1.108	F	No
		AP	N/A	0.889	D	0.993	E	No
Intersection 36	Vista Dei Mar at Grand	AM	N/A	0.813	D	0.591	A	No
		PM	N/A	0.459	A	0.607	B	No
		AP	N/A	0.469	A	0.707	C	No
Intersection 40	La Cienega at Florence	AM	N/A	0.690	B	1.468	F	Yes
		PM	N/A	0.925	E	1.024	F	Yes
		AP	N/A	1.428	F	1.450	F	No
Intersection 44	Sepulveda at Howard Hughes Pkwy	AM	N/A	0.710	C	0.748	C	No
		PM	N/A	0.788	C	0.747	C	No
		AP	N/A	0.649	B	0.635	B	No
Intersection 45	I-105 Fwy/Continental City Drive at Imperial	AM	N/A	0.688	B	0.786	C	Yes
		PM	N/A	0.797	C	0.667	B	No
		AP	N/A	0.791	C	0.729	C	No

4.3.2 Off-Airport Surface Transportation

Table 4.3.2-15

Year 2005 Alternative C Levels of Service (Adjusted Environmental Baseline Comparison)

Facility Number	Facility Name	Peak Hour ¹	Direc.	Adj. Env.		Alternative C		Impact
				V/C	LOS	V/C	LOS	
50	Sepulveda at Imperial	AM	N/A	0.797	C	0.849	D	Yes
		PM	N/A	1.015	F	1.645	F	Yes
		AP	N/A	0.794	C	0.803	D	No
51	Vista Del Mar at Imperial	AM	N/A	0.774	C	0.387	A	No
		PM	N/A	0.538	A	0.744	C	Yes
		AP	N/A	0.576	A	0.546	A	No
54	I-405 NB Ramps at Jefferson	AM	N/A	0.778	C	0.648	B	No
		PM	N/A	0.842	D	0.848	D	No
		AP	N/A	0.649	B	0.830	B	No
57	Lincoln at Jefferson	AM	N/A	0.930	E	0.813	D	No
		PM	N/A	1.252	F	1.037	F	No
		AP	N/A	0.883	D	0.767	C	No
72	La Cienega at Manchester	AM	N/A	0.647	B	1.057	F	Yes
		PM	N/A	0.759	C	0.726	C	No
		AP	N/A	1.018	F	1.030	F	No
78	I-405 NB Ramps at La Tijera	AM	N/A	0.878	D	0.552	A	No
		PM	N/A	0.941	E	0.948	E	No
		AP	N/A	0.597	A	0.561	A	No
81	Lincoln at La Tijera	AM	N/A	0.462	A	0.702	C	Yes
		PM	N/A	0.522	A	0.523	A	No
		AP	N/A	0.303	A	0.691	B	No
83	Sepulveda at La Tijera	AM	N/A	0.781	C	0.679	B	No
		PM	N/A	0.682	B	1.446	F	Yes
		AP	N/A	0.411	A	0.637	B	No
87	Lincoln at 83rd	AM	N/A	0.950	E	1.385	F	Yes
		PM	N/A	1.082	F	1.148	F	Yes
		AP	N/A	1.281	F	1.350	F	No
88	Lincoln at Manchester	AM	N/A	0.697	B	1.004	E	Yes
		PM	N/A	1.004	E	1.199	F	Yes
		AP	N/A	0.832	D	0.963	E	No
98	Pershing at Manchester	AM	N/A	0.432	A	0.150	A	No
		PM	N/A	0.560	A	0.499	A	No
		AP	N/A	0.265	A	0.153	A	No
99	Sepulveda at Manchester	AM	N/A	0.936	E	0.822	D	No
		PM	N/A	0.953	E	0.926	E	No
		AP	N/A	0.810	D	0.807	D	No
100	Sepulveda at Mariposa	AM	N/A	0.719	C	1.451	F	Yes
		PM	N/A	0.955	E	1.289	F	Yes
		AP	N/A	1.096	F	1.464	F	No
103	Sepulveda at Rosecrans	AM	N/A	1.540	F	1.836	F	Yes
		PM	N/A	1.700	F	1.670	F	No
		AP	N/A	1.803	F	1.833	F	No
106	Sepulveda at 76th/77th	AM	N/A	0.699	B	0.653	B	No
		PM	N/A	0.635	B	0.654	B	No
		AP	N/A	0.668	B	0.660	B	No
111	La Cienega at I-405 SB ramp n/o Century	AM	N/A	0.700	B	0.945	E	Yes
		PM	N/A	0.589	A	0.673	B	No
		AP	N/A	0.755	C	0.990	E	Yes

4.3.2 Off-Airport Surface Transportation

Table 4.3.2-15

Year 2005 Alternative C Levels of Service (Adjusted Environmental Baseline Comparison)

Facility Number	Facility Name	Peak Hour ¹	Direc.	Adj. Env.		Alternative C		Impact
				V/C	LOS	V/C	LOS	
Link 4	Sepulveda s/o Venice Bl	AM	NB/EB	0.855	D	0.863	D	No
			SB/WB	0.633	B	0.623	B	No
		PM	NB/EB	0.836	D	0.858	D	No
			SB/WB	0.823	D	0.822	D	No
			AP	NB/EB	0.796	C	0.869	D
Link 5	Overland s/o Venice Blvd.	AM	NB/EB	0.888	D	0.892	D	No
			SB/WB	0.898	D	0.871	D	No
		PM	NB/EB	0.825	D	0.814	D	No
			SB/WB	1.105	F	1.116	F	No
			AP	NB/EB	0.824	D	0.822	D
Link 21	Lincoln s/o Jefferson	AM	NB/EB	0.665	B	0.780	C	Yes
			SB/WB	0.381	A	0.373	A	No
		PM	NB/EB	0.812	D	0.817	D	No
			SB/WB	0.610	B	0.634	B	No
			AP	NB/EB	0.552	A	0.581	A
			SB/WB	0.597	A	0.578	A	No

N/A = Not Available.

¹ AP = Airport peak hour. Significant impacts occur in the airport peak hour only when total volumes exceed AM and PM peak hour volumes and the criteria for significant impacts are met.

Source: Barton-Aschman Associates, Inc.

Table 4.3.2-16

Year 2015 Alternative C Levels of Service (Adjusted Environmental Baseline Comparison)

Facility Number	Facility Name	Peak Hour ¹	Direc.	Adj. Env.		Alternative C		Impact
				V/C	LOS	V/C	LOS	
Intersection 8	La Cienega at Arbor Vitae	AM	N/A	0.949	E	1.570	F	Yes
		PM	N/A	0.944	E	1.460	F	Yes
		AP	N/A	0.893	D	1.153	F	No
Intersection 11	Aviation at Century	AM	N/A	0.940	E	1.322	F	Yes
		PM	N/A	1.062	F	1.123	F	Yes
		AP	N/A	1.850	F	1.876	F	No
Intersection 12	Aviation at El Segundo	AM	N/A	1.089	F	1.166	F	Yes
		PM	N/A	1.082	F	1.108	F	Yes
		AP	N/A	1.060	F	1.206	F	No
Intersection 15	Aviation at Rosecrans	AM	N/A	1.329	F	1.340	F	Yes
		PM	N/A	1.659	F	1.687	F	Yes
		AP	N/A	1.594	F	1.706	F	No
Intersection 22	Sepulveda at Centinela Ave.	AM	N/A	1.404	F	1.454	F	Yes
		PM	N/A	1.261	F	1.313	F	Yes
		AP	N/A	1.044	F	1.010	F	No
Intersection 26	La Cienega at Century	AM	N/A	0.756	C	1.082	F	Yes
		PM	N/A	0.840	D	1.054	F	Yes
		AP	N/A	0.616	B	0.868	D	No
Intersection 35	Sepulveda at El Segundo	AM	N/A	1.110	F	1.125	F	Yes
		PM	N/A	1.279	F	1.248	F	No
		AP	N/A	0.975	E	1.087	F	No

4.3.2 Off-Airport Surface Transportation

Table 4.3.2-16

Year 2015 Alternative C Levels of Service (Adjusted Environmental Baseline Comparison)

Facility Number	Facility Name	Peak Hour ¹	Direc.	Adj. Env.		Alternative C		Impact
				V/C	LOS	V/C	LOS	
Intersection 40	La Cienega Blvd. at Florence Ave	AM	N/A	0.789	C	0.866	D	Yes
		PM	N/A	1.087	F	1.098	F	Yes
		AP	N/A	1.566	F	1.566	F	No
Intersection 44	Sepulveda at Howard Hughes Parkway	AM	N/A	0.748	C	0.851	D	Yes
		PM	N/A	0.959	E	0.937	E	No
		AP	N/A	0.736	C	0.724	C	No
Intersection 48	I-105 WB Off/Nash at Imperial	AM	N/A	1.293	F	1.244	F	No
		PM	N/A	0.614	B	0.716	C	Yes
		AP	N/A	0.447	A	0.412	A	No
Intersection 50	Sepulveda at Imperial	AM	N/A	0.822	D	1.011	F	Yes
		PM	N/A	1.092	F	1.650	F	Yes
		AP	N/A	0.842	D	0.924	E	No
Intersection 52	La Cienega at Imperial	AM	N/A	0.691	B	0.747	C	Yes
		PM	N/A	0.544	A	0.596	A	No
		AP	N/A	0.574	A	0.580	A	No
Intersection 57	Lincoln at Jefferson	AM	N/A	1.408	F	1.431	F	Yes
		PM	N/A	1.187	F	1.226	F	Yes
		AP	N/A	0.835	D	0.861	D	No
Intersection 71	La Cienega at Lennox Blvd.	AM	N/A	0.379	A	0.632	B	No
		PM	N/A	0.484	A	0.775	C	Yes
		AP	N/A	0.876	D	1.321	F	Yes
Intersection 72	La Cienega at Manchester	AM	N/A	0.700	B	0.745	C	Yes
		PM	N/A	0.772	C	0.780	C	No
		AP	N/A	1.148	F	1.242	F	Yes
Intersection 78	I-405 NB Ramps at La Tijera	AM	N/A	0.828	D	1.027	F	Yes
		PM	N/A	0.941	E	0.867	D	No
		AP	N/A	0.626	B	0.449	A	No
Intersection 79	I-405 SB Ramps at La Tijera	AM	N/A	0.745	C	0.801	D	Yes
		PM	N/A	0.939	E	0.953	E	Yes
		AP	N/A	0.422	A	0.611	B	No
Intersection 81	Lincoln at La Tijera	AM	N/A	0.509	A	0.877	D	Yes
		PM	N/A	0.556	A	1.229	F	Yes
		AP	N/A	0.422	A	0.971	E	No
Intersection 83	Sepulveda at La Tijera	AM	N/A	0.889	D	1.284	F	Yes
		PM	N/A	0.910	E	1.749	F	Yes
		AP	N/A	0.485	A	0.827	D	No
Intersection 87	Lincoln at 83rd	AM	N/A	1.131	F	1.245	F	Yes
		PM	N/A	1.482	F	1.588	F	Yes
		AP	N/A	1.517	F	1.540	F	No
Intersection 88	Lincoln at Manchester	AM	N/A	0.792	C	1.015	F	Yes
		PM	N/A	1.543	F	1.732	F	Yes
		AP	N/A	0.921	E	1.241	F	No
Intersection 94	Lincoln at Teale	AM	N/A	0.620	B	0.785	C	Yes
		PM	N/A	0.540	B	0.652	B	No
		AP	N/A	0.458	A	0.487	A	No
Intersection 98	Pershing at Manchester	AM	N/A	0.482	A	0.406	A	No
		PM	N/A	0.610	B	0.748	C	Yes
		AP	N/A	0.366	A	0.218	A	No
Intersection 99	Sepulveda at Manchester	AM	N/A	1.008	F	1.113	F	Yes
		PM	N/A	1.085	F	1.033	F	No
		AP	N/A	0.888	D	0.836	D	No
Intersection 100	Sepulveda at Mariposa	AM	N/A	0.801	D	0.908	E	Yes
		PM	N/A	1.084	F	1.484	F	Yes
		AP	N/A	1.204	F	1.615	F	No
Intersection 101	Pershing at Westchester Pkwy	AM	N/A	0.331	A	0.633	B	No
		PM	N/A	0.299	A	0.863	D	Yes
		AP	N/A	0.138	A	0.509	A	No
Intersection 103	Sepulveda at Rosecrans	AM	N/A	1.645	F	1.643	F	No
		PM	N/A	1.692	F	1.733	F	Yes
		AP	N/A	1.888	F	1.936	F	No
Intersection 106	Sepulveda at 76th/77th	AM	N/A	0.762	C	0.868	D	Yes
		PM	N/A	0.666	B	0.640	B	No
		AP	N/A	0.722	C	0.651	B	No

Table 4.3.2-23

LADOT Level of Service Analysis, Alternative C 2005

N/S	E/W	No. 1	Existing (1996)			Env. Base (2005)			Alt C (2005)			Alt C w/ Mitigation			
			V/C		LOS	V/C		LOS	V/C		LOS	V/C		LOS	Impact
La Cienega		71	0.371	A	0.328	A	0.342	A	0.014	A	0.014	A	0.014	0.014	
La Cienega	Manchester	72	0.684	B	0.679	B	0.674	B	-0.005	B	-0.005	B	-0.005	-0.005	
La Tijera	Manchester	82	0.585	A	0.576	A	0.601	B	0.025	B	0.025	B	0.025	0.025	
Lincoln	83rd St	87	0.892	D	0.895	D	1.000	E	0.105	E	0.105	D	0.081	-0.081	
Lincoln	Jefferson	57	0.710	C	0.869	D	0.914	E	0.045	E	0.045	E	0.045	0.045	
Lincoln	La Tijera	81	0.429	A	0.441	A	0.633	B	0.192	B	0.192	A	0.078	0.078	
Lincoln	Manchester	88	0.712	C	0.755	C	0.783	C	0.028	C	0.028	C	-0.043	-0.043	
Lincoln	Teale	94	0.902	E	0.652	B	0.737	C	0.085	C	0.085	C	0.085	0.085	
Main	Imperial	47	0.833	D	0.741	C	0.609	B	-0.132	B	-0.132	B	-0.132	-0.132	
Main	Imperial (w/ project)	47A	---	---	---	---	0.527	A	N/A	A	0.527	A	N/A	N/A	
Pershing	Imperial	49	0.795	C	0.864	D	---	---	N/A	---	N/A	---	N/A	N/A	
Pershing	Manchester	98	0.478	A	0.380	A	0.483	A	0.103	A	0.103	A	0.103	0.103	
Pershing	Westchester Pkwy	101	0.186	A	0.279	A	0.659	B	0.380	B	0.380	B	0.380	0.380	
Sepulveda	76th/77th St	106	0.698	B	0.702	C	0.766	C	0.064	C	0.064	B	-0.078	-0.078	
Sepulveda	Centinela	22	0.945	E	1.055	F	1.040	F	-0.015	F	-0.015	F	-0.015	-0.015	
Sepulveda	Century	27	0.679	B	0.786	C	0.520	A	-0.265	A	-0.265	A	-0.266	-0.266	
Sepulveda	Et Segundo	35	0.869	D	1.062	F	1.087	F	0.025	F	0.025	F	-0.045	-0.045	
Sepulveda	Howard Hughes Pkwy	44	0.715	C	0.646	B	0.707	C	0.061	C	0.061	B	0.031	0.031	
Sepulveda	I-105 WB off-ramp	105	1.134	F	1.318	F	1.141	F	-0.177	F	-0.177	F	-0.177	-0.177	
Sepulveda	Imperial	50	1.018	F	1.026	F	0.993	E	-0.033	E	-0.033	E	-0.121	-0.121	
Sepulveda	La Tijera	83	0.694	B	0.822	D	1.043	F	0.221	F	0.221	E	0.036	0.036	
Sepulveda	Lincoln	93	0.582	A	0.447	A	---	---	N/A	---	N/A	---	N/A	N/A	
Sepulveda	Manchester	99	0.787	C	0.696	B	0.755	C	0.059	C	0.059	C	0.029	0.029	
Sepulveda	Mariposa	100	0.730	C	0.727	C	0.791	C	0.064	C	0.064	C	-0.006	-0.006	
Sepulveda	Rosecrans	103	1.220	F	1.127	F	1.115	F	-0.012	F	-0.012	F	-0.012	-0.012	
Sepulveda	Westchester Pkwy	109	0.585	A	0.871	D	0.761	F	-0.110	F	-0.110	F	-0.110	-0.110	
Sepulveda	Westchester Pkwy (w/ project)	109A	---	---	---	---	0.619	B	N/A	B	0.619	B	N/A	N/A	
Vista Del Mar	Grand	36	0.749	C	0.737	C	0.809	D	0.072	D	0.072	C	0.047	0.047	
Vista Del Mar	Imperial	51	0.465	A	0.837	D	0.895	D	0.058	D	0.058	C	-0.097	-0.097	
Centinela	Culver	A	0.585	A	0.633	B	0.655	B	0.022	B	0.022	B	0.022	0.022	
Centinela	Rte. 90 EB ramps	B	0.416	A	0.376	A	0.405	A	0.029	A	0.029	A	0.029	0.029	
Centinela	Rte. 90 WB ramps	C	0.555	A	0.449	A	0.468	A	0.019	A	0.019	A	0.019	0.019	
La Cienega	Centinela	D	1.001	F	0.990	E	1.022	F	0.032	F	0.032	E	0.002	0.002	
La Cienega	La Tijera	E	0.759	C	0.775	C	0.764	C	-0.011	C	-0.011	C	-0.011	-0.011	
Lincoln	Ball	F	0.524	A	0.475	A	0.536	A	0.061	A	0.061	A	0.038	0.038	
Lincoln	Fiji	G	0.558	A	0.442	A	0.552	A	0.110	A	0.110	A	0.110	0.110	
Lincoln	Marina Expwy	H	0.793	C	0.826	D	0.917	E	0.091	E	0.091	F	0.296	0.296	
Lincoln	Maxella	I	0.595	A	0.823	D	0.850	D	0.027	D	0.027	D	-0.020	-0.020	
Lincoln	Mindanao	J	0.807	D	0.733	C	0.788	C	0.055	C	0.055	B	-0.034	-0.034	
Lincoln	Venice	K	0.891	D	0.844	D	0.864	D	0.020	D	0.020	D	-0.004	-0.004	

4.3.2 Off Airport Surface Transportation

Table 4.3.2-23

LADOT Level of Service Analysis, Alternative C 2005

N/S	E/W	No. 1	Existing (1996)			Env. Base (2005)			Alt C (2005)			Alt C w/ Mitigation			
			V/C	LOS	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Impact	
La Cienega	Lennox	71	0.371	A	0.328	A	0.342	A	0.014	0.342	A	0.014	0.342	A	0.014
La Cienega	Manchester	72	0.684	B	0.679	B	0.674	B	-0.005	0.674	B	-0.005	0.674	B	-0.005
La Tijera	Manchester	82	0.585	A	0.576	A	0.601	B	0.025	0.601	B	0.025	0.601	B	0.025
Lincoln	83rd St	87	0.892	D	0.895	D	1.000	E	0.105	0.814	D	-0.081	0.814	D	-0.081
Lincoln	Jefferson	57	0.710	C	0.869	D	0.914	E	0.045	0.914	E	0.045	0.914	E	0.045
Lincoln	La Tijera	81	0.429	A	0.441	A	0.633	B	0.192	0.519	A	0.078	0.519	A	0.078
Lincoln	Manchester	88	0.712	C	0.755	C	0.783	C	0.028	0.712	C	-0.043	0.712	C	-0.043
Lincoln	Teale	94	0.902	E	0.652	B	0.737	C	0.085	0.737	C	0.085	0.737	C	0.085
Main	Imperial	47	0.833	D	0.741	C	0.609	B	-0.132	0.609	B	-0.132	0.609	B	-0.132
Main	Imperial (w/ project)	47A	---	---	---	---	0.527	A	N/A	0.527	A	N/A	0.527	A	N/A
Pershing	Imperial	49	0.795	C	0.864	D	---	---	N/A	---	---	N/A	---	---	N/A
Pershing	Manchester	98	0.478	A	0.380	A	0.483	A	0.103	0.483	A	0.103	0.483	A	0.103
Pershing	Westchester Pkwy	101	0.186	A	0.279	A	0.659	B	0.380	0.659	B	0.380	0.659	B	0.380
Sepulveda	76th/77th St	106	0.698	B	0.702	C	0.766	C	0.084	0.624	B	-0.078	0.624	B	-0.078
Sepulveda	Centinela	22	0.945	E	1.055	F	1.040	F	-0.015	1.040	F	-0.015	1.040	F	-0.015
Sepulveda	Century	27	0.679	B	0.786	C	0.520	A	-0.266	0.520	A	-0.266	0.520	A	-0.266
Sepulveda	El Segundo	35	0.869	D	1.062	F	1.087	F	0.025	1.017	F	-0.045	1.017	F	-0.045
Sepulveda	Howard Hughes Pkwy	44	0.715	C	0.646	B	0.707	C	0.061	0.677	B	0.031	0.677	B	0.031
Sepulveda	I-105 WB off-ramp	105	1.134	F	1.318	F	1.141	F	-0.177	1.141	F	-0.177	1.141	F	-0.177
Sepulveda	Imperial	50	1.018	F	1.026	F	0.993	E	-0.033	0.905	E	-0.121	0.905	E	-0.121
Sepulveda	La Tijera	83	0.694	B	0.822	D	1.043	F	0.221	0.858	D	0.036	0.858	D	0.036
Sepulveda	Lincoln	93	0.582	A	0.447	A	---	---	N/A	---	---	N/A	---	---	N/A
Sepulveda	Manchester	99	0.787	C	0.696	B	0.755	C	0.059	0.725	C	0.029	0.725	C	0.029
Sepulveda	Mariposa	100	0.730	C	0.727	C	0.791	C	0.064	0.721	C	-0.006	0.721	C	-0.006
Sepulveda	Rosecrans	103	1.220	F	1.127	F	1.115	F	-0.012	1.115	F	-0.012	1.115	F	-0.012
Sepulveda	Westchester Pkwy	109	0.585	A	0.871	D	0.761	C	-0.110	0.761	C	-0.110	0.761	C	-0.110
Sepulveda	Westchester Pkwy (w/ project)	109A	---	---	---	---	0.619	B	N/A	0.619	B	N/A	0.619	B	N/A
Vista Del Mar	Grand	36	0.749	C	0.737	C	0.809	D	0.072	0.784	C	0.047	0.784	C	0.047
Vista Del Mar	Imperial	51	0.465	A	0.837	D	0.895	D	0.058	0.740	C	-0.097	0.740	C	-0.097
Centinela	Culver	A	0.585	A	0.633	B	0.655	B	0.022	0.655	B	0.022	0.655	B	0.022
Centinela	Rte. 90 EB ramps	B	0.416	A	0.376	A	0.405	A	0.029	0.405	A	0.029	0.405	A	0.029
Centinela	Rte. 90 WB ramps	C	0.555	A	0.449	A	0.468	A	0.019	0.468	A	0.019	0.468	A	0.019
La Cienega	Centinela	D	1.001	F	0.990	E	1.022	F	0.032	0.992	E	0.002	0.992	E	0.002
La Cienega	La Tijera	E	0.759	C	0.775	C	0.764	C	-0.011	0.764	C	-0.011	0.764	C	-0.011
Lincoln	Bali	F	0.524	A	0.475	A	0.536	A	0.061	0.513	A	0.038	0.513	A	0.038
Lincoln	Fiji	G	0.558	A	0.442	A	0.552	A	0.110	0.552	A	0.110	0.552	A	0.110
Lincoln	Marina Expwy	H	0.793	C	0.826	D	0.917	E	0.091	1.122	F	0.296	1.122	F	0.296
Lincoln	Maxella	I	0.595	A	0.823	D	0.850	D	0.027	0.803	D	-0.020	0.803	D	-0.020
Lincoln	Mindanao	J	0.807	D	0.733	C	0.788	C	0.055	0.699	B	-0.034	0.699	B	-0.034
Lincoln	Venice	K	0.891	D	0.844	D	0.864	D	0.020	0.840	D	-0.004	0.840	D	-0.004

Table 4.3.2-24

LADOT Level of Service Analysis, Alternative C 2015

N/S	E/W	No.	Existing (1996)			Env. Base (2015)			Alt C (2015)			w/ Mitigation			Alt C Impact
			V/C			V/C			V/C			V/C			
			LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	
AM Peak Hour															
Arbor Vitae		3	0.361	A	0.617	B	---	---	N/A	---	N/A	---	N/A	---	N/A
Century		4	0.441	A	0.486	A	---	0.454	A	0.454	A	0.454	A	0.454	-0.032
La Tijera		5	0.521	A	0.565	A	---	0.506	A	0.506	A	0.506	A	0.506	-0.059
Manchester		6	0.579	A	0.725	C	---	0.735	C	0.735	C	0.735	C	0.735	0.010
111th		10	0.460	A	0.353	A	---	---	---	---	---	---	---	---	N/A
Aviation		7	0.454	A	0.681	B	---	0.557	A	0.557	A	0.557	A	0.557	-0.124
Aviation		7A	---	---	---	---	---	0.741	C	0.741	C	0.741	C	0.741	N/A
Aviation		11	0.689	B	0.842	D	---	1.183	F	1.183	F	1.183	F	1.183	-0.028
Aviation		12	0.835	D	1.097	F	---	1.113	F	1.113	F	1.113	F	1.113	-0.232
Aviation		13	0.533	A	0.919	E	---	0.901	E	0.901	E	0.901	E	0.901	-0.018
Aviation		14	0.712	C	1.052	F	---	0.726	C	0.726	C	0.726	C	0.726	-0.326
Aviation		15	1.121	F	1.164	F	---	1.171	F	1.171	F	1.171	F	1.171	0.007
Aviation		18	0.593	A	0.945	E	---	0.888	D	0.888	D	0.888	D	0.888	-0.057
Centinela		28	0.654	B	0.515	A	---	0.491	A	0.491	A	0.491	A	0.491	-0.024
Culver		33	0.668	B	0.706	C	---	0.414	A	0.414	A	0.414	A	0.414	-0.292
Culver		34	0.321	A	0.479	A	---	0.440	A	0.440	A	0.440	A	0.440	-0.039
Douglas		43	1.069	F	1.211	F	---	0.947	E	0.947	E	0.947	E	0.947	-0.264
Highland/Vista Del Mar		45	0.434	A	0.724	C	---	0.659	B	0.659	B	0.659	B	0.659	-0.065
Imperial		48	0.491	A	1.035	F	---	1.032	F	1.032	F	1.032	F	1.032	-0.003
Imperial		307	0.645	B	0.733	C	---	0.769	C	0.769	C	0.769	C	0.769	0.036
Century		46	0.239	A	0.273	A	---	0.254	A	0.254	A	0.254	A	0.254	-0.019
I-405 NB off-ramp		54	0.597	A	0.853	D	---	0.852	D	0.852	D	0.852	D	0.852	-0.001
I-405 NB ramps		78	0.964	E	1.218	F	---	1.085	F	1.085	F	1.085	F	1.085	-0.133
I-405 NB ramps		55	0.467	A	0.652	B	---	0.596	A	0.596	A	0.596	A	0.596	-0.056
I-405 SB ramps		79	0.820	D	1.112	F	---	0.804	D	0.804	D	0.804	D	0.804	-0.308
I-405 SB ramps		67	0.197	A	0.253	A	---	---	---	---	---	---	---	---	N/A
La Cienega		313	0.237	A	0.309	A	---	0.317	A	0.317	A	0.317	A	0.317	0.008
La Cienega		8	0.537	A	0.885	D	---	1.263	F	1.263	F	1.263	F	1.263	0.127
La Cienega		26	0.680	B	0.756	C	---	1.065	F	1.065	F	1.065	F	1.065	0.110
La Cienega		312	0.552	A	0.632	B	---	0.646	B	0.646	B	0.646	B	0.646	0.014
La Cienega		40	0.749	C	0.798	C	---	0.804	D	0.804	D	0.804	D	0.804	0.006
La Cienega		111	0.644	B	0.736	C	---	0.691	B	0.691	B	0.691	B	0.691	-0.045
I-405 SB ramps N/O Century		69	0.267	A	0.326	A	---	0.281	A	0.281	A	0.281	A	0.281	-0.045
I-405 SB ramps N/O Imperial		68	0.221	A	0.384	A	---	0.310	A	0.310	A	0.310	A	0.310	-0.074
I-405 SB ramps S/O Century															

Table 4.3.2-24

LADOT Level of Service Analysis, Alternative C 2015

N/S	E/W	No.	Existing (1996)			Env. Base (2015)			Alt C (2015)			Alt C w/ Mitigation		
			V/C	LOS		V/C	LOS		V/C	LOS	Impact	V/C	LOS	Impact
La Cienega	Imperial	52	0.321	A	0.689	B	0.726	C	0.037	0.726	C	0.037		
La Cienega	Lennox	71	0.371	A	0.398	A	0.465	A	0.067	0.465	A	0.067		
La Cienega	Manchester	72	0.684	B	0.732	C	0.699	B	-0.033	0.699	B	-0.033		
La Tijera	Manchester	82	0.585	A	0.649	B	0.597	A	-0.052	0.597	A	-0.052		
Lincoln	83rd St	87	0.892	D	1.054	F	1.237	F	0.183	1.044	F	-0.010		
Lincoln	Jefferson	57	0.710	C	1.064	F	1.160	F	0.096	1.160	F	0.096		
Lincoln	La Tijera	81	0.429	A	0.508	A	0.863	D	0.355	0.716	C	0.208		
Lincoln	Manchester	88	0.712	C	0.825	D	1.037	F	0.212	0.923	E	0.098		
Lincoln	Teale	94	0.902	E	0.746	C	0.797	C	0.051	0.797	C	0.051		
Main	Imperial	47	0.833	D	0.778	C	0.498	A	-0.280	0.498	A	-0.280		
Main	Imperial	47A	-----	-----	-----	-----	0.492	A	N/A	0.492	A	N/A		
Pershing	Imperial	49	0.795	C	1.017	F	-----	-----	N/A	-----	-----	N/A		
Pershing	Manchester	98	0.478	A	0.420	A	0.422	A	0.002	0.422	A	0.002		
Pershing	Manchester Pkwy	101	0.186	A	0.336	A	0.430	A	0.094	0.430	A	0.094		
Sepulveda	76th/77th St	106	0.698	B	0.742	C	0.849	D	0.107	0.691	B	-0.051		
Sepulveda	Centinela	22	0.945	E	1.305	F	1.338	F	0.033	1.115	F	-0.190		
Sepulveda	Century	27	0.679	B	0.813	D	0.542	A	-0.271	0.542	A	-0.271		
Sepulveda	El Segundo	35	0.869	D	1.190	F	1.231	F	0.041	1.161	F	-0.029		
Sepulveda	Howard Hughes Pkwy	44	0.715	C	0.680	B	0.719	C	0.039	0.719	C	0.039		
Sepulveda	I-105 WB off-ramp	105	1.134	F	1.387	F	1.251	F	-0.136	1.251	F	-0.136		
Sepulveda	Imperial	50	1.018	F	1.132	F	1.209	F	0.077	0.943	E	-0.189		
Sepulveda	La Tijera	83	0.694	B	0.878	D	1.079	F	0.201	0.890	D	0.012		
Sepulveda	Lincoln	93	0.582	A	0.528	A	-----	-----	N/A	-----	-----	N/A		
Sepulveda	Manchester	99	0.787	C	0.779	C	0.796	C	0.017	0.796	C	0.017		
Sepulveda	Mariposa	100	0.730	C	0.772	C	0.908	E	0.136	0.803	D	0.031		
Sepulveda	Rosecrans	103	1.220	F	1.275	F	1.243	F	-0.032	1.243	F	-0.032		
Sepulveda	Westchester Pkwy	109	0.585	A	0.923	E	0.656	B	-0.267	0.656	B	-0.267		
Sepulveda	Westchester Pkwy (w/ project)	109A	-----	-----	-----	-----	0.713	C	N/A	0.713	C	N/A		
Vista Del Mar	Grand	36	0.749	C	0.918	E	0.729	C	-0.189	0.729	C	-0.189		
Vista Del Mar	Imperial	51	0.465	A	1.098	F	0.903	E	-0.195	0.903	E	-0.195		
Centinela	Culver	A	0.585	A	0.749	C	0.731	C	-0.018	0.731	C	-0.018		
Centinela	Rte. 90 EB ramps	B	0.416	A	0.354	A	0.379	A	0.025	0.379	A	0.025		
Centinela	Rte. 90 WB ramps	C	0.555	A	0.494	A	0.501	A	0.007	0.501	A	0.007		
Centinela	Centinela	D	1.001	F	1.067	F	1.158	F	0.091	1.052	F	-0.015		
La Cienega	La Tijera	E	0.759	C	0.765	C	0.745	C	-0.020	0.745	C	-0.020		
La Cienega	Bali	F	0.524	A	0.554	A	0.557	A	0.003	0.536	A	-0.018		
Lincoln	Fiji	G	0.558	A	0.586	A	0.584	A	-0.002	0.584	A	-0.002		
Lincoln	Marina Expwy	H	0.793	C	0.942	E	0.964	E	0.022	1.033	F	0.091		
Lincoln	Maxella	I	0.595	A	0.837	D	0.865	D	0.028	0.817	D	-0.020		
Lincoln	Mindanao	J	0.807	D	0.868	D	0.876	D	0.008	0.789	C	-0.079		

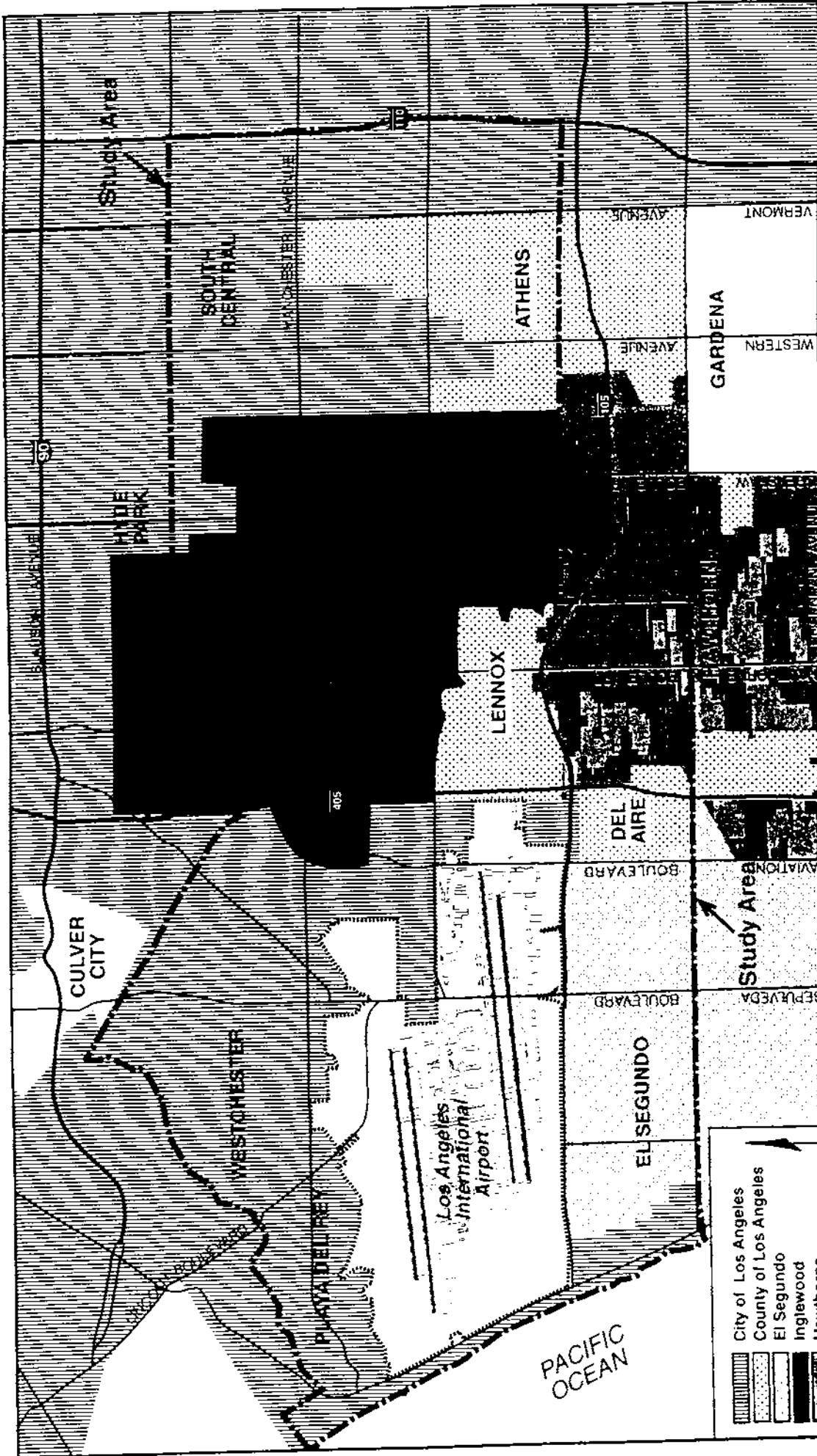


Figure 4.2-1

Land Use Study Area and Jurisdictional Boundaries

Los Angeles International Airport Master Plan

On preliminary review, it appears that the South Bay cities are excluded from the congestion relief package. Also, it is unclear whether these roadway improvements have a solid funding base. If not, there will be fierce competition for these funds with other regional projects and even the funding of mitigation measures for the LAX expansion.

It is recommended that the City of Inglewood include these concerns in their DEIR/EIS comments.

While the LAX Expressway borders areas in the City of Inglewood, Chapter 4.4.4, Community Disruption and Alteration of Surface Transportation Patterns, of the DEIR/EIS states that "this facility is proposed within existing rights of way and would not intrude into Inglewood or interfere with access to community services". The plans for the LAX Expressway and a more detailed discussion of its potential effects on communities are provided in Appendix K, Supplemental Environmental Evaluation for LAX Expressway and State Route 1 Improvements.

It is recommended that an independent consultant funded by LAWA conduct an extensive evaluation of the impacts of the LAX Expressway upon the citizens of the City of Inglewood.

Impacts on Levels of Service (LOS) Caused by the Project (Alternative C)

Of the six intersections in the City of Inglewood analyzed by Barton-Aschman, all were adversely impacted by the project in the Year 2005 and five in the Year 2015 as shown on the attached Tables 4.3.2-15 and 4.3.2-16.

The attached Table 4.3.2-23 shows the LADOT Levels of Service for Alternative C for 2005 under existing conditions, base conditions (2005), 2005 with Alternative C, and 2005 with Alternative C with mitigation in place. Table 4.3.2-24 shows the same for 2015 conditions under Alternative C.

There are serious concerns regarding the validity of the model with regard to the following:

Baseline Conditions - There is a question of the legitimacy of the baseline for evaluating the levels of service. Two baseline scenarios were used to determine the effect of the proposed Master Plan improvements on off-airport roadways. First, the environmental baseline is the surface condition existing in 1996. Second, the adjusted environmental baseline uses the current airport use, but assumes future roadways and land uses. Two issues are raised when using this approach:

1. It does not provide for a comparison of project alternatives with existing conditions. CEQA requires that the existing condition of an EIR be established at the time the Notice of Preparation (NOP) is issued. The use of so-called existing condition for the years 2005 and 2015 does not meet this requirement.

2. It minimizes the extent of change on area roads between the existing conditions and the future conditions associated with the project. It is clear that not all future roadway adverse conditions will be a result of the LAX Master Plan. However, comparing the project to a future condition seems to limit the evaluation of cumulative effects and the project's contribution to their mitigation.

Modeled Years - The DEIR/EIS modeled future conditions for the years 2005 and 2015. The current SCAG RTP uses 2025 as the horizon year. The 2025 year would seem to be the appropriate year to use since the project will take at least 16 years to complete. The proposed Master Plan improvements may well not be complete by 2015. A discussion of a longer planning horizon would be appropriate.

Assumptions - Because the base year for analysis purposes is 2005, assumptions were made that future transportation system improvements with programmed funding were added to the model networks. Improvements are assumed to the freeways, high-occupancy (HOV) lanes, surface streets, and to the transit system. The roadway improvements are shown in the attached Table 2.3. The validity of the model depends on these improvements being in place. However, there is no guarantee that these facilities will all be built in a timely manner.

It is recommended that the City of Inglewood include these concerns in their DEIR/EIS comments.

Mitigation Measures

One of the most important aspects of the Draft EIR/EIS is the identification, analysis and selection of measures to mitigate the impacts of increased traffic volumes resulting from the expansion of LAX. While the document conducts an extensive effort to identify potential mitigation measures, the specific impacts of implementing these measures upon the City of Inglewood does not appear adequate.

The mitigation measures currently in the report for intersections in Inglewood are shown the attached Phase 3F: 2005 Alternative C Final Transportation Improvements and Phase 3F: 2015 Alternative C Final Transportation Improvements. The 2005 improvements include five intersections in Inglewood and the 2015 improvements include two intersections in Inglewood. No roadway links in Inglewood were included for improvements nor is there a discussion regarding them.

Analysis of additional intersections and roadway segments east of the 405 freeway is appropriate and necessary to determine the need for additional mitigation measures other than those already included in the DEIR/EIS. Since LAWA has not made a final determination on which measures to adopt, input by the City of Inglewood through the DEIR/EIS comment process could be helpful in settling on the final set of mitigation measures.

Los Angeles International Airport Master Plan

PHASE 3F: 2005 ALTERNATIVE C FINAL TRANSPORTATION IMPROVEMENTS

Facility Number	Facility Name	Peak Hour	Adj. Env. V/C LOS	Alt. C V/C LOS	Impact	Mit. Alt. C V/C LOS	Impact	Improvements	Final V/C LOS	Comments
Intersection 3	Airport at Arbor Vitae	AM PM AP(1)	0.829 B 0.815 D 0.829 E	0.761 C 0.675 B 0.645 B	Yes No No	0.693 B 0.662 B 0.645 B	No No No	No additional improvements necessary	0.693 B 0.662 B 0.645 B	Impacts mitigated by network/link improvements, enhances airport access
Intersection 6	Airport at Manchester	AM PM AP(1)	0.890 B 0.712 C 0.885 D	0.811 D 0.568 A 0.771 C	Yes No No	0.521 A 0.588 A 0.759 C	No No No	No additional improvements necessary	0.521 A 0.588 A 0.759 C	Impacts mitigated by network/link improvements
Intersection 7	Aviation at Arbor Vitae	AM PM AP(1)	0.715 C 0.770 C 0.717 C	1.969 F 1.719 F 1.702 F	Yes Yes No	1.641 F 1.779 F 1.694 F	Yes Yes Yes	Add 2nd LT and a L/TTH lane on NB approach, add a free-flow RT lane on EB approach, add 2nd LT lane on WB approach, add a separate RT lane on SB approach, split phase N-S, plus ATCS	0.881 D 0.889 D 1.018 F	Temporarily unmitigated, enhances airport access
Intersection 8	La Cienega at Arbor Vitae	AM PM AP(1)	0.732 C 0.696 B 0.783 C	1.129 F 0.952 E 1.217 F	Yes Yes Yes	1.451 F 0.959 E 1.215 F	Yes Yes Yes	Add a separate RT lane WB and SB approaches, add 2nd LT lane on EB and NB approaches, add 1 L/TTH lane on NB approach, split phase N-S movements, ATCS.	0.924 E 0.713 C 0.774 C	Temporarily unmitigated AM only, enhances airport access
Intersection 11	Aviation at Century	AM PM AP(1)	0.828 D 1.006 F 1.804 F	1.431 F 1.012 F 1.553 F	Yes No No	1.497 F 1.043 F 1.525 F	Yes Yes No	Add 2nd LT lane and a free flow RT lane on EB approach, add 2nd RT lane on SB approach, plus ATCS	1.019 F 0.957 E 1.201 F	Mitigates impacts, enhances airport access, requires R/W
Intersection 12	Aviation at El Segundo	AM PM AP(1)	0.951 E 0.959 E 0.903 E	1.062 F 1.021 F 1.093 F	Yes Yes No	0.980 E 1.029 F 1.039 F	Yes Yes No	ATCS	0.910 E 0.959 E 0.969 E	Mitigates impacts, enhances airport access
Intersection 13	Aviation at Imperial	AM PM AP(1)	0.935 E 1.305 F 1.243 F	1.457 F 1.353 F 1.109 F	Yes Yes No	0.904 E 1.352 F 1.123 F	No Yes No	Temporarily reallocate NB THRT lane on RT only lane	0.792 C 1.158 F 1.141 F	Mitigates impacts, enhances airport access
Intersection 14	Aviation at Manchester	AM PM AP(1)	0.980 E 0.787 C 1.269 F	1.093 F 0.721 C 1.214 F	Yes No No	0.521 A 0.588 A 0.759 C	No No No	No additional improvements necessary	0.521 A 0.588 A 0.759 C	Impacts mitigated by network/link improvements
Intersection 15	Aviation at Rosemead	AM PM AP(1)	1.179 F 1.475 F 1.336 F	1.408 F 1.474 F 1.285 F	Yes No No	1.219 F 1.489 F 1.385 F	Yes Yes No	ATCS	1.149 F 1.419 F 1.315 F	Mitigates impacts, requires R/W
Intersection 18	Camelina at Jefferson	AM PM AP(1)	1.077 F 1.100 F 0.911 E	1.025 F 1.037 F 1.006 F	No No No	0.888 D 1.162 F 1.014 F	No Yes No	Temporarily add SB RT overlap phasing	0.789 C 1.084 F 1.014 F	Impacts created by network/link improvements, mitigates impacts
Intersection 26	La Cienega at Century	AM PM AP(1)	0.718 C 0.721 C 0.535 A	0.718 C 0.827 C 0.894 B	No Yes No	0.868 D 0.843 D 0.686 B	Yes Yes No	Widen WB approach to provide 1 LT, 3 TH, 1 THRT, and 1 RT lanes	0.793 C 0.843 D 0.685 B	Temporarily unmitigated AM and PM, enhances airport access
Intersection 35	Sepulveda at El Segundo	AM PM AP(1)	1.007 F 1.135 F 0.899 B	1.025 F 1.108 F 0.993 E	Yes No No	1.016 F 1.193 F 0.992 E	No No No	No additional improvements necessary	1.016 F 1.193 F 0.992 E	Impacts mitigated by network/link improvements, enhances airport access
Intersection 36	Vista Del Mar at Grand	AM PM AP(1)	0.813 D 0.459 A 0.489 A	0.591 A 0.607 B 0.707 C	No No No	0.905 E 0.865 B 0.707 C	Yes No No	Temporarily reallocate WB L/TTH lane on THRT lane	0.625 D 0.548 A 0.635 B	Impacts created by network/link improvements, mitigates impacts
Intersection 40	La Cienega at Florence	AM PM AP(1)	0.690 B 0.925 E 1.428 F	1.468 F 1.024 F 1.450 F	Yes Yes No	0.740 C 1.048 F 1.468 F	Yes Yes No	Temporarily modify E-W LT phasing to permitative only phasing, and temporarily reallocate WB approach to add a separate RT lane	0.724 C 0.975 E 1.384 F	Temporarily unmitigated PM only

Los Angeles International Airport Master Plan

PHASE 3F: 2005 ALTERNATIVE C FINAL TRANSPORTATION IMPROVEMENTS

Facility Number	Facility Name	Peak Hour	Adj. Env. V/C LOS	Alt. C V/C LOS	Impact	Mit. Alt. C V/C LOS	Impact	Improvements	Final V/C LOS	Comments
44	Sepulveda at Howard Hughes Pkwy	AM PM AP(1)	0.710 0.788 0.649	0.749 0.747 0.635	C C B	No No No	Yes C B	Add 4th TH lane on NB approach	0.636 0.665 0.552	Impacts created by network/link improvements. Mitigates impacts
45	1-105 Fwy/Continental City Drive at Imperial	AM PM AP(1)	0.688 0.797 0.791	0.786 0.667 0.729	C B C	Yes No No	C B C	Temporarily restrip 2nd LT lane on WB approach on a TH lane	0.712 0.723 0.738	Mitigates impacts
50	Sepulveda at Imperial	AM PM AP(1)	0.797 1.015 0.794	0.849 1.645 0.803	D F D	Yes Yes No	F F C	Make EB RT lane a free-flow lane	0.718 0.991 0.778	Mitigates impacts, enhances airport access
51	Via Del Mar at Imperial	AM PM AP(1)	0.774 0.538 0.578	0.387 0.744 0.548	A C A	No Yes No	F A A	Temporarily retain NB RT lane as a free-flow lane	0.533 0.621 0.416	Mitigates impacts, enhances airport access
54	1-405 NB Ramps at Jefferson	AM PM AP(1)	0.778 0.842 0.649	0.649 0.848 0.630	B D B	No No No	C D B	Temporarily restrip 1 EB TH lane as a LT/TH lane	0.840 0.758 0.571	Impacts created by network/link improvements. Mitigates impacts
57	Lincoln at Jefferson	AM PM AP(1)	0.930 1.252 0.883	0.813 1.037 0.767	D F C	No No No	E F C	Restripe 1 NB TH lane as a TH/RT lane	0.859 1.123 0.785	Impacts created by network/link improvements. Mitigates impacts
72	La Cienega at Manchester	AM PM AP(1)	0.547 0.759 1.018	1.057 0.726 1.030	F C F	Yes No No	B C F	No additional improvements necessary	0.673 0.731 1.015	Impacts mitigated by network/link improvements
78	1-405 NB Ramps at La Tijera	AM PM AP(1)	0.878 0.941 0.597	0.552 0.948 0.561	A E A	No No No	E E A	Restripe EB approach to add 2nd LT lane	0.774 0.815 0.432	Impacts created by network/link improvements. Mitigates impacts
81	Lincoln at La Tijera	AM PM AP(1)	0.462 0.522 0.303	0.702 0.523 0.681	C A B	Yes No No	B C D	Add 4th TH lane on SB approach	0.570 0.622 0.737	Mitigates impacts
83	Sepulveda at La Tijera	AM PM AP(1)	0.781 0.682 0.411	0.679 1.446 0.637	B F B	No Yes No	F F A	Add 2nd LT lane and a RT lane on NB approach, add 2nd LT lane and restrip TH lane as LT/TH lane on WB approach, add 1 TH/RT lane on EB approach, split phase EB & WB	0.851 0.785 0.371	Mitigates impacts
87	Lincoln at 83rd	AM PM AP(1)	0.950 1.082 1.281	1.385 1.148 1.250	F F F	Yes Yes No	F F F	Add 2nd LT lane on EB approach	0.887 1.054 1.235	Mitigates impacts
88	Lincoln at Manchester	AM PM AP(1)	0.697 1.004 0.832	1.004 1.199 0.983	E F E	Yes Yes No	F F E	Add 2nd LT lane and temporarily a separate RT lane on SB approach, temporarily add 2nd LT lane on EB approach, plus ATCS	0.637 1.076 0.828	Temporarily unmitigated PM only, enhances airport access
90	Perahua at Manchester	AM PM AP(1)	0.472 0.560 0.265	0.150 0.499 0.153	A A A	No No No	A A A	Add 2nd LT lane on SB approach, add a RT lane on NB approach, plus ATCS	0.459 .711 0.187	Impacts created by network/link improvements. Mitigates impacts
99	Sepulveda at Manchester	AM PM AP(1)	0.976 0.953 0.810	0.822 0.926 0.807	D E D	No No No	D E D	Restripe WB approach to provide a separate RT lane	0.895 0.927 0.818	Impacts created by network/link improvements. Mitigates impacts

Los Angeles International Airport Master Plan

PHASE 3F: 2005 ALTERNATIVE C FINAL TRANSPORTATION IMPROVEMENTS

Facility Number	Facility Name	Peak Hour	Adj. Env. V/C LOS	Alt. C V/C LOS	Impact	Mit. Alt. C V/C LOS	Impact	Improvements	Final V/C LOS	Comments
Intersection 100	Sepulveda at Mariposa	AM	0.719 C	1.451 F	Yes	0.791 C	Yes	Restripe WB to provide 2nd LT lane, add separate RT lane on EB approach, ATISAC	0.691 B	Mitigates impacts
		PM	0.955 E	1.289 F	Yes	1.297 F	Yes		0.907 E	
		AP(1)	1.096 F	1.464 F	No	1.468 F	No		1.007 D	
Intersection 103	Sepulveda at Rosecrans	AM	1.540 F	1.836 F	Yes	1.543 F	No	No additional improvements necessary	1.543 F	Impacts mitigated by network/link improvements
		PM	1.700 F	1.870 F	No	1.678 F	No		1.678 F	
		AP(1)	1.803 F	1.833 F	No	1.839 F	No		1.839 F	
Intersection 106	Sepulveda at 76th/77th	AM	0.699 B	0.653 B	No	0.823 D	Yes	Add separate RT lane on WB approach, plus ATIS	0.730 C	Impacts created by network/link improvements
		PM	0.635 B	0.654 B	No	0.681 B	No		0.598 A	
		AP(1)	0.568 B	0.650 B	No	0.681 B	No		0.606 B	
Intersection 111	La Cienega at 1-405 SB ramp r/o Century	AM	0.700 B	0.845 E	Yes	0.807 D	Yes	Temporarily add a separate RT lane on WB approach	0.677 B	Temporarily unmitigated AP only, enhances airport access
		PM	0.569 A	0.873 B	No	0.689 B	No		0.689 B	
		AP(1)	0.755 C	0.990 E	Yes	0.973 E	Yes		0.918 E	

Los Angeles International Airport Master Plan

PHASE 3F: 2015 ALTERNATIVE C FINAL TRANSPORTATION IMPROVEMENTS

Facility Number	Facility Name	Peak Hour	Adj. Em. V/C LOS	All C V/C LOS	Impact	Mit. Alt. C V/C LOS	Impact	Improvements	Final V/C LOS	Comments	
Intersection 9	La Cienega at Arbor Vitae	AM PM APU	0.949 0.944 0.893	1.570 1.460 1.150	Yes Yes No	1.503 1.401 1.153	Yes Yes No	Add separate RT lane on EB, WB and SB approaches, add 2nd LT lane on EB and NB approaches, add 1 LY/TH lane on NB approach, split phase N-S movement, ATSAC.	0.938 0.910 0.986	E E E	Mitigates impacts, enhances airport access
Intersection 11	Aviation at Century	AM PM APU	0.940 1.062 1.850	1.322 1.123 1.876	Yes Yes No	1.361 1.160 1.875	Yes Yes No	Add RT lane on WB approach, add 2nd LT lane on EB approach, make RT lane on SB approach free flow	0.902 0.998 1.257	E E F	Mitigates impacts, enhances airport access
Intersection 12	Aviation at El Segundo	AM PM APU	1.089 1.082 1.060	1.166 1.108 1.206	Yes Yes No	1.172 1.113 1.206	Yes Yes No	Add separate RT lane on WB approach, plus ATSAC	1.013 1.049 1.063	F F F	Mitigates impacts, enhances airport access
Intersection 15	Aviation at Reservoir	AM PM APU	1.329 1.659 1.594	1.340 1.687 1.706	Yes Yes No	1.346 1.676 1.705	Yes Yes No	ATSAC	1.276 1.606 1.635	F F F	Mitigates impacts
Intersection 22	Sepulveda at Cevallos Ave.	AM PM APU	1.404 1.261 1.044	1.454 1.313 1.010	Yes Yes No	1.454 1.285 1.010	Yes Yes No	ATSAC	1.384 1.225 0.940	F F E	Mitigates impacts, enhances airport access
Intersection 26	La Cienega at Century	AM PM APU	0.766 0.840 0.616	0.892 1.054 0.868	Yes Yes No	0.897 1.071 0.867	Yes Yes No	Add 2nd LT lane on EB approach, widen WB approach to provide 1 LT lane, 3 TH lanes, 1 shared TH/RT lane, and 1 RT lane	0.789 0.838 0.633	C D B	Mitigates impacts, enhances airport access, requires RW
Intersection 35	Sepulveda at El Segundo	AM PM APU	1.110 1.279 0.975	1.125 1.248 1.087	Yes No No	1.127 1.233 1.087	Yes No No	ATSAC	1.057 1.163 1.017	F F F	Mitigates impacts, enhances airport access
Intersection 40	Century Blvd. at Florence A	AM PM APU	0.789 1.087 1.566	0.866 1.098 1.566	Yes Yes No	0.807 1.028 1.566	Yes Yes No	No additional improvements necessary	0.807 1.028 1.566	D F F	Impacts mitigated by network/link improvements, enhances airport access
Intersection 44	Sepulveda at Howard Hughes Parkway	AM PM APU	0.748 0.959 0.735	0.851 0.937 0.724	Yes No No	0.877 0.905 0.724	Yes No No	Add 4th TH lane on NB approach	0.719 0.875 0.637	C D B	Mitigates impacts
Intersection 48	1105 WB Ovi/Nash at Imperial	AM PM APU	1.283 0.614 0.447	1.244 0.716 0.412	Yes Yes No	1.256 0.699 0.412	Yes No No	No additional improvements necessary	1.256 0.699 0.412	F B A	Impacts mitigated by network/link improvements, enhances airport access
Intersection 50	Sepulveda at Imperial	AM PM APU	0.822 1.092 0.842	1.011 1.650 0.524	Yes Yes No	1.035 1.667 0.504	Yes Yes No	Make EB RT lane free-flow, add 2nd LT lane on NB approach, re-stripes 1 NB TH lane on TH/RT lane	0.740 0.891 0.753	C D C	Mitigates impacts, enhances airport access
Intersection 52	La Cienega at Imperial	AM PM APU	0.691 0.544 0.574	0.747 0.596 0.590	Yes No No	0.781 0.581 0.580	Yes No No	Convert SB TH/RT lane to a 2nd RT lane with overlap phasing	0.654 0.476 0.620	B A B	Mitigates impacts, enhances airport access
Intersection 57	Lincoln at Jefferson	AM PM APU	1.408 1.187 0.835	1.431 1.226 0.861	Yes Yes No	1.463 1.209 0.855	Yes Yes No	Re-stripes one NB TH lane on TH/RT lane, re-stripes one WB TH lane on LY/TH lane, split phases E-W movements	1.136 1.166 0.785	F F C	Mitigates impacts
Intersection 71	La Cienega at Lennox Blvd.	AM PM APU	0.379 0.484 0.876	0.632 0.775 1.321	No Yes Yes	0.673 0.798 1.346	No Yes Yes	Add 1 LT lane on NB approach and re-stripes WB approach for 1 LT, 1 TH and 1 free-flow RT lane	0.508 0.657 0.878	A D B	Mitigates impacts
Intersection 72	La Cienega at Manchester	AM PM APU	0.700 0.772 1.148	0.745 0.780 1.242	Yes No Yes	0.705 0.719 1.146	Yes No Yes	No additional improvements necessary	0.705 0.719 1.146	C C F	Impacts mitigated by network/link improvements

It is recommended that the City of Inglewood include these concerns in their DEIR/EIS comments.

It is further recommended that an independent consultant funded by LAWA conduct an extensive evaluation of the impacts of the project on the intersections that were analyzed and an evaluation of intersections and roadway links east of I-405 that were not analyzed within the City of Inglewood.

Conformance to the 2001 RTP

The potential expansion of LAX must conform to areawide transportation plans. Apparently, there is substantial inconsistency between the Draft EIR/EIS and the SCAG adopted RTP. The DEIR/EIS refers to the 1998 SCAG RTP and its data. However, the SCAG RTP 2001 has been adopted and includes more up-to-date figures. In addition, the LAX project designated in the RTP is for 78 million air passengers not the 86 million used in the DEIR/EIS preferred Alternative C. Failure to conform could lead to potential funding sanctions and other Federal restrictions that could affect the City of Inglewood.

It is recommended that the City of Inglewood include these concerns in their DEIR/EIS comments urging that these deficiencies be corrected.

31754

PAUL E. COOK AND ASSOCIATES

CURRICULUM VITAE

PAUL E. COOK

Paul E. Cook
221 Main Street, Suite P
Huntington Beach, CA 92648
(714) 960-8298

PERSONAL INFORMATION

Birthplace: Portland, Maine
Birthdate: May 4, 1937
Marital Status: Married

EDUCATION

University of Southern California, Los Angeles - 1970 to 1973
Studies: Public Administration
Degree: Master of Public Administration

University of Maine, Orono, Maine - 1955 to 1959
Studies: Civil Engineering
Degree: Bachelor of Science/Civil Engineering

REGISTRATION

Registered Civil Engineer, State of California - #15677
Registered Traffic Engineer, State of California - #840
Licensed Real Estate Broker, State of California - #871559

EXPERIENCE

Over forty years of experience in civil engineering, traffic engineering, transportation planning, project management, and public administration with private businesses and public agencies at the state, county, and municipal level.

1960 to 1963 - CALIFORNIA DIVISION OF HIGHWAYS
(now known as Caltrans)

Performed and completed freeway interchange design including cost estimates, drainage, earthwork, horizontal and vertical alignments, and preparation of final plans and profiles in the Design Department.

Performed analyses of projected traffic patterns for alternate freeway routes including preparation of zoning and desired lines for the routes, the completed compilation of an economic analysis, and flow diagrams for all alternates in the Transportation Planning Department.

Performed various phases of survey work including chainman, rodman, and instrumentman, as well as computations and calculations in the Survey Department.

As Field Office Engineer, was responsible for highway reconstruction and resurfacing project in the Construction Department.

As Assistant Project Engineer in the Route Planning Department, was responsible for investigation of alternate alignments for proposed freeway locations including geometric design, cost estimates, cost benefit analysis, and preparation of project report for consideration by the California Highway Commission.

1963 to 1965 - ORANGE COUNTY ROAD DEPARTMENT
(now known as the Orange County Environmental Management Agency)

As Assistant Civil Engineer, duties consisted of the following:

Conducted major transportation studies in conjunction with committees representing several jurisdictions and organizations.

Supervised complex traffic analysis studies in conjunction with land use plans prepared by the county and city planning departments and major land developers in Orange County.

Conducted studies to determine the adequacy of proposed circulation systems in local developments.

Analyzed, wrote comprehensive reports, and made recommendations on the effects of proposed freeways or interchanges on the arterial highway system and general transportation needs of Orange County.

Made technical investigations and continuing research on traffic and transportation planning matters.

Coordinated traffic planning functions with various county departments, cities, developers, and other jurisdictions.

1965 to 1970 - CITY OF HUNTINGTON BEACH, CALIFORNIA

As City Traffic Engineer, duties consisted of the following:

Full responsibility for the administration of all traffic engineering in the city which included accident records, speed limits, intersection control, traffic signals, parking, street lighting, channelization, crosswalks, crossing guards, street closures, construction barricading and signing, and all matters of street operation.

Full responsibility for the administration of all transportation planning in the city which included freeway location and interchange design recommendations, street alignment planning, design standards, subdivision planning, geometric design, and access control on city's existing and proposed highway and street system.

Administration of State Gas Tax and County Arterial Highway Financing Program funds in the city.

Initiated Municipal Ordinance Code amendments with regard to traffic and planning.

Prepared annual Public Works Department section of the City Capital Improvement Program.

Set priorities for annual major street construction within the city.

Supervised the Engineering Plan Check Section of the Public Works Department.

Supervised the Engineering Permit Section of the Public Works Department.

Supervised the Grading Permit Section of the Public Works Department.

Represented the Public Works Department on the Subdivision Planning and Variance Committees to set conditions of development.

Served as a member of the City Board of Zoning Adjustments.

Supervised the design and construction of traffic signals at sixty intersections throughout the city.

1970 to 1973 - CITY OF INGLEWOOD, CALIFORNIA

As City Traffic Engineer, duties consisted of the following:

Full responsibility for all traffic engineering.

Full responsibility for all transportation planning.

Prepared and administered annual \$1.3 million engineering and maintenance budget.

Prepared and administered annual \$2.0 million Capital Improvement Program.

Supervision of four traffic engineering and administrative positions.

Supervision of 25 traffic maintenance positions.

Supervision of City Communication System maintenance.

Responsible for planning, design, construction, and contract administration of \$2 million annual capital improvement projects.

Conceived, pursued, and administered \$200,000 federal grant projects.

Administered TOPICS program.

Negotiated contracts and agreements for planning, right-of-way, and construction with contractors, developers, attorneys, property owners, and other public and private agencies.

Administered assessment districts for parking and street lighting.

Regularly prepared and presented oral and written reports to city council, schools, commissions, citizen groups, and other public agencies.

Acted as chief staff consultant to the City Parking and Traffic Commission.

Planned and conducted innovative projects such as the \$500,000 Prairie Avenue reversible lane system and the \$1.5 Million city-wide computerized traffic control system.

Constructed \$3 million city-wide arterial street lighting system.

Constructed a 500 space downtown parking structure.

Created unique methods of handling heavy traffic generated by two major sport complexes, the Forum and Hollywood Park racetrack.

1973 to 1976 - CITY OF CLAREMONT, CALIFORNIA

As Director of Public Works, duties consisted of the following:

Full responsibility for the administration of the Public Works Department.

Full responsibility for all traffic engineering and civil engineering.

Full responsibility for all public facility and street maintenance, traffic signals, streetlighting, refuse collection, and motor fleet management.

Full responsibility for engineering design, construction, inspection, and contract administration of all public projects.

Served as City Traffic Engineer.

Acted as staff liaison to City Traffic Safety Commission.

Conducted engineering studies and supervised property acquisition for capital improvement projects.

1976 to 1978 - CITY OF CLAREMONT, CALIFORNIA

As Director of Community Development, duties consisted of the following:

Full responsibility for the administration of the Community Development Department.

Full responsibility for all traffic engineering and civil engineering.

Full responsibility for engineering design, construction, inspection, and contract administration of all public projects.

Served as City Traffic Engineer.

Acted as staff liaison to City Traffic Safety Commission.

Conducted engineering studies and supervised property acquisition for capital improvement projects.

Full responsibility for all planning, code enforcement, and building services for the city.

Full responsibility for land use analysis, development review, general plan review, zoning code enforcement, CEQA procedures, city annexations, planning research, building plan check, permits, and inspection.

Full responsibility for staffing the City Planning Commission, Architectural Commission, and Environmental Quality Board.

1978 to 1979 - CITY OF POMONA, CALIFORNIA

As Director of Public Works, duties consisted of the following:

Full responsibility for administration of the Public Works Department including all civil engineering, traffic engineering and maintenance, public facility maintenance, street and sewer maintenance, motor fleet management, and refuse collection and disposal.

Full responsibility for city's real estate management and assessment districts.

Full responsibility for engineering design, construction, inspection and contract administration of all public projects including buildings, parks, streets, utilities, traffic signals, street lighting, and parking lots.

1979 to 1987 - CITY OF HUNTINGTON BEACH, CALIFORNIA

As Director of Public Works, duties consisted of the following:

Full responsibility for administration of the Public Works Department including all civil engineering, water engineering, traffic engineering and maintenance, public facility and park maintenance, street and sewer maintenance, motor fleet management, refuse collection and disposal, and flood control.

Full responsibility for engineering design, construction, inspection and contract administration of all public projects including water facilities, buildings, parks, streets, utilities, traffic signals, street lighting, parking lots, bridges, piers, and flood control.

Full responsibility for preparation and administration of \$25 million annual budget and \$35 million Capital Improvement Program.

1987 to 1990 - CITY OF HUNTINGTON BEACH, CALIFORNIA

As City Manager, duties included the following:

Full responsibility for the administration of all city services including Police, Fire, Public Works, Community Development, Community Services, Economic Development, and Administrative Services.

Full responsibility for preparation and administration of \$150 million annual budget.

Full responsibility for redevelopment activities.

Served as Executive Director of the City Redevelopment Agency.

1973 to PRESENT - PAUL E. COOK AND ASSOCIATES,
TRAFFIC ENGINEERING AND TRANSPORTATION
CONSULTING SERVICES

As President of Paul E. Cook and Associates, duties include the following:

Provides traffic engineering and transportation planning services for public and private agencies.

Conducts traffic impact studies for public and private development projects, city general plan amendments, and zone changes.

Designs traffic signals and channelization projects for public and private entities.

Performs area-wide circulation studies for public agencies.

Provides consulting services for public transit agencies.

Serves as consulting City Traffic Engineer for the City of Hesperia, California.

Serves as consulting City Traffic Engineer for the City of Irwindale, California.

Provides public works and traffic engineering expert witness testimony regarding roadway maintenance, construction zone safety, public transportation, pedestrians and bicycles, traffic control devices, traffic signals, zoning impacts, and geometric design.

Serves as consulting Project Director for the I-15 and I-215 interchanges project at Murrieta Hot Springs Road, City of Murrieta.

Performs construction management services for public and private agencies.

Provides organizational services for public agencies.

Acts as facilitator and negotiator for redevelopment projects, project entitlements, real estate acquisition and sales, and property management.

TRAINING

Completed courses in Traffic Engineering at U.C.L.A. and Public Works Management at U.C. Irvine. Attended and participated in numerous seminars and conferences in the fields of traffic engineering, transportation planning, outdoor lighting, rapid transit, pedestrian safety, and bicycle planning.

PROFESSIONAL AFFILIATIONS

Past President, American Public Works Association, Southern California Chapter
Past President, League of California Cities, Public Works Officers Department
Past President, Orange County City Engineers Association
Past Chairman, Orange County Traffic Engineering Council
Past Chairman, Metropolitan Transportation Engineering Board
Past Chairman, Orange County Transportation Authority, Technical Advisory Committee
Past Chairman, Orange County Arterial Highway Financing Program,
Technical Advisory Committee
Past Chairman, Orange County City Engineers Flood Control Advisory Committee
Past Chairman, Transportation Committee, American Public Works Association,
Southern California Chapter
Past Chairman, Huntington Beach Chamber of Commerce
Fellow, Institute of Transportation Engineering
Los Angeles County Federal Aid Urban Technical Committee
League of California Cities Transportation Committee
American Society of Civil Engineers
American Water Works Association
American Society for Public Administration
National Society for Professional Engineers
California Council of Civil Engineers and Land Surveyors
International City Managers Association

Exhibit H

Charles M Salter Associates Inc

17 May 2001

Mr. Thomas F. Vandenburg, Esq.
Radcliff Frandsen & Dongell LLP
Fortieth Floor, 777 South Figueroa Street
Los Angeles, CA 90017-5800
Fax: 213/489-9263

Subject: Acoustical Review of LAX Master Plan Draft EIS/EIR
CSA Project No. 01-0189

Dear Tom:

This letter presents my review of the subject LAX Master Plan Draft EIS/EIR. This review addresses primarily the adequacy of the document in terms of CEQA guidance outlined in your 4 May 2001 correspondence to me. Specifically, I have evaluated the document for sufficiency as an informational document, determined whether or not the conclusions set forth are adequately supported by evidence, examined the document for technical and factual accuracy and for adequacy and completeness, and assessed it for opinions or unsubstantiated statements. My review provides a general technical audit of the aircraft operations forecast information. I have also reviewed the Master Plan itself, but have not identified any information therein which would alter the results of my review of the EIS/EIR; therefore, my comments are restricted to the EIS/EIR.

Following are my overall conclusions resulting from the EIS/EIR review.

- The 1996 baseline year, five years ago, is an unacceptable baseline from which to evaluate future noise impacts, and misleads the reader into believing comparisons are made with respect to current conditions. The current airport noise impact is substantially less than that described for the baseline condition, resulting in an understatement of the increased noise impacts for future year assessments.
- All noise exposure contours are understated because discreet single-line flight tracks were input to the Integrated Noise Model (the INM is the FAA standard noise modeling computer program) rather than actual dispersed flight tracks observed from the ARTS radar information. This was probably done to simplify computer input for noise modeling.
- All noise impacts are given solely in terms of the CNEL noise descriptor. While the report states that at least a "Time Above" (TA) analysis was also conducted

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using the INM, I find no TA results within the report, nor any impact assessment made with respect to this metric.

- The technical report on economic impacts does not address the effects of noise on property values.
- Appendix 14b, "Health Effects of Noise Technical Report," is a good discussion of physiological and psychological effects of airport noise at LAX, but the EIS/EIR fails to make any assessment with respect to the criteria set forth.

The Baseline Year

The 1996 five-year-old baseline year represents a noise environment substantially greater than that realized around LAX today. The Airport Noise and Capacity Act (ANCA) required the graduated phase-out of the older and noisier Stage 2 aircraft by the year 2000. The year 1996 was midway through this phase-out when the noise environment at LAX continued to be dominated by noisier Stage 2 aircraft, all of which have subsequently been retired. Thus the current noise exposure at LAX is substantially below the 1996 baseline. This is readily evident by reviewing the latest Quarterly Report to the State Department of Transportation provided in compliance with static noise standards.

There was no need to adopt a baseline year five years old. Certainly there was substantial preparation time required for this document, but reliable forecasts had been available for some time before the current year 2001 when this EIS/EIR has been submitted for review. It is a simple, straight forward and responsible act to revise the EIS/EIR using the latest INM model submitted to the State for review. This is an accurate model which is verified by noise monitoring stations around LAX.

Specific Comments

Following are individual observations of details down throughout the EIS/EIR:

- The noise overview, page 4-12, shows a bar graph "Population Newly Exposed to 65 CNEL compared to environment baseline (2015)." At the risk of dwelling on this issue, the term "newly" should be understood to be with respect to the baseline year 1996. Thus the population actually "newly" exposed to 65 CNEL using today's baseline would be substantially greater for each of the alternatives that is shown in this misleading bar chart.
- Table 4.1-6, "Combined Daily Aircraft and Roadway Noise at Receptor Site by Alternative (L_{eq})," attempts to compare peak-hour equivalent noise levels for aircraft and roadway noise. It is unclear how this was done. Was the aircraft activity that occurs during the peak hour road traffic used to compute this level? Was the road traffic that occurs during the peak aircraft hour used for the assessment? Were different peak hours used for the assessment? Or is the

comparison being made between two different metrics, CNEL for aircraft noise and peak-hour equivalent noise level for traffic noise? I believe that this section is important because it appears to be the only section of the EIS/EIR that attempts to describe the total noise environment in the areas around LAX, that is, the noise environment from both LAX aircraft activity and from local roadway activity. The information and computations made for Table 4.1-6 should be provided.

- Table 4.1-7, "Forecast Daily Aircraft Operations," reflects only moderate transition from propeller aircraft to light jets between the years 2005 and 2015. One might expect a greater increase during this period due to the emerging popularity of regionally jets which may be well suited for central valley and Palm Springs locations.
- Table 4.1-18, "Significant NEPA/FICON Noise Impacts," is an important table and an example of the understated impacts due to selection of a five-year-old baseline year. Again the "newly exposed to 65 CNEL" is misleading.
- Section 4.2 on land use is fairly comprehensive but, unfortunately, understates the noise impacts through use of a five-year-old baseline year. Actual numbers of churches, schools, residences, etc. newly impacted are substantially greater in the future prediction years.

Flight Track Dispersion

The flight tracks use for the current condition and all alternatives are simplified single-line tracks such as those shown in Exhibit 2 in Section 2.1.3, Flight Tracks, of Appendix D, "Aircraft Noise Technical Report." These flight tracks were likely generalized to single-lines after reviewing actual flight track histories recorded on the FAA control tower's ARTS radar. It appears that flight tracks were developed by observing the concentration and dispersion of aircraft along a general route, and then placing all aircraft on a single flight track generally centered in the middle of the dispersed route. This facilitates modeling because it eliminates the need to create multiple routes along a single published flight track. However, the effect of this centralization is to understate the resulting CNEL contour. For instance, the noise contour for two identical aircraft departing on routes five degrees apart would be larger than for the identical two aircraft departing on a single route.

Each flight track should be broken into three or five discreet flight tracks with one or two flight tracks a few degrees each side of the single centerline flight track. The aircraft then assumed to fly the single flight track should be dispersed somewhat equally among the three or five independent flight tracks before the INM is run. The accuracy of the model may be checked by comparing the model results at noise monitor locations with the recorded noise exposure at those locations. This may readily and easily be done in conjunction with the preparation of the Quarterly Reports for the State Department of Transportation.

Economic Impacts

The technical report on the economic impacts of the Master Plan alternatives, listed as Appendix 5, discusses many of the economic benefits from the commerce associated with operation of LAX. However, it fails to discuss the economic impact on housing, commercial structures, schools and other land uses adversely affected by airport noise from LAX. Further, the economic impact would certainly be expected to vary with the variations in noise exposure among the various alternatives.

Of particular concern to local residents is the economic impact on their housing values from increasing noise exposure on their property. This is a particular concern for those areas which will be newly exposed to noise exposure at or above 65 CNEL. In addition to the decreased desirability of these residences, California requires disclosure of airport noise environments, essentially requiring the property sellers to advise all potential buyers of the new adverse noise environment. Several studies have been conducted on the effects of airport noise on residential properties, and these may serve as the basis for this required economic assessment. Likewise, small business owners are concerned about the effects of airport noise on their commercial property.

The cost to cure the interior noise environment through a potential noise insulation program must also be addressed in this economic assessment. LAX has considerable experience with these programs, and a great deal of data exist on the expenditures for residential noise insulation. Certainly, new residential noise insulation must be included as a noise mitigation measure and an economic assessment of this mitigation is required in the overall scheme of this EIS/EIR.

Finally, lost productivity by workers residing in the airport noise environment, from sleep disturbance, should also be addressed. Likewise, the effects of disturbance on learning in schools should be economically quantified.

Health Effects of Noise

Appendix 14b, "Health Effects of Noise Technical Report," is a good summary of several key noise impacts which have not been evaluated in the LAX Master Plan EIS/EIR. The physiological health issues are hearing loss and other physiological effects; the psychological effects are speech communication, sleep disturbance, learning effects and work performance effects. Each of these is discussed generally, some specific criteria is presented in this appendix, and excellent references are provided to obtain the necessary information and procedures to conduct these important analyses. However, these important analyses, recommended by the FAA in their "Aviation Noise Abatement Policy 2000," are not a part to this EIS/EIR and constitute a major deficiency.

The discussion of hearing loss states, in the first paragraph, "Baseline noise exposure analysis shows that the peak Sound Exposure Level (SEL) affecting residents closest to LAX is 109 dB along Imperial Avenue in El Segundo." This noise exposure.

unfortunately, is not given in terms of any other metric, although that may be easily determined using TA analyses from the INM. Specifically, the time-above analysis should be conducted at these critical areas where the potential for hearing loss may exist. The TA analysis may be summed for the aircraft operations at specific locations, and the resultant noise exposure duration per day at various sound levels may be related to Table 1, "OSHA and CalOSHA Permissible Noise Exposure Standards," in this section. This would enable direct computation of the noise dose. The SEL value of 109 dB cited in this section indicates a potential for hearing damage, since a number of these events may be expected and sound levels above 105 dB are permitted for less than one hour per day according to the OSHA criteria. Children in outdoor areas may be particularly vulnerable to hearing damage risk.

Likewise, other physiological effects such as release of adrenalin, rise in blood pressure and muscle tension should be addressed, particularly for children in the highest noise areas. Additionally, the issues of effects on cardio-vascular system, well-documented in the literature, need to be discussed and applied to this particular EIS/EIR.

Speech interference is a key impact not adequately addressed in this EIS/EIR. As noted in this section, normal conversational speech is in the range of 60 dB to 65 dB. Where normal open-window construction providing approximately 15 dB of attenuation and closed-window construction providing 20 dB to 25 dB of attenuation, aircraft events with levels above 80 dB may be expected to interfere with speech communication. This occurs not only in residential areas, but also in commercial areas where they materially affect the productivity and consequent economic productivity of the area.

Perhaps most important is the impact of speech interference upon classroom activities. An assessment is required for each school within the study area to determine the degree of speech interference caused by operation of LAX, for the current baseline year and for each of the alternatives. Again, there is considerable literature on the learning problems associated with airport noise environments. In addition to an adequate assessment of speech interference in schools, a noise mitigation program must also be developed to minimize this impact.

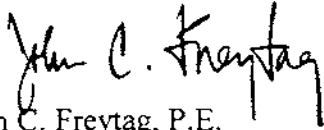
Sleep disturbance is another important issue cited in this technical appendix and not fully addressed within the EIS/EIR. The technical appendix includes, in Figure 1, "Recommended Sleep Disturbance Dose Response Relationship," which relates the percent of people awakened with the indoor SEL value. In addition to the percent awakened, an assessment is required of the changes in stage of sleep with single-event noise exposure levels. An assessment of sleep stage change is important because it directly relates to fatigue and worker productivity. As with the other psychological and physiological effects, an economic impact assessment is required for these adverse effects of noise from LAX.

Mr. Thomas F. Vandenburg, Esq.
17 May 2001
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This completes my review of the LAX Master Plan EIS/EIR. Please do not hesitate to contact me with questions or for clarification. I sincerely look forward to working with you on this and other important projects.

Very truly yours,

CHARLES M. SALTER ASSOCIATES, INC.

A handwritten signature in black ink that reads "John C. Freytag". The signature is written in a cursive style with a large, stylized initial "J".

John C. Freytag, P.E.
Director

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My17jfc

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JOHN C. FREYTAG, P.E.
Director

PROFESSIONAL EXPERIENCE

Mr. Freytag has over 20 years of experience as an acoustical consultant and airport noise expert. His background includes management of FAA-sponsored noise insulation projects, aeroacoustic research for NASA, management of more than forty airport noise studies, engineering of large industrial facilities, digital signal processing, and project management and engineering management of high technology business ventures. He has been a licensed pilot since 1966.

As a Director at Charles M. Salter Associates, Inc., he serves as aviation program manager responsible for business development, quality control, profit and loss, and project management for various acoustical consulting projects. He has managed airport noise studies for civil and military airport clients, noise-impact residents and for NASA. Projects include a large program EIS for testing of the joint services affordable lightweight fighter by NASA, seventeen aircraft noise insulation projects, land use litigation cases, airport expansions, and crash hazard potential studies. He has also served as Director of the Audio Forensic Center, specializing in de-noising, dialog recovery and authentication of evidentiary audiotapes including flight recorder tapes recovered from aircraft crashes.

As a Noise Control Engineer at Bechtel, he was responsible for the acoustical design of the world's largest airport, New Riyadh Airport, Saudi Arabia. He performed experimental and theoretical aeroacoustics work at NASA while attending Stanford University, and worked primarily on airport and architectural acoustics projects for two years at Towne and Associates, Seattle. Other Bechtel assignments included venture capital analyst and corporate officer for portfolio companies, project engineer, and special assistant to the manager of the company's petroleum division.

PUBLICATIONS

Co-author *ACOUSTICS: Architecture, Engineering, the Environment*. (1998 William Stout Publisher)
Various technical papers.

PROFESSIONAL REGISTRATION

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PROFESSIONAL SOCIETIES

American Institute of Aeronautics and Astronautics
Institute of Noise Control Engineering - Board Certified
Transportation Research Board - Aviation Noise Subcommittee
Airport Noise Report - Editorial Advisory Board Member
Acoustical Society of America
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EDUCATION

Stanford University M.S. Engineering, 1976
Arizona State University, B.S.M.E., 1972
Golden Gate University, Graduate Business Studies, 1980

Exhibit I

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality

The Effects of LAX Aircraft Noise on Local Communities

Fred M. Svinth, Assoc. AIA
Senior Consultant

January 2001

AL00017

AIRCRAFT NOISE AND ITS EFFECTS

The environment is getting noisier everyday and a significant contribution to this increasing noise is the growth in passenger and air cargo aircraft activity.¹ This increase in noise significantly impacts the quality of American life. According to the United States Congress, nearly 20 million citizens are exposed to noise levels that can lead to psychological and physiological damage, and another 40 million people are exposed to noise levels that cause sleep or work disruption.² Over 25 years ago, in 1974, the U.S. Environmental Protection Agency (EPA) estimated that nearly 100 million Americans lived in areas where the daily average noise levels exceeded 55 dBA. The total number of citizens exposed has presumably increased; however, since then, both the EPA Office of Noise Abatement and funding sources for gathering these statistics have been eliminated.³

A considerable amount of study and research has been conducted over the last 25 years to understand the effects of high noise levels on communities. For those who live near airports, noise from departing and arriving aircraft has been shown to be a constant source of distress, interfering with normal speech, interrupting sleep, and disrupting a wide range of activities. Studies also show that in addition to lifestyle disruption, there is a relationship between noise and the health of community residents, with high noise levels as a potential factor in hypertension, cardiovascular disorders, and gastrointestinal disturbances.⁴

¹NRDC Report, 1996.

²Quiet Communities Act of 1997, Proposed Senate Bill 951.

³Suter, 1992.

⁴Bronzaft *et al.*, 1998.

A significant contribution to this increasing noise problem near airports has been the growth of passenger and air cargo aircraft activity.⁵ The increase in aircraft activity, and particularly the increase in the amount of cargo that is shipped via air, has resulted in more and more people being exposed to excessive aircraft noise. Nowhere is the cause for concern more apparent than in the communities underneath the flight corridors of the Los Angeles International Airport (LAX).

LAX is a significant source of noise for the communities surrounding the Airport. Residents, employees and students in the LAX environs suffer daily from the barrage of aircraft overflights. Residents living within the LAX air corridor have long complained about intrusive aircraft noises. In testifying at workshops on noise issues in the City of Los Angeles, members of the public were unanimous in their desire for relief from the aircraft noise burden that is increasingly disrupting their lives.⁶

Members of the public have reported that they suffer from severe sleep disruption, inability to carry on conversations in their homes and inability to enjoy their homes due to the intensity and constant noise from aircraft operations at LAX. Others reported that it is unpleasant and uncomfortable to walk outside, unpleasant for their children to play out of doors, and unpleasant to use bike paths along the beach due to the noise from aircraft.⁷ The City of Los Angeles has identified noise generated by LAX as the primary unresolved noise issue facing the City.⁸

⁵NRDC Report, 1996.

⁶Sec Los Angeles City Planning Department Staff report to the Planning Commission, prepared for the 11/12/1998 Planning Commission hearing - hereinafter "Staff Report."

⁷Staff Report.

⁸City of Los Angeles Noise Element, 2-11.

In this paper, discussions of the effects of high noise levels on the quality of life and health of a community are followed by a presentation of specific noise problems in the communities surrounding LAX due to aircraft overflights.

The Effects of Noise on the Quality of Life and Health of Communities

Noise has a significant impact on the quality of life, and in that sense, it is a health problem in accordance with the World Health Organization's definition of health, which includes total physical and mental well being, as well as the absence of disease. Along these lines, the World Health Organization has determined that "[n]oise must be recognized as a major threat to human well-being."⁹

Some of the effects of noise, such as sleep disruption, the masking of speech, and the inability to enjoy one's property or leisure time, limit or impair the quality of life. In addition, high noise levels interfere with the teaching and learning process, disrupt the performance of certain tasks, and increase the incidence of anti-social behavior. There is also evidence that noise can adversely affect general health and well being in the same manner as chronic stress.¹⁰ Documentation now exists that noise is harmful to the human body and is capable of altering the body's physiological processes. Another serious and quite alarming effect is the reduction of the ability of children to focus and learn when in a high noise environment. Below we discuss some of the harmful effects of a high noise environment on health and well-being.

1. Annoyance and Feelings of Helplessness

*Suter, 1992, citing Suess, 1973.

*Suter, 1992.

Over 70 million Americans live in neighborhoods with noise levels that interfere with communication and cause annoyance and dissatisfaction.¹¹ Aircraft are the leading offender of noise producing community annoyance. Annoyance can connote more than a slight irritation; it can mean a significant degradation in the quality of life.¹²

A prime effect of chronic noise exposure is the feeling of helplessness. Studies show that chronic exposure to noise appears to be associated with feelings of helplessness among adults living near airports.¹³ Community surveys of noise annoyance frequently note that, while annoyance is common, complaints or other actions to intervene are rare.¹⁴ Most people who are annoyed by noise report feeling unable or helpless to alter the situation.¹⁵

2. Sleep Disturbance

Noise is more annoying when it occurs at times when people expect to rest or sleep. Noise has been found to be one of the most common causes of sleep disturbance, and sleep disturbance is a critical component of noise-related annoyance. Noise-induced sleep interference can produce short-term adverse effects, such as mood changes and poor performance at work the next day. The possibility

¹¹Cohen, Krantz *et al.*, 1981.

¹²Suter, 1992.

¹³Evans and Lepore, 1993.

¹⁴Evans and Lepore, 1993, citing Evans and Tafalla, 1987.

¹⁵Evans and Lepore, 1993, citing Jue *et al.*, 1984.

also exists for more serious effects on health and well being when sleep interference continues over long periods of time.¹⁶

¹⁶Suter, 1992.

High noise levels can cause people to awaken repeatedly and to report poor sleep quality the next day, but noise can also produce reactions of which the individual is unaware. These reactions include changes from heavier to lighter stages of sleep, reductions in “rapid eye movement” sleep, increases in body movements during the night, and changes in cardiovascular responses. Thus, even if people are not actually awakened by noise during the night, they still may be subject to sleeplessness, mood changes, irritability and poor performance the next day.¹⁷

Intermittent and impulsive noises, such as aircraft overflights, have been found to be more disturbing to sleep than continuous noise sources.¹⁸ Furthermore, as one might expect, studies have determined that the quality of sleep and sleep disturbance are directly related to aircraft noise exposure.¹⁹ In one study of 1,500 residents living near JFK Airport in New York, almost 60% of the residents living about a mile from the airport reported some sleep disturbance, compared to about 30% of the residents located five miles away, and less than 10% living 12 miles away. About half of residents living 2.5 miles or closer to the airport say that aircraft-induced sleep interruption is serious and unacceptable, compared to only 2% in the 15-mile distant areas.²⁰

3. Interference with Speech

¹⁷Suter, 1992.

¹⁸Suter, 1992.

¹⁹Borsky, 1976.

²⁰Borsky, 1976.

Interference with communication has proved to be one of the most important components of noise-related annoyance.²¹ Noise can mask important sounds and disrupt communication between individuals. It can also disrupt effective communication between teachers and students in schools, and can cause fatigue and vocal strain in those who need to communicate in spite of the noise.

4. Physiological Effects

*Suter, 1992.

Noise has been implicated in the development or exacerbation of a variety of health problems.²² The research on the physiological effects of noise appears to indicate that noise is harmful to the human body.

a. Cardiovascular and Behavioral Effects on the General Population

Much of the research on the health effects of aircraft noise has been directed toward cardiovascular effects, especially potential elevations in blood pressure.²³

Accumulating evidence suggests that prolonged exposure to high-intensity noise can produce long-term changes in cardiovascular function in animal and human subjects. A study sponsored by the EPA, constituting one of the most notable studies of animal noise exposure, examined cardiovascular effects of noise on monkeys.²⁴ This research demonstrated that monkeys subjected to industrial noise at levels between 85 to 90 dBA for several months developed significant elevations of systolic and diastolic blood pressure.²⁵ It is particularly notable that these changes persisted long after exposure ceased, demonstrating that noise has a chronic effect on blood pressure.²⁶

*Suter, 1992.

*Suter, 1992.

*Suter, 1992, citing Peterson et al., 1978, 1981 and 1983.

*Suter, 1992.

*Cohen, Krantz et al., 1981.

Human studies have shown similar results to those on animal subjects. One study investigating how low-flying aircraft affected elderly human subjects, showed significant increases in both systolic and diastolic blood pressure after exposure to chronic aircraft noise.²⁷ In another series of studies, it was found that residents in neighborhoods adjacent to an airport in Amsterdam with high levels of aircraft noise were more likely to be taking drugs for cardiovascular problems. These residents were more likely to have high blood pressure and other cardiac abnormalities than an unexposed population.²⁸ While the increase in cardiovascular drug use could not be explained by age, sex, smoking habits, or obesity, the noisy and quiet areas in this study did differ in socioeconomic status. Another study conducted by the same researchers, which included controls for socioeconomic status, indicated that increases in the purchase of cardiovascular drugs were positively correlated with the number of aircraft overflights at night.²⁹

2. Depression and Feelings of Helplessness

One effect of exposure to noise, at least to unpredictable or uncontrollable noise, such as aircraft overflights, is a reduction in perception of control over the environment. This loss of control is often accompanied by a depressed mood and decreased motivation to initiate new responses.³⁰ If people have perceived control over noise, it appears to decrease the adverse effects on their subsequent performance of certain tasks.³¹

*Suter, 1992, citing Michalek et al., 1990.

*Cohen et al., 1981.

*Cohen et al., 1981.

*Cohen et al., 1981.

*Suter, 1992.

5. **Effects of Aircraft Noise on Children and Their Ability to Learn**

One particularly disturbing result of noise research are studies that show the effect of high noise levels on young children. Research confirms that children exposed to persistently high noise levels suffer from modest elevations of resting blood pressure, attention deficiencies, and decreased reading ability. Other effects suspected to be a result of exposure to chronic high noise levels include diminished task motivation and deficits in auditory discrimination.³² In fact, noise can disrupt communication in the classroom to the extent that the instructional method used in schools close to airports is sometimes nicknamed “jet pause” teaching.³³

a. **Reduced Academic Performance**

Children in schools assailed by frequent aircraft noise do not learn to read as well as children in quiet schools. This finding is the conclusion of a Cornell University study that compared a total of 116 first and second graders from two elementary schools. One of the two schools in the study had low-flying planes passing overhead from a major New York metropolitan airport. These overflights produced maximum noise levels of up to 90 dBA at the school every 6.6 minutes. The other school, closely matched for ethnicity and percentage of children receiving subsidized school lunches and speaking English as a second language, was in the same urban area but in a quiet neighborhood not affected by aircraft noise. The results of this study showed a correlation between lack of speech recognition skills and lower reading scores with chronic noise exposure. Thus, this study seems to provide a link

³²Evans and Lepore, 1993.

³³Suter, 1992.

between chronic aircraft noise exposure at school and a child's lack of speech recognition skills and lower reading scores.³⁴

³⁴Evans and Maxwell, 1997.

The major reason for the reduction in reading level appears to be due to children tuning out speech when continuously exposed to high levels of aircraft noise. Gary Evans, an international expert on environmental stress, such as noise, crowding and air pollution, indicates that "we've known for a long time that chronic noise is having a devastating effect on the academic performance of children in noisy homes and schools." His study shows that children do not tune out sound per se, rather they have difficulty hearing in high noise environments and thus have a limited ability to acquire speech recognition skills.³⁵

Another study, this one conducted with elementary school children near LAX, confirms that academic performance is hindered when children are exposed to excessive aircraft noise. In this study the impact of aircraft noise on children initially in the third and fourth grades living and attending schools in the air corridor of LAX was assessed. The children were compared with children of similar socioeconomic status, age, and race living and attending schools in quiet Los Angeles neighborhoods.³⁶ Again, the results of this study demonstrated that chronic exposure to the noise resulting from aircraft overflights affects a variety of cognitive, motivational, and physiological processes. Blood pressure was relatively higher in noise-affected children, and they did less well with puzzle solving and math. These findings could not be attributed to economic or social variables or to hearing loss. The study also looked at the effect of school noise abatement programs and found that, in general, sound insulation in the classroom may not be sufficient to repair the harm done to children from a noisy environment. "*The longitudinal data provide little evidence that children who had been enrolled in a noisy school improve in their performance and/or health after a school year in a noise-abated classroom, even though interior sound levels were substantially reduced.*"³⁷ Confirmation of this conclusion has come in

*Lang, 1997.

*Cohen, Evans, et al., 1980.

*Cohen et al., 1981.

another research study which showed that students in the poorest schools read at least one year below grade level.³⁸

³⁸Green, Pasternack, Shore, 1982.

Perhaps the most persuasive data of reduced motivation related to high noise levels is Cohen *et al.*'s (1980) findings on "giving up." Not only are children from noisy schools less likely to solve a challenging puzzle within a four-minute time period, a substantially greater proportion of them (15%) simply gave up before the allotted time had elapsed, often remarking that they could not do the task, in comparison to 2% of their quiet school counterparts who gave up.³⁹

Further evidence of the problem of aircraft noise and children's learning comes from a 1981 research study by Cohen and Weinstein which showed that skills such as auditory discrimination and reading achievement can be adversely affected when children *live* in noisy circumstances, even though their schools may be no noisier than average. These studies also indicate that interference with communication in the classroom is not the only process at work. Possible additional explanations include adverse effects on children's information processing strategies and their feelings of personal control.⁴⁰

b. Children's Psychological Stress

Not surprisingly, excessive noise levels have also been shown to increase children's stress levels and to result in elevated blood pressure levels. Children may be psychologically less able to deal with the continuous nature of noise because of a limited range of coping strategies or because they lack the opportunity to control or manipulate their environment.⁴¹

³⁹Evans and Lepore, 1993.

⁴⁰Suter, 1992.

⁴¹Evans and Lepore, 1993.

A study was undertaken of children in third and fourth grades living either near the newly constructed Munich International Airport or in nearby communities outside the noise impact zone of the airport. This research determined that chronic exposure to ambient aircraft noise elevates psychological stress in human beings. Children living proximate to the new Munich Airport experienced significant elevations in resting blood pressure after the airport opened. During the same time period, well-matched children in nearby, similar communities unaffected by aircraft noise experienced stable levels of resting blood pressure.⁴²

In conclusion, it is no surprise that, after controlling for socioeconomic factors, studies indicate that the academic performance of children in quiet schools is better than that of children in noisy schools.⁴³

6. Problems with Noise Regulations and Standards

The aviation industry's regulation of noise and use of noise descriptors present some obstacles in understanding the true impact of noise on people. The aviation industry typically reports aircraft noise in terms of the average noise level produced by aircraft operations for an annually averaged day. The average noise descriptor used in California, known as the Community Noise Equivalent Level (CNEL), fails not only to account for days and weeks when air traffic is heavier, but it also, and more importantly, ignores the impact of single aircraft events. In this way, the CNEL understates the true impact of aircraft noise.

⁴²Evans, Hygge, Bullinger, 1995.

⁴³Suter, 1992.

The Federal Aviation Administration (FAA) has established a CNEL of less than 65 dBA as being “normally acceptable” with residential land uses, despite research and public testimony that a CNEL threshold of 65 dBA is not sufficient to protect the public’s health and welfare. Research confirms that annoyance is often generated at average sound levels well below 65 dBA.⁴⁴ Specifically, studies of the Burbank and Orange County airports showed that, at an average day/night noise level of 60 dBA, the percentage of the population who described themselves as highly annoyed ranged from 70% near the Burbank Airport to some 40% near the Orange County Airport.⁴⁵ Thus, people exposed to a CNEL of 60 dBA may be disturbed by aircraft noise, sometimes for many hours a day. Yet, because the FAA has set a CNEL of 65 dBA as the threshold for compatibility with residential uses, these people are ignored in government reports on aircraft noise because noise levels in their communities fall below a CNEL of 65 dBA.

The U.S. EPA confirms these studies that demonstrate community annoyance is triggered at noise levels lower than a CNEL of 65 dBA. In the 1970s, the EPA identified a noise level that it deemed necessary to protect the public health and welfare (with an adequate margin of safety) of 55 dBA, which constitutes a noise level with half as much average loudness (or an order of magnitude less sound energy) as the 65 dBA level established by the FAA.⁴⁶ Unquestionably, the government is under-reporting the numbers of people affected by aircraft noise.⁴⁷

When used as the only measure of noise, the CNEL does not provide a true or complete picture of what people actually hear as aircraft fly overhead. Indeed, since the CNEL is an average noise measurement, it tends to mask the tremendous effect that a single aircraft overflight has on individuals. It is single-event and maximum noise levels, after all, and not average noise levels, that result in adverse impacts such as sleep disturbance, speech interference and inability to concentrate in school.

⁴⁴Suter, 1992, citing Fidell *et al.*, 1985, 1991; Hall *et al.*, 1981.

⁴⁵Suter, 1992.

⁴⁶NRDC Report, 1996.

⁴⁷Bronzaft *et al.*, 1998.

LAX NOISE IN THE SURROUNDING COMMUNITIES

Aviation is the fastest growing mode of transportation in the United States.⁴⁸ Noise pollution is likely to become an even greater public health threat as air traffic continues to increase. In 1980, U.S. scheduled airlines flew approximately 255.2 billion passenger miles and 5.7 billion cargo ton-miles. By 1990, these figures were 457.9 billion passenger miles and 10.6 billion cargo ton-miles. This represents an increase of 79% in passenger mileage, and 86% in airfreight mileage in the 10-year period between 1980 and 1990.⁴⁹ Air cargo traffic appears to be growing at an exceptionally rapid pace, and according to the FAA, there will be 36% more flights in 2007 than there are today.⁵⁰ LAX, the fourth busiest airport in the United States and the world, with 58 million passengers and 1.89 million tons of air cargo freight passing through it in 1996, has also experienced tremendous increases in traffic; and the Los Angeles World Airports, the agency which oversees LAX, contemplates a tremendous increase in aircraft activity over the next 20 years.⁵¹

There is a growing concern that, with the increase in aircraft activity projected for the next decade, communities will not be able to withstand the constant bombardment of aircraft noise. Some relief is at hand in that quieter Stage III aircraft are being phased in. By the end of this year, 2000, all of the noisier Stage II aircraft are to be phased out pursuant to the Airport Noise and Capacity Act of 1990. While this requirement should promote a quieter environment around airports, the growth of air transportation and increased use of larger jets threatens to offset the benefits of the quieter aircraft.

⁴⁸NRDC Report, 1996.

⁴⁹Suter, 1992

⁵⁰NRDC Report, 1996.

⁵¹City of Los Angeles Noise Element, 2-23.

Furthermore, though Stage III aircraft are quieter than Stage II, they are nevertheless noisy. In general, Stage III aircraft are 10 dBA quieter than Stage II aircraft, which represents a halving of perceived noise. However, actual noise reduction varies by aircraft. For example, maximum noise levels produced by retrofitted Boeing 747s that meet Stage III standards are only 4 to 5 dBA quieter than non-retrofitted 747s. In addition, according to *Airport Noise: A Guide to the FAA Regulations Under the Airport Noise and Capacity Act*, Stage III aircraft actually can be noisier on landing than Stage II aircraft.⁵²

LAX is a tremendous source of noise in the surrounding communities. A review of LAX's quarterly noise reports shows that in the eight years between 1990 and 1998 the total land area within the 65 dBA CNEL contour increased by over 35% with the number of homes within this contour increasing by 26%. In the fourth quarter of 1998, the 65 dBA CNEL noise contour encompassed over 10,000 acres (more than 15 square miles), with over 95,000 people living in over 34,000 dwellings within the 65 dBA CNEL noise contour. During this same period the total number of flights at LAX increased by nearly 17 % to a total of over 760,000 flights.

The greater percentage increase in the total land area and number of homes officially impacted by aircraft noise than the percentage increase in air traffic (35 and 26% vs. 17%) between 1998 and 1990 may be explained in a number of ways; the most logical appearing to be that, (1) more planes flew during evening and nighttime hours in 1998 than in 1990, (2) more planes used approach or departure paths over residences, or (3) on average, planes flying into and out of LAX produced more noise in 1998 than in 1990. If the aircraft using LAX were somewhat louder in 1998 than in 1990, the increase in noise is most likely due to an increase in the number of passengers and/or weight of cargo loads on the planes, since the percentage of Stage III aircraft at LAX increased from below 70% in 1990 to about 93% in 1998.

* NRDC Report, 1996, p. 85, citing The Cutler Stanfield series, in conjunction with Harris Miller, Miller & Hanson, Inc.

If one were to assume that the over 760,000 flights which took place in 1998 occurred 7 days per week, 24 hours per day, 365 days per year, which they do not, LAX would have handled almost 2,100 flights per day or 87 flights per hour. Considering that late night and early morning hours operations at LAX have historically decreased, but not ceased with about 5 to 20 flights per hour between 11 p.m. and 7 a.m., during the daytime hours (7 a.m. to 10 p.m.) a takeoff or landing would occur every one or two minutes. Because some days, weeks and months have much greater air traffic, during busy periods one could expect more than this number of LAX operations per hour.

Prior to 1973, aircraft operations into and out of LAX were almost entirely conducted in an east-to-west direction. However, after 1973, in an effort to reduce noise exposure during sleeping hours for the people living east of LAX, aircraft have been required to approach the airport from over the ocean between 11:00 p.m. and 6:00 a.m., except when tailwinds exceed ten (10) knots. In a subsequent action, the hours of over-ocean operations were adjusted to between midnight and 6:30 a.m.⁵³ Though this curfew on eastward operations may have somewhat reduced nighttime operational noise levels, the bulk of operations out of and into LAX continue to produce high noise levels during the early morning, daytime and late evening hours in the communities east of the runways.

The majority of the aircraft operations that produce high noise levels in the community are passenger jet and air cargo jet flights. Though the jet fleet operating out of the airport is to have achieved full Stage III compatibility by the end of the year 2000, it will continue to produce high maximum noise levels when overflying schools, residences and other sensitive land uses surrounding the Airport. The communities of Playa del Rey, Westchester, Inglewood, Lennox, Hawthorne and El Segundo are adjacent to the

⁵³LAX 2000 Draft EIR, 1988, p. 16.

Airport, with residences and schools in Inglewood and Lennox directly under the flight paths as close as 4,500 feet from the eastern end of the nearest runways.

When jets either depart or arrive over these communities, maximum noise levels can be quite high. To determine the noise levels produced by aircraft flying over the schools and residences nearest LAX during the early morning, daytime and late evening hours, maximum aircraft noise levels were modeled using the latest version of the FAA's Integrated Noise Model (INM version 6.0A). The results of this modeling are shown in the following table:

Aircraft Type	Maximum Noise Levels at Schools and Homes Approximately 4,500 Feet East of LAX Runways	
	Standard Approach	Standard Departure
350+ seat Passenger Jet (typical: B747, Stage III)	104 dBA	95 dBA
250-349 seat Passenger Jet (typical: B777, Stage III)	98 dBA	90 dBA
150-249 seat Passenger Jet (typical: B767, Stage III)	95 dBA	88 dBA
100-149 seat Passenger Jet (typical: B737, Stage III)	95 dBA	80 dBA
Air Cargo Jet (typical: DC-8, Stage III)	95 dBA	88 dBA

Based on the results of this modeling it is clear that, even with Stage III aircraft, homes and schools are, and will continue to be, exposed to excessive maximum noise levels when passenger and air cargo jets approach and depart LAX directly overhead.

From these average maximum noise levels, it may also be seen that smaller passenger jets produce maximum noise levels during approach and departure of between of 6 to 9 dBA and 5 to 15 dBA,

respectively, less than a wide-body B747 jet. However, even these "smaller" aircraft still expose the community to excessive noise.

Another important observation is that maximum noise levels produced by arriving aircraft are 7 to 15 dBA greater than departing aircraft. This is especially important when one considers that the preferred morning, daytime and evening arrival paths at LAX are from the east over the schools and residences of the surrounding communities. Additionally, though the 1973 curfew order required nighttime approaches and departures over the ocean, planes confronting adverse wind conditions still approach and depart over these communities during the nighttime hours.

The preceding table also shows that wide-body four-engine passenger jets, such as 747s, operating out of LAX, generate the highest maximum noise levels in the communities surrounding the Airport. According to noise reports from LAX, the total number of this aircraft type at LAX increased by almost 15% between 1990 and 1998. Based on the number of 1998 operations at LAX, one could expect that, on the average, one 747 would either depart or arrive at LAX every eight to nine minutes during the daytime and evening hours.

The rest of the air fleet operating out of LAX operates on a similarly busy schedule. From a review of LAX's existing design day operations hourly usage charts, one may see that aircraft at LAX operate at all hours of the day and night. Following is a brief review of some of these operations and their frequency.⁵⁴

International flights to and from LAX occur primarily between the hours of 7 a.m. and 11 p.m., with between three and 20 operations per hour. International flights continue after 11 p.m. to about 2 a.m. with between one and five flights per hour.

⁵⁴Project Description, LAX Master Plan Phase IIIF, October 29, 1999.

Domestic passenger flights typically begin at about 6 a.m. and continue to 11 p.m., with between 30 and 40 flights per hour for Central/Eastern/Hawaii flights, and between 30 and 50 flights per hour for Pacific Coast flights. Domestic passenger flights continue after 11 p.m. to about 2 a.m., with between one and seven flights per hour.

Air cargo flights operate at all hours of the day and night with peak activity occurring at 3 a.m., 7 a.m., and 7 p.m., with between eight and 16 flights per hour. During other hours of the day and night, cargo flights tend to occur at between one and five flights per hour.

Future Airport Noise (Assuming Greater Proportion of Wide-Body, B747, Planes)

The Los Angeles World Airports is contemplating the expansion of LAX. Preliminary expansion plans call for the introduction of a greater percentage of wide-body aircraft, such as the B747, to handle the expected service demand and minimize the need for increases in the total number of operations.⁵⁵ This change will increase B747 or similar large-capacity air traffic by over 180% so that, on the average, one B747 can be expected to depart or arrive at LAX about every five to six minutes during daytime and evening hours.

Though in this scenario, the overall percentage of passenger jets with seating capacities under 350 persons is projected to decrease, the number of jets that can carry between 250 and 349 passengers, such as B777s, and which can produce maximum noise level of 90 to 98 dBA in the community, are expected to increase by 80% over existing usage levels. The number of jets that can carry between 150 and 249 passengers, such as B767s, which can produce maximum noise

⁵⁵Project Description, LAX Master Plan Phase IIIF.

level of 88 to 95 dBA in the community, are expected to increase by 50% over existing usage levels.

Because larger aircraft produce higher noise levels, increasing the percentage of the largest aircraft, while maintaining the overall activity levels, will not only expose residents to more extremely noisy events, but is also estimated to result in a 1 to 2 dBA increase in the existing CNEL noise exposure due to aircraft operations. To characterize the significance of this CNEL increase, we note that in 1999 CNELs at homes and schools in El Segundo, Lennox, Inglewood, Westchester, and Playa del Rey were reported to range from a low of 64.9 to a high of 73.5 dBA.⁵⁶ In the future these levels can be expected to range from 65.9 to 75.5 CNEL.

The FAA typically uses a 1.5 dBA increase to determine whether a significant noise impact has occurred. Therefore, perhaps the projected 1 to 2 dBA increase in future CNEL noise exposure due to the aircraft operations called for in the proposed airport expansion plan will be seen as significant by FAA regulators.

Ultimately the proposed airport expansion plan, with its call for a greater percentage of wide-body aircraft, and the phase in of Stage III aircraft, will not solve the noise problem at LAX. Though there are many reasons for this failure, the primary problems are that noise levels at residences under landing aircraft would likely increase since (1) as previously noted, Stage III aircraft can be noisier upon landing than Stage II aircraft, (2) the total number of aircraft operations over the next decade will continue to increase, and (3) the use of larger aircraft to limit overall increase in aircraft operations will burden residents with higher single event noise levels. As discussed earlier in this paper, noise at the levels currently experienced by the

⁵⁶Florida West International Airways Negative Declaration Filing, December 2, 1999, Table II.

members of the communities near LAX have been shown to cause serious adverse effects on not only the quality of life but also potentially health threatening effects in the community.

Bibliography

Borsky, Paul N., "Sleep Interference and Annoyance by Aircraft Noise," *Sound and Vibration*, December 1976.

Bronzaft, Arline, L.; Ahern, Kathleen Dee; McGinn, Regina; O'Connor, Joyce; Savino, Bartholomew, "Aircraft Noise, A Potential Health Hazard," *Environment and Behavior*, Vol. 30, No. 1, January 1998.

City of Los Angeles, "Florida West International Airways Operating Agreement at LAX Negative Declaration Filing and Newspaper Publication Notice," December 1999.

Cohen, Sheldon; Evans, Gary W.; Krantz, David S.; Stokols, Daniel, "Physiological, Motivational, and Cognitive Effects of Aircraft Noise on Children, *American Psychologist*, Vol. 35, No. 3, March 1980.

Cohen, Sheldon; Krantz, David S.; Evans, Gary W.; Stokols, Daniel, "Cardiovascular and Behavioral Effects of Community Noise," *American Scientist*, Vol. 69, 1981.

Evans, Gary W.; Hygge, Staffan; Bullinger, Monika, "Chronic Noise and Psychological Stress," *American Psychological Society*, Vol. 6, No. 6, November 1995.

Evans, Gary W.; Lepore, Stephen J., "Nonauditory Effects of Noise on Children: A Critical Review," *Children's Environments*, 10(1), 31-51, 1993.

Evans, Gary W.; Maxwell, Lorraine, "Chronic Noise Exposure and Reading Deficits, The Mediating Effects of Language Acquisition," *Environment and Behavior*, Vol. 29, No. 5, September 1997.

Federal Aviation Administration (FAA), "Airport Environmental Handbook," Order 5050.4A, October 1985.

Green, Kendall B.; Pasternack, Bernard S.; Shore, Roy E., "Effects of Aircraft Noise on Reading Ability of School-Age Children," Archives of Environmental Health, Vol. 37, No. 1, January/February 1982.

Lang, Susan, "Why Johnny Can't Read: The Airport Next Door," Albion Monitor, May 3, 1997.

Los Angeles City Planning Department, "Noise Element of the Los Angeles City General Plan," February 1999.

Los Angeles City Planning Department, "Staff Report to the Planning Commission, prepared for the 11/12/1998 Planning Commission Hearing."

Los Angeles Department of Airports Environmental Management Bureau, "Draft Environmental Impact Report - LAX 2000," February 1988.

Los Angeles World Airports, "LAX Master Plan Phase III F - Project Description," October 1999.

Natural Resources Defense Council (NRDC), "Flying Off Course - Environmental Impacts of America's Airports," October 1996.

Quiet Communities Act of 1997 (Introduced in the Senate), Proposed Bill 951, June 1997.

Suter, Alice H., "Noise Sources and Effects - A New Look," Sound and Vibration, January 1992.

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Exhibit J

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CITY OF INGLEWOOD

INFORMATION AND DISCUSSION
ON INGLEWOOD'S COMMENTS
ON THE LAX DRAFT MASTER PLAN
AND EIS/EIR REPORT

SATURDAY, JUNE 30, 2001
11:00 A.M.

Reported by:
Alfred J. Long
CSR No. 2024

1 REPORTER'S TRANSCRIPT OF THE CITY OF
2 INGLEWOOD'S Information, Discussion and Comments on
3 the LAX Draft Master Plan and EIS/EIR Report, held at
4 Inglewood High School Auditorium, 231 Grevillea
5 Avenue, Inglewood, California, Saturday, June 30,
6 2001, at 11:00 a.m.; reported by Alfred J. Long,
7 CSR No. 2024.
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10 FACILITATOR:
11 JOSEPH T. ROUZAN, City Administrator
12
13 PANEL:
14 Roosevelt F. Dom, Mayor
15 Curren D. Price, City Council District 1
16 Judy Dunlap, City Council District 2
17 Jose Fernandez, City Council District 3
18 Larry Kirkley, City Council District 4
19 Charles E. Dickerson III, City Attorney
20 Dr. Dale Hattis, Clark University
21 John C. Freytag, Environmental Consultant
22 Jules Radcliff, Radcliff, Frandsen & Dongell
23 Tom Vandenburg, Radcliff, Frandsen & Dongell
24 Matt Bures, Radcliff, Frandsen & Dongell
25

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1 invocation by Reverend Talbert A. White.
2 REV. WHITE: Good morning. I wish that
3 everyone would stand, please. Let us bow our heads.
4 Dear Lord, first of all, we want to give
5 thanks to you for this day that you've made. We ask,
6 Father, that you open up the ears of the people. Let
7 them hear what's being said with understanding. Most
8 of all, Lord, we ask for peace in this meeting.
9 Then, Lord, we ask you to let us hear and be
10 attentive to all the speakers on the panel and to see
11 the vision of this City of Inglewood. And God, we're
12 asking you right now to let the purpose and the
13 overview of this project today, let everything on
14 this agenda be accomplished. Let the people learn,
15 get wisdom and get understanding that we may move
16 forth at such a time as this. And we ask this all in
17 the name of Jesus.
18 Bless the people that are here, bless those
19 that are coming, in Jesus' mighty, mighty name.
20 Amen and amen.
21 MR. ROUZAN: Thank you.
22 Please remain standing.
23 Thank you, Reverend White.
24 REV. WHITE: You're welcome.
25 MR. ROUZAN: May we have the salute to the

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1 INGLEWOOD, CALIFORNIA;
2 SATURDAY, JUNE 30, 2001; 11:00 A.M.
3 ---000---
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6 MR. ROUZAN: Good morning.
7 Just to remind you, before we get started,
8 that those of you who wish to speak today, please get
9 a card -- they are being passed out now -- and fill
10 out your name and any comments that you'd like to
11 make, so that later in the program we can call upon
12 you, and you can speak to the issues that we're going
13 to talk about today.
14 We'll be starting in just a couple minutes
15 now. Thank you.
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17 ---000---
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19 MR. ROUZAN: Good morning.
20 Welcome, and thank you for coming to this
21 community meeting that the mayor's called this
22 morning. My name is Joe Rouzan. I'm the city
23 administrator, and I will serve as the moderator for
24 the meeting today.
25 First of all, we'd like to have the

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1 flag, please. Ready, begin.
2 (Pledge of Allegiance.)
3 MR. ROUZAN: Thank you.
4 Once again, thank you very much for coming
5 out this morning. The school officials of the
6 Inglewood Unified School District have been very kind
7 to make this facility available to us, and we have
8 the facility available from 11 a.m. until 3 p.m.
9 today.
10 Their only request is that we not bring food
11 or drink into the auditorium. They've gone through
12 some very elaborate and expensive refurbishing of the
13 chairs in the auditorium, and we will respect their
14 request, and not bring food or drink into the
15 auditorium, please.
16 Several weeks ago, after we received
17 information that the city attorney's office had
18 prepared, with the cooperation of several expert
19 attorneys from the outside, a document to respond to
20 the Los Angeles Department of Airports environmental
21 impact study and environmental impact report, the
22 mayor asked that I put together a meeting so that we
23 could have community involvement so that you would
24 know what the response to those studies that has been
25 submitted to the city for adoption with input from

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1 the community.
2 So today, we will be talking about our
3 response, the city's response, with your input, to
4 those two studies. Shortly, we will have the city
5 attorney, along with the expert attorneys, give you
6 their insights and their responses and opinions to
7 those draft reports.

8 Before we do that, I just want to give you
9 the parameters of how we will have the meeting today.

10 After the mayor gives some opening remarks,
11 and council members who may be present give some
12 comments, we will then have the city attorney give an
13 overview of the presentation and introduce the
14 attorneys who will speak today.

15 After that, we will have an opportunity, for
16 those of you who have submitted cards, to hear your
17 comments in relation to these reports. The attorneys
18 will take notes on your comments, and if there are
19 any questions that you have during your comments,
20 they will respond at the end of the time that all of
21 the persons have an opportunity to make comments.

22 We would anticipate, depending on size of
23 the crowd, that each of you will have at least two to
24 three minutes to come up and make your comments, and
25 then we will have the attorneys, at the end of those

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1 also incorporated the comments of the South Bay
2 Cities Council of Governments, so that the South Bay
3 Cities Council of Governments have also been
4 incorporated in the responses of the experts.

5 What we are here for today is for you to
6 have an opportunity to hear the experts' responses to
7 LAX's Draft EIS/EIR Report, and then we want to hear
8 your responses to that LAX's Draft EIS/EIR Report,
9 and then we want to incorporate your responses into
10 the experts' responses before we send the responses
11 to LAX.

12 Now, there are those that said, "Well, why
13 did we wait so late to have this meeting?" I did not
14 call the meeting until the reports were ready, number
15 one, and I had received one of the reports. And then
16 number two, I asked that the report be placed on the
17 Internet so that anyone who wanted to download it
18 would be able to download it.

19 See, we wanted to make certain that every
20 resident had an opportunity to receive this report in
21 order to study it at least a week before this
22 meeting, and that's what we did. And so we feel very
23 good about the fact that, I would say, most of the
24 residents had an opportunity to at least download and
25 receive our response to the EIR/EIS report.

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1 comments, respond to some of these questions. We
2 will also have some closing remarks by the city
3 attorney and the mayor and members of the council.

4 So with that, we will get started and have
5 some opening comments from the mayor.

6 Mayor Dom...

7 (Applause.)

8 MAYOR DORN: Good morning.

9 I'm so pleased to see that you're here this
10 morning. I was hoping that the place would be just
11 jammed.

12 The city council - I called this meeting,
13 and the city council gave me the authority to send
14 out messages in every - notices in every way
15 possible.

16 This meeting has probably been given better
17 notice than any meeting that the city has ever had,
18 because we wanted everyone to have an opportunity to
19 come out, hear the responses that have been prepared
20 by the experts in regard to the Draft EIS/EIR Report,
21 and then we want the people to have an opportunity to
22 give their input in regard to the Draft EIS/EIR
23 Report.

24 Now, along with this humongous EIS/EIR
25 response that has been prepared by the experts, we've

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1 I have read it. I think it's an excellent
2 report. I think you will find that we are objecting
3 to virtually everything that LAX's EIR/EIS report has
4 submitted. And once we submit our responses, and
5 then they respond to that, we will have an
6 opportunity to respond again.

7 If this does not stop the expansion, then we
8 won't have any choice but to file a lawsuit. But
9 this is the first step to see that that expansion
10 does not occur. This is the first step. If we
11 didn't do this, then we would not be able to file a
12 lawsuit if they proceeded. So we're trying to do
13 everything in our power to protect the residents of
14 Inglewood. This is our response, and this is what we
15 intend to do.

16 So we want to hear from you. So with the
17 size of the crowd, I'm sure each of you will have at
18 least three minutes to respond. And I'm just hoping
19 that more people show up. But if they do not show
20 up, we were able to contact the president of AT&T
21 Broadband, Ms. Teresa Elder.

22 See, when I returned from the National
23 Mayors' Meeting, I was told that we would not have
24 this televised, we would not have the cable people
25 here. They said that they didn't have the people to

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1 do it, so when I heard that, I immediately called the
2 president in Denver. And of course, she was in a
3 meeting, but I spoke to her assistant.
4 And lo and behold, within 30 minutes
5 thereafter, all of a sudden we have people here, and
6 the cable people are here now, and it's being
7 televised. And this meeting will be televised at a
8 later time on our local station, and that's what it's
9 all about.
10 So I want to take this opportunity to thank
11 Ms. Teresa Elder for responding; and also the vice
12 president that responded and said, "Yes, Mayor Dom,
13 we're going to do it. We agree with you. We think
14 this meeting is important enough to be televised."
15 So God bless all of you. And I hope that
16 you remain and hear this information and respond.
17 Thank you.
18 (Applause.)
19 MR. PRICE: Good morning.
20 Good to see so many faces here, even on a
21 Saturday.
22 Over the past several months, I think every
23 member of the council has expressed their opposition
24 to the expansion and concern, certainly, about the
25 EIR regarding the proposed expansion. And I'm

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1 questions, to provide some pertinent insight, but of
2 course your concerns are of utmost importance, and so
3 we look forward to hearing them, recording them, and
4 reflecting them in the final report that we submit.
5 So again, I appreciate your participation,
6 and I look forward to a productive morning.
7 Thank you.
8 (Applause.)
9 MR. ROUZAN: Thank you, Councilman.
10 Also, we'd like to make sure that you are
11 aware that we have Spanish translation over to the
12 right, your left, for those of you who would like to
13 have translation or have the earphones to assist you.
14 Also, as the mayor and Councilman Price
15 indicated, this will be televised, and will be
16 transcribed, and this information will be submitted,
17 along with our report, to the appropriate authorities
18 and those involved agencies that will review this
19 information.
20 We will also have copies in the library, as
21 well as the city clerk's office, for review after
22 they are prepared. The transcription will take a few
23 days, but once we have them, we'll make notice so
24 that anyone who would like to review them can do so.
25 At this time I'd like to introduce

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1 pleased to say that the draft EIR that we have, our
2 response to it, I think reflects the serious concerns
3 and opposition to it. It's quite lengthy in detail,
4 and it's thorough, and I think that is an important
5 factor as well.
6 The draft report came before the council
7 last week. Some of you who were at the meeting or
8 saw the meeting expressed concerns that you did not
9 have a chance to make comments prior to the draft
10 being approved.
11 We heard those calls, we heard those
12 concerns, and chose not to approve it until we had a
13 chance to have some additional input from citizens,
14 until you had a chance to more fully understand and
15 appreciate the position that your city was taking in
16 opposition to it.
17 So as the mayor pointed out, we took some
18 extraordinary steps to get the word out. Notices
19 were in the water bill. We did Walkman, newspapers,
20 fliers, on the Internet, and we're here televising it
21 on cable today. So I'm pleased that we've made an
22 effort to get the word out, and I'm very pleased that
23 you are here to participate in this important
24 process.
25 We have experts here today to answer your

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1 Councilwoman Judy Dunlap for a few opening comments.
2 (Applause.)
3 MS. DUNLAP: Thank you very much,
4 Mr. Rouzan.
5 I too am pleased to be here for this event.
6 I'm hoping that more and more residents will begin to
7 come in as the morning progresses, because this
8 surely is a very critical meeting for the residents
9 to be involved in, to give input, and to listen to
10 what the city has devised with regard to comments
11 that we're going to be submitting on your behalf
12 which represent you.
13 I'm also glad that the city did take the
14 effort to put the word out citywide. It's very
15 critical that everyone at least have the information
16 available so that they can attend these very
17 important meetings.
18 I'm going to save most of my time for my
19 remarks after I too listen to some of the reports of
20 our experts that we have here so that I may make my
21 comments.
22 But I'd like everyone to know that we have,
23 at least in my office for District 2 -- and anyone in
24 the city is welcome to use them. I have personally
25 made two additional books with regard to -- it has

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1 all of this information, and you may check them out
2 from my office if you'd like to personally review all
3 of the material that the city is submitting so that
4 you can have that to look at to evaluate before you
5 make your written suggestions to the city, as well as
6 to LAWA yourself.

7 With that, I'll close for now, and look
8 forward to our presentation this afternoon.

9 Thank you.

10 (Applause.)

11 MR. ROUZAN: Also, we'd like to afford the
12 opportunity for Councilman Jose Fernandez, who just
13 came in, to make a few comments.

14 (Applause.)

15 MR. FERNANDEZ: Good morning, everyone.

16 This is an opportunity for everyone to give
17 their input. The city council is extremely
18 important -- extremely interested in what you have to
19 say, and I am very interested in what you have to
20 say.

21 We know the impact of noise in our
22 community. It's been here since I've been born and
23 before, and we want to make sure that this issue is
24 an issue we begin to start to revolve. The issue of
25 noise insulation is extremely important, and we

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1 as far as letting the community know about this
2 meeting. You've done a far better job than LAWA or
3 the FAA has done in letting the community know about
4 their meetings. So again, I'd like to thank you for
5 doing that.

6 I just have a few comments. The
7 congresswoman will also be submitting her comments in
8 mid July, in the next week or two, and many of the
9 same things that are in your comments we also find in
10 ours.

11 First of all, this is a highly flawed
12 document, which we have also found violates NEPA and
13 CEQA laws in many different areas. But I'd like to
14 go over just a couple things that we have found as
15 far as our -- the congressman's comments as far as
16 her experts that have looked at this and what they
17 have come up with.

18 First of all, the master plan is deceiving,
19 in that its preferred option is entitled "No
20 Additional Runway." This name implies that no runway
21 is to be built. However, all four existing runways
22 will be altered, moved, and otherwise reconstructed,
23 thus resulting in basically four completely new
24 runways.

25 The environment is also a victim of the

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1 really need to get some direction.

2 There's a lot of signals coming from
3 different areas, and I think the city council needs
4 to hear from you directly on what you'd like to see
5 in the future.

6 I know that in my district, people complain
7 over and over again that they need to have their
8 homes insulated, that they are tired of what's going
9 on, and I'm sure a lot of you feel the same way. So
10 this is an opportunity for you to give input and to
11 tell us how you feel on this very important issue.

12 Thank you very much.

13 (Applause.)

14 MR. ROUZAN: Thank you.

15 Also, we have some elected official
16 representatives here this morning. I think one of
17 them would like to speak.

18 Walter Cole, representing Congresswoman
19 Maxine Waters' office...

20 MR. COLE: Thank you.

21 First of all, I'd like to thank the mayor,
22 the city council members, for inviting me here today
23 to speak.

24 First of all, I have to commend the city on
25 the wonderful job, the excellent job, you have done

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1 expansion. LAWA admits that low-income and minority
2 populations will bear the largest burden from
3 expansion. They will be exposed to increased noise
4 and air pollution.

5 LAWA has instituted an environmental justice
6 task force. Despite multiple requests from our
7 office and from the congresswoman, we have been
8 unable to obtain information regarding the efforts of
9 this task force -- basically, Who is on it? When do
10 they meet? Is there an agenda item from their
11 meetings?

12 Also, the most affected populations, again,
13 are low-income and minority populations. They have a
14 high susceptibility to a majority of health problems
15 such as asthma and cardiovascular diseases created by
16 air pollution, and tend to have less adequate health
17 care to help them deal with these issues.

18 The Draft EIS/EIR spends a great deal of
19 time explaining economic benefit in jobs as a result
20 of the expansion, but the truth is, jobs and throwing
21 money at us does not help mitigate many of the
22 environmental consequences of this proposed expansion
23 project.

24 The Draft EIS/EIR also concludes that the
25 only way, the only way, to improve air quality in the

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1 area is to reduce airport activities, especially at
2 LAX, of course.
3 The Draft EIS/EIR also lacks studies
4 regarding the true health effects of the toxic air
5 pollutants released by the airport as a result of
6 their expansion, and also lacks any analysis of this,
7 and also lacks any remedy for this, which also in
8 many ways violates many of the CEQA laws.
9 LAWA has not completed their current noise
10 abatement programs, and these programs should also be
11 completed before any expansion projects are begun.
12 And again, one of the most important things
13 is the effect of noise on children and their learning
14 abilities. And we've found various studies, some
15 done here at LAX, that have shown that children
16 exposed to high levels of noise on a continuous basis
17 have poor reading skills, and may develop poor
18 persistence in challenging tasks, when compared to
19 children living in quieter neighborhoods.
20 So these are just a few things, among the
21 many, many flaws and many horrible environmental
22 issues that will be facing us if this proposed
23 expansion takes place.
24 Two other items I'd like to mention is that
25 the congresswoman, as of Thursday, submitted two

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1 reduce airport noise, including noise reduction goals
2 and time tables for the achievement of these goals.
3 Information about the availability of
4 federal, state and local residential noise mitigation
5 funds, and the application procedures for these
6 funds, will also be required to be sent to residents.
7 Again, these are, like I say, a few things
8 we're trying to do to stop this expansion. This is
9 definitely the congresswoman's number one priority
10 right now in the district. She realizes that this
11 expansion, if it goes through, will impact
12 neighborhoods, will impact Inglewood, impact Los
13 Angeles for decades to come, for a century to come.
14 And this area already is also overburdened,
15 and we need to look at other areas -- Palmdale,
16 Ontario, possibly a facility in El Toro -- that will
17 help, you know, take some of the burden off of
18 Inglewood, off of Los Angeles, off of Lennox, off of
19 all of the surrounding communities, and spread some
20 of the burden around to the areas that actually use
21 the airport the most.
22 So again, thank you.
23 (Applause.)
24 MR. ROUZAN: Thank you, Walter.
25 Walter Cole, from Congresswoman Maxine

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1 bills to the House of Representatives. One will be
2 the Airport Aircraft Noise Compensation Act, and this
3 bill will basically require those air carriers that
4 use LAX to provide -- to contribute funds to
5 nonprofit organizations in the community that
6 basically provide health services to persons living
7 with disabilities and hearing impaired persons that
8 live within the impacted areas.
9 Also, the second bill is the LAX Noise
10 Community Accountability Act, and this act will
11 require LAX -- will require LAWA to mail annual noise
12 reports to all hospitals within the airport's
13 footprint and within a ten-mile radius of the
14 airport. This, obviously, will include all of the
15 City of Inglewood.
16 They will also require a detailed
17 description of the extent to which aircraft noise is
18 increased or decreased during the previous year, with
19 the dates and times of plane arrivals and departures
20 that have taken place during prohibitive hours
21 through the previous year, a description of all
22 efforts to reduce airport noise, the extent to which
23 these efforts were successful, and the means and
24 methods used to achieve the noise reduction.
25 Also, a description of all plans to further

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1 Waters' office.
2 Is Lavonne Hill here from Assemblyman Jerome
3 Horton's office? There she is.
4 Ms. Hill, from Assemblyman Jerome Horton's
5 office...
6 MS. HILL: Good morning, everyone.
7 Thank you for giving us this opportunity to
8 offer comments about the LAX expansion. My name is
9 Lavonne Hill, and I'm offering comments on behalf of
10 the Honorable Jerome Horton, of the 51st State
11 Assembly District.
12 Mr. Horton would like for you to know that
13 the law requires the airport to submit an
14 environmental impact statement/environmental impact
15 report that describes the potential negative impact
16 of their proposed expansion, and provide a specific
17 plan of action to mitigate such impacts.
18 Furthermore, the law requires public
19 hearings and a reasonable public comment period
20 before they can proceed with any expansion effort.
21 If they fail to accurately identify all of the
22 negative impacts and to provide a remedial action
23 plan, the airport may not be allowed to expand.
24 Therefore, you can see the importance of your
25 comments and my comments and suggestions before the

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1 deadline for the formal public comment hearing.
2 For various reasons, Mr. Horton continues to
3 be opposed to the proposed airport master expansion
4 plan, and the current draft environmental impact
5 statement and environmental impact report.
6 In his opinion, the current EIS/EIR does not
7 satisfy the legal requirements of the California
8 Environmental Quality Act, nor the National
9 Environmental Policy Act, in numerous areas.
10 He feels that the airport expansion as
11 proposed will have numerous detrimental environmental
12 impacts on the City of Inglewood and its surrounding
13 neighborhoods. The expansion will cause an increase
14 in auto and air traffic, increased noise pollution,
15 increase and aggravate existing health effects, such
16 as asthma, hearing loss, sleep deprivation, and
17 others, a loss of personal comfort and property
18 values due to the aggravation of existing nuisances.
19 We would like for you to know, as an
20 Inglewood city councilman, he authored an initiative
21 to employ legal experts to provide the city with a
22 detailed analysis of the EIR/EIS, and advise the city
23 on how to legally oppose the expansion.
24 The time has come for us to place our
25 concerns about the expansion of the airport on

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1 unfairly and disproportionately burdens minority and
2 low-income populations surrounding the airport.
3 For these other reasons, Mr. Horton would
4 like for you to join and encourage others to work
5 together to present a united front, because we all
6 share a common goal of opposing the proposed
7 expansion, and to this end, strongly believes that
8 working intelligently and collectively will yield
9 positive results.

10 Thank you.

11 (Applause.)

12 MR. ROUZAN: Thank you, Ms. Hill, from
13 Assemblyman Jerome Horton's office.

14 I think, from the Supervisor Yvonne Burke's
15 office, we have representing that office Sharon
16 Murray.

17 MS. MURRAY: Good morning, Mayor. Good
18 morning, council members. Good morning, panel.

19 My name is Sharon Murray. I'm here on
20 behalf of County Supervisor Yvonne Braithwaite Burke.

21 In late January, Supervisor Burke proposed a
22 motion to the Board of Supervisors to urge the board
23 to go on record to oppose all three expansion
24 proposals – and I'll read – for the following
25 reasons:

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1 record. This is an important step in the process.
2 The lawsuit that was filed against the
3 airport and United Airlines for incrementally trying
4 to expand the airport under the illusion of expanding
5 cargo storage space, although it was not successful,
6 we were successful in legally stalling the
7 construction, and establishing that airlines share
8 liability for negative environmental impacts.
9 This established an important precedent, and
10 will prove useful in future dealings with the
11 airport. The courts reaffirmed the need to exhaust
12 all administrative procedures and remedies before
13 suing. Thus the reason we must share our concerns
14 via this formal public comment period, and ask them
15 to respond to these concerns within a reasonable
16 period of time.
17 The airport master plan and Draft EIS/EIR do
18 attempt to address anticipated environmental impacts.
19 However, what is offered is insufficient, and needs
20 to be revised in order to ensure that our
21 neighborhoods stay safe and environmentally sound.
22 It is quite evident that the draft EIR/EIS
23 fails to satisfy federal policy concerning
24 environmental justice and state law, because it does
25 not consider alternatives and other locations, and it

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1 The LAWA's preferred expansion plan, Plan C,
2 contemplates an increase to 90 million passengers a
3 year. Expansion of any magnitude will affect the
4 quality of life standards for residents living near
5 the airport, as well as for many local businesses and
6 schools. Expansion will increase the environmental
7 air, noise and traffic hazards that are already
8 unmanageable around the airport. Mitigation efforts
9 being proposed cannot effectively address these
10 issues.

11 Airport officials have conceded that
12 expansion will cause many problems in the surrounding
13 communities, communities which are comprised mostly
14 of minority neighborhoods, which have endured a
15 disproportionate amount of environmental hazards.
16 These hazards have not been addressed from the last
17 expansion two decades ago, despite assurances from
18 LAX officials.

19 Any expansion will displace residents and
20 businesses and traffic congestion. Aircraft noise
21 pollution will increase. While soundproofing of
22 residences and businesses are being recommended as a
23 mitigation effort, this mitigation effort essentially
24 keeps people inside their homes and businesses, and
25 is contrary to all efforts of developing safer,

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1 cohesive neighborhoods, which is key to economic
2 development and safer communities.
3 We must look at the needs of air travel from
4 a regional perspective. Some airports in the
5 Southern California area have the capacity and local
6 support for expansion. And all of this must be
7 considered and in place before we should move forward
8 on considering expansion of the facilities at LAX.
9 This is not to say that Supervisor Burke is
10 against modernization, enhancement or improvement of
11 the existing facilities of LAX or the addition of new
12 facilities. These upgrading efforts, which are not
13 necessarily expansion efforts, should also be
14 considered as alternatives to nonexpansion of LAX.
15 Therefore, Supervisor Burke moves that Board
16 of Supervisors take a do-not-support position on the
17 LAX expansion plan as written; support a thorough
18 study for modernization, enhancement and improvement
19 of existing facilities at LAX, including terminals
20 that can accommodate the new generation of larger,
21 quieter aircraft; reconfiguration of runways; air
22 traffic control tower safety improvement; relocation
23 of small commuter planes that now take up 30 percent
24 of the air traffic;
25 Support efforts to enhance traffic flow in

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1 and around LAX; encourage public transportation, and
2 alleviate noise pollution and traffic congestion on
3 surface streets, which now affect the residential and
4 business communities; support a cap on the annual
5 number of flights landing and taking off at LAX at
6 the present level of 790,000;
7 Support the lowering of the decibel
8 threshold, and elimination of abrogation of easements
9 being imposed by LAWA; establish an LAX expansion
10 review committee, comprised of representatives from
11 the CAO, aviation commission, county counsel,
12 regional planning and public works, to advise the
13 board on these issues and provide recommendations.
14 We're also encouraging everyone to
15 participate in the 180-day review process.
16 Thank you.
17 (Applause.)
18 MR. ROUZAN: Thank you, Ms. Murray, from
19 Supervisor Burke's office.
20 I just want to remind those who intend to
21 speak this afternoon, please fill out the cards so
22 that we can call upon you in the order of signing up.
23 Also, I notice in the audience is friendly
24 Inglewood Unified School District board member
25 Loistene Irving sitting in the audience.

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1 Ms. Irving, how are you? Do you have any
2 comments?
3 MS. IRVING: Our district is working towards
4 this goal. Thank you.
5 MR. ROUZAN: Thank you very much.
6 As stated previously, we do have a panel of
7 experts that the city attorney's office has put
8 together for us, and as you're aware, the mayor and
9 the city council members, all representing the City
10 of Inglewood, are adamantly opposed to the airport
11 expansion, and take strong issue with the Draft
12 EIS/EIR Report.
13 To that end, the city has retained and hired
14 professional law experts in various fields to analyze
15 and critique those airplane plans. Our city
16 attorney, Mr. Charles Dickerson, has assembled here
17 today those experts, who he will introduce and you
18 will hear from very shortly.
19 Our city attorney, Mr. Dickerson.
20 (Applause.)
21 MR. DICKERSON: Good morning to each of you,
22 and thank you so much for coming this morning.
23 Thank you, Mr. Rouzan, for your
24 introduction.
25 We're delighted that so many of you have

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1 come today to hear about these comments that we have
2 prepared in response to the environmental impact
3 statement and environmental impact report which has
4 been submitted by LAX.
5 At the risk of perhaps being a little bit
6 too simplistic, I'm going to nevertheless take that
7 risk, because lawyers are frequently accused of
8 speaking in legalese or putting items in language
9 that sometimes kind of goes over even our own heads.
10 So I'm going to try my very hardest to
11 explain some of the concepts and ideas that have been
12 forwarded as a result of this entire project being
13 proposed. If this is too simple for you, please bear
14 with me. If it is not, I hope it will be of some
15 help and assistance to you.
16 Essentially, I want to describe to you how
17 we have arrived at where we are today, and then tell
18 you exactly where we are today, and then I will be
19 presenting the experts who will provide the
20 information.
21 How did we get to where we are today?
22 Approximately eight years ago, as of
23 tomorrow, Richard Riordan became mayor of Los
24 Angeles. When he became mayor of Los Angeles, he did
25 at least two things that have had an extremely

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1 significant impact on the residents of the City of
2 Inglewood.
3 What were those things? They were both
4 related to construction and development. The first
5 was, he determined that it would be in the best
6 interests of the City of Los Angeles to build the
7 Staples Center, and in so doing, it was his intent
8 that the local teams that were playing here in
9 Inglewood -- namely, the Lakers, the Kings, the
10 Sparks -- would move from Inglewood to Los Angeles.
11 In fact, that has happened, and as a result,
12 the City of Inglewood has suffered some detriments,
13 and some of those detriments are primarily related to
14 revenue. We no longer receive some of the tax
15 benefits that we had from having those teams play
16 within our city.
17 The second thing that he did that had such a
18 significant impact on the City of Inglewood is, he
19 decided that in order to increase economic
20 development in the region of Los Angeles, that the
21 Los Angeles airport should be expanded.
22 I'll say that again. In order to increase
23 the economic viability, the economic vitality, of the
24 Los Angeles region, he believed that Los Angeles
25 Airport should be expand.

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1 accommodate more passengers, build more terminals.
2 In order to accommodate more cargo, they are going to
3 have to build more cargo facilities. And in order to
4 accommodate more passengers and cargo, they need to
5 build new roads and build new passageways through
6 which passengers and cargo can get to and out of
7 Los Angeles Airport.
8 By building these new terminals and building
9 these new roads, it was the intent of Mayor Riordan
10 of Los Angeles and the Los Angeles Airport Commission
11 to allow for an expansion of Los Angeles Airport.
12 And that is the first step. They created
13 this master plan. Now, once they created the master
14 plan, the law requires that if in fact they are going
15 to construct new roads or construct new facilities,
16 construct new terminals, they must prepare and
17 circulate two documents. One is called an
18 environmental impact statement, the other is called
19 an environmental impact report.
20 You will hear a lot of talk about an EIS and
21 an EIR, and that's exactly what they are -- EIS,
22 environmental impact statement; EIR, environmental
23 impact report.
24 Well, what are those? The law says that any
25 time a developer is going to build something -- in

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1 So what did he do? He appointed a number of
2 commissioners to the Los Angeles Airport Commission
3 who took his ideas and created what is now commonly
4 referred to as the Los Angeles Master Plan. That
5 master plan describes, sets forth, presents a means
6 through which Los Angeles World Airport,
7 specifically, LAX airport here, can be expanded.
8 We talk a lot about the expansion of LAX,
9 and I'd like to talk for just a moment about exactly
10 what that means. Some of you have had the benefit of
11 seeing some of the comments and the summaries that we
12 provided, and some of this information is included
13 there; and we might be duplicative, but I think we
14 better take that risk today.
15 Expansion means an increase of operations at
16 Los Angeles Airport. Well, what does that mean, an
17 expansion of operations at LAX? It means that the
18 effort will be to make Los Angeles Airport in such a
19 way that it can accommodate additional passengers and
20 additional cargo; obviously, the two elements that
21 come in on airplanes. So the whole idea about
22 expanding LAX airport is to make it so that airport
23 can accommodate more passengers and more cargo.
24 How would they do that? Well, it's very
25 simple. They are going to have to, in order to

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1 essence; I'm summarizing here -- but in essence, any
2 time a developer is going to build something, that
3 developer must take into consideration the impact
4 that the development will have on the environment.
5 Any time a developer is going to develop
6 something, build something, that developer must
7 submit a statement that describes and explains what
8 environmental impact will occur as a result of that
9 development.
10 Well, Los Angeles Airport is, in this sense,
11 a developer, because it is determining that it is
12 going to build new roads, build new facilities, build
13 new terminals, and in so doing, it is required --
14 "it" being Los Angeles Airport -- is required to
15 submit an environmental impact statement and
16 environmental impact report, which describe the
17 environmental impacts that will impact upon the
18 various communities around the airport as a result of
19 the development.
20 Just so you'll know, you will hear sometimes
21 a reference to NEPA and CEQA, and I want to tell you
22 what those are for just a very quick moment so that
23 you'll understand what we're talking about when we
24 talk about the law imposes this requirement.
25 NEPA is the National Environmental Policy

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1 Act, N-E-P-A. That is an act which was enacted by
2 the United States Congress. Under that act, any
3 developer must submit an EIS, or environmental impact
4 statement, before that developer can go forward with
5 the development.
6 California has its own environmental act.
7 It is called the California Environmental Quality
8 Act. We frequently refer to it as CEQA, California
9 Environmental Quality Act. And under the California
10 Environmental Quality Act, or CEQA, any developer who
11 is going to develop must submit an environmental
12 impact report, E-I-R.
13 So we have a national act, we have a state
14 act. Under the national act, which is called NEPA,
15 or the National Environmental Policy Act, a developer
16 must submit an EIS, environmental impact statement.
17 Under the state act, the state law, the California
18 Environmental Quality Act, CEQA, a developer must
19 submit an environmental impact report. There's where
20 we get to EIS/EIR.
21 So to summarize so far, the commission,
22 pursuant to Mayor Riordan's direction, decided,
23 "We're going to develop these additional things out
24 in L.A." The law says that L.A. airport must now, if
25 they are going to do this development, submit this

1 hallmarks of his administration, so he wanted this
2 done prior to his leaving office, and as many of you
3 know, today is in fact his last day in office.
4 (Applause.)
5 MR. DICKERSON: I don't mean to turn this
6 into a political rally.
7 But in any event, he wanted to have this
8 done prior to his leaving office, so now, in January
9 of this year, his commission submitted the
10 environmental impact statement and environmental
11 impact report.
12 Now, under the law, the CEQA and NEPA law,
13 interested parties have an opportunity to comment on
14 what is said in the environmental impact statement
15 and environmental impact report. Interested parties
16 can get up and object and say, "You, developer, you
17 LAX, have said that you're going to build this, and
18 you are saying you're going to build this additional
19 facility, you're going to build this additional
20 terminal, you're going to build these additional
21 roads, and you, LAX, are saying that as a result of
22 building these roads and facilities, there are going
23 to be environmental impacts on the communities around
24 Los Angeles."
25 "However, we, Los Angeles Airport, are going

1 environmental impact report/environmental impact
2 statement.
3 Los Angeles World Airport in fact prepared
4 an environmental impact report/environmental impact
5 statement, EIR/EIS. And I hope you won't mind us
6 primarily referring to it as the EIR/EIS from this
7 point forward.
8 That EIR/EIS was submitted on January 18,
9 2001, this year. That document comprises over 12,000
10 pages, and was developed, I think, at a cost of
11 approximately \$60 million.
12 What I mean by that is, when Los Angeles
13 Airport commission decided that they needed to
14 develop these additional facilities, and therefore
15 had to come forward with an environmental impact
16 report or environmental impact statement, they hired
17 experts, and those experts made an analysis and
18 submitted their report.
19 I'm telling you that the cost to the
20 Los Angeles Airport for developing their master plan
21 and their environmental impact statement and
22 environmental impact report was approximately
23 \$60 million. That's six zero million dollars. And
24 it took them many years to do this.
25 Mayor Riordan wanted this to be one of the

1 to mitigate those environmental impacts by doing A,
2 B, C, D and E."
3 That's what they put in this 12,000-page
4 document. They said, "We're going to do X, Y and Z,
5 and as a result of doing X, Y and Z, A, B and C is
6 going to happen. But if A, B and C happens, we're
7 going to do D, E and F to make sure that A, B and C
8 doesn't hurt the people of Inglewood, the people of
9 Lennox, the people in the surrounding communities."
10 Interested parties such as you, such as the
11 city, such as us, have an opportunity, under both of
12 those laws, NEPA and CEQA, to object, to raise
13 concerns, to raise issues. We're permitted to say,
14 "We do not believe that the impacts that are
15 supposedly mitigated by this environmental impact
16 statement or environmental impact report are
17 sufficient."
18 In fact, people like you and people like us
19 have an opportunity to say, "You shouldn't be doing
20 this at all. And the reason why you shouldn't be
21 doing this at all is because of the impact that it
22 will have on the environment."
23 This is the primary way through which
24 individuals such as ourselves have an opportunity to
25 raise objections to a development such as the

1 expansion of LAX. That's why it is so vitally
2 important to the City of Inglewood, to our elected
3 officials, to each of you, that we participate in
4 this process here and now, because this is really the
5 forum through which we have an opportunity to say to
6 L.A., "We don't think this development should go
7 forward."

8 Now, I want to make it very clear. This is
9 a legal requirement. And when I say "this," I need
10 to be more clear. Our submitting our objections is a
11 legal requirement to any further legal action that
12 the City of Inglewood may contemplate at any time in
13 the future. If we do not submit comments, either
14 orally or in writing, then we will not have any legal
15 standing to challenge this development. So that's
16 why it's so vital and important that we do this.

17 I also want to distinguish for you the
18 difference between the legal challenge and the
19 political challenge.

20 The legal challenge is one that focuses on:
21 Why should this project be stopped as a matter of
22 law? The political challenge says: Why is this not
23 good public policy?

24 Now, the two are often very closely
25 enmeshed, and in the legislature and congress, those

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1 forward as a matter of law, we have had to analyze
2 the environmental impact statement and report which
3 was submitted by Los Angeles Airport, and in so
4 doing, we have hired experts.

5 The first experts that we hired was the law
6 firm of Radcliff, Frandsen & Dongell. We hired them
7 based on my recommendation. My recommendation was
8 based on the idea that this is one of the world
9 renowned environmental law firms that specializes in
10 handling environmental matters. Not only are they
11 based here in the Los Angeles area, but they have
12 offices around the world.

13 You're going to hear today from at least
14 three members of that firm. The first person that
15 you're going to hear from is Jules Radcliff. The
16 name of the firm is Radcliff, Frandsen & Dongell.
17 Mr. Radcliff is the senior partner of that firm.

18 Mr. Radcliff is going to talk with you in
19 just a few minutes about the four alternatives for
20 the development of the project that LAX has set
21 forth. What does that mean?

22 Essentially, when L.A. decided that we were
23 going to build out LAX, expand LAX so it could
24 accommodate more passengers and more cargo, and then
25 set forth an environmental impact statement and

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1 two concepts come together consistently, the creation
2 of law and public policy. But at this point, they
3 are separate and distinct concepts.

4 What we are doing here today is providing to
5 you the information that we have gathered to be able
6 to say to L.A. and any court that we may ultimately
7 discuss this with, "This development should not go
8 forward as a matter of law."

9 That is an argument that is totally distinct
10 from any effort that may be promoted by this panel,
11 by you, to say this project should not go forward as
12 a matter of public policy. That is an entirely
13 different effort, one in which we invite your
14 participation as well. But today we're going to be
15 focusing on why we, as the representatives of the
16 City of Inglewood, are saying this project should not
17 go forward as a matter of law.

18 Now, that's kind of how we got here. That's
19 what this is all about today. We are wanting to
20 explain to you why we have the arguments that we have
21 developed to suggest to L.A., and ultimately to a
22 judge if need be, why this project should not go
23 forward as a matter of law.

24 In creating our arguments for saying this
25 matter should not -- this development should not go

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1 environmental impact report, in so doing, LAX
2 considered four different alternatives for how the
3 development should go forward.

4 We commonly refer to those alternatives as
5 Alternative A, Alternative B, Alternative C, and what
6 is called the No Action/No Project Alternative.
7 That's Alternative A, B, C, and No Action. In just a
8 moment, Mr. Radcliff is going to speak with you and
9 explain to you what is Alternative A, what is
10 Alternative B, what is Alternative C, and what is the
11 No Action Project -- No Action/No Project
12 alternative.

13 After he speaks we're going to hear from
14 other experts who have analyzed other elements of the
15 proposed project and how it will environmentally
16 impact us, how it will increase noise in Inglewood,
17 how it will increase traffic in Inglewood, how it
18 will have an impact on air quality in Inglewood, how
19 it will have human health risks attendant to it.

20 And because I don't want to overburden you
21 with too much -- I almost feel like I have already --
22 we're going to take this one step at a time. I'll
23 first introduce Mr. Radcliff, and he will give his
24 comments, and then I'll come back and introduce the
25 other experts as they come up.

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1 But starting with Jules Radcliff, I'd like
2 you to know that he's a member of the California and
3 District of Columbia Bars, having graduated from UCLA
4 Law School in 1976. He is also a graduate of
5 California State University at Northridge.
6 He is a contributing editor to the
7 International Court of Justice opinion briefs, which
8 is an American Bar Association project. He served as
9 executive assistant to Lt. Governor --
10 Who, Jules?
11 MR. RADCLIFF: Leo McCarthy.
12 MR. DICKERSON: -- Leo McCarthy, from 1983
13 to 1984, has been a member of the Los Angeles County
14 Courthouse board of directors since '89. He's served
15 on a variety of charitable and public service
16 organizations. He's a well-known, well-respected,
17 world-renowned lawyer, who is a specialist in this
18 area, and I am pleased and proud that he has
19 consented to accept the responsibility of carrying
20 out Inglewood's response to the environmental impact/
21 environmental statement report.
22 So without further ado, I'd like to present
23 to you our lawyer, Mr. Jules Radcliff.
24 (Applause.)
25 MR. RADCLIFF: One of the things I want to

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1 start with, because Chuck said he was going to keep
2 this simple, mine's going to be a lot simpler than
3 that.
4 It goes without saying this airport is just
5 an enormous, gigantic, politically powerful presence
6 in this area and this city. Dealing with changes of
7 this proposed magnitude over at that airport is a
8 challenge for anybody. And I'm going to stress
9 something here, because I think it's why most of you
10 are here.
11 We're going to talk about a lot of technical
12 things so you know what's happening on the legal
13 side, but the starting point is this: Your city
14 council, your mayor, the city administrator, Joe
15 Rouzan, and Chuck Dickerson have, I think, done an
16 extremely skillful and very adroit job at trying to
17 manage that behemoth sitting over here. I think
18 they've gone a good job in managing the relationship.
19 There is no one person, no one city, no one
20 anywhere, who can dictate, who can simply say, "No,
21 you can't do it." It's a complex task.
22 Chuck Dickerson mentioned a major piece of
23 this already. It's both legal and it's political.
24 You, unquestionably, have an opportunity to influence
25 the political. And I appreciate the fact that

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1 Mr. Dickerson commented on how we got where we are
2 today.
3 This started off with Dick Riordan, and we
4 just happen to be sitting here as there's a change in
5 administration taking place. There's probably going
6 to be a change over at the LAX board. My guess is
7 there may be a little bit more open and sympathetic
8 ear.
9 You people have to live with this, as do a
10 lot of others around here. There has to be a balance
11 between the needs of the airport, whatever they may
12 be, and the fact that human beings have to live here.
13 And I think the timing just couldn't be better for
14 this, and I would encourage absolutely everybody,
15 that's either watching this later on cable or sitting
16 here today, to go ahead and take a shot and see if
17 you can make a little bit of a difference.
18 Jim Hahn, who I've known as long as he's
19 been in public office, has been a person who has
20 always listened, and I suspect he's going to have a
21 very good working relationship with this council and
22 with the people in this city.
23 What I wanted to do was just sort of tee up
24 the issues, if you will, kind of give some framework
25 to what we're talking about here, and give you some

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1 framework so that when you call these people, when
2 you call Jim Hahn's office, when you call whoever,
3 don't let them buffalo you.
4 Don't let them snow you. It's not all that
5 complicated. The technical stuff, I have trouble
6 following. You don't have to follow it. That's what
7 these guys all get paid to do. That's their job.
8 But what's happening at the moment is we're
9 coming up on this big showdown. We are there,
10 people. The showdown has arrived. Your council has
11 been looking at this for months; the city, under
12 Riordan, has been gearing up for months, and now the
13 die is being cast.
14 They are throwing down the gauntlet, and
15 they throw it down in the form of this master plan.
16 And what's going to happen is the city, through the
17 careful management that they have brought to the
18 relationship with this airport, is going to continue
19 to work the political side of it, no question about
20 it.
21 And they have made the commitment to bring
22 on people who know how to deal with the technical
23 side of this. Make no mistake, there's a showdown
24 here, and one of two things is going to happen, and
25 it's this simple.

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1 When all of the comments, all of the
2 criticisms, all of the responses, all of the
3 reactions to this master plan is received -- again,
4 keep in mind, it's a new mayor as well -- when all of
5 this comes in, they are either going to throw it out
6 or make big changes in it, in which event they have
7 to come back, and they are going to try to do it in a
8 different form -- that would be good -- or they are
9 going to say, "I don't care. We're going to do it
10 anyway." And if that's the case, as Mayor Dorn said,
11 it goes without saying, that's a lawsuit. That's
12 what we'll be handling.

13 And the whole point to the technical
14 challenge is to cross every "t" and dot every "i," so
15 that when you file the lawsuit, a judge somewhere
16 says, "Hold on. You did it wrong. You gotta go
17 back."

18 My personal opinion is, on balance, by and
19 large, if you have to file a lawsuit, you've lost,
20 because right now -- think about this -- you're
21 either right or you're not. And you're going to hear
22 some things explained here today that will tell you
23 that in fact, you're not crazy. You're right. This
24 is nuts, what they are doing.

25 The problem that has been encountered so far

1 things like this on an issue I didn't know a lot
2 about, and when I began to hear all the technical
3 stuff, I started to kind of fold my tent a bit. I
4 was a little bit intimidated. I kind of thought, I
5 don't know this stuff too well, and all I need is
6 somebody to answer me back in some sort of technical
7 gibberish, and I won't be able to say anything.

8 Don't fall for that here. You're going to
9 hear some very practical problems with what these
10 people want to do. And I don't think any of us are
11 crazy. We haven't put our heads in the sand and
12 said, "No, there don't need to be some reasonable
13 accommodations at LAX." That's not it at all.

14 What they have laid out over at LAX is nuts,
15 and it needs to get rolled back, it needs to get
16 revisited, it needs to get downsized, and most
17 importantly, it needs to be put in the context of
18 this whole region.

19 There's a technical legal issue, and this
20 goes directly to something Chuck Dickerson mentioned.
21 It's a legal issue, but it's wrapped all around a
22 very common sense issue. The legal issue says, when
23 they're thinking about doing something like this at
24 LAX, must they take into account the whole region --
25 Palmdale, Ontario, Long Beach -- or can they just

1 is a mayor determined to push it through no matter
2 what -- he doesn't live here -- and a staffed board
3 over at LAX doing his bidding -- they don't live
4 here -- so they didn't care what anybody said.
5 That's my opinion.

6 And if we had four more years of that, I
7 think they would say, "We're going to ignore you. We
8 hear you. Nice of you to talk to us, but we're going
9 to do it anyway."

10 Now, this starts to be more of a political
11 talk than a legal talk, but it's important to know
12 we're not looking at four more years, we're not even
13 looking at four more days, of that mayor, and so what
14 you want to do is hear what your city council, your
15 city administrative officer, your city attorney, and
16 to a certain extent what we have to say.

17 But listen and take your cue from them,
18 because they are good at this, and this is the time
19 to go for the jugular. You have an opportunity to
20 get this fixed. You have an opportunity to change
21 it.

22 Now what I'm going to turn to is, I'm going
23 to frame the legal issues and technical issues that
24 they are going to address, and if you guys are like
25 me, there have been times that I have sat in on

1 restrict their thinking to this airport? That's a
2 technical legal issue.

3 But think about the common sense. You're
4 going to hear one of the reasons LAX is saying they
5 have to do this is because they don't have a choice.
6 It's going to grow like crazy no matter what, and
7 they can either expand the infrastructure to
8 accommodate it or not.

9 That's not necessarily true. If in fact
10 there were no airport at Ontario, no airport at
11 Burbank, no airport at Long Beach, if there were no
12 other airports, then maybe they've got a point.
13 That's a legal issue, but it's a common sense issue.

14 And if I were to be in your shoes, and I
15 wanted to work with the council people here, and with
16 the mayor and the city attorney and Joe Rouzan, in
17 trying to do something about this, I wouldn't try to
18 latch on to everything.

19 I would pick two or three common sense
20 issues, and I would look these people in the eye -- I
21 mean the new mayor's administration and the people at
22 LAX -- and I would say, "You tell me that I'm wrong
23 on a common sense level. You tell me that." Because
24 you have the comfort sitting here of knowing that
25 your city has already put together the legal team and

1 the expert team that can deal with the technical
2 arguments. Hit them with the common sense arguments.
3 Here's what you're looking at. The reason
4 I say it's a showdown, we're working on a time
5 schedule now that is largely a function of law. It's
6 the rules. This can't go on forever, so it's going
7 to come to a head here real quick, and a lot of what
8 me, my firm, the experts are going to be doing is
9 taking care of the practical technical deadlines.
10 Don't even give it a thought. That will
11 happen. But when the whole thing comes to a head,
12 and then the new mayor, presumably the new airport
13 board and others, have to make a decision, was this a
14 lunatic idea or not? and then they'll go forward.
15 When you get into the dialogue, what you're
16 going to hear -- and let me now turn to what this
17 master plan says. And I've tried to distill it down
18 so that I can understand it.
19 It starts with the assumption -- and I've
20 already touched on this, and for anybody taking
21 notes, this is one you put a big mark by, because
22 this is the one they can't defend.
23 It starts with the assumption that LAX is
24 going to grow no matter what. Maybe that's true,
25 maybe it's not. We're debating that. They are

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1 part that you can hammer on.
2 But I wanted to start there, because that's
3 where LAX started. And if you take the time to read
4 the executive summary of this master plan, or, God
5 forbid, the whole master plan -- it's an unbelievable
6 document -- they slip that in. They just slip it in.
7 The gist of it is, "Here in our master plan
8 we're going to tell you that we're very reasonable
9 people, and we considered four alternatives, and we
10 tried to balance the interests, and we tried to
11 select the alternative that we believe does the least
12 amount of harm to the community, et cetera, while
13 still taking care of the needs of the airport."
14 But it starts with the faulty premise that
15 there's no alternative that involves directing some
16 of the traffic to other airports.
17 You guys know, as I know, there are people
18 in Orange County that drive up here and use this
19 airport to go places. Now, there may be very good
20 practical reasons for that, but it strikes me they've
21 got all the power. They can talk to the FAA, or
22 whoever they need to, and try to get airports in
23 Orange County to have better connections. I don't
24 know what it takes. That's their problem, not ours.
25 But that's where they start.

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1 saying that over the coming 10, 15 years, the annual
2 passenger traffic at LAX is going to go up by at
3 least 21 million. 21 million people. It's going to
4 go up.
5 It's going to go from the current 58-, 60-,
6 65 million, whatever it is per year right now, it's
7 going to go on up by at least 21 million. That's
8 what they are saying. And they are saying the cargo
9 traffic is going to go up by another million to a
10 million and a half tons of cargo per year, with no
11 changes over there. That's what they are saying.
12 That is not necessarily a correct premise.
13 Think about this. You're part of an extended family.
14 The airports are part of an extended family of
15 airports in different regions. You happen to have
16 the house where everybody has decided they want to
17 stay. You talk to your other relatives and you say,
18 "Come on, you can take some of these kids and some of
19 these cousins into your house over there in the next
20 neighborhood. Don't put it all on me."
21 That's what's going on over here. These
22 people at LAX are saying, "No, you don't get to do
23 that. You just have to stay focused on your house."
24 That's a huge fundamental legal issue and it's a huge
25 fundamental practical issue, and it's the practical

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1 So what I'm underscoring here, you're going
2 to hear most of the technical analysis focused upon
3 the one alternative that LAX says they want to use,
4 and I'm telling you, be careful. That's a legal
5 requirement, but it is a political trap.
6 Do not fall prey to the notion that these
7 people considered every alternative, because they
8 didn't, but this is the way they have legally teed up
9 the issue for us, so legally, we have to meet them on
10 that ground. Politically, your hands are not tied
11 that way.
12 Politically, you can start at the beginning,
13 and you can say, "Hold on here. There's an
14 alternative that you all missed, and that is, take
15 all this power" -- what was it, \$60 million they've
16 pumped into this? What would that have bought it in
17 the way of lobbying power in congress if they had
18 tried to put a little of that time and effort into
19 increasing the traffic to other regional airports
20 around here? That's my point. So let's turn to
21 alternatives, not as we define them, but as LAX teed
22 them up for us.
23 They said, as Chuck pointed out, that there
24 were three, four alternatives. The fourth
25 alternative was basically do nothing, no project, no

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1 nothing. They rejected that out of hand for
2 everything I just explained.
3 So let's take a few moments to talk about
4 the three alternatives. And I just love this. It's
5 like -- the way LAX is doing this, it's a little bit
6 like talking to a child, because the child knows no
7 better, so you say, "I'll give you three choices, and
8 that's it," and the kid doesn't know that's crazy,
9 there's --

10 So I'm struggling with that issue myself,
11 and that's why I'm dwelling on it. It's a political
12 issue. It's hard for us to attack legally, but you
13 folks can hammer away on it.

14 But they say there's three major
15 alternatives. Of the three alternatives -- they are
16 labeled A, B and C, easily enough. Of the three
17 alternatives, I'm just going to give you a brief
18 synopsis of them so that you're conversant with what
19 they do.

20 Two of them involve adding runways, so let's
21 start with what kind of impact these three
22 do-something alternatives have on the community,
23 because two of them, Alternatives A and B, both
24 involve new runways, one on the north side, one on
25 the south side. It's going to have an impact.

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1 lose 27 multiple-unit structures. So LAX says,
2 "Well, that's a heck of a lot better for everybody.
3 We're only going to wipe out 100 less businesses, but
4 still 200 plus. Never no mind we still wipe out the
5 same number of living quarters."

6 At the airport itself, under Alternatives A
7 and B, they both result in increasing the number of
8 gates, new gates. A would increase the new gates by
9 87, so it would go up to 273 gates. The current
10 number is 186. B would increase the number of gates
11 by 69, to 255 total. Again, there's 186 gates over
12 there right now.

13 So LAX says, "Well, we're going to try to
14 reduce the impact." So under C -- which is the
15 favored alternative for LAX, that's what they want to
16 do. They are going to increase the number of gates
17 by 42, so it would go to 228 gates.

18 Now, an editorial footnote for a second.
19 What they have done is pose a horrible, and then they
20 have said, "But we're not going to give you the
21 horrible. We're going to give you the awful. The
22 horrible being 87 new gates, but we're just going to
23 add 42." So you're supposed to be thankful and feel
24 a lot better that you're just not going to get it
25 quite as bad as you could have gotten it, because

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1 Alternative C doesn't involve adding a new runway.

2 It involves extending an existing runway, so
3 there's an increase in a lot of stuff at LAX. In
4 order to accommodate these increased runways and the
5 resulting increase in capacity, all manner of things
6 have to happen in the community and surrounding the
7 community.

8 All three alternatives involve building a
9 new terminal, putting a peripheral road around LAX,
10 an express highway connecting 405 to LAX, things of
11 that nature. And the three alternatives -- which
12 I'll call the three build alternatives -- the three
13 alternatives collectively, under A and B, the City of
14 Los Angeles will be acquiring 330 businesses -- gone.
15 Under A and B, the City of Los Angeles will be
16 acquiring 57 single-family homes and 27
17 multiple-family units, most likely apartments --
18 gone.

19 The city says, "That's why we didn't pick A
20 and B. That's why we went with C," because under
21 C -- which only involves extending a runway, not
22 adding a new one -- but under C, the city will still
23 take away 240 businesses -- 240 gone.

24 Most amazingly, under C, you still lose the
25 same number of single-family homes, 57, and you still

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1 they could have been bad guys and gone with A.

2 They say that under all three alternatives,
3 the number of flights is going to increase. Now, I
4 don't know about you, I live in a flight path as
5 well, and I don't kind of really care how many gates
6 are at the airport that's driving me nuts. I just
7 know that when I'm sitting outside and a plane goes
8 overhead, I tend to count airplanes.

9 Under A, they are saying -- and this really
10 starts to become a parade of horrors -- "If you
11 guys don't watch out, we're going to hit you with 485
12 increased flights." It could be that bad. If we go
13 to Alternative B, same number.

14 Now, these are not stupid people. They
15 know -- [jet aircraft noise]. Hear it? They know
16 that's what reminds you. That reminds you every
17 time. So they are saying, "It could be 485, but
18 because we want to minimize the impact on you,
19 under C, we're going to increase it by 85."

20 Now, think about it. How dumb do they think
21 we are? If they had started out saying, "We're going
22 to go to 85, or it could be ten," right, we'd be up
23 in arms, going, "Oh, my" -- you know. So they start
24 out saying, "Could be 485. Lucky you. Under the
25 alternative that we're going to do, no matter what,

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1 you're going to get 85 new flights."
2 They pulled the same stunt with the number
3 of passengers. Under Alternatives A and B, there
4 will be an increase of 40 million passengers per
5 year. Under Alternative C, the one they are going to
6 do, it's 31 million passengers per year increase.
7 Now, again, the big hit with passengers is
8 how many people are driving around the neighborhood,
9 but that translates less directly than airplanes over
10 your head.
11 Those are the major differences. I could
12 tell you the cargo numbers increase, you would
13 understand that, but it doesn't have quite the same
14 impact. It's trucks on the street, and all the rest.
15 The numbers aren't as dramatic between A, B and C.
16 But they are saying, "A, B, C – we have to
17 do one of the three, because we have to build. We
18 don't have a choice. And at a minimum, we have to
19 add a new terminal, a roadway around, an express
20 road," all that kind of stuff, and they are saying,
21 "Be thankful. We could put 480 flights over your
22 head more, but we're just going to do 85."
23 What they are not looking at is the no
24 build/no project alternative, the one they rejected,
25 the one they just kind of ignored.

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1 just trying to emphasize, don't fall for the trap.
2 Don't take the bait. This is not necessarily take C
3 or die. You don't quite have that problem.
4 We have the problem, because we have to pic'
5 C apart. And it will come as no surprise to you, as
6 you listen to what these folks say -- this goes to
7 the political process -- when a mayor makes a
8 decision that he's going to strip all your teams away
9 from you and take them downtown, and to heck with
10 you, there's a lot of horsepower behind that; and a
11 lot of people just kind of get caught up in it, and
12 they get away with it.
13 When he says, "I'm going to take and turn
14 LAX into something vastly bigger than it is," you at
15 least have some legal hurdles he has to go over, and
16 as he goes over those legal hurdles, you get to do
17 something that you don't get to do when he strips
18 your teams away. You get to say, "Let's take a look
19 at all of those legal assumptions you just made."
20 And so the important point here is, we're
21 not making this up. You're going to hear flaws, and
22 we're not the only people who see them. These flaws
23 actually exist. And it should not come as a surprise
24 that there are flaws, because when somebody with
25 enough horsepower in government wants something,

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1 Now, in transitioning over to these folks,
2 the practical political points of sensitivity -- and
3 again, pay close attention to what your council
4 people say, what your mayor is saying, the city
5 administrative officer, and the city attorney.
6 They are signaling, directly and indirectly,
7 the political points of vulnerability that you can
8 hammer away at. All I have done is highlight those
9 that relate directly to the presentation you're going
10 to hear, and what I don't want to do is sit down
11 leaving you feeling like what these guys say next are
12 the only arguments you have, because I struggle with
13 what I hear when they start talking.
14 What matters is, they are making a mockery
15 of the process. They are treating us like children.
16 They are saying, the same way we say to a child, "I
17 could give you three whacks on the butt, or I could
18 give you one." Thank God it's going to be just one.
19 That's what they're doing here, and they are
20 doing it because they are saying, "We don't have to
21 take into account what happens in the whole region.
22 Huge legal common sense flaw in this plan.
23 What you're going to hear now is focusing
24 principally upon their Alternative C, as we must do,
25 because that's what LAX has done. And again, I'm

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1 everybody else has a tendency to get in line and say,
2 "Yup, I'll do it."
3 And guess what. In the product that they
4 produce, they tend to give short shrift to some
5 problems. They tend to take some issues and kind of
6 put them back here, hoping you won't see them, and
7 they tend to take some other issues and say, "Well,
8 you know, let me deal with that."
9 But then they give you a lot of smoke and
10 mirrors, and our job has been to wade through 12,000
11 pages and figure out where's the smoke and mirrors,
12 where's the nonsense, where are the things that we
13 know are there.
14 Any time somebody is absolutely determined
15 to ram something home and run roughshod over you, you
16 can bet they are going to make mistakes. There's
17 going to be flaws. And happily, for purposes of the
18 legal hurdle they have to go over, those flaws are
19 very important. And again, it's what all these guys
20 are all going to be addressing.
21 So I'll turn it back over to Chuck. But
22 recognize, just because you're hearing these flaws,
23 that's only Alternative C out of three, but the LAX
24 people are ignoring the fourth, which is, they don't
25 have to do this.

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1 But anyway, these guys will give you the
2 flaws in C. They are not making it up. It's pretty
3 bad.
4 (Applause.)
5 MR. DICKERSON: Thank you, Jules.
6 Ladies and gentlemen, there are essentially
7 seven environmental impacts that we have identified
8 that are set forth in the environmental impact
9 statement and environmental impact report submitted
10 by LAX. Those seven are as follows:
11 1. There will be an increase in air
12 traffic;
13 2. There will be an increase in ground
14 traffic;
15 3. There will be an increase in noise from
16 air traffic;
17 4. There will not be an increase in noise
18 from ground traffic;
19 5. There will be an increase in air
20 pollution from the increase in air traffic;
21 6. There will be an increase in air
22 pollution from the increase in ground traffic; and
23 7. Because of all of these items, there
24 will be adverse health impacts.
25 We have attempted to address at least these

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1 Massachusetts. His past experience includes working
2 as a principle research associate at MIT -- that's
3 the Massachusetts Institute of Technology -- and as a
4 visiting senior lecturer in social ecology at the
5 University of California at Irvine.
6 He has consulted for the National Academy of
7 Sciences, the United States Food and Drug
8 Administration, the Occupational Safety and Health
9 Administration, and other agencies. And he's
10 authored or co-authored over 150 articles in the area
11 of environmental studies and risk analysis.
12 He did the analysis for us from a health
13 perspective, and he is going to provide for you now
14 information that he developed, and provide for you
15 the arguments that he has developed against the
16 expansion plan.
17 Please welcome Dr. Hattis.
18 (Applause.)
19 DR. HATTIS: Thank you.
20 One of my favorite definitions of an expert
21 is "more than 50 miles from home." And in a way, as
22 Mr. Dickerson has said, I'm really not -- this feels
23 quite a bit like coming home, because, you know, I
24 grew up here, and I'm just pleased to try to help in
25 making the analysis that is done for air traffic

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1 issues and more. You're now going to hear from
2 Dr. Dale Hattis, who will analyze -- Dr. Hattis is a
3 leading national expert on environmental risk
4 analysis. He has analyzed the human health risk
5 assessment in the LAX master plan for sufficiency
6 from an environmental justice and risk analysis
7 perspective.
8 When we began this process, we looked for
9 people that would have a sensitivity to the City of
10 Inglewood. Dr. Hattis grew up in Inglewood. His
11 father opened the Hattis Pharmacy, which was
12 previously located at Century and Van Ness, where the
13 post office currently sits, and his family lived in
14 the avenues, right under the flight path, for many
15 years. He's a graduate from, excuse me, not
16 Inglewood High, but from Morningside High.
17 (Applause.)
18 MR. DICKERSON: Okay. He earned his B.A.
19 degree, a bachelor's degree from -- a bachelor of
20 science degree in biochemistry from the University of
21 California at Berkeley, and a Ph.D. in genetics from
22 Stanford.
23 He currently holds the position of research
24 professor for the Center of Technology Environment
25 and Development at Clark University, in Boston,

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1 expansion in the LAX area fair and informative to all
2 the people who are going to be affected by that.
3 And I think that's really one of the
4 important responsibilities of technical types, is to
5 communicate, to ask the questions that should help a
6 democratic society, the people of a democratic
7 society, to make the choices that will affect their
8 lives.
9 So what I want to talk to you a little bit
10 about is, at least in theory, about how one should
11 try to structure an analysis to be informative in
12 making choices, and then I'll tell you a little bit
13 about the ways in which I think the current analysis
14 that LAWA has offered fails short of what you should
15 have expected, particularly for a \$60 million
16 enterprise, and what can be relatively readily
17 remedied in further analysis that you can suggest
18 that they do.
19 Anyhow, the basic idea -- and this is basic
20 common sense that is really not rocket science. If
21 I'm going to make a choice, what I first would like
22 to do is to define the full range of the realistic
23 choices that I have available to meet the perceived
24 needs that I'm building the project for.
25 Second, I want to fairly and fully assess

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1 the results that I might care about that could follow
2 from those different choices over the whole time
3 scale where the differences are going to be created
4 in the world that would result from the alternatives
5 that I've defined.

6 And finally, I want to make those methods
7 that I use to do the analysis and the results clear
8 and accessible to all of those who are affected.

9 Now, starting with the first, you've already
10 heard quite a bit of discussion about the problems
11 and the way that the current 12,000-page analysis has
12 structured the problem, and one of the big things
13 that I think they really should be encouraged to
14 consider are possible economic actions that would
15 have the effect of shifting the demand from the LAX
16 airport to outlying airports, because it's just
17 common sense.

18 You know, do you want to place a major
19 polluting facility upwind of the population or
20 downwind of the population? I think, you know, it's
21 pretty clear that there's going to be some benefits
22 to shifting it downwind.

23 And it's also pretty clear that people who
24 use air services respond to economic incentives. So
25 if I create a \$200 difference between landing at LAX

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1 situation.

2 So those folks who control the access to a
3 limiting resource are going to have the opportunity,
4 and most likely are going to take the opportunity, to
5 realize the economic benefits from control of the
6 restricted access. So essentially, if I control a
7 limiting resource, then I've got a chance to raise
8 the revenue.

9 So that if the governmental entities don't
10 impose the user charges to control the demand, then
11 it's likely that other economic factors, like
12 airlines, are going to realize that benefit, and so
13 that creates, you know, a situation that it seems to
14 me should be analyzed in a fully sophisticated
15 analysis.

16 So let's go on to, necessarily, the issues
17 of framing the options for comparison, which I think
18 can be clearly improved with a recognition of the
19 possibilities of economic measures and measures
20 involving shifting the demand to outlying airports.

21 There's also a number of serious problems in
22 the way the current document assesses and compares
23 the consequences of the different policy choices.

24 Firstly, they mainly talk about impacts in
25 two different snapshots in time: 2005, which is sort

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1 and landing at Ontario, right, there's going to be a
2 fair number of folks who are going to consider that.
3 And if you create such differentials by having
4 increased user charges at LAX, maybe some subsidies
5 for the outlying airports, then I think you're going
6 to have a chance of making that shift, and it seems
7 to me that we ought to examine the consequences of
8 possible choices along those lines.

9 They would generate -- obviously, if you had
10 some increased user charges, it would generate some
11 additional revenue that could also be used, in fact,
12 to fund other mitigation actions that would sort of
13 lower the existing burden that the community now has.

14 You would expect to change the rate of
15 increase in demand for air service at LAX. At the
16 very least, if you have to build something, maybe you
17 could build it on a more extended schedule, with
18 better environmentally protected technology, and
19 benefit in that way.

20 And finally, the other thing that should be
21 noticed is sort of an equity issue that gets to the
22 environmental justice domain, and that is that if you
23 create a system that does not accommodate all of the
24 demands that you project to be happening, well,
25 you're creating essentially a monopoly-type

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1 of during the construction, but actually is not
2 actually at the peak of construction -- they would
3 get bigger impacts had they actually done the
4 analysis as of 2004, which is the actual peak; and
5 2015, which is after the construction is supposed to
6 be completed.

7 If you're going to have a picture of the
8 total impacts, you need to understand, what is the
9 total sum of impacts that we expect over the entire
10 period. They could do that. They didn't do that.
11 They should have done that. They can do that in
12 further analysis if you insist.

13 The second thing -- and this is actually
14 even a bigger issue -- is that the impacts are
15 expressed in terms of "the significance" for the most
16 exposed individual in a particular area for the air
17 pollutants, or the area in some cases that is
18 significantly affected, either by having too much
19 cancer risk or cancer risk exceeding a particular
20 value, or having too much noncancer risk, given an
21 even more arcane set of units.

22 It would be much better and much more
23 understandable to everybody if they were to go beyond
24 this artificial definition of significance, and
25 basically tell you, to the degree that we can from

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1 our existing information, how many cancers do we
2 expect to be produced under the different options, so
3 that we can see, okay, how many extra serious health
4 problems are happening, how many extra folks do we
5 expect to have asthma attacks because of the
6 particles in the air.
7 And the particles in the air are most
8 important for increasing deaths mostly from heart
9 attacks and related conditions. And we have now the
10 capability, from a large number of epidemiological
11 studies in Los Angeles, and in about 89 other cities
12 in the country in the most recent analysis, to say,
13 within some broad ranges, how much extra deaths do we
14 expect from the extra load of particles in the air.
15 They could do that. Seems to me that's part
16 of being frank with the community about what the
17 total effects of the alternative actions are. And it
18 wouldn't cost 60 million bucks to do that, but it
19 does require a little bit different analysis that
20 takes into account the latest scientific literature
21 that's available in the field and some improvements
22 in their air pollution modeling.
23 Actually, air pollution modeling sort of
24 takes information about the amount of particles and
25 other pollutants that are emitted, that are released,

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1 and then says, "Okay, where did they go? How
2 quickly? How much are people exposed to?"
3 Right now, essentially, what they've done is
4 to take a relatively defined area around the airport
5 and say, "We're going to quantify the impacts here,
6 because we're pretty sure that that's where the most
7 intense impacts are."
8 But if you really want to assess the total
9 benefits and total costs in health terms for the
10 community of Southern California as a whole, the
11 South Coast Air Quality basin, you need to have a
12 basinwide modeling of the extra impacts, and suffice
13 it to say they didn't do that.
14 They've calculated basinwide or Southern
15 California-wide changes in economic flows. They can
16 tell you, "Okay, this is our estimate of the extra
17 number of jobs that are going to happen, the extra
18 dollars that are going to be realized by different
19 levels of different sectors of the economy."
20 It seems to me that it's fair to assess the
21 health changes, at least those that we know about, in
22 the same population aggregate units, and then to
23 break it down -- what does it mean for Inglewood,
24 okay? What does it mean for El Segundo? What does
25 it mean for Los Angeles as a whole? -- so that you

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1 can make your judgments about whether the
2 requirements of the environmental justice portions of
3 the Act are reasonably satisfied, or you can in fact
4 bargain for the mix of changes in mitigation measures
5 and other policies that would be fair in approaching
6 the needs of the community as a whole.
7 That's enough for the technical stuff.
8 Finally, I think it's important that they
9 communicate. That the document that's done as a
10 result of this communicate fairly and appropriately.
11 Oh yeah, let's -- we've got a little bit
12 more on the technical stuff, but I'll be quick about
13 this.
14 It's important in making this kind of
15 broader analysis that the methods and results be
16 clear and accessible to all of those who are
17 affected, so I think it's important that you create a
18 consolidated bottom-line summary of expected outcomes
19 for different parties, including the economic
20 benefits for LAWA and the airlines, and the expected
21 health changes.
22 So, you know, in important technical issues,
23 they need to show the sensitivity of the results to
24 alternative possibilities. Do you think that anybody
25 can predict air travel population growth over the

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1 next 20 years with absolute certainty? No, of course
2 not.
3 You know, they have to expose the
4 uncertainties, the consequences of major possible
5 states of the world, for the results of their
6 choices. I mean, this is basically fair and honest
7 in trying to do an analysis.
8 These things have uncertainties. There are
9 ways of trying to estimate what those uncertainties
10 are, and fairly carry the uncertainties through the
11 analysis -- what is the effect of this and that
12 possibility on the overall costs and benefits, health
13 effects, noise effects, what have you, that we expect
14 to result?
15 I think I've gone into that, and I think at
16 this stage, I'll turn it over to you folks for
17 further discussion. I think we have a number of
18 other presenters. And I'd be happy to amplify on any
19 of these issues in response to any question you folks
20 have.
21 MR. DICKERSON: Thank you.
22 (Applause.)
23 MR. DICKERSON: Now, folks, you can't tell
24 me that Inglewood doesn't produce some heavyweights.
25 Thank you, Dr. Hattis.

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1 (Applause.)

2 MR. DICKERSON: I had the privilege of
3 meeting him recently, and I've got to tell you,
4 everything that he started with by telling me was so
5 far over my head, I couldn't understand any of it.
6 This man is brilliant. But I hope that he's been
7 able to break down some of these issues for you
8 today.

9 Our next speaker will be Mr. Jack Freytag.
10 Jack has over 20 years of experience as an acoustical
11 consultant, an airport noise expert. He holds a
12 bachelor's degree in mechanical engineering from
13 Arizona State University, and a master's degree in
14 engineering from Stanford.

15 He has analyzed the LAX master plan Draft
16 EIS/EIR for sufficiency from an aircraft noise impact
17 perspective. In other words, he looked at what
18 noise -- how much more noise is going to result from
19 the proposed expansion, how much more noise over the
20 City of Inglewood.

21 Mr. Freytag is no novice at this. He has
22 done this stuff for many years. He has consulted for
23 numerous cities that are close to airports. He has
24 previously served as a consultant to the City of
25 Alameda, California, which is directly next to the

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1 Oakland airport, and has consulted and advised that
2 city. He has consulted and advised the City of
3 Chino, California, which is right next to the Ontario
4 airport. And he has consulted with the City of
5 Coppell, Texas, which is right next to the Dallas-
6 Fort Worth airport. So Mr. Freytag has a lot of
7 experience.

8 I should also tell you that he has also done
9 acoustical research for NASA. So he has a lot of
10 information and a lot of understanding, and has done
11 a lot research and background as it relates to
12 acoustical matters, not just in a generic sense, but
13 also with a sense of how it actually has gone to
14 work, how it actually has impacted cities that are
15 close to airports.

16 With that, I'm pleased to present to you our
17 expert on noise, Mr. Jack Freytag.

18 MR. FREYTAG: Thank you, Mr. Dickerson.

19 I'll try to take everything to heart that
20 I've heard here so far as far as simplifying the
21 explanation. And I'd also kind of like to reiterate
22 what Mr. Radcliff said. He had some excellent ideas
23 of other things that should be done.

24 Nonetheless, my assignment was to review the
25 document that was before me. And that is not to say

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1 that I don't think there are a lot of other things
2 that should be done, but the focus of my work here
3 has been to look for deficiencies and things that I
4 think are lacking in this document. And they are
5 significant, but that is not the entire story right
6 there.

7 So what we have here in the noise analysis
8 portion of this master plan EIS/EIR is somewhat
9 straightforward. They prepared a noise exposure
10 analysis for two base years, the year 2005, the year
11 2015, for each of the three scenarios, the no
12 project, and as well, they compared that with what
13 they call the baseline year.

14 Now, I know a lot of you have a lot of
15 experience in noise, so I'll try to be kind of brief,
16 but for those of you that haven't, there's really
17 three elements that go into what we call noise
18 exposure.

19 The first of those is, obviously, how loud
20 the individual aircraft are. I think that's pretty
21 obvious.

22 But secondarily, and equally important, is
23 the volume of aircraft. We obviously have a much
24 worse situation with more aircraft than with fewer
25 aircraft, so that is factored into this noise

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1 exposure measure.

2 And then the third item that goes into this
3 is the distribution of those aircraft, whether they
4 happen during the daytime, the evening or the
5 nighttime. The evening aircraft are penalized by
6 some 35dbs, while the nighttime are penalized by
7 10db. And that's the standard that has been
8 established out in California and accepted
9 nationally, and it is the standard that was used to
10 evaluate here.

11 As I will mention in a moment, I don't
12 believe that's everything that should be said on this
13 subject, but it is a standard. It's correlated with
14 social surveys of percentage of people highly
15 annoyed. And quite frankly, we had only one number.
16 There's no reason you need only one number, but if
17 you had to use one number, probably the CNEL measure
18 is probably the best for average community response.

19 Coupled with that, we want to look kind of
20 at the history of the noise exposure here at LAX, and
21 it pretty much parallels what's happened across the
22 country. Essentially, over the last 20 years, the
23 individual aircraft have been getting a little bit
24 quieter. Certainly, the old 707s and early 727s are
25 certainly quieter than the planes we have now.

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1 But while all that has happened, we have
2 also gotten tremendously more aircraft. And not
3 surprisingly, the predictions that are set forth in
4 all these scenarios kind of tend to show the same
5 thing -- well, we're going to keep getting quieter
6 aircraft, but there are going to be a lot more of
7 them.

8 The way this is put together, the CNEL
9 equation shows that we have had a historical decline
10 in noise exposure. If you've been watching the noise
11 contours as they are published here, they get
12 gradually ever so smaller. They've been inching back
13 for some 20 years.

14 Now, that brings me to the first and really
15 what I consider a key deficiency in this assessment,
16 and that is the use of the 1996 baseline year.
17 Essentially, the noise impact is presented by saying,
18 well, here's what it is, what they call "now." It
19 stays current throughout the entire EIR/EIS, and
20 here's what it will be in the future; and you lay one
21 contour over the other, and you can see the new areas
22 and all this, how much is it going to grow.

23 Well, why in the year 2001 are we using a
24 1996 baseline year? I know it takes a while to come
25 up with 12,000 pages, but it doesn't take five years.

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1 think a more appropriate year certainly would have
2 been something like 2000.

3 Now, I'm certainly not the only one to
4 discover this. I certainly want to give credit to
5 the South Bay Council of Governments, because when I
6 got around to reading their review of the noise, they
7 came up with exactly the same thing. So that's the
8 first key point.

9 Second point is certainly worth mentioning.
10 It's not as dramatic. Here we have these flight
11 tracks that are shown on one of these here. That's
12 where all the lines are with the planes in the sky,
13 and that's the basis of how these contours are put
14 up.

15 Obviously, you take the planes, you know how
16 high they climb and you know how much noise they put
17 out, and then you add up all of this noise energy and
18 you come up with these noise contours. And there's
19 an FAA standard program that was used to do this.

20 Now, the thing of it is, these planes do not
21 fly on one line in the sky all the time. They have
22 very defined air traffic procedures and all, but they
23 have crosswinds, and this, that and the other, and
24 there's a known leeway in the way these planes
25 disburse as they go out here. And it's all part of

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1 Now, the reason -- well, I can't say why they did it,
2 but I can tell you the effect. This noise has been
3 going down most dramatically over the last ten years.

4 Just briefly, in 1990 they passed something
5 called the Airport Noise and Capacity Act, and
6 basically, the FAA said, "We're going to phase out
7 the noisiest airplanes by the year 2000." And
8 there's a lot more to the story than that, as you
9 might imagine.

10 But basically, that's what they did, and
11 there were phaseouts. And sure enough, we have
12 gotten rid of most of the noisiest airplanes.
13 There's always going to be noisy airplanes, but there
14 are no longer planes flying that are noisier than a
15 certain certified threshold.

16 So by picking the year 1996 instead of the
17 year 2000, you've got a noisier environment than you
18 have today. So what is being compared here
19 throughout all of these alternatives is a 1996 base
20 year that's noisier than what we have now. So when
21 we compare these two contours, and we count the
22 impacted population in these areas, and the schools
23 and the churches and the number of dwelling units and
24 all that, we're comparing it with the history five
25 years ago and not really what's happening today. I

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1 air traffic control, and it's all monitored on the
2 radar, and all the information is available,
3 certainly to the airport, in preparing this.

4 They should have used more flight tracks,
5 disbursed them more. You'll get slightly larger
6 contours by doing that. In other words, for example,
7 if we have a single flight track in the sky, and we
8 have two airplanes on exactly the same flight track,
9 you'll have a smaller contour than if you take each
10 of those planes and you fan them out just a little
11 bit. So that's a fairly important issue, and
12 certainly one that's worth bringing up.

13 The third point I wanted to bring up is that
14 the CNEL, or this community noise equivalent level,
15 is a sole measure or metric used to measure the
16 noise, and it's an absolute requirement that that be
17 done; but it's also left that supplemental noise
18 analyses may also be done, and I think, certainly for
19 a project this size and this magnitude, that that
20 would have been appropriate.

21 There's really nothing in the CNEL that
22 relates directly to speech interference, the speech
23 interference that you realize at home and that you
24 realize in schools -- the fact that you can't carry
25 on a conversation over the dinner table or watch the

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1 TV or talk on the telephone, those types of
2 interferences -- do not relate directly to this total
3 noise dose, this integration of noise level and noise
4 volume.
5 So I think they did -- a time above analysis
6 is mentioned in here. However, they never did
7 anything with it; never did any conclusions, never
8 left us another way to look at the noise.
9 Another, I think, very serious impact: We
10 hear an awful lot by the proponents of the airport
11 that it's of some kind of economic benefit. And
12 without going into that, they really, I feel, need to
13 say, "Well, what is the economic detriment?" And
14 that is, on the property values of the residences and
15 business in this community. There's no financial
16 impact of any sort on this.
17 I think it could reasonably be done. We
18 certainly have historical real estate records on
19 property values here. You can compare similar
20 properties that are highly noise impacted with these
21 that aren't and come up with something like that.
22 Dollars are dollars, and I think that it's only fair
23 to look at both sides of the coin on that issue.
24 Finally, they included in the end, almost as
25 an appendix, kind of a laundry list of health-noise

1 this.
2 So those are the comments that I recommend
3 be put in for the critique of the document.
4 Thank you.
5 (Applause.)
6 MR. DICKERSON: Thank you, Mr. Freytag.
7 As I said a few moments ago, we also took a
8 good look at so many issues. Among the issues we
9 took a look at were air pollution. We hired a
10 consultant, David Calkins, who is an environmental
11 consultant and air pollution regulation expert, and
12 he analyzed the master plan and Draft EIS/EIR for
13 sufficiency in addressing air pollution impacts on
14 Inglewood and surrounding communities.
15 Mr. Calkins grew up here in Southern
16 California, and holds a bachelor of science degree in
17 civil engineering from UC Berkeley and a master's
18 degree in city and regional planning from the
19 University of Southern California.
20 He has 31 years of experience in air
21 pollution regulation, and I can give you a lot on his
22 resume. However, regrettably, he is out of the
23 country today on another environmental matter, but we
24 are pleased to have Tom Vandenburg.
25 Mr. Vandenburg is an associate in the office

1 impact issues, but then they never conducted any
2 analyses of those. And these are very, very serious.
3 Certainly, sleep interference. There's no way to
4 directly relate the CNEL value to sleep interference.
5 You need to look at the individual noise levels of
6 the aircraft, how loud they are in the homes.
7 There's other health effects, such as
8 increased stress and all. I think that in the large
9 aggregate of the Inglewood community that there's
10 probably a lot of stress and all, and there's not a
11 word mentioned in the report in the way of assessing
12 that.
13 We've already talked a little bit about
14 environmental justice issues, like where do these
15 contours go.
16 And then finally, I think one of the key
17 issues that I would certainly like to have seen in
18 this is the learning effect on children. There's
19 much more literature coming out on this all the time.
20 When children are interrupted, it isn't just
21 that they've lost what the teacher might have been
22 saying at one point. It's distracted the whole
23 class, and it takes them a while to come back in.
24 It's a complex and a very serious issue. And that's
25 the final issue I think should have been covered in

1 of Radcliff, Frandsen & Dongell, and he has received
2 his law degree from the University of Virginia School
3 of Law in 1992. He has also been involved as a
4 member of the environmental law section of the
5 California Bar Association and of the torts and
6 insurance practice section of the American Bar
7 Association.
8 His practice is concentrated in
9 environmental law, and we are pleased that
10 Mr. Vandenburg, who really was an instrumental
11 drafter of the document that we are submitting, is
12 here to present information today as it relates to
13 the issue of air pollution.
14 Please welcome Mr. Vandenburg.
15 MR. VANDENBURG: I was going to say good
16 morning, but I think I have to say good afternoon.
17 I'm going to be presenting the comments that
18 Mr. Calkins had. I'm a lawyer, not an air pollution
19 expert, but I'm going to try to cover what he
20 covered.
21 And they put up a board. There's five main
22 points for Mr. Calkins' report that I want to talk
23 about. He actually did two reports for us, and they
24 are on the website in the appendices, so you can
25 download those and read those for yourself.

1 The first issue that I want to talk about in
2 regards to his report is environmental justice. Now,
3 I want to just describe what I understand
4 environmental justice to be. There are two parts to
5 that.
6 Environmental justice is a concept in law,
7 both in federal law and in California law. The first
8 concept is, the concept of the undue burden from a
9 project should not fall on communities that are low
10 income or minority. That's what environmental
11 justice says. It says you should spread the burden,
12 and not have it simply fall on people of low income
13 or minority.
14 The second one, the second concept for
15 environmental justice, is that if you're going to
16 inflict burdens on people, you also have to give them
17 benefits, so there has to be a balance.
18 Now, I want to talk about that in terms of
19 Mr. Calkins, but I also want to direct you to
20 Mr. Dickerson's letter, because after the summary,
21 the first topic that his letter talks about is
22 environmental justice, and he shows in that letter
23 that LAWA has missed on both of those point. So I
24 just want to direct you guys to that.
25 But in terms of air pollution, Mr. Calkins

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1 Now, that just happened a couple of months
2 ago, and part of that plan is that LAX does not
3 expand. Now, the LAX master plan contemplates huge
4 expansion at LAX. The regional transportation plan
5 says no. So they've got a real problem here. They
6 are supposed to conform their plan to what SCAG is
7 saying, and they haven't done that, so they are going
8 to have a real problem. If they try to defend that
9 in a court of law, they are going to have a real
10 problem with that.
11 They have another plan they have a problem
12 with, too. It's called the air quality maintenance
13 plan. Southern California has an air pollution
14 problem, so Southern California is required by the
15 Clean Air Act to maintain a plan -- How are we going
16 to clean up the air? -- and the entity that does that
17 is the South Coast Air Quality Management District.
18 Now, South Coast puts out a new plan every
19 three years, and they are in the middle of putting
20 together a new plan. Now, the problem that LAWA has
21 is, they don't know what's going to be in that plan,
22 and whatever's in that plan, it's very likely that
23 it's not going to include expansion at LAX.
24 So not only is LAWA going to have a problem
25 with the regional transportation plan from an air

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1 looked at that, and what he said was this. He said
2 one area that they did not look at was ozone. Ozone
3 is smog. The document has a passing comment about
4 ozone. It says that ozone might increase.
5 Now, they are required to analyze every
6 significant effect, okay? Ozone is a very
7 significant effect. Studies have shown that ozone
8 leads to increased cases of asthma and increased
9 cases of respiratory illness, and for them to simply
10 say that ozone might increase, they are just
11 playing -- you know, they are glossing over something
12 that's very important.
13 The second issue is that the master plan
14 does not conform to other local plans. Now, LAWA can
15 do what they want on their property, but in the
16 overall scheme of things, they are required to fit
17 their plan into a regional plan, and they've got two
18 big problems. The first is called the regional
19 transportation plan.
20 Now, a lot of people probably know what the
21 regional transportation plan is. You probably were
22 involved in the regional transportation plan. The
23 Southern California Association of Governments gets
24 together and comes up with a plan for the next 25
25 years for all transportation in Southern California.

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1 pollution perspective, but they are also going to
2 have a problem with the South Coast and what they
3 come up with.
4 The third point: Inadequate analysis of
5 impacts on Inglewood. And again, we're talking
6 specifically about air pollution. CEQA requires
7 analysis of all impacts, including what's called
8 cumulative impacts.
9 Now, what cumulative impacts are is this:
10 LAX is going to expand, but there's also going to be
11 expansion in economic development and more activity
12 in the area. LAX can't just look at what they are
13 going to do, but they've got to look at what
14 everybody else is going to do as well.
15 They've got to look at what Inglewood is
16 going to do and what the growth is going to be in
17 Inglewood. They didn't do that at all. They didn't
18 take into account any growth in Inglewood. It's
19 illogical. They are not going to be able to defend
20 this. They need to go back and say, "Okay, this is
21 what we're going to do, but this is what Inglewood's
22 going to do, so the total is going to be here."
23 Now, interestingly enough, what they did do
24 is that they assumed that all the mitigation measures
25 would be put into place and that all the traffic

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1 projects that are going to supposedly reduce traffic
2 would also be put into place. They made assumptions
3 on their own side for their benefit, but they didn't
4 think about other problems that they were going to
5 have.

6 The problem that they have with this
7 mitigation and with the traffic projects is they
8 don't have any funding. So they are saying, "Yeah,
9 this is all going to happen. We don't know where the
10 money's going to come from, but this is all going to
11 happen." It's another illogical point in LAWA's
12 analysis.

13 Next point, health risks of air toxics.
14 There's no comprehensive baseline study. They don't
15 know where they are.

16 Now, amazingly enough, LAWA just comes out
17 and admits this. This is a quote from the document:

18 "The health risk assessment did
19 not evaluate impacts of toxic air
20 pollutants associated with current
21 airport operations."

22 They don't know what the health risks for
23 air pollution is for current airport operation.
24 That's a pretty basic fact. If you're going to
25 figure out what impact your plan is going to have,

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1 okay? In the document they make absolutely no
2 commitments, okay? They make one promise. They
3 promise to discuss it. They say, "Okay, in the
4 future, we'll sit down, we'll talk to the
5 communities, we'll talk to the South Coast, we'll
6 talk to the EPA," but that's all they committed to.

7 Now, Mr. Calkins is an expert. He's looked
8 at this and said, "That's ludicrous. That's just
9 completely unacceptable. They can't defend this."
10 He's looked at the mitigation measures that are
11 proposed or that are discussed. They are discussed.
12 They are not really proposed, because there's no
13 commitments.

14 LAX identifies 15 of the mitigation measures
15 as priority. Mr. Calkins agrees. He says they are
16 priority, they should be done today. He also looked
17 at the list, and he said there's another 14 that they
18 came up with that also should be done today. And I
19 won't go into all of them. That's 29 measures. I'm
20 not going to go into all that, because it's all in
21 this report. You guys can get that off the website.

22 He also went beyond that and proposed some
23 of his own mitigation measures. I want to touch on
24 three of them.

25 The first one that he suggests is an

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1 you've got to know where you are today.

2 Now, they have started a study on this.
3 They've started a rather large study. It's going to
4 take them at least a year, probably two years, to
5 complete that study, and at that time they will begin
6 to have the ability to analyze and figure out what
7 they are talking about, what impact it's going to
8 have. But until then, they have no way of doing
9 that. It's a major problem.

10 The fifth and final point on air pollution:
11 Mitigation measures. The mitigation measures,
12 Mr. Calkins comes straight out, they are
13 insufficient. They don't get the job done.

14 Now, I want to just give a quick point about
15 Mr. Calkins on this, which is interesting. This is
16 his area of specialty. This is what he did when he
17 was at EPA, was he worked on air mitigation. And
18 when the EPA officials up there in San Francisco
19 found out that Mr. Calkins was looking at this, they
20 called him up and they said, "Would you please come
21 down to us and tell us what you think, because we
22 have to make comments on this, and we don't know what
23 to say." So it will be interesting to see what the
24 EPA says. I think it will sound somewhat familiar.

25 LAWA makes no commitments on mitigation,

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1 incentive program to cut down on employee trips to
2 LAX. The analysis is that a lot of the traffic is
3 caused by employees coming in and out, and that's
4 something that LAWA can influence by encouraging the
5 vendors on site to offer incentives to their
6 employees to find other means of transportation other
7 than driving in and out of the airport.

8 His second idea is this: He wants the FAA
9 to institute what's called an emissions fee on the
10 airlines. Basically, the airlines would pay for
11 every plane that comes in based on the amount of
12 pollution that that plane contributes to the air.

13 Now, that's going to have two effects.
14 Number one, the airlines are going to have to take a
15 look at that. They are going to have to think about,
16 Maybe we should send some of these planes to Ontario;
17 maybe we should send some of these planes to Orange
18 County, because we don't have to pay this fee, as
19 opposed to sending it to LAX.

20 The second thing it's going to do is the
21 planes that they do send to LAX are going to be the
22 cleanest ones in their fleet. They've got two
23 planes, one's dirty and one's clean, they are going
24 to send the clean one.

25 The last point has to do with user fees,

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1 which has been touched on. You create an incentive
2 program. You give discounts for using the outlying
3 airports. It's very simple. As Dr. Hattis talked
4 about, it's a very simple idea. You know, put the
5 pollution out where there's less people, and then
6 you'll have less problems and less health effects.
7 And from a CEQA perspective, that's how you reduce
8 and minimize impacts.

9 Thank you very much.

10 (Applause.)

11 MR. DICKERSON: I'm a little sympathetic to
12 our court reporter. He's been going for a couple
13 hours. We have one more, then we're going to take a
14 little break.

15 Just to put a cap on the last point that
16 Mr. Vandenburg was making, this whole idea about
17 providing financial incentives to the airlines to
18 send airplanes, particularly high-polluting
19 airplanes, to other areas, it works like this:

20 Every time I fly -- I'll restate that. Just
21 about every time I fly to Washington, D.C., I fly
22 into the Baltimore-Washington International Airport.
23 There are three airports in Washington -- there's
24 Dulles, there's what's now called the Reagan Airport,
25 and Baltimore-Washington. If I fly into Dulles,

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1 was previously a director of public works --

2 And thank you for being here today, Bill
3 Nahar, our director of public works.

4 But Mr. Cook was previously the director of
5 public works for the cities of Claremont, Pomona and
6 Huntington Beach, and he also served as the city
7 manager for the City of Huntington Beach. He's got
8 a -- his resume is very long. I won't take up more
9 time describing it.

10 But Mr. Bures, who is going to stand in his
11 place today, is also a member of the law firm of
12 Radcliff, Frandsen & Dongell. He's a graduate of the
13 Cornell Law School in New York. He also holds an MBA
14 from Cornell University Johnson Graduate School of
15 Management. He's a civil litigator, with a broad
16 background and practice that includes complex federal
17 and state environmental litigation. What that means
18 is he tries very hard cases.

19 He also sits as a judge pro tem for the Los
20 Angeles Superior Court, which means occasionally he
21 will be a temporary judge. So he has a lot of
22 experience and understanding about these matters and
23 the judicial system. We're pleased and privileged
24 that he's part of our team, so please welcome him for
25 our benefit.

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1 generally during the week, a round-trip flight is
2 going to cost me somewhere close to \$1,000. If I fly
3 into Baltimore-Washington, a round trip is basically
4 going to cost me \$500 to \$600.

5 So what you do is you encourage the airlines
6 to make it more expensive to fly into Los Angeles, if
7 they are going to be sending more pollutants here,
8 and make it less expensive to fly into, say, Orange
9 County or whatever.

10 Now, that's going to have another kind of
11 impact on us. Some of us will complain that after
12 all, why should the folks in Orange County supposedly
13 get the break? But the whole idea is to encourage
14 the airlines to send those airplanes into those other
15 areas by offering lower costs for the flight.

16 Our last speaker, before we take a break,
17 and then we'll have the privilege of hearing from
18 you, is Mr. Matt Bures. Mr. Matt Bures is going to
19 stand in for Paul Cook today. Mr. Paul Cook did the
20 analysis for us as it relates to traffic.

21 Mr. Cook has over 40 years of experience in
22 civil engineering and traffic engineering and
23 transportation planning. And as a matter of fact,
24 Mr. Cook was a traffic engineer for the City of
25 Huntington Beach and for the City of Inglewood. He

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1 Mr. Matt Bures...

2 MR. BURES: Thank you.

3 Again, I'm standing in for Mr. Cook, so
4 hopefully what I will do, as Mr. Vandenburg did, is
5 help you understand some of the technical nature --
6 some of the technical information that is included in
7 the City of Inglewood's presentation to LAWA.

8 That is, again, on the website, but for
9 those of you who don't know what the website is, let
10 me give that to you, because it's banded about a
11 bit. www.cityofinglewood.org. That's o-r-g. And I
12 assume you know how to spell City of Inglewood.

13 The other thing that you might want to do,
14 just for your own edification, is take a look at what
15 is on the web with respect to the master plan, and
16 you can locate that at [www.laxmasterplan](http://www.laxmasterplan.org) -- that's
17 all run together -- .org, and there are a number of
18 options that you can click on, and you can see maps.

19 For example, the first thing I want to do,
20 is we've talked about a number of traffic aspects and
21 we've talked about a number of modifications that are
22 going to occur. This very blurry picture has been
23 blown up off of the LAX website. Let me just hit a
24 couple of the high points.

25 This is the extension of the LAX Expressway

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25

1 that's designed, at least in theory, to facilitate
2 the flow of traffic to the airport. The 105, along
3 with the Green Line, are supposed to be extended
4 along the southern portion of the airport. This
5 aspect here looks -- yeah, this aspect here is what's
6 been called the Airport Ring Road. Supposedly what
7 this does is it facilitates traffic flowing around
8 the airport.

9 What I would suggest to you is, this isn't a
10 traffic plan that's designed to ease your life or
11 anyone else's life. As you go through and evaluate
12 the plan yourself, as you look at the city's
13 comments, what you will see is, How do we get more
14 cargo into and out of the airport so that LAX can
15 make more money? That's what it is.

16 Cargo facilities, Ring Road to facilitate
17 trucks going and in and out of the place. That is
18 what it's there to facilitate. What do trucks mean?
19 Trucks mean traffic. And to go back to the health
20 aspects, trucks also mean more diesel exhaust, and
21 diesel exhaust, as Dr. Hattis will tell you, is a
22 very nasty, bad thing that you don't want to have.

23 I don't mean to oversimplify, but hopefully,
24 that gives you a picture of what it is that we're
25 looking at so you understand when everybody says,

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1 sense. Sure, you get more traffic into and out of
2 it, and that should ease everybody's lives. But the
3 funnel is bigger, and the flow going into the funnel
4 is now higher.

5 What you need to do is either keep the flow
6 in the same or reduce it if you want to ease
7 congestion, because a bigger funnel, when you're
8 handling more traffic, simply means you still have
9 more traffic. You just have more of it going through
10 at any given point in time.

11 Those are the fundamental points that
12 underlie this. They are in the business of moving
13 cargo. They want to make money. They want to make
14 money on your backs, and they don't care if traffic
15 is falling in your backyard in order to do that.

16 That's my summation of what it is that
17 Mr. Cook says, but let me hit a couple of his more
18 specific points.

19 First of all, what is a baseline? We've
20 used that expression. Let me try and define it for
21 you. If you're going to decide that a project has an
22 environmental impact, you have to be comparing it to
23 something. Well, what is it you compare with? You
24 compare with a baseline. And you've already heard a
25 very good argument as to why it is that the baselines

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1 "When we develop LAWA, actually things are going to
2 be better." They are not.

3 You've heard several mentions to "MAP,"
4 M-A-P, which is million air passengers. From my
5 perspective, "MAP" means more automobile pain. And
6 that's -- let me give you an -- I like to think of
7 analogies, so let me begin -- before I go through the
8 points that Mr. Cook made, let me give you a couple
9 of analogies.

10 A number of us here are not exactly slim of
11 girth. If you take a pair of pants that you've had
12 for a while and you try and put them on, and you
13 haven't been exercising and modifying your diet, you
14 can't exactly get them on, and when you cinch the
15 belt, what happens to the belt? It folds over the
16 edges, right?

17 Well, it's the same concept with LAX. If
18 you take the same size pair of pants, meaning the
19 stuff that's on the ground, and you try and put more
20 body into it, what does it do? It spills over. And
21 where does it spill over? Into Inglewood.

22 Or if you'd prefer a less personal analogy,
23 what LAWA is arguing is that they've taken the funnel
24 that facilitates transportation into the airport, and
25 they've made the funnel bigger. Well, that makes

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1 that are being used are no good from a noise
2 perspective.

3 Well, similarly, if you're going to compare
4 what it is that SCAG has done and what it is that
5 LAWA is proposing, you have to at least have the same
6 baseline for traffic, and you don't. Instead, what
7 you have is an environmental baseline of 1996.

8 You have another baseline that is existing
9 conditions. Oh yeah, plus we have growth. In that
10 context, by contrast with noise, we're
11 (unintelligible) with noise, and if you're comparing
12 with older, noisier aircraft, the current quieter
13 aircraft shows less of an impact.

14 Well, conversely, if you're comparing with
15 trumped up numbers from a traffic perspective, and
16 you already have high traffic levels, you're
17 artificially showing a reduced impact. The fact is,
18 you're going to have more traffic. You're going to
19 have more traffic coming in. And if you want to
20 compare anyway to decide whether I'm right, Mr. Cook
21 is right or someone else is right, use the same
22 numbers, use the same baseline. They don't do that,
23 and that's a fundamental flaw.

24 No analysis of the impact of LAX Expressway
25 upon Inglewood. You'll find that this is a theme

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1 that's repeated throughout all of the traffic
2 aspects, and the bottom line is they ignore
3 Inglewood. What is the 405 Expressway from the north
4 going to do to life in your city? They don't discuss
5 that. They don't discuss the effect of the 105
6 extension on Inglewood. They also don't discuss the
7 extension of the inclusion of the Ring Road.

8 The bottom line here is not have they done
9 it right. They haven't done it at all. And the
10 argument is probably going to be, "Well, all we have
11 to do is look at the project and the local
12 community"; but the local area only extends to the
13 405, ignoring again the funnel concept.

14 If everything's going into the funnel, it's
15 filling up the funnel. If the pants are full, what
16 happens on the other side of the funnel? What
17 happens up here when the pants don't -- when you
18 can't fit into the pants? And that's the issue for
19 Inglewood.

20 I'm going to give you some homework at the
21 end of this so that you can visualize a little more
22 what it is I'm talking about. Tom Vandenburg also
23 touched on the master plan, the fact that it does not
24 conform to the regional transportation plan. I'm not
25 going to belabor points that have already been made.

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1 Intersection 26, La Cienega and Century;
2 Intersection 40, La Cienega and Florence;
3 Intersection 72, La Cienega and Manchester;
4 Intersection 111, La Cienega and
5 Interstate 405. But that's the southbound ramp, and
6 that's important.

7 Now, if you circle those intersections on
8 your map, you're going to say, "These are the places
9 that they've studied. They actually took a look at
10 Inglewood." They did not, however, look at
11 northbound exits. You'd think they might want to do
12 that.

13 Well, let's have them take a look. You go
14 back and take a look through the report and tell me
15 if they analyzed the northbound Century exit from off
16 the 405. I don't think they did. Take a look and
17 tell me if they examined the northbound exit at
18 Manchester off the 405. I don't think that they did.

19 They did evaluate traffic flows, and they
20 are proposing widening lanes and things like that on
21 Manchester and Arbor Vitae and Century west of
22 La Brea. But when you take your map, like I did,
23 outline the city, mark the intersections, and then
24 draw pink lines for Manchester and Arbor Vitae and
25 Century. And what you look at is, you'll say, "First

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1 Suffice it to say again, SCAG adopts an RTP
2 every three years. The latest one, although it's not
3 final, it's April 2001 -- but as you're already heard
4 from our other experts, if you have information
5 available, why don't you use it? And they don't.
6 Instead, they take a look at the 1998 regional
7 transportation plan.

8 The regional transportation plan, again,
9 does not include things like the Ring Road, the 105
10 extension or the 405 Expressway, so there's no way to
11 compare it.

12 So let me go on to the homework portion of
13 this. And this is going to involve the intersections
14 and the traffic flow in your backyard. For those of
15 who you have a Thomas Guide -- and no, I'm not
16 advertising for them, but it does work in their
17 comment -- at pages 702 and 703, that's where
18 Inglewood gets put together. I want you to take a
19 look at the following intersections. And for those
20 of you who also go to the LAWA report, those are the
21 following intersection numbers:

22 Intersection No. 7, Aviation at Arbor Vitae;
23 Intersection No. -- and if I pronounce it
24 wrong, I'm sorry, I apologize -- Intersection No. 8,
25 La Cienega and Arbor Vitae;

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1 of all, there are a couple of other places that they
2 didn't look at that it makes sense to me they would
3 look at."

4 Honestly, I don't live here, but if I looked
5 at the map and I asked myself how would I want to get
6 to LAX, I know the freeway's going to be crowded, so
7 I'm going to try and cut through somewhere, right?
8 Well, what am I going to do? Maybe I'll exit at
9 Hawthorne and I'll cut up to Century. I don't think
10 Hawthorne and Century was evaluated.

11 What if I want to go up a little further to
12 Arbor Vitae and La Brea? That's not been evaluated
13 either.

14 What happens if there's a horse race going
15 on, and we've got the backup over here over at the
16 405, can you all escape?

17 When was the last time somebody tried to go
18 west so you could get on the 405? Or do you all go
19 south to the 150 so you don't have to hassle with
20 that?

21 Think logically about what's going on, and
22 what you will see is the only thing they looked at is
23 the LAX area, the immediate environs. They ignored
24 the fact that once the funnel is full, it's got to
25 spill over somewhere. It's got to back up, and the

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1 place it backs up is right into your backyard. They
2 don't address that at all.
3 That's your homework. But I want to tie
4 this into something, too. You remember I said that
5 this all ties into cargo, right?
6 Well, how are you paying for that? And
7 remember something that Mr. Radcliff said. Actually,
8 I think the numbers are worse than what he said.
9 Alternative A takes away 57 single-family
10 dwelling units, so does B, and so does C. The
11 preferred choice is C, though, right? Well, how many
12 here live in apartment dwellings or live in condos,
13 something like that, where there's more than one
14 family? There's got to be a number of you here.
15 Well, Alternative A gets rid of 27.
16 Alternative B gets rid of 27. Alternative C gets rid
17 of 89. That's in the master plan Draft EIS/EIR.
18 That's how they are paying for cargo. That's how
19 they are paying for failure to take a look at traffic
20 in your backyard. And what I mean by that is, gee,
21 if we have fewer people in Inglewood, there are fewer
22 cars on the road and less traffic.
23 Thank you very much.
24 (Applause.)
25 MR. DICKERSON: Well, that concludes what

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1 (A recess was taken.)
2 MR. ROUZAN: As I said earlier, as the
3 comments are made by the individuals coming up, the
4 attorneys representing the city will make notes so
5 that they can address any questions you may have
6 after everyone has had a chance to speak.
7 It's imperative that we give everybody
8 courtesy and the opportunity to say what they need to
9 say, hopefully, as quickly as possible, and move
10 forward, because we have about 40 cards up here
11 indicating they'd like to speak.
12 If we gave everybody a couple of minutes to
13 make their comments, it would take us at least an
14 hour and a half. So we are going to try to ask you,
15 on the honor system, to take as little time as
16 necessary to make your point. Your information will
17 be filed. Those of you that need to speak a little
18 longer, you'll have to hold your comments to no more
19 than three minutes.
20 I will call the names of the speakers as we
21 received the cards, and request that the first five
22 line up behind the microphone over to my right, and
23 that the second five on the microphone to the left.
24 We will start with the first five over on the right,
25 and after they've finished, the second five will

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1 we're going to present to you by way of the reports
2 from our experts today. There's so much more that we
3 could present to you, but we do want to provide you
4 an opportunity to make your comments.
5 Before we go to our break, I'm going to turn
6 it back over now to our city administrator, Mr. Joe
7 Rouzan, who will have some comments for you before we
8 take our break.
9 Mr. Rouzan...
10 MR. ROUZAN: Thank you, Charles.
11 We're going to give a short break for those
12 who need to go to the rest room, get some water, and
13 also the reporter. When we come back, we will have
14 the audience participation section.
15 We have over 40 people who wish to speak, so
16 we are supposed to have the auditorium until
17 3 o'clock is the agreement. We will try to see
18 everybody gets that opportunity. There are some
19 folks that have submitted cards that say they do not
20 want to speak, but they want the cards submitted with
21 the information we're going to send to LAWA and the
22 other agencies, which we will do.
23 So we'll take about a ten-minute break, and
24 start promptly on time, and we'll give you the
25 opportunity to speak. Thank you.

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1 speak, and then we'll call an additional ten folks.
2 The first person is Michael Adams, then John
3 Witring. Excuse me if I mispronounce your name.
4 Dawn Miller, Aldene Sly.
5 A VOICE: Michael Adams isn't here, but he
6 wanted his question read.
7 MR. ROUZAN: Swinton Scott.
8 Are any of those folks here? I know Ms. Sly
9 is. Michael Adams? John Witring? Dawn Miller?
10 THE VOICE: Michael Adams had to leave, but
11 he said he'd like his question read.
12 MR. ROUZAN: Okay. Dawn Miller, and then
13 Scott.
14 Mr. Adams had to leave, but he indicated on
15 his card:
16 "What is being done to expedite
17 the noise testing of those dwellings
18 that are under the flight path that
19 are not on the list? And how does
20 that addition of the \$10 million
21 impact those aforementioned
22 dwellings?"
23 We will answer that question when everybody
24 has had a chance to speak.
25 John Wetring is not here?

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1 A VOICE: Yeah, here he is.
2 MR. ROUZAN: Oh, there he is.
3 Next five on the other side will be Louise
4 McGee, Doris Baker, Larry Springs, Jesse Smith, and
5 Dr. Marilyn Derow.
6 MR. WETRING: My name is John Wetring. I am
7 not (unintelligible), but I'm very much against the
8 expansion of the LAX (unintelligible). I hope you
9 don't come through with this plan, what they plan to
10 do it.
11 Thank you. That's all I have to say.
12 MR. DICKERSON: Thank you.
13 MR. ROUZAN: Thank you, sir.
14 MS. SLY: My name is Aldene Sly, and I'm a
15 resident of Inglewood for 36 years.
16 I want to first thank the panel of attorneys
17 that have come and have done such a great job in
18 disseminating the information that you passed on to
19 us today from the EIS/EIR. It was an awesome job, I
20 know, to disseminate this kind of information, to
21 make it understandable to us as laymen, because we
22 would have never been able to do it. I don't care if
23 they had given us five years. So thank you very much
24 for that.
25 My main concern is the environmental justice

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1 people suffering from lung conditions, and that is
2 just on my street in my block. And we know it's from
3 the atmosphere, from the air pollution, because
4 people who have only lived there a short while, came
5 in healthy, and now they are suffering from these
6 ailments.
7 MR. ROUZAN: Thank you, Ms. Sly.
8 MS. SLY: Thank you very much.
9 MS. MILLER: Hello. My name is Dawn Miller.
10 I live in District 2, and I want to thank the panel
11 for putting on -- like she said, disseminating the
12 information to us on the EIR, but I have to say that
13 in evaluating the City of Inglewood's response, I'd
14 have to go by what you're doing and not by what
15 you're saying.
16 And what you're doing is fairly well
17 documented. You're collaborating with LAWA on the
18 Century Boulevard corridor project. You are not
19 involved in fighting the Arbor Vitae Interchange
20 project. So what you're doing is speaking much more
21 loudly than what you're saying.
22 So I would like you, the City of Inglewood,
23 to stop treating this city as if it's LAX's backyard,
24 and I want you to cancel the MOU, and I want you to
25 fight back.

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1 portion, and as a resident and as a minority, it
2 seems that big corporations always seem to take the
3 path of least resistance, which they think, in this
4 case, is Inglewood. We are not the path of least
5 resistance, and we refuse to be dumped on.
6 I want to thank Mike Stevens, as well,
7 because he has educated many of us in terms of what
8 LAX is trying to do, and without him we would have
9 been so ignorant, and it's more understandable, what
10 you have told us today. We understand it much
11 better, and you have confirmed a lot of the things
12 that we have been learning through this process.
13 There was the statement that Mr. Radcliff
14 made about having gone through this process, and then
15 if it had to go to trial or court, that we would have
16 lost anyway. I didn't understand that, and I hope I
17 misunderstood it, but that is -- I think I'm quoting
18 him correctly -- "If you have to go to court, then
19 you've lost already." So if someone would clarify
20 that for me. Tell me if I have misunderstood that
21 statement.
22 The health issues are horrendous in
23 Inglewood already. The LAX airport cannot mitigate
24 what is happening to us today. We are getting sick.
25 We have cancer, we have asthma, we have many, many

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1 (Applause.)
2 MR. SCOTT: My name is Swinton Scott. I
3 live in District 2.
4 Good afternoon to everybody up there, and
5 thank you very much for your presentation. It was
6 very well done.
7 I wanted to speak about how the loose leaf
8 binder that was made up of the response to the
9 EIR/EIS I thought did not go far enough in condemning
10 the EIR/EIS. And in truth, there should have been no
11 need for any of this in the first place if the
12 memorandum of understanding had never been signed by
13 the City of Inglewood or agreed to.
14 (Applause.)
15 MR. SCOTT: The EIR/EIS report is probably
16 okay if you own a business looking to expand by
17 pushing out the residents. Is LAX to be looked at
18 like it's a neutron bomb, which will get rid of all
19 the people in Inglewood and keep the real estate
20 right where they want it, which is empty and ready
21 for redevelopment and rezoning?
22 (Applause.)
23 MR. SCOTT: This expansion should never have
24 gotten this far in the first place, let alone with
25 the City of Inglewood signing the MOU with LAX. The

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1 EIR/EIS should be thrown out. We don't want to have
2 commerce taking over our lives just to make money on
3 our backs and on our lives, our quality of life has
4 gone down the drain.

5 Thank you.

6 (Applause.)

7 MR. SMITH: My name is Jesse Smith.

8 First, to all the mayor and all the council.

9 I'm not a good speaker, but I've never been to one of
10 the meetings, but I always look at them every
11 Wednesday night.

12 What I want to say, I live on 109th Street,
13 in the Fourth District, between Yukon and Lemoli, and
14 it's nothing but a freeway there. The cars come
15 through there 60 and 70 miles an hour. And I've been
16 talking to my councilman about. He say, "We're going
17 to look into it."

18 We got two big trucks come there and park
19 every weekend loaded with trash. You can't get out
20 of your driveway. You go to back out, you nearby get
21 hit by a car, and I don't know why something can't be
22 did about that.

23 We used to -- several years ago, when we
24 called up the police about this, they'd come out, and
25 these trucks wouldn't park there. But from Yukon and

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1 it, but I don't like what the airplane does to the
2 community. These kids in school, they don't have
3 trained teachers, and then if she's not trained, and
4 then this noise is there, how do we expect a future
5 in our city?

6 And I would like to congratulate Judith
7 Dunlap, because she has taken the same position that
8 I have had. And I have been to every meeting I've
9 heard of.

10 This I got yesterday to tell me about a
11 meeting today. That's not kosher with me. I taught
12 school for 40 years, and you boys and girls that are
13 serving now, I didn't teach you like that. And I
14 taught special ed, and I know special ed kids can do
15 it, you can do it, too.

16 Let's get the people together and get what
17 the people want and what they say they want, and
18 let's work together. If you don't want to work for
19 the people, move out, and let somebody that wants to
20 work for the people in Inglewood get up here and work
21 for us.

22 And if we fight together, and get a group
23 like this group is today -- I mean, I like what you
24 say. We will have somebody to work for us, and we
25 won't have to worry about this.

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1 Lemoli, that's all you got there is these big, large
2 trucks. You can't get out of your driveway.

3 And I have this big tree in front of my
4 yard, where I've spent over \$700 -- I've been in
5 (unintelligible) for the last year. I've spent over
6 \$1,000 for those trees for plumbing, busting my pipes
7 under my house and everything, and I don't know why
8 something can't be did about it.

9 Thank you very much.

10 (Applause.)

11 MS. BAKER: I'm Doris Baker.

12 I came to California the first time in 1956.
13 I flew in at the little airport on Airport Way, and
14 it was nothing to what that airport is. And I'm an
15 airport freak. But I live right here, 80th Street,
16 right off of Crenshaw, and they tell me I'm not
17 covered with insulating your house?

18 When I first came here, (unintelligible)
19 over there by Century, 'cause that's the way I came
20 in all the time, and I could look down, but I can
21 look down here on Florence Avenue when I come in,
22 'cause I make a trip every year in the airplane. At
23 my age, I don't need to go every year -- I mean
24 every -- twice or three times a year.

25 But I know about the airplane, and I like

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1 Thank you.

2 (Applause.)

3 MR. SPRINGS: Good afternoon. My name is
4 Larry Springs. I live in the First District, and I
5 want to congratulate the panel on its well-done job
6 on the presentation that you have given the
7 community. There's no way that we could have read
8 12,000 pages in the EIR/EIS.

9 When I received this information on the
10 EIR/EIS, I'm sure a lot of people wanted to know what
11 in the heck was an EIR/EIS, and I'm sure you
12 explained it very well.

13 I want to commend the city council for
14 actually getting the notice out. I received the
15 notice in my water bill, I saw it on the website, and
16 this information was given to us on the first day of
17 the week. However, I think Saturday's a terrible
18 day. A lot of people have things that they need to
19 do.

20 I'm not criticizing you for doing it on a
21 Saturday, but I think it would have been done better
22 on a weekday. I'm kind of disappointed in the amount
23 of people that we have out here this afternoon, or
24 this morning/this afternoon. I think that we should
25 have had more.

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1 I think that Los Angeles International
2 should have spent \$60 million on trying to devise a
3 way of diverting some of the aircraft to other
4 airports.
5 (Applause.)
6 MR. SPRINGS: I think the City of Inglewood
7 and the city council should work with the people in
8 the community, because they know what our concerns
9 are. It's not like it's a secret to them. They are
10 aware of what our concerns are. And one of the
11 concerns was the Arbor Vitae off-ramp, and I don't
12 think the City of Inglewood heard our message in
13 regards to the Arbor Vitae off-ramp, so that's a
14 concern that the city council and the mayor needs to
15 take a look at.
16 Another concern that the city should look at
17 would be the aviation easement that was signed by a
18 lot of people in the community. Now, the city
19 council was responsible for putting out some of the
20 information on the aviation easement. They should
21 have been opposed to it from the very beginning.
22 (Applause.)
23 MR. SPRINGS: People don't understand how
24 important signing an aviation easement means to
25 them. They are assuming that once they sign this

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1 document, then they have air conditioning,
2 soundproofing and things of this nature.
3 But we don't just live in our homes. We
4 live outside our homes. We do functions outside of
5 our homes as well as inside, so it seems like once we
6 sign a aviation easement, we get this soundproofing
7 and this air conditioning, we're okay, but we're
8 really not.
9 What happens in another ten years, when that
10 particular soundproofing and air conditioning is not
11 working anymore? Is the city going to come back and
12 help us, or is Los Angeles International going to
13 come back and help us? Those are things that we
14 should take a look at, and we need the support of not
15 only the city council, but other people in the
16 community.
17 Now, my question to the panel that gave this
18 fantastic presentation is: What do you want us to do
19 as a community? And what is our responsibility? You
20 had indicated that it's the law, that we have to work
21 within the law, and you want us as a community to do
22 something, so what is it that you want us to do? Is
23 there something special that we need to do?
24 MR. ROUZAN: Thank you, Mr. Springs.
25 MR. SPRINGS: Thank you.

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1 (Applause.)
2 MR. ROUZAN: The next five over to the right
3 here are Danny Schneider, Manuel -- I'm sorry, I
4 can't read the last name -- on Tamarack. Jose
5 Alonzo, Jose Gomez, Mr. Roosevelt Douglas. And on
6 the left, Cecil Smith, Joyce Smith, Jose Hernandez,
7 and I can't read the last name here. The first
8 name -- or the last name is M-i-n-a.
9 Only three of them here? Okay, sir.
10 MR. SCHNEIDER: I'm Danny Schneider, and I
11 represent this area and the entire north and east
12 sides of the airport at the LAX Community Round
13 Table, and applaud all of the people that have come
14 out and are staying here to hear all the comments.
15 I'd like to acknowledge the panel and your
16 leadership here for helping in the fight. It's
17 extremely important that we continue, because even
18 when we stop this particular expansion, it's not
19 going to stop all expansion.
20 One of the things that I would like everyone
21 to do is to send a postcard to new Mayor Hahn to
22 remind him that he has pledged to stop the expansion,
23 and to appoint commissioners who are of the same
24 mindset. And you want to send those to 200 North
25 Main Street, Los Angeles 90012. That's L.A. City

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1 Hall.
2 Now, in terms of problems in areas, I just
3 want to remind everyone that there's still an LAX
4 Expressway project from Caltrans, and if they
5 continue with that project, they are going to wipe
6 out your Centinela Adobe. That's right in my
7 neighborhood.
8 In addition to that, of course,
9 soundproofing you've heard already isn't enough, but
10 I think one of the most important things that we can
11 recognize from this whole issue is the fact that this
12 is one of the few times that you've seen all of the
13 communities working together, and I applaud all of
14 you for doing that. Thank you.
15 (Applause.)
16 MR. SCHNEIDER: I also would like to
17 announce to everyone that the next Round Table
18 meeting is July 11th, at The Proud Bird, the
19 5 o'clock noise committee and 7 o'clock general
20 meeting.
21 Thank you.
22 MR. SMITH: I am Cecil Smith.
23 To the council, the elected officials and
24 officials of Inglewood, and to this panel of experts:
25 Among the experts in particular, I have

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1 enjoyed what you've said, including the city
2 attorney. You spoke well. Attorneys, they are
3 accustomed to telling us what we want to hear, so we
4 wonder, what have you done wrong?

5 So congratulations for these experts here.
6 I like a lot that you said. You gave some good
7 reports. You have said this is going to be hard for
8 the Department of Airports to defend. I like that.

9 But there's one other thing here, and that
10 is that MOU that have been signed by a number or
11 majority of our elected officials. That is going to
12 be hard for us to defend. They are going to say, "We
13 don't have to."

14 There is too many loopholes in that MOU.
15 One councilperson, Councilperson Judy Dunlap, wrote
16 those. I read them. I read the MOU. I agree with
17 each one of them. And the first one of the myths
18 that she wrote threw it out into left field, which to
19 me, this one alone, plus the others, amounts to a
20 hold harmless letter.

21 The City of Inglewood, whatever you have to
22 do to us, you can expand it. I could be wrong now.
23 What is written and what you're saying is two
24 different things. It's so much that that MOU, what
25 it does not say, that's going to be hard to defend.

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1 it's presently set. So with that, please talk about
2 the expansion, if you will.

3 Mr. Douglas...

4 MR. DOUGLAS: I'm Roosevelt Douglas, 29
5 years a resident of Inglewood. I'm in the Third
6 District. All councilmen are my councilmen. My
7 immediate councilman, Third District, is Mr. Jose
8 Fernandez.

9 I want to say, they have written this
10 \$60 million master plan, and your pretty commission,
11 and in turn, they recruited the labor union, because
12 the union relies on them. That's a long contract,
13 and contracts mean money, and so the union are
14 fighting very hard to get this passed, because money
15 talks in any language.

16 And the union are very strong. They have
17 lots of members, and they have lots of pull with
18 lobbying their councilman, and so I don't feel that
19 the City of L.A. is going to walk away from
20 \$60 million that they already have put out.

21 Also, I'm very alarmed with the pollution.
22 We got so many different things these airplanes can
23 do -- expansion can do to us that's harmful, but the
24 most important one I think has been said already, is
25 the major health concern is the breathing problem.

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1 But you know something? I think we can.

2 We want to stop this expansion according to
3 environmental impact or justice system. Take it
4 someplace else. El Toro. They have the Marine base.
5 When I was in the Marines, they -- I was not in the
6 Marines. I was in the Navy. They flew big planes in
7 and out of there. Open it up. That is the next best
8 step.

9 But here, this MOU that have been signed,
10 that's going to be hard to defend. The damage is
11 already done.

12 MR. ROUZAN: Thank you, Mr. Smith.

13 MR. SMITH: But in spite of --

14 MR. ROUZAN: Thank you.

15 Just a moment, before you start Mr. Douglas.

16 Everybody must understand they have a right
17 to their opinion and to say what they have on their
18 mind and how they feel. However, as the audience
19 speaks, none these things are necessarily matters of
20 fact, and we will be very happy to address those at
21 another time.

22 The MOU is not an issue today. It does not
23 impact the expansion one iota. We will address that
24 at the end of the meeting. However, some of the
25 information you have may not be actually the case as

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1 I have a breathing problem, and it seem like
2 all my family and my block members have. And to hav
3 these added, heavy-duty planes, that's what I
4 remember stated here on the board, with the bad
5 planes, that's going to be detrimental.

6 And I want to state, we Inglewood citizens
7 have not begun to fight. And Mr. Radcliff, I think
8 you -- I think you -- I recommend as you stated here.
9 And I want you to know we are strong supporter of our
10 mayor, city council, city attorney, Mr. Rouzan, our
11 city administrator, and staff, along with the
12 president of No More L.A. Expansion.

13 He's a very hard worker, but we want him to
14 work along with our elected official, because our
15 elected official are the one have the expertise,
16 along with you all, sir, can get things done for us.

17 So along with our citizens, I say we're
18 going to work with you. And God bless you all, and
19 God bless Inglewood.

20 (Applause.)

21 MS. MINA: My name is Mina (unintelligible).
22 I live in Westchester. We own some property in
23 Inglewood. I'm a realtor, and the concern I have is
24 I think Inglewood should have advertised the EIR/VEIS
25 hearings. They were both held on the same day, same

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1 time, and no publicity was given to those hearings,
2 and people were not encouraged to submit their
3 comments.
4 I came here, and I asked somebody from the
5 mayor's office if I could pass out, just as a common
6 courtesy, the public comments form and an envelope
7 addressed to Jim Ritchie, where people can write down
8 their comments and mail them so that we have a lot of
9 negative comments about the expansion, and I was told
10 that I cannot pass out any of these forms.
11 I'm not sure how many people here are aware
12 that they should write down their comments and mail
13 them or give them out to you, how many people and
14 what kind of comments they need to make.
15 They need to make comments on the regional
16 solution. We need El Toro to be expanded or
17 Palmdale, Ontario.
18 The traffic mitigation, we need to figure
19 out, or LAX needs to respond to us, how the traffic
20 is going to be mitigated on our freeways.
21 The noise level, what they are measuring is
22 just average noise level, not one-time noise level,
23 so they do not take into consideration the loud
24 single event noises.
25 The air pollution, because the EIR/EIS

1 MS. MINA: Yeah. I can go ahead and pass
2 out this one sheet, but then I've got to go back to
3 work. So if you want to, I can. Otherwise --
4 MS. DUNLAP: You may pass them out here.
5 MR. ROUZAN: This is a city function. We do
6 not to have any confusion about the information that
7 we're presenting, so please do not pass them out.
8 MS. DUNLAP: There's no confusion,
9 Mr. Rouzan.
10 MR. ROUZAN: The next speakers are Mr. Mike
11 Stevens, Cecil Karpio, Diane Zimbrano, Sanders, and
12 Francisco Coronai. Then to the left side would be
13 Ms. Donna Slaughter, Nancy Molten, Karen Gill, and
14 Mr. Rudy Green.
15 MR. STEVENS: My name is Mike Stevens. I'm
16 president of the L.A.X. Expansion No!
17 And in reference to working with our
18 government, we have attempted -- we had a meeting
19 with -- as a matter of fact, Congresswoman Maxine
20 Waters went with us to meet with Mayor Roosevelt Dorn
21 and the city manager, and we asked -- there were
22 certain things that we asked for. The councilwoman
23 was with us on that. She supported us, and to no
24 avail. The City of Inglewood turned us down flat.
25 Things such as this.

1 predicts that the increased ground and air traffic
2 will result in increased emissions of all five
3 criteria pollutants.
4 The safety. Safety is a big issue. There
5 may be more accidents.
6 Cargo demand. LAWA is focusing its
7 expansion to meet projected cargo demand, and that is
8 going to affect the surrounding area for
9 distribution, heavy shipping, warehousing, high
10 trucking and cargo traffic.
11 So Mr. Mayor, if you have no objections, I
12 would like to pass out these forms and envelopes,
13 which people can take home and write their comments,
14 and make sure that they are submitted before
15 July 25th.
16 It's a shame that we have only 911,
17 according to Jim Ritchie. People talk and talk and
18 talk, but what are they doing? Thank you.
19 MR. ROUZAN: Thank you.
20 To make sure there is no confusion about the
21 information that you want to pass out and what the
22 city's response is, we'd appreciate if you'd pass
23 them out in the back, outside the school as people
24 leave, not to disseminate them here in the audience,
25 please.

1 If you take a look at all the alternatives
2 over there, there's one thing that stands out and
3 that's "Other Major Improvements." One of them
4 happens to be the Ring Road. Now, as was stated
5 earlier, the Ring Road starts over here at the
6 405 freeway and Arbor Vitae.
7 It makes its way all the way down to the
8 beach, comes down to Imperial Highway, and comes back
9 east to the 105 freeway; virtually a complete circle,
10 when you include Sepulveda Boulevard here.
11 One of the things that this city should do
12 that the MOU prevents you from doing presently is
13 bringing forward a lawsuit, because if you take a
14 look right here, Mr. Mayor -- and we've shown you
15 this time and time again -- you see these little
16 arrows right here? Those represent planes. And that
17 means airport property is coming all the way to the
18 405 freeway.
19 Inglewood should have brought forward some
20 type of litigation, and should bring forward
21 litigation now. The problem is not Mr. Radcliff. As
22 a matter of fact, Mr. Vandenburg, I believe your name
23 is, he addressed that issue to a certain point. The
24 point being this, is that you're dictating to them,
25 the way I'm getting it, what they need to do.

1 Now, the bottom line is this: What do we
2 need to do? We need to send a clear and sound and
3 solid message that we are opposed to the Arbor Vitae
4 interchange, which is here. We also need to bring
5 forward legal action, whether as a form of an
6 injunction.

7 This yellow area here represents Manchester
8 Square. This is going to bring the airport all the
9 way to the 405 freeway. This city could take issue
10 with this, could take legal action. You need to turn
11 loose Mr. Radcliff and Mr. Vandenburg and let them do
12 what they do best.

13 You have grounds for it, because LAX cannot,
14 cannot, spend PFC money except on airport property.
15 That's why they're acquiring Manchester Square. They
16 have to complete that Ring Road. The only area
17 that's left to complete is on Manchester Square
18 property, which is between Airport Boulevard and the
19 405 freeway.

20 Now, the funny thing is, as Mr. Vandenburg
21 alluded to, they take for granted that they have
22 already acquired this property. That's where
23 Inglewood has to step in and stop them now.

24 Now, last month they turned over all
25 streets, all thoroughfares, over to LAX. That helped

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1 will continue.

2 Thank you.

3 (Applause.)

4 CECIL KARPIO: Good afternoon. My name is
5 Cecii Karpio. I'm from District Two, and I have a
6 question that I need answered, please.

7 On the 37-page letter from Mr. Dickerson to
8 Mr. Ritchie, on item No. 12, where it has to do with
9 comments by the South Bay Cities COG are incorporated
10 by reference, I spent all night trying to -- I'm
11 sorry I'm slow in getting up to speed, but what I
12 need is that reference, the comments by the South Bay
13 Cities COG.

14 I don't have it in my copy of the comments,
15 but I was hoping I'd be able to review that, and I
16 couldn't find it anywhere on either the South Bay
17 COG's website or the City of Inglewood's website, and
18 that's really important for me to review, especially
19 under considerations of the South Bay Cities COG's --
20 South Bay Cities coastal corridor transportation
21 study, which does uphold and advance Arbor Vitae
22 Interchange, and that Arbor Vitae Interchange has
23 been pulled by SCAG.

24 And I hope to see that the South Bay COG
25 comments as well take into consideration the fact

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1 LAX. Where we're going to stop LAX -- without the
2 land, they can't expand. If you look at the plan,
3 this one swatch of land is primarily the addition of
4 land. Everything else is a rearrangement. We have
5 to hit them where it hurts.

6 Now, last we went to SCAG, we were
7 successful at keeping them at 78 million annual
8 passengers -- the residents of Inglewood,
9 Westchester, El Segundo -- and also have the Arbor
10 Vitae project pulled as far as funding, which is what
11 Mr. Vandenburg referred to.

12 But this City of Inglewood still supports
13 the Arbor Vitae Interchange. We have to have that
14 project pulled. We have to change our position on it
15 as a city. We have to bring forward litigation in
16 reference to Manchester Square, and the Arbor Vitae
17 Interchange project, in order to be successful as far
18 as stopping not only expansion, but also incremental
19 expansion, because after it's all over, said and
20 done --

21 MR. ROUZAN: Thank you, Mr. Stevens.

22 MR. STEVENS: -- once the EIR has been
23 defeated --

24 MR. ROUZAN: Thank you, Mr. Stevens.

25 MR. STEVENS: -- that incremental expansion

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1 that Arbor Vitae does support LAX expansion. But
2 yes, it is in the South Bay Cities coastal corridor
3 transportation study, which came out January 2001,
4 and which the City of Inglewood is a member.

5 As to the discussion of avigation easements,
6 how does the El Segundo -- I'm sorry I'm not pulled
7 together here. How does the El Segundo findings,
8 where the judge said it is illegal to ask for
9 avigation easements in return for sound insulation,
10 how does that play into this whole thing?

11 And as to the memorandum of understanding, I
12 am a little bit confused, or I don't understand.
13 What happens if Inglewood does have to go into
14 litigation? We hope that doesn't happen. It looks
15 like it won't because of the way the EIR/EIS was put
16 together, but what happens if we do have to go to
17 litigation? I really want to hear a comprehensive
18 discussion of the effects of the MOU.

19 Thank you.

20 MR. ROUZAN: Thank you, Mrs. Karpio.

21 MS. ZIMBRANO: Good afternoon.

22 To the panel members who joined us today, I
23 want to say thank you. For the limited time -- I
24 think we hired you about a month and a half, two
25 months ago -- that you had, you've done a fairly

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1 extensive study. I only wish our city counsel had
2 chose to hire you much earlier, and you could have
3 done a far more comprehensive study.
4 THE REPORTER: What's your name?
5 MS. ZIMBRANO: My name is Diane Zimbrano. I
6 live in District Four.
7 Among the comments we heard today was that
8 everything's Mr. Riordan's fault, and I've got to
9 say, he couldn't have done it alone. He needed other
10 votes. Now, some mayors do believe they are God, but
11 I don't know that he's one of them.
12 I've got to suggest that as we go through
13 and blame another entity for our not taking action by
14 not suggesting to the residents of this community how
15 to go about responding to the environmental impact
16 report, by not presenting to them the video, the
17 visual applications, the Alternates A, B and C, we,
18 the residents of this community, have not had the
19 opportunity, except for a few members of this
20 community, doing that educational process.
21 We heard that approximately 57 homes, no
22 matter what alternative, would be eliminated, and
23 that's not very many. But that doesn't take into
24 consideration the people who have already been
25 eliminated. We call them Manchester Square's former

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1 Thank you.
2 (Applause.)
3 MS. SANDERS: Good afternoon. My name is
4 Pat Sanders. I'm a resident of the First District.
5 I want to say first, thank you to the mayor,
6 council people that are present; also a city
7 official, Mr. Rouzan, and our own city attorney,
8 Mr. Dickerson. You've done a very fine job in
9 presenting this.
10 Also, I want to say thank you to the panel.
11 Your reports and everything, you're really right on
12 target. I'm really glad everybody is on the same
13 page working with this. And I also want to say thank
14 you to Mike Stevens, because I wouldn't have been
15 able to understand half of what you have given us
16 this afternoon if it hadn't been working a year with
17 him, and also attending SCAG meetings and attending
18 MTA meetings.
19 I want to just say, everybody has kind of
20 hit on points that I do agree with, and I'm not going
21 to reiterate those, but I'm really concerned. The
22 people that are here, we're a small group. We need
23 to carry this information forward and tell everybody,
24 and along with our council, "Mr. Riordan" -- and he's
25 Mr. Riordan now -- "don't think that it's going to

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1 residents. That does not include the people who are
2 being kicked out of their homes, not dwelling units,
3 for the benefit of sound mitigation. We should have
4 taken a stand a long time ago.
5 Now, one of the people who had submitted a
6 speaker card earlier and had to leave, because she
7 thought she could actually come here and participate,
8 as opposed to the monologues, wanted me to point out
9 that no amount of someone else's economic development
10 is beneficial to those of us who suffer the
11 environmental injustices.
12 You see, over and over again, we hear it's
13 the other guy who hurts us, when, in reality,
14 frequently it's lack of information being provided to
15 this community so they can in fact speak on their
16 own.
17 I must say, thank you so much to the SCAG
18 members who voted just a couple days ago to request
19 78 or less MAP. I wish I could say it was our
20 councilperson and our representative was there to
21 push that through. In fact, he was absent.
22 But then again, that's the story of our
23 lives. And I hope that the people of LAWA pay
24 greater attention to us than I generally believe this
25 city's governmental officials do.

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1 end there.*
2 This has been a political thing. He's
3 courting Bush, or Bush is courting him, to take over
4 as governor. We're talking about big money. And we
5 have already seen they are, to me -- by this report,
6 which is an insult, they are going to ignore
7 Inglewood and what our importance is to this project,
8 just try to roll over us.
9 I still think that the citizens need to be
10 vigilant. I mean, let's face it. If Bush doesn't
11 know his own second man has one foot on a banana peel
12 and one foot on a skateboard with his heart issue,
13 then he's not going to care about us and our
14 environmental issues.
15 (Applause.)
16 MS. SANDERS: (Unintelligible) common sense.
17 So I really want to say that the citizens have got to
18 be involved, and really, let's be vigilant, and let's
19 work with this.
20 This excellent panel, please include more of
21 the citizens here. And we've got to still go out to
22 those SCAG meetings, we've still got to go to MTA
23 meetings, and we have to go to our council meetings
24 and really be supportive of our council. You have to
25 be supportive of us also.

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1 Thank you.
2 (Applause.)
3 MR. BRAMERA: Good afternoon. My name is
4 Francisco Bramera, and I live on Kelso Avenue.
5 First of all, when one has as a picture of
6 Los Angeles, there are many features concerned.
7 People want to come here because they want to go to
8 Disneyland. And luckily, I'm a small guy, but if I
9 was like Michael Jordan, probably I could touch the
10 airplanes that fly through the ceiling of my house.
11 But the unfortunate thing is that the
12 capitalists do not understand, what they are doing
13 here is probably a mistake, because when the Japanese
14 come here, they don't want to come and see Inglewood.
15 There is nothing to see here. The only thing that we
16 had has been taken downtown.
17 So the Japanese don't come here, the
18 foreigners don't come here, and most of the traffic
19 that come here goes to Disneyland, the house of the
20 stars and other places. We care about those people.
21 That is not our business to care. That should be
22 included here. We should care about the education of
23 our children that go to Inglewood High.
24 I can hear the airplanes. The kids that
25 come here can hear the airplanes. I and you probably

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1 have more responsibility to pay attention to the
2 teachers. They probably don't have as much. We are
3 forcing them to compete with less than proper places.
4 These buildings are not insulated against those
5 airplanes. And the airplanes are getting bigger and
6 noisier and are using more gas that is lethal to our
7 residents. We are killing people.
8 When I saw this issue, I came, because to me
9 what LAX means is Latins and Africans Being
10 Exterminated.
11 (Applause.)
12 MR. BRAMERA: Latins and Africans Being
13 Exterminated. Population of Latins, 46 percent;
14 population of African-American, 46 percent. The rest
15 probably don't count. But some people do care. I
16 saw that they care, too, because their children are
17 being annihilated.
18 We are killing people in gas chambers, which
19 takes only one minute, two minutes, five minutes. In
20 Inglewood, it takes ten years. From my own
21 experience, I can say that we are allowing these
22 people to kill our people. Their education is
23 suffering. And we are getting worse than some cities
24 in the world.
25 Bangkok is more polluted than LAX, but we

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1 are getting closer to them. Santiago, Chile, is more
2 polluted than Los Angeles. It's hard to believe that
3 there are cities that are more polluted than Los
4 Angeles to some Americans that come from Minnesota
5 that come from Virginia, and then let's talk about
6 the Canadians. Canadians think that we are --
7 MR. ROUZAN: Thank you, Francisco.
8 MR. BRAMERA: Thank you.
9 MRS. SLAUGHTER: Good afternoon, everyone.
10 Mayor Dorn, council that's present, Mr. Rouzan, and
11 attorney Dickerson, and our visiting panel, thank you
12 for being with us this morning, and now this
13 afternoon.
14 My name is Velma Slaughter, and I live in
15 District 1. I've been in District 1 for over 27
16 years. I have one son, and he was raised in
17 Inglewood, born in Inglewood. He's in the Navy now.
18 But what I would like to say is that I'm
19 totally opposed of the L.A. expansion, and I feel
20 that L.A. expansion would destroy Inglewood as a city
21 and community, and it will destroy lives.
22 A regional solution is the only answer --
23 El Toro, Palmdale and other airports. To take their
24 fair share of the responsibility would be great. I
25 feel, Inglewood, we have enough burden on us, with

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1 the air, the pollution, the traffic. We just can't
2 take it no more. It's detrimental to our health.
3 Stop victimizing the people of Inglewood.
4 Also, I would like to say, if the mayor and
5 some other people on the panel would have took this
6 position that they have taken I seen, I'm going to
7 say, in the last, say, five months, possibly, give
8 and take, and brought in the top guns, our panel, the
9 attorney, and had them working with us then instead
10 of now, we would not be going through what we're
11 going through.
12 And I really appreciate, Mayor Dorn, you and
13 the city council, for bringing -- and attorney
14 Dickerson, for bringing in the panel, giving us
15 information, but I -- I'm not claiming to be no
16 attorney, so I don't want nobody going back and
17 saying, "Velma Slaughter said she's an attorney."
18 But I do understand a lot of things that
19 they were talking about, and one person I have to
20 thank for that dearly that I have been working with
21 for over two years, and that's Mr. Mike Stevens.
22 (Applause.)
23 MRS. SLAUGHTER: I attend all the
24 meetings -- a lot of SCAG meetings, MTA meetings,
25 Caltrans meetings, Round Table meetings, all kind of

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1 meetings. And we went up to Lake Arrowhead Thursday.
2 We had a bus-load of people. We went up there, and
3 we had some good victories.
4 But the Arbor Vitae off-ramp that they want
5 to make, and the Ring Road going around the airport,
6 and also -- because they will tell you that that's
7 not tied into the expansion of LAX. They are lying
8 to you. Yes, it is to move traffic in and out.
9 So I just want to again thank all of you
10 guys, and especially thank Mike Stevens for all he
11 have done for us, because he's there for us and all
12 these meetings we go to to get educated on what's
13 going on.
14 MR. ROUZAN: Thank you, Mrs. Slaughter.
15 MRS. SLAUGHTER: Thank you.
16 MRS. MOLTAN: Hello. My name is Nancy
17 Moltan, and I'm a member of L.A.X. Expansion No!
18 Mike Stevens is the president, and I appreciate Mike
19 so well, because I wouldn't know what I know if it
20 wasn't for Mike, because you, Mayor, sold us out.
21 (Applause.)
22 MRS. MOLTAN: And I want everybody here to
23 know the mayor sold us out. And the reason why I
24 know, I was at his meeting when he said he signed the
25 contract. And he did. And I forgot what I was going

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1 And there were studies done in 1980 that
2 reported that children attending schools near LAX had
3 more difficulty in solving cognitive problems. There
4 was a study done in 1995, and I'm not sure which
5 airport area they did the study with, but there was a
6 study done that said children chronically exposed to
7 aircraft noise have significant deficits in reading.
8 And so if they can zero in on auditory
9 discrimination. I'd just like to briefly give a
10 definition. It's the brain's ability to tell the
11 difference between very similar sounds. An
12 impairment in auditory discrimination can interfere
13 with verbal comprehension and the development of
14 functional reading skills.
15 In addition, a serious weakness in auditory
16 discrimination in the classroom setting can be
17 confused with inattention as the child appears not to
18 have listened closely. So a lot of times, when we
19 are told maybe that our children aren't paying
20 attention, it may be because of the outside noise.
21 So it's not just insulating the buildings.
22 It's also what goes on when the children play
23 outside, outside of our homes, outside in the
24 schoolyard.
25 It also means that what happens is, you

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1 to say.
2 Oh. I want to know why that they can't just
3 build another airport and stop expanding that one.
4 It wasn't made when the blood was made. They can go
5 to the desert and find a place to build an airport,
6 and not bring all this mess in here on us.
7 (Applause.)
8 MS. GILL: Good afternoon. My name is Karen
9 Gill. I live in District 1.
10 I'd like to thank the mayor and the council
11 and Mr. Rouzan and Mr. Dickerson for putting together
12 this opportunity for the residents to come and speak.
13 I'd like to commend the panel for the work that they
14 did, and also in presenting it to me so that I can
15 understand the work that you did.
16 One of the comments that I noticed that LAWA
17 made was that there's no scientific evidence about
18 the connection between noise and learning. If I read
19 the comments correctly, they say that, and that's not
20 correct. There is scientific evidence, depending on
21 what they zero in on.
22 Many of those graduate students, we did work
23 with auditory discrimination and the effects on
24 learning, and so I know that they had studies then,
25 and they have to have even more available now.

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1 start to tune out the sounds. So you can realize
2 that when your neighbors come, people come to visit
3 you from outside of this area, and sometimes you're
4 sitting outside, and you don't pay attention to the
5 noise because you've become adjusted to it in some
6 cases, and your friends will count the planes.
7 That's auditory discrimination. What we have started
8 doing is tuning out the noise.
9 But when that happens at a lower level, the
10 children start tuning out what's happening in the
11 classroom. So even if the teacher stops, which is
12 disruptive, they are still not coming back in when
13 the teacher is ready to resume the conversation
14 again.
15 So I would like, if there's something
16 that -- I would like the city to push for L.A. to
17 actually show the scientific evidence that's there
18 that shows that there are detrimental effects.
19 Thank you.
20 MR. ROUZAN: Thank you, Ms. Gill.
21 (Applause.)
22 MR. GREEN: Yes. My name is Rudolph Green.
23 I live in the 1st District. I'm a member of the
24 mayor's advisory counsel.
25 I would like to speak on what Dr. Mattis

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1 spoke on earlier today about the environmental
2 studies that have not been done, especially in the
3 areas of health. There have been many things in the
4 area of health, such as the survey for the people
5 that live in and under the flight pattern of the LAX,
6 LAWA.

7 One of the things that the -- I've read the
8 executive -- most of the executive summary of the
9 EIS/EIR Report, and I found that there's many holes
10 in that report that needs to be addressed, and I'm
11 very pleased that this panel and the city council and
12 Mr. Rouzan has put together this panel to address
13 these issues, and they've done an excellent job, and
14 I applaud you for that.

15 One of the things that I would like to speak
16 on is if they could do some kind of study for those
17 areas of the people who live directly under the
18 flight path of the airport that would compare them
19 with other cities that are not in this area, such as
20 Torrance, Beverly Hills, any of those outlying cities
21 that don't have the same effects of the fallout and
22 pollution that we that live directly under the flight
23 pattern has.

24 I also think about what we have is an
25 inalienable right as life, liberty and pursuit of

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1 we're kind of running out of time, so I would ask
2 that you make your comments as brief as possible so
3 that we give the attorneys and the panel and the city
4 attorney an opportunity to respond to some of those
5 questions, and have the members of the council who
6 are still here, the mayor, to have some remarks
7 before we leave.

8 If we start over here on the left at this
9 time, to this area, Catherine Thompson, then Anna
10 Hernandez, Sonja Hernandez.

11 Any of those folks here now? Cathy? Anna?
12 Sonja?

13 Lopez? I can't see the first name. Lunelia
14 Lopez, Raymond Allen, Elaine Baker, Gene Morris,
15 Dorothy McKee, Sandra Roberts, Gary Farwell, Vanzoia
16 Duffy, Joan Crabtree, Silvia Resendez. I can't read
17 that one. Jose Hernandez, and Ralph Pray, La Verne
18 Mann, Milton -- can't read the last name -- and
19 Josephine Parenti.

20 MR. ALLEN: My name is Raymond Allen. I've
21 been living in Inglewood actually since 1983. You
22 can almost throw a rock and hit my house from here,
23 okay?

24 What I have to say basically is, you know,
25 my wife and I, we've been complaining for years about

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1 happiness, and all three of those things have been
2 taken from us by LAWA.

3 They've taken away life as I used to know
4 it. I've lived in the City of Inglewood for 31
5 years. I've lived on 2nd Avenue in Century Heights,
6 which is directly under the flight path of LAX.

7 They've taken away my liberties -- or they
8 have attempted to take away my liberties to have a
9 real enjoyable life and able to fight them on these
10 issues, but I'm going to continue to fight.

11 And the pursuit of happiness. Pursuit is
12 always searching for, looking for, hoping to have
13 happiness, and I cannot have the happiness that I
14 think that I'm entitled to, or anyone in this city is
15 entitled to, that they have taken away from us.

16 And as far as the mayor, people say that the
17 mayor has not fought this issue. I believe he's
18 diligently fought this issue on the expansion. And
19 please don't confuse the MOU and the expansion as
20 being one and the same.

21 Thank you.

22 (Applause.)

23 MR. ROUZAN: Thank you, Mr. Green.

24 As I said earlier, we started out with 40
25 cards, and we now have 60. So what's happening is

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1 the noise. And my wife even, you know, tried to
2 enter into the lottery to get our house insulated or
3 soundproofed, but so far we haven't heard anything,
4 okay? Nothing has happened.

5 My address is to the attorneys, okay? What
6 are we waiting for? You know what I mean? I mean
7 it's been years. I don't understand what attorneys
8 do. What do you guys do? Do you guys sue people, or
9 just -- we need to just sue people or sue this
10 airport, okay?

11 What are we waiting for? That's all I want
12 to know is what are we waiting for? And people need
13 to just stand up and stop taking this, okay? That's
14 the reality of it. We just need to stop taking this.

15 (Applause.)

16 MR. GREEN: I don't get it. We just waited
17 too long. Thank you.

18 MS. BARARDI: I'm Josephine Barardi. I've
19 lived in Inglewood since 1958.

20 A few years ago, I voted Yes to assess
21 myself about \$100 a year for more police protection,
22 and I have a question. Why is it that I, as a member
23 of L.A.X.E.NI, a faithful taxpayer of Inglewood since
24 1958, have been deprived of meeting at the police
25 community building near Manchester and Crenshaw? We

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1 used to meet there once a month, and all of a sudden
2 we couldn't meet there.
3 L.A.X.E.N! is a democratic grass-roots
4 organization which makes visible all our concerns at
5 the different government organizational meetings.
6 I've been to meetings at the Caltrans, the
7 Metropolitan Transit Authority, Southern California
8 Association of Governments, the Orange County Board
9 of Supervisors, the airport commissioner meeting in
10 Van Nuys, the Southern Regional Air Quality
11 Management District, the Los Angeles City Council
12 meetings, and the City of Inglewood Council meetings,
13 at which the city council walked out.
14 Now, all of this was because I was informed
15 of L.A.X.E.N! meetings, and I've been faithfully
16 attending them, and I think the effort to close off
17 the police community center there backfired, because
18 other doors have opened to us.
19 (Applause.)
20 MS. BARARDI: I'm interested in the Arbor
21 Vitae Interchange, because I live near Arbor Vitae
22 and La Cienega. That is the key to the Ring Road
23 around the airport, and it will place an unjust
24 burden on me and my neighbors. It will demolish
25 Inglewood homes, and according to a member of the

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1 school maintenance department, it will demolish Oak
2 Street school.
3 I feel that the City of Inglewood made it
4 easy for them to do this. Years ago Inglewood saw
5 that LAX was slowly demolishing Manchester Square by
6 offering 30 percent above market price to homeowners
7 for them to move away so that they could make that
8 area a cargo center and fall in line with the cargo
9 cult that I see.
10 Right now I enjoy perfect ventilation in my
11 home. When I open the windows, I get a breeze from
12 the west cooling off the house in the afternoon.
13 MR. ROUZAN: Thank you.
14 MS. BARARDI: Now I'm being offered a chance
15 to lock myself up.
16 MR. ROUZAN: Thank you.
17 (Applause.)
18 MRS. BAKER: Good afternoon, city council,
19 Mr. Rouzan, Mr. Dickerson, and esteemed panel.
20 It has been very gratifying to be here and
21 to hear your exchange regarding the issues that we
22 face here in Inglewood.
23 THE REPORTER: Your name, please? Your
24 name?
25 MRS. BAKER: I'm sorry. My name is Elaine

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1 Baker. I'm a resident, City of Inglewood,
2 District 4, approximately 27 years, under the flight
3 path.
4 I attended a meeting at the South Bay COG
5 where they had a panel such as yourself, and it seems
6 as though we all came up with the same conclusions.
7 It's gratifying to know that and to know where we're
8 going.
9 Also, I have attended a SCAG meeting whereas
10 it was noted that Orange County has spent in the sum
11 of \$40 million to fight an airport being placed in
12 their backyard. So in essence, they are saying, "We
13 don't want that nasty airport in our backyard. We
14 want those cheap tickets when we come to Los Angeles.
15 We want to wear out your roads, we want to pollute
16 your air, but we don't want it in our backyard."
17 Well, I would like to go on record as saying
18 that Inglewood should not be charged for the
19 disproportionate part of taking the impact on our
20 environment, our children's learning.
21 We talk in terms of school, and the young
22 lady that was here when she said about the children
23 not learning. Actually, that's true, because the
24 children are not sleeping at night where I live when
25 those planes go across -- the big cargo planes go

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1 across and rattle my house at 2 and 3 in the morning
2 and wake me from my sleep.
3 Also, when my granddaughter comes to visit
4 me, she is awakened from her sleep, so how can this
5 child wake up at 6 o'clock in the morning, at
6 7 o'clock in the morning, with the planes going over;
7 to the extent that you have to conclude a
8 conversation, tell the person that you're speaking
9 to, "Wait just a moment, as soon as the plane goes
10 over, we can continue our conversation"?
11 This is what is being imposed upon myself
12 and others that live under the flight path here in
13 Inglewood. So I say to you, I support any and every
14 effort that goes forth to fight further expansion in
15 the airport.
16 I do realize that the airport was here when
17 I moved here, but I guarantee you, when I moved here,
18 I hardly heard a plane at all. I don't know whether
19 they were flying at a higher altitude or whether they
20 were spacing the trips or whatever. It is nothing to
21 the magnitude that I'm confronted with today.
22 Thank you.
23 (Applause.)
24 MRS. ROBERTS: Good afternoon, members of
25 the city council, city administrator, Mr. Dickerson.

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1 That was a marvelous presentation. You did
2 a great job with the response to the EIR/EIS. Thank
3 you very much. And thank you, panelists, for a very
4 interesting afternoon.
5 My name is Sandra Roberts. I don't know if
6 I told you or not.
7 I'm opposed, of course, to LAX's expansion.
8 The EIS/EIR fails to address how to prevent aircraft
9 collisions over and near our city. It also fails to
10 propose how LAX intends to mitigate traffic and
11 aircraft emissions that are so detrimental to our
12 health. Nor the mitigation of noise pollution, which
13 causes psychological and neurological disorders has
14 not been addressed.
15 These factors negatively impact our
16 community 24 hours a day. LAX must not feel that we
17 are expendable just because we are a low-income
18 minority community. This is tantamount to genocide.
19 (Applause.)
20 MRS. MANN: Good afternoon, Mayor, council
21 members, Mr. Rouzan, panel. It was a fantastic
22 presentation.
23 I'm here today, hopefully, to put something
24 in that would save the children. I have an example,
25 my granddaughter, who just got graduated from

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1 Gallaudet University, which is a university for the
2 hearing impaired. She was born in Inglewood, and she
3 lived quite close to the airport. In taking her to
4 John Tracy Clinic at that time, they mentioned it's
5 possibly the airport, that the airplanes come in.
6 Upon hearing that, and not being sure
7 really, couldn't do anything at the time, she did
8 move to San Diego in a nice quiet neighborhood, but
9 at that time the damage was done.
10 You'd be surprised the children who are in
11 school who you think may be ignoring you, like we
12 thought that she was doing when she was young, but
13 she couldn't hear. She would do fine as long as she
14 could see our lips. We did not realize that she was
15 reading lips at the time, but she had severe hearing
16 loss.
17 So I'm hoping that this will come about
18 where maybe we can save children. Don't think they
19 are ignoring you. Have them tested. It's very
20 possible that their hearing loss is to the point
21 where they just don't know what's going on unless
22 they actually hear you.
23 Also, I bought my home 35 years ago, and I
24 bought it because of the backyard. It's quite large,
25 which most people on the avenues do have large yards.

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1 If I knew that this was going to happen, I would have
2 bought a condo if I had to stay in a house with
3 locked up windows. I mean, you know, give me a
4 break.
5 Do we actually have to just keep going, or
6 do we have to wait until there's really a catastrophe
7 of all those planes, and then something will be done
8 right away?
9 Thank you very much.
10 MR. PRAY: My name is Ralph Pray, and I'm a
11 resident of Inglewood for 38 years, and a retired FAA
12 employee, and I would look to speak to the issue of
13 safety as it relates to LAX current air traffic and
14 ground operations and exposure to terrorist attacks.
15 I'll repeat that. Safety as it relates to
16 LAX's current air traffic, ground operations and
17 exposure to terrorist attacks.
18 Fact No. 1: Today, LAX is high on the top
19 ten most dangerous airports for ground incursions.
20 That's a fact. It's also a fact that the FAA does
21 not know how to correct the problem of rising ground
22 incursions.
23 It's also a fact that LAX was the target for
24 the terrorist that was arrested recently in Seattle.
25 This international terrorist, his destination was Los

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1 Angeles. He carried incendiaries and bombs with him.
2 If he hadn't been arrested in Seattle, he would have
3 had LAX as his target.
4 Fact 4: Plans A, B and C all result in an
5 increase in air traffic and ground traffic.
6 Fact 5: This will cause LAX to have more
7 exposure to ground accidents and to terrorist
8 attacks.
9 Legally and politically, the only safe
10 course of action is a regional approach. Under the
11 LAX plans, we perish. With a divided regional plan,
12 we live.
13 Thank you.
14 MR. ROUZAN: Mr. Brown, you're up.
15 MR. BROWN: Milton Brown, District 3.
16 My major claim to fame to being here in
17 terms of noise mitigation -- as I like joke, but in
18 reality -- I'm the last Inglewood citizen that lives
19 the furthest west, and each plane that flies over
20 north runway, I'm about 200 feet underneath.
21 So nobody in this room is more impacted by
22 noise than me. I am familiar with each and every
23 runway pattern, how far out the heavies must go to
24 land. When Northwest makes a left, I know it all,
25 and I stand surviving it.

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1 Now, in this room I almost feel like the
2 battle of the Israelis and Palestinians in trying to
3 get a peace treaty. Everybody here is right. There
4 is, unfortunately, nobody wrong. But what appears to
5 be missing is, for a city that basically can only
6 earn, regretfully, 25 percent of what it takes to
7 support us, we seem to be tremendously indifferent to
8 the economic impact of having 75 to 80 million people
9 of the world coming within two miles of our area.

10 Of course, the regions want a piece of that.
11 They are out there with nothing. We've lost FedEx.
12 They've moved out there. We should be agreeing that
13 there is faults, but we should also be trying to
14 mitigate those faults with the pluses.

15 There must be pluses in this new growing
16 global economy. For one, why can we not see if we
17 can't have everything going over the ocean?

18 (Applause.)

19 MR. BROWN: With computerized technology,
20 the idea of a physical pilot actually landing is
21 about as arcane as Snoopy flying a (unintelligible)
22 plane. The so-called prevailing wind theory that
23 pilots prefer to only land coming into the wind can
24 be easily handled today by lengthening the runway,
25 and simply having the computer take over the plane

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1 Mel -- I can't pronounce the last name, but it's on
2 Midfield Avenue, 7502, Barbara first name. Alfredo,
3 John Bowman, Ms. Hartzell, Sandra Delahousen Bonds,
4 Yvonne Autry, James Irvine. Thank you.

5 MS. COREY: Elizabeth Corey, and I'm from
6 District 1.

7 I'm going to quote something from the Draft
8 Environmental Impact Report, Proposed Amendments to
9 the Merged Inglewood Redevelopment Project. That's
10 dated April 10th, 2001. This has to do with Lockheed
11 and the added area that's proposed. On page 2-9, the
12 following comments are made:

13 "With the expansion of LAX, this
14 area has become unsuitable for
15 residential use, since it is located
16 in an expanded pathway.

17 ...since it's expected that
18 eventually the area will be
19 developed with freight forwarding or
20 other airport-related uses that now
21 dominate the north Inglewood
22 Industrial Park area."

23 That's just what was stated in that draft
24 environmental impact report under that area.

25 My comment or question: Assuming the City

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1 somewhere in the ocean, and bring him in as gently as
2 he needs to be brought in. This way we get the
3 activity of a global expansion, and we also no longer
4 have to deny anybody using their backyard.

5 So all I ask is, we attempt to find some
6 kind of compromise. It should not be us versus them.
7 Yes, the airport probably took us for granted.

8 People like Mike Stevens, Judy, and other members of
9 the council did their job in making that not happen,
10 but we don't want to drive them away.

11 I'm not sure if these are the people to
12 create the solution. We need solutions too, not just
13 stopping. So let's open our minds to trying to --
14 yes, we should want to be partners with that airport,
15 respected partners. Because why? We need the money.
16 We spent \$260 million, and we can only earn seven.

17 And the man said, "Well, people are coming
18 here to go to Disneyland. Well, why can't we create
19 a place where people come here and come to us? So we
20 have a lot to do, but let's try to look for balance
21 in our argument.

22 Thank you.

23 (Applause.)

24 MR. ROUZAN: Ms. Corey, Garcia, Miriam
25 Garcia, Lillian Garcia, Jose Hernandez, Barbara

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1 of Inglewood knew that LAX was doing incremental
2 expansion, why didn't the city take aggressive action
3 against the airport years ago to change the course of
4 events?

5 Why are they saying that acquiring land and
6 more land that is required is a likelihood or the
7 possibility the airport or LAX will expand?

8 We're seeing land acquisition right here in
9 Inglewood. And what was just stated, for airport
10 use, seems to me that the city is saying one thing
11 and doing something else. Doesn't make sense here.

12 But the Arbor Vitae interchange. This is
13 the book from last year, Caltrans. Why didn't the
14 City of Inglewood take a stand against the Arbor
15 Vitae Interchange last year at the public hearing
16 that Caltrans held in July in Community Room A? This
17 book was given to all our elected officials, but I
18 believe only one elected official was at that
19 meeting.

20 To Mr. Vandenburg, Mr. Freytag and
21 Mr. Bures: Thank you for bringing to light
22 everything that Mike Stevens has been saying for the
23 past two to three years regarding --

24 (Applause.)

25 MS. COREY: -- incremental expansion,

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1 regarding Arbor Vitae Interchange, 405, and what the
2 city has not been doing.

3 We did meet, but they chose not to work with
4 us. I have attended many of the meetings that
5 previous speakers have mentioned, and it's just too
6 bad that our elected officials waited this long to
7 have this meeting --

8 MR. ROUZAN: Thank you --

9 MS. COREY: -- 23 days before we have to
10 turn in the written report.

11 MR. ROUZAN: Thank you.

12 MS. MELOUTAS: Hello. My name is Barbara
13 Meloutas. I'm a resident of Westchester.

14 Unfortunately, I was out of the country when
15 they had the FORAMA meeting, so I came here to get
16 some more information, and it seems like the lawyers
17 have done a good job.

18 I'd like to ask a question. If there has to
19 be a report before there's expansion, isn't
20 incremental expansion also illegal, if that's the
21 law? So should that be included in your remarks or
22 in your case, whatever you're going to do?

23 Secondly, I do think that economic solutions
24 are the only way to go, because money talks, so why
25 don't we charge the cars from Orange County and

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1 for a few years. I thank you for finally documenting
2 and presenting a study. Hopefully, you'll continue
3 to listen to us.

4 Just to drive this matter home, as I live
5 here, and I was educated in this community for the
6 majority of my education, high school, elementary
7 school, again, because of the bombardment -- it's
8 like being shell-shocked, okay? I can't think of
9 another word. And it's gotten worse. The children
10 suffer, the seniors suffer, everyone does. And I
11 know that, you know, some of the traffic can be
12 diverted to other airports, okay?

13 Just, again, to make this very clear,
14 symptoms of fibromyalgia, not just problems with
15 sleeping, but also serious chronic migraines,
16 headaches, birth defects, again, neurological damage,
17 damage to the immune system, which could cause an
18 increase in the advent of AIDS or other diseases,
19 okay, just because of the continuous bombardment, and
20 again, with the pollution of the air and the water
21 okay? It's very, very serious.

22 But you see, with this environmental
23 genocide, a lot of these symptoms go untreated, and
24 it just looks like as if we're just kind of an
25 apathetic, lazy, slow, retarded, dysfunctional people

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1 outlying areas that come into our area? Why don't we
2 charge them a fee for using our airport?

3 (Applause.)

4 MS. MELOUTAS: The City of L.A. has to take
5 charge of the these kinds of fees, as one of the
6 lawyers mentioned about charging fees to airplanes
7 which are dirtier than planes that are cleaner.

8 I'm also concerned about the number of
9 responses Mr. Ritchie said he got. He said he only
10 got 911. I feel like, can we trust the wolf? I
11 don't know.

12 Who is looking at these things? Who is
13 counting the responses beside LAWA? Thank you for
14 what you offered us today, and I'm going to continue
15 to work with Mike Stevens.

16 Thank you.

17 MR. ROUZAN: Thank you.

18 MS. AUTRY: Good afternoon.

19 My name is Yvonne Michelle Autry. I've been
20 a resident of District No. 4 for about 25 of my 34
21 years, and I'd like to thank the panel for addressing
22 a lot of the issues that had been raised and the
23 concerns of the community in the last one or two
24 years, again reiterating or just restating a lot of
25 what Michael Stevens and a lot of us have been saying

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1 that become homeless, unemployed, and just kind of,
2 you know, the undesirable, people that just don't
3 want to work. Many of us cannot get up. As one of
4 the residents said, her child can't sleep.

5 Okay. Again, problems like asthma, symptoms
6 of asthma and bronchitis, problems with heart
7 palpitations, respiratory illness and infection,
8 because, you know, without oxygen, the body can't
9 heal itself. We can't live without oxygen too long.
10 At least you can't live a healthy life with a high
11 standard of living like a human being, okay?

12 Brain damage, not just for the children, but
13 people my age and seniors as well, from lack of
14 oxygen. Symptoms of attention deficit syndrome,
15 forgetfulness, symptoms of Alzheimers due to the lack
16 of oxygen. Brain damage, cellular deterioration
17 symptoms, in which case people are treated with
18 medication, when all they need is clean air and sound
19 insulation and clean water.

20 Hyperactivity, hypertension --

21 MR. ROUZAN: Thank you, Ms. Autry.

22 MS. AUTRY: Well, anyway, thank you very
23 much. I hope you'll...

24 (Applause.)

25 MR. ROUZAN: We have some keys that were

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1 found in the lobby. Somebody may miss their car
2 keys. It has "Saab" on it. So if you miss your car
3 keys, we will have them up here for you.

4 We've extended our time a little bit and
5 gone beyond it, and we're going to try to give the
6 city attorney and the other attorneys a few moments
7 to respond to some of the issues they can, so we'll
8 take the next 10 or 15 minutes to respond.

9 MR. DICKERSON: Thank you, Mr. Rouzan. We
10 hope to be done in less time than that.

11 Matt...

12 MR. BURES: The most important thing that I
13 want to respond to is a comment that actually I
14 believe is a misunderstanding about what Mr. Radcliff
15 said when he said, if you file a lawsuit, you've lost
16 already.

17 You have to remember that in a context. As
18 we've been listening here today, we've heard a number
19 of different opinions, some saying, "No way, no how,
20 no expansion," and others saying, "Well, wait a
21 second. If we do that, what happens to the
22 business?"

23 Mr. Radcliff's point was simply, when you
24 get to the point of filing a lawsuit in a given
25 context -- and this is not to say whether you should

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1 Mr. Springs's question about what we'd have the
2 community do.

3 If you'd like to write, write. At this
4 point that's the only thing that is really left open
5 to us, until such time as LAX takes the comments that
6 they shall receive, not only from us, but from other
7 communities, and evaluate.

8 The address is as follows: Los Angeles
9 World Airports, LAX Master Plan Office, Post Office
10 Box 92216, Los Angeles, California 90009-2216.

11 As an alternative, so I don't have to spend
12 time reading this again, all of you I think have in
13 your packets a copy of a letter that goes under my
14 signature to Jim Ritchie at Los Angeles Airport, and
15 you may use that same address if you wish to send
16 comments to Los Angeles Airport relative to the
17 matters today. So please, what is the community to
18 do? Write. And I encourage you to do so.

19 With respect to the question about the South
20 Bay Council of Governments' comments and our adopting
21 them by reference, my understanding -- and I might
22 need some help here, fellas -- is that they have not
23 yet been finalized.

24 Is that correct?

25 But when they are finalized, they will

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1 or should not, okay? That's not what I'm speaking
2 to.

3 When you get to the point that you are
4 filing a lawsuit, you have to have already loaded
5 your gun, pulled it, pointed it, cocked the trigger,
6 and you're pulling the trigger. There's nothing more
7 after that. Then it's in the judge's hands or the
8 jury's hands.

9 What he was speaking to is, if you get to
10 the point that you are filing a lawsuit, you have
11 lost already, you have lost in the court of
12 negotiation, you have lost in the court of community
13 involvement. That's what he was speaking to. Not
14 that you have a loser lawsuit, simply you have lost
15 in those avenues of opportunity. That's what he was
16 speaking to.

17 (Applause.)

18 MR. ROUZAN: Thank you, Matt.

19 A couple of other real quick points.

20 Mr. Springs asked, what is it that we would
21 like to have the community do? One of my last duties
22 for today is to give you the address to which we are
23 asking that if any of you have any written responses
24 further that you would like to send to LAX, I'd like
25 to give that to you. And this really goes to

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1 become a part of our response by our having referred
2 to them. I do not know whether the Council of
3 Governments is going to be putting their comments on
4 the website as we have. We will do everything that
5 we can to get copies of them, and make them available
6 through the clerk's office, or whatever, but I want
7 to respond to that.

8 And I think that's just about all that we
9 can say today.

10 With respect to the question about what are
11 we waiting for to sue, I regret to have to tell you
12 that there are certain procedural requirements that
13 we must comply with prior to our having -- in the law
14 we call --

15 There's a concept in the law called
16 ripeness, r-i-p-e-n-e-s-s, and a lawsuit is
17 considered to be ripe after all of the preliminaries
18 to the lawsuit have been exhausted. In many
19 instances, as this, we call this the exhaustion of
20 administrative remedies. Once all those remedies are
21 exhausted and you still do not have the relief that
22 you want, then your lawsuit is ripe, and you can file
23 it at that point.

24 Unfortunately, I understand -- I have not
25 lived in Inglewood. I do not live in Inglewood. I

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1 haven't lived here, and haven't had the privilege of
2 being your city attorney, until two and a half years
3 ago, and have become very well aware of the issues
4 and concerns that this community has since that time.

5 And I'm going to tell you that while I
6 understand that you have had all these concerns, as
7 it relates to the EIS/EIR, which is all that we're
8 here to talk about today, we're not even yet at a
9 point of ripeness for the filing of the lawsuit.

10 But I can assure you, if that time arises, I
11 am certain that the -- I know that the council will
12 be advised, and the council at that time will make a
13 determination as to whether further legal action
14 should indeed be taken. The best thing that I can
15 encourage you to do at this time is what I said a
16 moment or two ago, to please do write.

17 As a final comment, I do want to take this
18 one opportunity to say to you that I have been your
19 city attorney for the last two and a half years, and
20 I have never had an opportunity like this to say
21 before that it is a privilege to serve in that
22 capacity.

23 Undertaking this particular project has been
24 a mammoth, mammoth job. We're not done with it yet,
25 and we do appreciate all comments that you've brought

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1 say they will also air it Friday, July 6th, at
2 7:00 p.m., on Channel 35. So the entire broadcast
3 will be seen at that time.

4 I would also like to thank Bob Gilbert, from
5 LAX, who presented us with some of the documents that
6 we used to indict their plan. Also, we'd like to
7 thank the Inglewood Unified School District -- we've
8 gone over time with the use; Chuck Lomack, the stage
9 manager that's helping back here; as well as
10 Dr. Lowell Winston, the principal; and the Inglewood
11 staff, of course.

12 (Applause.)

13 MR. ROUZAN: I think, as you can see, the
14 city has assembled some of the best minds in this
15 area to address our issues, and truthfully,
16 considerable tax payers' money has gone into putting
17 this kind of program together. Great numbers of
18 funds are being expended to protect our city.
19 Perhaps we can recover some of this money through our
20 eloquent city attorney's office when this goes to
21 court.

22 But we will continue to keep you apprised of
23 what we are doing in this area, and I'm sure, at our
24 weekly council meetings, comments will be made by
25 council members, the mayor and staff, regarding our

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1 to us today, and we will certainly take them into
2 consideration and incorporate as much of them as we
3 can.

4 We are trying to make certain that all of
5 your written comments that have been submitted today
6 will also be sent with the response that the City of
7 Inglewood will send to LAX.

8 So I want to express to you my thanks to you
9 for having come and participated today, for actually,
10 and frankly, your words of encouragement, as we are
11 doing the utmost best that we can to try to present
12 to LAX, and whatever other legal authorities we need
13 to -- we are trying to present them in the best way
14 that we can so that your interests are best
15 protected.

16 Thank you again for coming.

17 And Mr. Rouzan...

18 (Applause.)

19 MR. ROUZAN: Thank you, Chuck.

20 A couple of comments before I ask the
21 councilwoman to have a few words, and then the mayor.

22 I just want to let you know that AT&T
23 Broadband Cable Channel 35 will air this meeting next
24 Wednesday -- terrible night, because it's July the
25 4th -- at 7:00 p.m. But they were gracious enough to

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1 progress. The city attorney's office will bring
2 forth, I'm sure, reports.

3 We will provide you with any information we
4 have. And as I said, the transcripts, the tapes, and
5 everything we've assembled today, will be available
6 for review in our library and city clerk's office,
7 and please feel free to call our offices to get any
8 information that we can assist you with.

9 At this time I would ask Councilwoman Judy
10 Dunlap to give some closing remarks.

11 (Applause.)

12 MS. DUNLAP: Thank you.

13 First, I'd like to state regarding -- make a
14 statement regarding my lower classman, Dr. Dale
15 Hattis. We both attended Morningside High School at
16 the same time. I graduated in 1962, he graduated in
17 1964.

18 I would like to say, at that time the
19 Inglewood Unified School District ranked in the top
20 10 percent of educational institutions in the State
21 of California. The State of California ranked number
22 one in the nation. We have a long way to go. There
23 were lot less planes flying over Inglewood in the
24 early '60s.

25 I would like to also state that the one

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1 hearing that we were allowed from the FAA and LAWA,
2 that was the public hearing held at the casino, which
3 was the official opportunity for residents of this
4 city to give comments. The FAA and LAWA has
5 advertised, as you know, as having offered three
6 public hearings. Indeed, I want the record to
7 reflect they had one public hearing in three places.
8 It's far different.

9 With regard to the comments from the public
10 on the MOU, there are many differences of opinion
11 here, up on this stage, as well as in the audience.
12 I agree with those in the audience that believe the
13 MOU has everything to do with expansion, and I
14 believe that you had a right to comment to that.

15 (Applause.)

16 MS. DUNLAP: And Congresswoman Maxine Waters
17 actually encouraged this body, the Inglewood City
18 Council, to not accept that MOU, because it was
19 laying the groundwork for LAX expansion; and her
20 attempts to block that were ignored by our city
21 council. Inglewood City Council passed it anyway.

22 I would like to comment with regard to
23 environmental justice. I don't think LAWA, Los
24 Angeles World Airport, even knows anything about
25 environmental justice. If they did, they would have

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1 MS. DUNLAP: And I'd like to end with a
2 question to the panel that has to do with our
3 submission, which is what this meeting is about, our
4 comments.

5 We have the 37-page summary at the
6 beginning, and then our booklet that we're submitting
7 is divided with a number of appendices, one of them
8 being, of course, the SCAG comments. Now, what is it
9 that we need to know that makes us believe that the
10 LAWA is going to comment on everything?

11 What requires them to comment to a section
12 which has been, say, one of your studies, if your
13 study is actually directed to us, if one reads it, as
14 opposed to just the 37 pages? Meaning, what is it
15 that we need to know that would make us believe
16 that they are actually going to respond to all of the
17 issues brought up and all of the appendices?

18 As well as the fact that even though we're
19 submitting to SCAG, what is it that we are presenting
20 that's saying these are also our questions in
21 addition to our questions?

22 I want to make sure that everything is
23 clearly covered and responded to. So if that could
24 be answered, I would really appreciate it.

25 Thank you.

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1 compensated us over the years for the impact they
2 have on us now.

3 (Applause.)

4 MS. DUNLAP: The current sound insulation
5 program going on in the City of Inglewood is for
6 damage now. It has nothing to do with the expansion.

7 (Applause.)

8 MS. DUNLAP: Plus, I believe that the fact
9 that our homes are valued from \$150,000 to, say,
10 \$250,000, when they should be \$300,000 to \$600,000.

11 (Applause.)

12 MS. DUNLAP: Environmental justice means
13 that they will begin to compensate our current
14 property owners for their loss of value over these
15 years. Then they can begin to talk about another
16 day.

17 (Applause.)

18 MS. DUNLAP: They also need to come into our
19 city and look over our health problems. Not only our
20 children, but our seniors, people who have lived here
21 for 30 years that are suffering, developing asthma in
22 their 70s, because they live under the flight path.
23 They need to start paying our medical bills today,
24 not tomorrow.

25 (Applause.)

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1 (Applause.)

2 MR. ROUZAN: For closing remarks now, we ask
3 the Honorable Roosevelt Dorn to address you.

4 (Applause.)

5 MAYOR DORN: First of all, I want to thank
6 the panel. I think you've done an outstanding job
7 today. I think that you have thoroughly and
8 completely informed those that are here, and I think
9 that those that see this on Channel 35 will be very
10 impressed with your answers and with our objections
11 to the EIR/EIS report.

12 Someone raised the issue as to why didn't we
13 do this earlier. We didn't do it earlier because the
14 report was not ready earlier. This meeting would
15 have meant nothing until the report was ready, until
16 the experts were ready to make their decisions.

17 Now, someone said, "Well, why wasn't it done
18 a long time ago?" It wasn't done a long time ago,
19 because the EIR and the EIS was not submitted to us
20 until January. That's the reason. You can't act on
21 something until you received it.

22 We received it in January, and we went out
23 and we hired experts to go over it, and you see the
24 results of studying 12,000 pages in that short period
25 of time. And it is a short period of time, and the

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1 only reason we got that much time is by lobbying the
2 city council, L.A. City Council, or lobbying the
3 Board of Supervisors and everyone else to have them
4 extend it for the six months rather than 30 days,
5 which is all they had to do by law, but we were able
6 to get them to extend it, the comment time, for six
7 months. So that's the approach that we have used.
8 As far as the lawsuit in regard to the ring
9 around the interchange: Now, first of all,
10 Mr. Kirkley is the one who made the motion to pull
11 the money for that, so why anyone would say that the
12 City of Inglewood is for that interchange is beyond
13 me. I don't understand that, when our city
14 councilman is the one that made the motion for the
15 money to be pulled from it.
16 That's a fact. The city council, we do not
17 and have not supported that circle around the
18 airport. Yes, I firmly believe it has everything to
19 do with an expansion. That's the reason we don't
20 support it.
21 (Applause.)
22 MAYOR DORN: The other issue is, clearly, we
23 are continuing to call upon the mayor of Los Angeles,
24 the mayor elect -- I guess, as of today or early
25 tomorrow, he will be the mayor -- Jimmy Hahn. We

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1 CERTIFICATE
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3
4
5 I, ALFRED J. LONG, Certified Shorthand
6 Reporter No. 2024 in and for the State of California,
7 do hereby certify:
8 That the meeting was taken down by me
9 stenographically and thereafter transcribed via
10 computer-aided transcription under my direction;
11 I further certify that I am neither counsel
12 for, nor related to, any party to said action, nor
13 interested in the outcome thereof.
14 IN WITNESS WHEREOF, I have hereunto
15 subscribed my name this 16th day of July 2001.
16
17
18
19
20
21
22 ALFRED J. LONG, CSR No. 2024
23
24
25

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1 will continue to call upon him.
2 I had an opportunity to meet with him. I
3 spoke with him at the National Mayors Conference in
4 Detroit. He was there. He again assured me that he
5 opposed the expansion, and that he certainly will
6 continue to work with Congresswoman Waters. He knows
7 she's opposed to it. He knows that I oppose it. I
8 told him we are both on the same page.
9 Therefore, with that, we believe that with
10 Jimmy Hahn opposing it, hopefully he will appoint
11 commissioners that will oppose the expansion. If
12 that occurs, we believe that that will kill it from
13 the word go. That's what we're hoping for.
14 If it doesn't, we will take the next step
15 when the lawsuit becomes ripe. You heard the city
16 attorney explain to you, when the lawsuit becomes
17 ripe, if that becomes necessary, we'll file a
18 lawsuit.
19 We thank all of you for coming. Tell your
20 neighbors to watch this so that they will better
21 understand what the issues are. And with that, God
22 bless you, and have a great afternoon.
23 (Applause.)
24 (At 3:26 p.m., the meeting was
25 adjourned.)

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Tracy Alan Arbaugh
8806 S. 2nd Avenue
Inglewood, CA 90305

July 3, 2001

Hilda Kennedy;

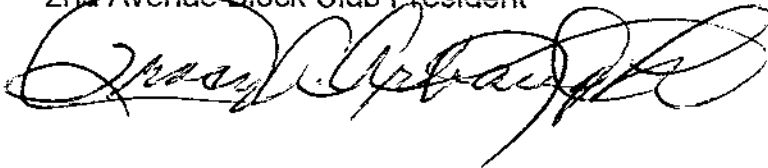
I am writing this letter to address some of my concerns regarding the proposed LAWA expansion. As a 26 year resident of the city of Inglewood and a retired senior citizen, I have noticed fallout and pollutants associated with the Los Angeles airport that I had not really been aware of, or paid particular attention to during my working years since I did not work in the area.

Lately I have noticed an increase in problems with my breathing. I am also starting to cough for no apparent reasons. These are problems that I have never had before. I am constantly being awakened by the airplane noise that we are forced to endure day and night. Carrying on a conversation in the outdoors is almost an impossibility.

We have very strange coatings on our flowers, shrubbery, and trees. I just recently stopped planting a vegetable garden because of the strange spots that appear on my tomatoes and leafy vegetables. The fallout on our vehicles is terrible. We are being forced to wipe our vehicles almost daily, have them washed weekly and have them detailed (polished) about 4 times per year. These are big investment items and even more so when you are a retired senior citizen.

The fallout and pollutants from the aircraft traffic is just the tip of the iceberg. The increased street traffic has a tremendous negative impact on the city. One can easily smell the pollutants in the air. During the summer months, it is impossible for one to remain inside with the windows closed, which means that we must endure these pollutants inside our homes also. The presently designed noise contours are a real joke. Our home is less than 75 feet outside of the noise contour and yet plane after plane flies directly over our residence. The environmental studies have not been in any way comprehensive, or the people responsible for them would know that they are meaningless.

Sincerely, Tracy Alan Arbaugh
2nd Avenue Block Club President

A handwritten signature in black ink, appearing to read 'Tracy Alan Arbaugh', written in a cursive style.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization):

Mary White

Date:

7-23-2001

Address:

3217 7th Ave

City:

Inglewood

State:

Calif

Zip Code:

90305

Telephone (Optional):

E-Mail (Optional):

Document:

Draft Master Plan

Draft EIS/EIR

Subsection (if applicable):

1-12

Number:

file by the above

Title:

7th Ave. ck check

Comments:

below

Office Use Only

Based on the belief that the proposed LAX expansion will cause: 1) increased noise and air pollution; 2) increased noise and air pollution; 3) increase and aggravate existing health effects; 4) a loss of personal comfort and property values due to the aggravation of existing health effects. In reviewing the draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) Plan), the following is evident:

Please send this to Charles make copy for my wife thank you

1. The dEIS/EIR fails to satisfy federal policy concerning:
 - a. It does not consider alternatives and does not evaluate impacts equitably and reduce risks to human health.
 - b. It unfairly and disproportionately burdens low income communities that lie directly under the primary arrival flight path with significant noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.)
2. The dEIS/EIR fails to satisfy state and federal law because:
 - a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations;
 - b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and
 - c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods.
3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered.
4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point.
5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law.
6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns.
7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion.
8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods.
9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts.
10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways.
11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact on construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing.
12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

c. Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

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Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): 7TH AVE 86 E GLOBE CLUB - BARBARA J. SMITH Date: 7-23-2001

Address: 8702 7th Ave

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): 323 753 5286 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: 1-12 Title: Below

Comments: *Office Use Only*

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc., and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because:
 - a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and
 - b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.)
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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

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 Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): The Home 86' E. 9th Block Club - Milton Smith Date: 7-23-2001

Address: 8702 TRL Ave

City: Inglewood, CA State: CA Zip Code: 90305

Telephone (Optional): 323 1535286 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable):
 Number: 1-12 Title: Area

Comments: Office Use Only

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12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

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Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): LLANICIA K. TOVAR Date: 7/24/01

Address: 8708 7th AVE

City: ING State: CA Zip Code: 90305

Telephone (Optional): 323 971-0148 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):

Number: 1-12 below Title:

Comments: Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution, 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc., and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because:
 - a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and
 - b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.)
2. The dEIS/EIR fails to satisfy state and federal law because:
 - a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations;
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8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods.
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12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): 7th Ave 86.5th Block Club ERMA SULLIVAN Date: 7-23-2001

Address: 8620 7th Ave

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: 1-12 below Title: _____

Comments: _____ Office Use Only

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): HARRIETT P MITCHELL Date: 7-23-01

Address: 8717 7TH AVE.

City: INGLEWOOD State: CA Zip Code: 90305

Telephone (Optional): 323-767-3168 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable):
Number: 1-12 Title: 7TH AVE 86TH BLOCK CLUB

Comments: Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:
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12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): EDDIE CHATE JR. Date: 7-23-01

Address: 8720 7TH AVE.

City: INGLEWOOD State: CALIF Zip Code: 90305

Telephone (Optional): 323-758-4980 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: ALL Below 11-12 Title: 7TH AVE 86TH Block Club

Comments:

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) for the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Office Use Only

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): PENNY, ANTHONY Date: 7-23-01

Address: 8704 - 7th Ave

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): (323) 751-3700 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: ALL Below 1-12 Title: 7th Ave 8615th Block Club

Comments:

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:
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c. Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): 86th Block Club BARBARA KING		Date: 7/23/01
Address: 8704-7th Ave		
City: Inglewood	State: CA	Zip Code: 90305
Telephone (Optional): (323) 753-5248	E-Mail (Optional):	

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: ALL BELOW (1-12) Title: 7th Ave 86th Block Club

Comments:

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition. In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) per the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): <u>Clifton E. Mitchell</u>		Date: <u>7-22-01</u>
Address: <u>8717 7th Ave</u>		
City: <u>Inglewood</u>	State: <u>CA</u>	Zip Code: <u>90301</u>
Telephone (Optional): <u>(323) 751-3168</u>	E-Mail (Optional):	
Document:	<input type="checkbox"/> Draft Master Plan	<input checked="" type="checkbox"/> Draft EIS/EIR

Subsection (if applicable):
 Number: SEE BELOW 1-12 Title: 7th Ave STEEM Block Club

Comments:

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition. In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) per the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Iona J. Hood Date: 7-23-01

Address: 8621 S. 7th. Ave.

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____
Number: 1-12 Title: 7th Ave 8650 block club

Comments:	Office Use Only
<p>Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:</p> <p>In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:</p> <ol style="list-style-type: none"> 1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because: <ol style="list-style-type: none"> a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.) 2. The dEIS/EIR fails to satisfy state and federal law because: <ol style="list-style-type: none"> a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations; b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods. 3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered. 4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point. 5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law. 6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns. 7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion. 8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods. 9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts. 10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways. 11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing. 12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods. <p>c: Jerome E. Horton, 51st Assembly District</p> <p>Attach additional sheets if necessary.</p>	

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Willie R. Head Date: 7-23-01

Address: 8621 S. Hh. Avenue

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____
Number: 1-12 Title: 7th Ave 86 EA Block Club

Comments: _____ Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:
In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because:
 - a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and
 - b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.)
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 - c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods.
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12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): *Bernice Hunter* Date: *7/23/01*

Address: *8705 7th Ave*

City: *Inglewood* State: *Calif.* Zip Code: *90305*

Telephone (Optional): E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: *1-12* Title: *2th Ave, Black Club*

Comments: *all above below* Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc., and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): *George Runtz* Date: *7/23/01*

Address: *8705 - 7th ave*

City: *Inglewood* State: *Calif.* Zip Code: *90305*

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: *1-12* Title: *7th ave, Block 4*

Comments: *All above below* Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:
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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

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AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): OCIAN TOVAR Date: 7-24-2001

Address: 870E 7th AVE

City: ING State: CA Zip Code: 90305

Telephone (Optional): 323 971-0148 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable): Number: Title:

Comments:	Office Use Only
<p>Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.,; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:</p> <ol style="list-style-type: none"> 1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because: <ol style="list-style-type: none"> a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.) 2. The dEIS/EIR fails to satisfy state and federal law because: <ol style="list-style-type: none"> a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations; b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods. 3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered. 4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point. 5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law. 6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns. 7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion. 8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods. 9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts. 10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways. 11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards, plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing. 12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods. <p>c: Jerome E. Horton, 51st Assembly District</p> <p>Attach additional sheets if necessary.</p>	

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AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): <i>Effie Loretha Chate</i>		Date: <i>7-24-01</i>
Address: <i>2720 7th Ave</i>		
City: <i>Inglewood</i>	State: <i>CA</i>	Zip Code: <i>90305</i>
Telephone (Optional):	E-Mail (Optional):	

Document: *1-12* Draft Master Plan Draft EIS/EIR

Subsection (If applicable):
Number: _____ Title: _____

Comments:

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution, 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.,; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): HARRISON WYLEY JR. Date: 7/25/2001

Address: 8716 S. 7TH AVE.

City: INGLEWOOD State: CA. Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: 1-12 Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____ Number: _____ Title: _____

Comments:	Office Use Only
<p>Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:</p> <ol style="list-style-type: none"> 1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because: <ol style="list-style-type: none"> a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.) 2. The dEIS/EIR fails to satisfy state and federal law because: <ol style="list-style-type: none"> a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations; b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods. 3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered. 4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point. 5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law. 6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns. 7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion. 8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods. 9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts. 10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways. 11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing. 12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods. <p>c. Jerome E. Horton, 51st Assembly District</p>	

Attach additional sheets if necessary.

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): THELMA WYLEY Date: 7/25/2001

Address: 8716 S. 7TH AVE.

City: INGLEWOOD State: CA. Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: 1-12 Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____ Number: _____ Title: _____

Comments: _____ Office Use Only

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

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AL00017

To: City of Inglewood
Hilda Kennedy-Public Information Officer

From: Geraldine Hollier-President of the 76th Street Block Club

Date: July 20th, 2001

Subject: Los Angeles World Airport Expansion Plan

My neighbors (THE INGLEWOOD/LOS ANGELES 76TH STREET BLOCKCLUB), my family and everyone I have spoken to in the City of Inglewood is against this LAX Expansion Plan . We understand that more people are taking to the air for transportation. This is why we feel other alternatives must be pursued in solving this ongoing air transportation issue.

These are but a few of our long list of concerns:

Noise Pollution-We are already subjected to the air traffic noise generated by the planes in it's pre-expansion state, we can only imagine what it will be like in the post expansion state.

Air Pollution -We are extremely sensitive on this issue. We do not feel that we are being told the truth about the current negative impact on the environment these planes are causing on all whoare in it's flight path today. This issue will not resolved by soundproofing-this is a silent killer and "Right To A Healthy Life Issue". We shiver at the thought of what it will be if the airport is allowed to expand at LAX.

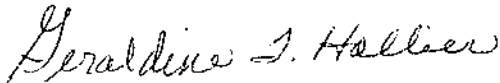
Increased Traffic Congestion In Inglewood and Neighboring Cities

Negatively Impacting Our Property Values

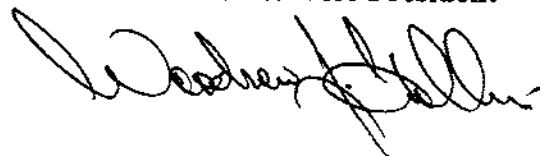
We are confident that common sense and sound judgement will prevail and you will heed our issues and concerns regarding this urgent matter. The welfare of the citizens of Inglewood and those who work or visit our city must always have priority in deciding what business dealings will be supported or rejected.

Thanks in advance for you support on this very sensitive and important issue. Feel free to contact us on 323 752-1915 if you need our assistance.

Geraldine T Hollier- President



Woodrow J. Hollier-Vice President



Cc Assemblymember-Jerome E.Horton
District Office
One Manchester Blvd
Inglewood, Ca.90306

AL00017

To Whom it may Concern,

7-24-01

As a resident and homeowner
in the city of Inglewood, I do
not support the LA X expansion.
It will lower our property value,
increase noise & air pollution as
well as other things.

KARL Spires
2402 W. 111TH ST
Inq, CA. 90303

Karl Spires
Block Captain

AL00017

Tracy Alan Arbaugh
8806 S. 2nd Avenue
Inglewood, CA 90305

July 3, 2001

Hilda Kennedy;

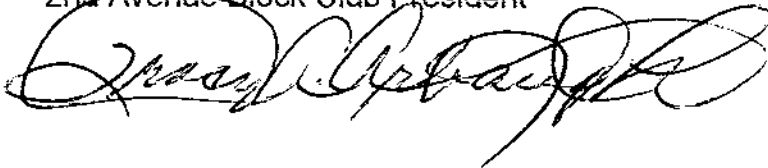
I am writing this letter to address some of my concerns regarding the proposed LAWA expansion. As a 26 year resident of the city of Inglewood and a retired senior citizen, I have noticed fallout and pollutants associated with the Los Angeles airport that I had not really been aware of, or paid particular attention to during my working years since I did not work in the area.

Lately I have noticed an increase in problems with my breathing. I am also starting to cough for no apparent reasons. These are problems that I have never had before. I am constantly being awakened by the airplane noise that we are forced to endure day and night. Carrying on a conversation in the outdoors is almost an impossibility.

We have very strange coatings on our flowers, shrubbery, and trees. I just recently stopped planting a vegetable garden because of the strange spots that appear on my tomatoes and leafy vegetables. The fallout on our vehicles is terrible. We are being forced to wipe our vehicles almost daily, have them washed weekly and have them detailed (polished) about 4 times per year. These are big investment items and even more so when you are a retired senior citizen.

The fallout and pollutants from the aircraft traffic is just the tip of the iceberg. The increased street traffic has a tremendous negative impact on the city. One can easily smell the pollutants in the air. During the summer months, it is impossible for one to remain inside with the windows closed, which means that we must endure these pollutants inside our homes also. The presently designed noise contours are a real joke. Our home is less than 75 feet outside of the noise contour and yet plane after plane flies directly over our residence. The environmental studies have not been in any way comprehensive, or the people responsible for them would know that they are meaningless.

Sincerely, Tracy Alan Arbaugh
2nd Avenue Block Club President

A handwritten signature in black ink, appearing to read "Tracy Alan Arbaugh". The signature is fluid and cursive, with a large initial "T" and "A".

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization):

Mary White

Date:

7-23-2001

Address:

5217 7th Ave

City:

Inglewood

State:

Calif

Zip Code:

90305

Telephone (Optional):

E-Mail (Optional):

Document:

Draft Master Plan

Draft EIS/EIR

Subsection (if applicable):

1-12

Number:

All by the above

Title:

7th Ave. ex. check

Comments:

below

Office Use Only

Based on the belief that the proposed LAX expansion will cause: 1) increased noise and air pollution; 2) increased and aggravate existing health effects; 3) increase and aggravate existing health effects, comfort and property values due to the aggravation of existing health effects; 4) a loss of personal property values due to the aggravation of existing health effects. In reviewing the draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the proposed Expansion Master Plan (the Plan), the following is evident:

Please send this to Charles make copy for my wife. Thanks!!!

1. The dEIS/EIR fails to satisfy federal policy concerning:
 - a. It does not consider alternatives and does not evaluate impacts equitably and reduce risks to human health.
 - b. It unfairly and disproportionately burdens low income communities that lie directly under the primary arrival flight path with significant noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.)
 - c. It does not consider alternatives and does not evaluate impacts equitably and reduce risks to human health.
2. The dEIS/EIR fails to satisfy state and federal law because:
 - a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations;
 - b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and
 - c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods.
3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered.
4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point.
5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law.
6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns.
7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion.
8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods.
9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts.
10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways.
11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing.
12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

c. Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization):

7TH AVE 86 E BLOCH CLUB - BARBARA J. SMITH

Date:

7-23-2001

Address:

8702 JU AVE

City:

Inglewood

State:

CA

Zip Code:

90305

Telephone (Optional):

323 753 5286

E-Mail (Optional):

Document:

Draft Master Plan

Draft EIS/EIR

Subsection (if applicable):

Number:

12
Below

Title:

Comments:

Office Use Only

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): The Home 86' E. 9th Block Club - Milton Smith Date: 7-23-2001

Address: 8702 TRL Ave

City: Inglewood, CA State: CA Zip Code: 90305

Telephone (Optional): 323 1535286 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable):
Number: 1-12 Title: Area

Comments: Office Use Only

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): LLANICIA K. TOVAR Date: 7/24/01

Address: 8708 7th AVE

City: IN6 State: CA Zip Code: 90305

Telephone (Optional): 323 971-0148 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: 1-12 below Title:

Comments: Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution, 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc., and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:
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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): 7th Ave 86.5th Block Club ERMA SULLIVAN Date: 7-23-2001

Address: 8620 7th Ave

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: 1-12 below Title: _____

Comments: Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition. In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): HARRIETT P MITCHELL Date: 7-23-01

Address: 8717 7TH AVE.

City: INGLEWOOD State: CA Zip Code: 90305

Telephone (Optional): 323-767-3168 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable):
Number: 1-12 Title: 7TH AVE 86TH BLOCK CLUB

Comments: Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:
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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): EDDIE CHATE JR. Date: 7-23-01

Address: 8720 7TH AVE.

City: INGLEWOOD State: CALIF Zip Code: 90305

Telephone (Optional): 323-758-4980 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: ALL Below 11-12 Title: 7TH AVE 86TH Block Club

Comments: Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) for the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): PENNY, ANTHONY Date: 7-23-01

Address: 8704 - 7th Ave

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): (323) 751-3700 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: ALL Below 1-12 Title: 7th Ave 8615th Block Club

Comments:

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:
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 - b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and
 - c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods.
3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered.
4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point.
5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law.
6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns.
7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion.
8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods.
9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts.
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11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of house values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing.
12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

c. Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): 86th Block Club BARBARA KING		Date: 7/23/01
Address: 8704-7th Ave		
City: Inglewood	State: CA	Zip Code: 90305
Telephone (Optional): (323) 753-5248	E-Mail (Optional):	

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: ALL BELOW (1-12) Title: 7th Ave 86th Block Club

Comments:

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition. In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) per the Expansion Master Plan (the Plan), the following is evident:

1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because:
 - a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and
 - b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.)
2. The dEIS/EIR fails to satisfy state and federal law because:
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 - b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and
 - c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods.
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4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point.
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12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): <u>Clifton E. Mitchell</u>		Date: <u>7-22-01</u>
Address: <u>8717 7th Ave</u>		
City: <u>Inglewood</u>	State: <u>CA</u>	Zip Code: <u>90301</u>
Telephone (Optional): <u>(323) 751-3168</u>	E-Mail (Optional):	
Document:	<input type="checkbox"/> Draft Master Plan	<input checked="" type="checkbox"/> Draft EIS/EIR

Subsection (if applicable):
 Number: SEE BELOW 1-12 Title: 7th Ave STEEM Block Club

Comments:

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition. In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) per the Expansion Master Plan (the Plan), the following is evident:

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 - It fails to create jobs in a manner beneficial to the impacted neighborhoods; and
 - It fails to balance the economic benefits with the negative impact on surrounding neighborhoods.
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- The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods.
- The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative effect of increasing existing negative impacts.
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- Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Iona J. Hood Date: 7-23-01

Address: 8621 S. 7th. Ave.

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____
Number: 1-12 Title: 7th Ave 8650 block club

Comments:	Office Use Only
<p>Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:</p> <p>In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:</p> <ol style="list-style-type: none"> 1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because: <ol style="list-style-type: none"> a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.) 2. The dEIS/EIR fails to satisfy state and federal law because: <ol style="list-style-type: none"> a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations; b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods. 3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered. 4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point. 5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law. 6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns. 7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion. 8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods. 9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts. 10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways. 11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing. 12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods. <p>c: Jerome E. Horton, 51st Assembly District</p> <p>Attach additional sheets if necessary.</p>	

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Willie R. Head Date: 7-23-01

Address: 8621 S. Hh. Avenue

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____
Number: 1-12 Title: 7th Ave 86 EA Block Club

Comments: _____ Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:
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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Bernice Hunter Date: 7/23/01

Address: 8705 7th Ave

City: Inglewood State: Calif. Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: 1-12 Title: 2th Ave, Black Club

Comments: all above below Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc., and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): *George Runtz* Date: *7/23/01*

Address: *8705 - 7th ave*

City: *Inglewood* State: *Calif.* Zip Code: *90305*

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: *1-12* Title: *7th ave, Block 4*

Comments: *All above below* Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition. In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization):

OCIAN TOVAR

Date:

7-24-2001

Address:

870E 7th AVE

City:

ING

State:

CA

Zip Code:

90305

Telephone (Optional):

323 971-0148

E-Mail (Optional):

Document:

Draft Master Plan

Draft EIS/EIR

Subsection (If applicable):

Number:

Title:

Comments:

Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.,; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): <i>Effie Lorena Chate</i>		Date: <i>7-24-01</i>
Address: <i>2720 7th Ave</i>		
City: <i>Inglewood</i>	State: <i>CA</i>	Zip Code: <i>90305</i>
Telephone (Optional):	E-Mail (Optional):	

Document: *1-12* Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: _____ Title: _____

Comments:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): HARRISON WYLEY JR. Date: 7/25/2001

Address: 8716 S. 7TH AVE.

City: INGLEWOOD State: CA. Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: 1-12 Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____ Number: _____ Title: _____

Comments:	Office Use Only
<p>Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:</p> <ol style="list-style-type: none"> 1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because: <ol style="list-style-type: none"> a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.) 2. The dEIS/EIR fails to satisfy state and federal law because: <ol style="list-style-type: none"> a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations; b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods. 3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered. 4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point. 5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law. 6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns. 7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion. 8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods. 9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts. 10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways. 11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing. 12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods. <p>c. Jerome E. Horton, 51st Assembly District</p>	

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): THELMA WYLEY Date: 7/25/2001

Address: 8716 S. 7TH AVE.

City: INGLEWOOD State: CA. Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: 1-12 Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____ Number: _____ Title: _____

Comments: _____ Office Use Only

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

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AL00017

To: City of Inglewood
Hilda Kennedy-Public Information Officer

From: Geraldine Hollier-President of the 76th Street Block Club

Date: July 20th, 2001

Subject: Los Angeles World Airport Expansion Plan

My neighbors (THE INGLEWOOD/LOS ANGELES 76TH STREET BLOCKCLUB), my family and everyone I have spoken to in the City of Inglewood is against this LAX Expansion Plan . We understand that more people are taking to the air for transportation. This is why we feel other alternatives must be pursued in solving this ongoing air transportation issue.

These are but a few of our long list of concerns:

Noise Pollution-We are already subjected to the air traffic noise generated by the planes in it's pre-expansion state, we can only imagine what it will be like in the post expansion state.

Air Pollution -We are extremely sensitive on this issue. We do not feel that we are being told the truth about the current negative impact on the environment these planes are causing on all whoare in it's flight path today. This issue will not resolved by soundproofing-this is a silent killer and "Right To A Healthy Life Issue". We shiver at the thought of what it will be if the airport is allowed to expand at LAX.

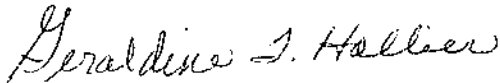
Increased Traffic Congestion In Inglewood and Neighboring Cities

Negatively Impacting Our Property Values

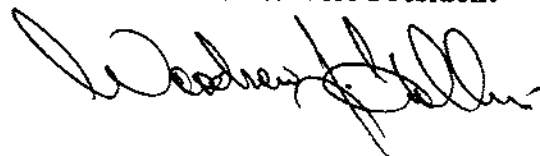
We are confident that common sense and sound judgement will prevail and you will heed our issues and concerns regarding this urgent matter. The welfare of the citizens of Inglewood and those who work or visit our city must always have priority in deciding what business dealings will be supported or rejected.

Thanks in advance for you support on this very sensitive and important issue. Feel free to contact us on 323 752-1915 if you need our assistance.

Geraldine T Hollier- President



Woodrow J. Hollier-Vice President



Cc Assemblymember-Jerome E.Horton
District Office
One Manchester Blvd
Inglewood, Ca.90306

AL00017

To Whom it may Concern,

7-24-01

As a resident and homeowner
in the city of Inglewood, I do
not support the LA X expansion.
It will lower our property value,
increase noise & air pollution as
well as other things.

KARL Spires
2402 W. 111TH ST
Inq, CA. 90303

Karl Spires
Block Captain

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Margaret Nicks / Core Hawk Eyes Date: 7/19/01

Address: 8914 So 7th Core

City: Inglewood State: CA Zip Code: 90302

Telephone (Optional): 323-911-2178 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable):
Number: Title:

Comments:	Office Use Only.
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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Patsy GARRETT		Date: 7/17/01
Address: 8907 7th AV		
City: Inglewood	State: CA	Zip Code: 90305
Telephone (Optional): 323 971-4450	E-Mail (Optional):	

Document: Draft Master Plan Draft EIS/EIR

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): WALTER GARRETT Date: 7/17/01

Address: 8907 7th AV

City: INGLEWOOD State: CA Zip Code: 90305

Telephone (Optional): 323 971-4450 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): GREGORY J. HAYS **Date:** 7-17-2001

Address: 8904 S. 7th Ave

City: INGLEWOOD **State:** Ca **Zip Code:** 90305

Telephone (Optional): **E-Mail (Optional):**

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable):

Number: **Title:**

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c: Jerome E. Horton, 51st Assembly District

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Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Alexia C. Hays		Date: 7/17/01
Address: 8904 7th ave		
City: Inglewood	State: Calif	Zip Code: 90305
Telephone (Optional):	E-Mail (Optional): LIA 2100 AOL.COM	
Document: <input type="checkbox"/> Draft Master Plan <input type="checkbox"/> Draft EIS/EIR		

Subsection (if applicable): **Title:**

Number: **Title:**

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Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Davion J. Hayes **Date:** 7-17-02

Address: 8904 S. 7th Ave

City: INGLEWOOD **State:** Ca **Zip Code:** 90305

Telephone (Optional): **E-Mail (Optional):**

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): **Number:** **Title:**

Comments: *Office Use Only*

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): James A. Spencer Date: 7-20-01

Address: 8400 TOWERWAY 541 W. Manchester

City: Inglewood State: CA Zip Code: 90304

Telephone (Optional): 213 994-8414 E-Mail (Optional):

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: Title:

Comments:	Office Use Only
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Attach additional sheets if necessary.

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AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): CLYDE HOGAN Date: 07-20-01

Address: 8910 So. 4th Ave.

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): LHHOGAN6@MSN.COM

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____
Number: _____ Title: _____

Comments:

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c/ Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): <i>MONIQUE HOGAN</i>		Date: <i>07-20-01</i>
Address: <i>8910 50th Ave</i>		
City: <i>Inglewood</i>	State: <i>CA</i>	Zip Code: <i>90305</i>
Telephone (Optional):	E-Mail (Optional): <i>LAHOGANS@MSN.COM</i>	
Document:	<input type="checkbox"/> Draft Master Plan	<input type="checkbox"/> Draft EIS/EIR

Subsection (if applicable):

Number: Title:

Comments:

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c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Evangeline V Ross Date: 7-20-01

Address: 8817 7th Ave

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____
Number: _____ Title: _____

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Daryl L. Ross Date: 7-19-01

Address: 8817 7th Avenue

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____
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Comments:	Office Use Only
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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Saralyx L Ross Date: 7-19-01

Address: 8817. 7th Ave

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____
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AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Julio Inayon Date: 7-19-01

Address: 8817. 7th Ave

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable): _____ Title: _____

Comments: _____ Office Use Only

Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution, 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc., and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:

1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because:
 - a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and
 - b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.)
2. The dEIS/EIR fails to satisfy state and federal law because:
 - a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations;
 - b. It fails to create jobs in a manner beneficial to the impacted neighborhoods, and
 - c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods.
3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered.
4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point.
5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law.
6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns.
7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion.
8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods.
9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts.
10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways.
11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing.
12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

c: Jerome E. Horton, 51st Assembly District

Attach additional sheets if necessary.



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): <i>Yvonne Perkins Grayson</i>		Date: <i>7-20-01</i>
Address: <i>8817. 7th Ave</i>		
City: <i>Inglewood</i>	State: <i>CA</i>	Zip Code: <i>90305</i>
Telephone (Optional):	E-Mail (Optional):	

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: _____ Title: _____

<p>Comments:</p> <p>Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:</p> <p>In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:</p> <ol style="list-style-type: none"> 1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because: <ol style="list-style-type: none"> a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.) 2. The dEIS/EIR fails to satisfy state and federal law because: <ol style="list-style-type: none"> a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations; b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods. 3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered. 4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point. 5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law. 6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns. 7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion. 8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods. 9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts. 10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways. 11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing. 12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods. <p>c: Jerome E. Horton, 51st Assembly District</p> <p>Attach additional sheets if necessary.</p>	<p><i>Office Use Only</i></p>
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Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

AL00017



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): E. J. Winston Date: 7-20-01

Address: 8817. 7th Ave.

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): _____
Number: _____ Title: _____

Comments:	Office Use Only
<p>Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition:</p> <p>In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) per the Expansion Master Plan (the Plan), the following is evident:</p> <ol style="list-style-type: none"> The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because: <ol style="list-style-type: none"> It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.) The dEIS/EIR fails to satisfy state and federal law because: <ol style="list-style-type: none"> It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations; It fails to create jobs in a manner beneficial to the impacted neighborhoods; and It fails to balance the economic benefits with the negative impact on surrounding neighborhoods. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise, especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods. <p>c: Jerome E. Horton, 51st Assembly District</p> <p>Attach additional sheets if necessary.</p>	

Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Marcus E. Perkins Date: 7-20-01

Address: 8817 7th Ave

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): _____ E-Mail (Optional): _____

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable): _____
Number: _____ Title: _____

Comments:	Office Use Only
<p>Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition: In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:</p> <ol style="list-style-type: none"> 1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because: <ol style="list-style-type: none"> a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.) 2. The dEIS/EIR fails to satisfy state and federal law because: <ol style="list-style-type: none"> a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations; b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods. 3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered. 4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point. 5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law. 6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns. 7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion. 8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods. 9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts. 10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways. 11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing. 12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods. <p>c: Jerome E. Horton, 51st Assembly District</p>	

Attach additional sheets if necessary.

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization):		Date: 7-18-01
Address: Terri Spencer 8808 78th AV		
City: Inglewood	State: CA	Zip Code: 90305
Telephone (Optional): 323-718-0158	E-Mail (Optional): twstspn@hotmail.com	

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable):
Number: Title:

<p>Comments:</p> <p>Based on the belief that the proposed LAX expansion will cause 1) an increase in auto and air traffic, 2) increased noise and air pollution; 3) increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc., and 4) a loss of personal comfort and property values due to the aggravation of existing nuisances, the following comments are submitted in opposition. In reviewing the draft Environmental Impact Statement/Environmental Impact report (dEIS/EIR) pm the Expansion Master Plan (the Plan), the following is evident:</p> <ol style="list-style-type: none"> 1. The dEIS/EIR fails to satisfy federal policy concerning environmental justice and state law because: <ol style="list-style-type: none"> a. It does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health; and b. It unfairly and disproportionately burdens minority and low-income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.) 2. The dEIS/EIR fails to satisfy state and federal law because: <ol style="list-style-type: none"> a. It fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations; b. It fails to create jobs in a manner beneficial to the impacted neighborhoods; and c. It fails to balance the economic benefits with the negative impact on surrounding neighborhoods. 3. The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered. 4. The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point. 5. The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law. 6. The dEIS/EIR and Plan does not consider or factor time as a variable when assessing the added health risks, which result from increased passenger travel and traffic patterns. 7. The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion. 8. The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods. 9. The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, the dEIS/EIR should have taken into consideration the cumulative affect of increasing existing negative impacts. 10. The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways. 11. The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing. 12. Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods. <p>c. Jerome E. Horton, 51st Assembly District</p> <p>Attach additional sheets if necessary.</p>	<p>Office Use Only</p>
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Official comments on the Draft LAX Master Plan and/or Draft EIS/EIR must be received no later than July 25, 2001.

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JUL 25 2001

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ATTORNEY

P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Debra Holloway Date: July 6, 2001

Address: 9021 3rd Avenue

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): 323.756.2297 E-Mail (Optional): DebraHolloway@UCLAumni.net

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): Number: Title:

Comments:

I wish to express my extreme opposition to any expansion of the Los Angeles International Airport (LAX). I appreciate LAWA's efforts to address current problems of access and traffic congestion as presented in the LAX Master Plan. However, I must vehemently oppose LAX expansion on the grounds that it would subject my family and my fellow Inglewood residents to additional (and excessive) nuisance and environmental and economic harm.

It is true that LAX provides important transportation to the greater Los Angeles area. Yet it is unreasonable to further burden Inglewood residents with the additional environmental and economic detriment that will result from LAX expansion. Expansion will subject us to:

- Increased noise and pollution from additional automobile and airplane traffic
- Reduction in real estate values from additional noise, pollution and traffic congestion
- Increased health risks from prolonged exposure to airport related pollution
- Decreased quality of life from additional noise, pollution and traffic congestion

The LAX Master Plan proposes that expansion will alleviate the current congestion problems. The plan does not explain how less traffic will result from a larger airport. It is more likely that a larger airport will simply be a busier airport with more flights, noise, pollution and traffic congestion.

In addition, the EIR/EIS falls seriously short in demonstrating that LAWA gave due consideration to the negative impacts LAX expansion will have on surrounding communities, specifically the City of Inglewood. The baseline data used for much of the reported analysis does not provide accurate representation of the negative impacts of LAX current operations on Inglewood residents. Further, it is disconcerting that LAWA's plans for mitigating the egregious harm that LAX expansion will inflict on Inglewood residents is not explicitly defined in the report. Lastly, the EIR/EIS fails in many respects to comply with the requirements of CEQA or NEPA.

It is time to be fair in sharing the environmental and economic burdens of regional air transportation. I strongly urge LAWA to reconsider expanding LAX and instead urge them to seek more environmentally and economically fair alternatives to alleviate the current traffic congestion problems.

Attach additional sheets if necessary.

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Caro RANDALL LAW PA

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P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.

Name (First MI Last, or Organization): Steven C. Holloway Date: July 6, 2001

Address: 9021 3rd Avenue

City: Inglewood State: CA Zip Code: 90305

Telephone (Optional): 323.756.2297 E-Mail (Optional): SCH@Concentric.net

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable): Number: Title:

Comments: *Office Use Only*

I wish to express my extreme opposition to any expansion of the Los Angeles International Airport (LAX). I appreciate LAWA's efforts to address current problems of access and traffic congestion as presented in the LAX Master Plan. However, I must vehemently oppose LAX expansion on the grounds that it would subject my family and my fellow Inglewood residents to additional (and excessive) nuisance and environmental and economic harm.

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JUL 2001

P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Please print.
Name (First MI Last, or Organization): 3rd Avenue United Neighbors **Date:** July 6, 2001

Address: 9021 3rd Avenue

City: Inglewood **State:** CA **Zip Code:** 90305

Telephone (Optional): 323.756.2297 **E-Mail (Optional):** DebraHolloway@UCLAAlumni.net

Document: Draft Master Plan Draft EIS/EIR

Subsection (If applicable):
Number: **Title:**

Comments:	Office Use Only
<p>The members of the 3rd Avenue United Neighbors Block Club wish to express our extreme opposition to any expansion of the Los Angeles International Airport (LAX). We appreciate LAWA's efforts to address current problems of access and traffic congestion as presented in the LAX Master Plan. However, we must vehemently oppose LAX expansion on the grounds that it would subject my family and my fellow Inglewood residents to additional (and excessive) nuisance and environmental and economic harm.</p> <p>It is true that LAX provides important transportation to the greater Los Angeles area. Yet it is unreasonable to further burden Inglewood residents with the additional environmental and economic detriment that will result from LAX expansion. Expansion will subject us to:</p> <ul style="list-style-type: none"> • Increased noise and pollution from additional automobile and airplane traffic • Reduction in real estate values from additional noise, pollution and traffic congestion • Increased health risks from prolonged exposure to airport related pollution • Decreased quality of life from additional noise, pollution and traffic congestion <p>The LAX Master Plan proposes that expansion will alleviate the current congestion problems. The plan does not explain how less traffic will result from a larger airport. It is more likely that a larger airport will simply be a busier airport with more flights, noise, pollution and traffic congestion.</p> <p>In addition, the EIR/EIS falls seriously short in demonstrating that LAWA gave due consideration to the negative impacts LAX expansion will have on surrounding communities, specifically the City of Inglewood. The baseline data used for much of the reported analysis does not provide accurate representation of the negative impacts of LAX current operations on Inglewood residents. Further, it is disconcerting that LAWA's plans for mitigating the egregious harm that LAX expansion will inflict on Inglewood residents is not explicitly defined in the report. Lastly, the EIR/EIS fails in many respects to comply with the requirements of CEQA or NEPA.</p> <p>It is time to be fair in sharing the environmental and economic burdens of regional air transportation. I strongly urge LAWA to reconsider expanding LAX and instead urge them to seek more environmentally and economically fair alternatives to alleviate the current traffic congestion problems.</p>	

Attaching photos if necessary.

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See Reverse for CC

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JUL 25 2001

Mrs. Clarence Long
2408 1/2 W. 85th St. ATTORNEY
Inglewood, CA 90305-1816

July 22, 2001
Mr. Jim Ritchie
Deputy Executive Director Long Range Planning
Los Angeles World Airports
LAX Master Plan Office
P. O. Box 92216
Los Angeles, Ca 90009-2216

Draft: EIR/EIS

I am a 61-year old, black, female, 21-year resident of Inglewood.

There are already far too many planes flying over and near my residence. They fly over 24 hours a day.

I will continue to call the Noise Abatement

Council District I is the noise contour.

New to some issues.

Noise Pollution

Soundproofing is a quiet fix.
People have to come outdoors.

Single event noise levels must be recorded.
The community level discounts and minimizes

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very noisy aircraft.

Planes are flying lower and louder. It sounds like the roof is being torn off. I am under siege. I feel like they are executing military maneuvers and will attack at any moment.

Now, more than ever before, my phone conversations and TV reception are disrupted.

What are the cumulative health effects of repeated, chronic exposure to loud noises from aircraft over a 20-year period?

Air Pollution

Large diesel trucks and jumbo jets will be spewing 4 tons of airborne pollutants daily on Inglewood and surrounding area residents.

These emissions contain at least 5 known carcinogens. Skin cancer, lung cancer, asthma, and other respiratory ailments will be the inevitable result.

Airport employees are cancer victims.

Resident Population

The EIR and EIS assume "NO GROWTH." The opposite is true. The South Bay and South Central L.A. are experiencing growth by leaps and bounds.

Your report must address the obvious increase of ailments listed above in a rapidly growing population.

Q07g

7-22-61

Page 3

- 3 -

Infrastructure

Our streets cannot handle the increased weight of more heavy vehicles.

Economic Justice

The economic benefits to Inglewood are trivial. There is no justice. There is "just us."

Alternatives A, B, C, D

"None of the above."

Other Alternatives

LAWA owns Ontario and Palmdale Airports. Include them in your plans

Most Viable Alternative

Ed Lora is a well-reasoned and supremely practical answer to any expansion scenario.

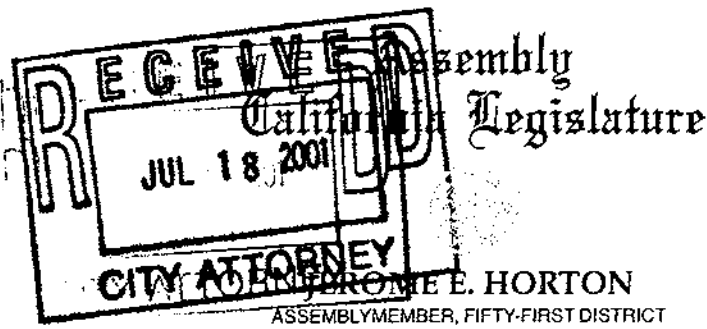
Thank you for your kind attention.

Sincerely

Clarene Long

AL00017

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0051
(916) 319-2051
FAX (916) 319-2151
DISTRICT OFFICE
ONE MANCHESTER BLVD.
P.O. BOX 6500
INGLEWOOD, CA 90306
(310) 412-6400
FAX (310) 412-6354



COMMITTEES:
BUDGET SUBCOMMITTEE #2
ELECTIONS, REAPPORTIONMENT
& CONSTITUTIONAL AMENDMENTS
GOVERNMENTAL ORGANIZATION
INSURANCE
RULES
SELECT COMMITTEE ON THE
CALIFORNIA HORSE RACING
INDUSTRY, CHAIR
SELECT COMMITTEE ON
COMMUNITY COLLEGES/
SCHOOL TO CAREER, CHAIR

City of Inglewood
Hilda Kennedy,
Public Information Officer
One Manchester Boulevard, 9th Floor
Inglewood Ca, 90301

July 17, 2001

Dear Decision Makers:

I am writing to voice my concerns about the proposed expansion of the Los Angeles Airport and the environmental impact it will have on surrounding neighborhoods. The law requires the Airport to submit an Environmental Impact Statement/Environmental Impact Report that describes the potential negative impact of their proposed expansion and provide a specific plan of action to mitigate such impacts.

Furthermore, the law requires public hearings and a reasonable public comment period before proceeding with any expansion effort. If the negative impacts are not accurately identified, and no remedial action plan is provided, the Airport should not be allowed to expand.

For various reasons, I continue to be opposed to the proposed Airport Master Expansion Plan and the current draft Environmental Impact Statement/Environmental Impact Report(dEIS/EIR). In my opinion, the current dEIS/EIR does not satisfy the legal requirements of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) in numerous areas. Personally, I know that the proposed expansion will have numerous detrimental environmental impacts on the City of Inglewood, its surrounding neighborhoods and my family and friends. Specifically the expansion will cause:

- an increase in auto and air traffic;
- increased noise pollution;
- increased air pollution;
- increase and aggravate existing health effects, i.e., asthma, hearing loss, sleep deprivation, etc.; and

- a loss of personal comfort and property values due to the aggravation of existing nuisances.

As you may recall, as an Inglewood City Councilman I authored an initiative to employ legal experts to provide the City with a detailed analysis of the EIS/EIR and advise the City on how to legally oppose the expansion of the Airport. In the midst of the shouting and accusations, I thought it prudent to plan for legal and political opposition. Well friends, the time has come for us to place our concerns about the expansion of the airport on record. This is an important step in the process.

This comment period is much like the lawsuit I filed against the Airport and United Airlines for incrementally trying to expand the Airport under the allusion of expanding Cargo storage space. Although we did not win this particular case, we were successful in legally stalling the construction and establishing that airlines share liability for negative environmental impacts. As far as I am concerned, this established an important precedence and will prove useful in future dealings with the Airport. In addition, the courts reaffirmed the need to exhaust all administrative procedures and remedies before suing. Thus, the reason we must share our concerns with the Los Angeles World Airport (LAWA), and the Federal Aviation Administration (FAA) via this formal public comment period and ask you to respond to our concerns within a reasonable period of time.

My experience with the Airport and its environmental issues has taught me the importance of legally crafting our statement. Many opponents to the expansion will have repeatedly expressed their opposition based on personal and business inconvenience and they are to be commended for their efforts. However, we must make sure that our positions have a sound legal basis and are properly noted and recorded. In this regard, I commend the city of Inglewood's mayor and city council members for continuing to pursue their legal options.

Although the Airport Master Plan and the dEIS/EIR attempt to address these anticipated environmental impacts and personal inconveniences, they are insufficient and need to be revised to insure our neighborhoods stay safe and environmentally sound. In reviewing the dEIS/EIR the following is evident:

- (1.) The dEIR/EIS fails to satisfy federal policy concerning environmental justice and state law because:
 - (a.) it does not consider alternatives and other locations that would shift or distribute burdens of expansion more equitably and reduce risks to human health.
 - b) it unfairly and disproportionately burdens minority and low income communities that lie directly under the primary arrival flight path with significant impacts of noise and toxic air emissions. (i.e. 25% of incoming flights occur directly over the city of Inglewood.)
- (2.) The dEIS/EIR fails to satisfy state and federal law because:
 - a.) it fails to disclose the economic gain of the Airport as a result of the expansion at the expense of the surrounding low income populations;
 - b.) it fails to create jobs in a manner beneficial to the impacted neighborhoods; and
 - c.) if fails to balance the economic benefits with the negative impact on surrounding neighborhoods.

- (3.) The dEIS/EIR fails to satisfy existing law because alternatives to expansion have not been adequately explored or considered.
- (4.) The dEIS/EIR does not measure environmental impacts properly because it fails to use the current negative impact as a starting point.
- (5.) The dEIS/EIR fails to comply with Federal air quality regulations because it does not properly measure nor study toxic air pollutants or air emissions as required by law.
- (6.) The dEIS/EIR does not consider or factor time as a variable when assessing the added health risks which result from increased passenger travel and traffic patterns.
- (7.) The dEIS/EIR fails to have specific criteria when determining the specific health risks involved in the expansion.
- (8.) The dEIS/EIR fails to assess and consider the impact of air and noise emissions mitigation measures on surrounding neighborhoods.
- (9.) The dEIS/EIR fails to address the negative impact of current air traffic and the recurring damages caused by the Airport's failure to expeditiously mitigate the current negative impacts. With this in mind, I believe that the dEIR/EIS should have taken into consideration the cumulative affect of increasing existing negative impacts.
- (10.) The dEIS/EIR fails to properly analyze the traffic impact and propose an adequate mitigation plan, e.g., standing traffic on the surrounding freeways.

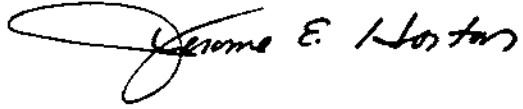
(11.) The dEIS/EIR fails to consider the economic impact on property and housing values as a result of the added noise; especially, the decrease in recreational value of local parks and residential back yards; plus the reluctance of certain businesses to locate within the flight pattern. It should be noted that while property values of homes under the flight path have increased, arguably, the marginal increase of home values in this area continue to suffer. This has a negative impact of construction of additional housing stock within the area and accordingly limits the growth of these communities. Additionally, the negative impact of the Airport limits the type, quantity and quality of homes that can be built in the area. This will serve to impede local communities' ability to comply with Federal Housing Regulations that require replacing housing.

(12.) Finally, the dEIS/EIR fails to consider the negative impact of increased noise and flights over local schools under the flight path, including interruptions of instructional and recreational periods.

In closing, I would encourage all of us to work together to present a unified front. I am pleased that the California League of Cities, Congresswoman Jane Harman and 12 Southern California Members of Congress have joined together to support an adequately developed plan. They are to be commended for their commitment to fairness in this process. I remain confident that, whereas, members of various communities have sought to protect their residents in different ways, with sometime competing agendas, they all share a common goal of opposing the proposed expansion. To that end, I strongly believe that working intelligently and collectively will yield positive results.

Therefore, I am submitting these comments to the Los Angeles World Airways and Federal Aviation Administration to incorporate into your response to the Airport Expansion Master Plan and the dEIS/EIR. Please do not hesitate to contact me at (310) 412-6400. I look forward to responding to any questions that you may have.

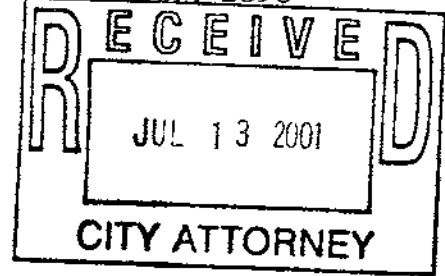
Sincerely,

A handwritten signature in black ink that reads "Jerome E. Horton". The signature is written in a cursive style with a large, looping initial "J" and a distinct "E" and "H".

JEROME E. HORTON
51st Assembly District

Leon E. Ferguson
9413 11th Avenue
Inglewood, CA 90305-2921

310-677-2898



City Of Inglewood
Hilda Kennedy, Public Information Officer
One Manchester Blvd. 9th Floor
Inglewood, CA 90301

July 2, 2001

Dear Hilda,

This letter is my reply to the dEIS/EIR on the expansion plan for the Los Angeles airport. (Note there is no capital on airport as it does not rate or deserve one.)

I am in full agreement with any and all written and oral oppositions to the Master Plan, the EIS and the EIR. As block captain for 128 homes (approximately 520 adults and children) in Inglewood. I can speak for my neighbors also, who, to a man/woman, also oppose any expansion plans and the EIS/EIR as it is written.

we are forever seeking relief for the planes that fly over our neighborhood now - so to imagine more low-flying jets on a daily basis is incomprehensible. The EIS/EIR fails to address, as it is impossible, the human toll attributable to years of aircraft flying over ones abode.

I will not go into great details about the EIS/EIR reports as the Comments Draft from the City of Inglewood as well as Assemblyman Horton's written comments on the EIS/EIR are quite comprehensive and say it very well - the EIS/EIR as proposed is seriously flawed both legally and environmentally. The only solution that will satisfy those living under the flight path is to scrap any expansion plans that impact our neighborhoods and take a regional approach to expansion so as to spread the devastation around.

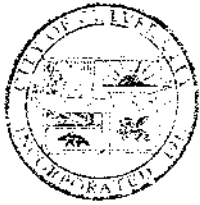
Yours truly,

A handwritten signature in black ink that reads "Leon E. Ferguson". The signature is fluid and cursive, with a long horizontal line extending to the right.

Leon E. Ferguson
Block Captain, Darby Park 10th & 11th Ave. Block Club

cc: Jerome Horton, Assemblyman

AL00017



CITY OF CULVER CITY

9770 CULVER BOULEVARD
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CITY HALL Tel. (310) 253-6000
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e.mail@culvercity.org

EDWARD M. WOLKOWITZ
MAYOR

CAROL A. GROSS
VICE MAYOR

COUNCIL MEMBERS
DAVID HAUPTMAN
ALAN B. CORLIN
STEVEN J. ROSE

July 18, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
Master Plan Office
P.O. Box 92216
Los Angeles, CA 90009-2216

[Certified with Return Receipt]

RE: Comments on the LAX Master Plan Environmental Impact Statement / Environmental Impact Report

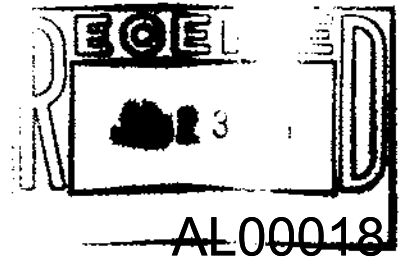
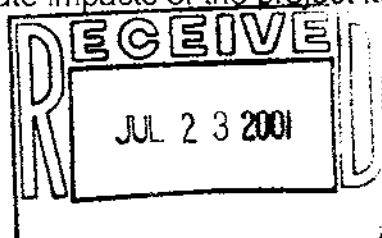
Dear Mr. Ritchie:

The City of Culver City has reviewed the LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) and submits this letter containing our comments. We are deeply concerned about the negative and unmitigated impacts the proposed LAX expansion will have on Culver City. Accordingly, the City of Culver City has adopted the attached City Council Resolution No. 2001-R068 that formally transmits our comment on the Draft EIS/EIR.

Overall, we believe the Draft EIS/EIR fails to adequately address potential significant impacts to Culver City caused by the proposed expansion of LAX including the proposed LAX Expressway along the I-405 Freeway. The Draft EIS/EIR and associated documents primarily focus on an analysis of impacts and proposed mitigation measures for the area immediately adjacent to the airport.

Due to the failure of the Draft EIS/EIR to adequately address impacts and propose mitigation measures for Culver City, despite our close proximity, we believe that the Los Angeles World Airports should find the Draft EIS/EIR inadequate for certification and require that it be revised and re-circulated to respond to the deficiencies we have identified in Resolution No. 2001-R068 and the extensive technical comments that is attached thereto as Exhibit A.

The City of Culver City will use all means necessary to insure that the environmental documents are adequate in their analysis of, and proposed mitigation of, potential impacts on our city. We will work to insure that our city is fully protected from any inappropriate impacts of the project itself.

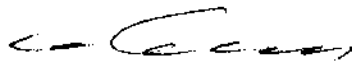


Mr. Jim Ritchie
Page 2 of 2
July 18, 2001

As part of this letter, a copy of Culver City City Council Resolution No. 98-R087, referenced in Resolution No. 2001-R068, calling for a regional airport for Southern California is attached. Further, we are also forwarding a copy of a letter dated June 11, 2001, from the Hillside Memorial Park and Mortuary located in Culver City containing their comments on the LAX Master Plan Draft EIS/EIR.

We look forward to your response to the comments and concerns of the City of Culver City.

Sincerely,



Edward M. Wolkowitz
Mayor, City of Culver City

- Attachments:
1. City Council Resolution No. 2001-R068 including Exhibit A
 2. City Council Resolution No. 98-R087, Calling for a Regional Airport Plan
 3. Hillside Memorial Park and Mortuary letter dated June 11, 2001

Copy: U.S. Congresswoman Diane Watson, 32nd Congressional District
Honorable Kevin Murray, Senator, 26th Senatorial District
Honorable Herb Wesson, Assembly Member, 47th Assembly District
Supervisor Yvonne Braithwaite Burke, LA County, 2nd District
Supervisor Don Knabe, LA County, 4th District
Honorable James Hahn, Mayor City of Los Angeles
Honorable Ruth Galanter, Los Angeles Council Member, Council District 6
David Kessler, Federal Aviation Administration
Tom Bridle, Policy Deputy for Congresswoman Jane Harman
City Council Members, City of Culver City
Barry Berlin, Executive Director, Hillside Memorial Park and Mortuary

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RESOLUTION NO. 2001-R068

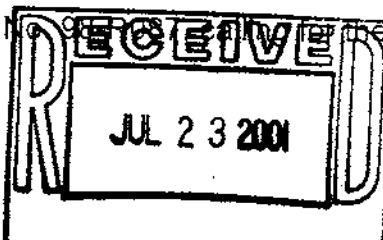
1
2 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
3 CULVER CITY, CALIFORNIA, RECOMMENDING THAT THE
4 LEAD AGENCIES FIND THE DRAFT ENVIRONMENTAL
5 IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT
6 FOR THE PROPOSED LAX MASTER PLAN INADEQUATE
7 FOR CERTIFICATION BECAUSE IT FAILS TO COMPLY WITH
8 THE REQUIREMENTS OF THE CALIFORNIA
9 ENVIRONMENTAL QUALITY ACT AND THE NATIONAL
10 ENVIRONMENTAL POLICY ACT.

11
12 WHEREAS, the City of Los Angeles Department of Airports has developed a
13 draft Master Plan for Los Angeles International Airport (LAX) which incorporates capacity
14 enhancements to enable the expansion of passenger activity from a current 60 million
15 passengers per year up to an expected 98 million passengers per year and its cargo
16 activity from its current 1.7 million tons per year to an expected 4.2 million tons per year
17 through the year 2015; and,

18
19 WHEREAS, LAX is located in close proximity, approximately two miles from
20 the boundaries of the City of Culver City, and the impacts of its operation are of critical
21 interest to the citizens of Culver City; and,

22
23 WHEREAS, on July 31, 1997, Culver City provided written comments to the
24 City of Los Angeles Department of Airports and the Federal Aviation Administration (FAA)
25 on the June 11, 1997, Notice of Preparation/Notice of Intent of a Draft Environmental
26 Impact Statement/Environmental Impact Report (Draft EIS/EIR), which in addition to other
27 comments, requested that issues related to traffic, air quality, overflight operations, and
28 regional context be analyzed in the environmental review document; and,

WHEREAS, on September 14, 1998, the City Council of the City of Culver City
approved and adopted Resolution No. 98-09 of the development of a Regional



2001-R068

AL00018

1 Airport Plan for Southern California that constrains LAX to operate within the capacity of its
2 existing facilities and promotes development of additional capacity at the many other
3 commercial airports in Southern California to serve the expanding air commerce market
4 place. As established in City Council Resolution No. 98-R087, the City's official position
5 regarding the proposed expansion is one of opposition to the LAX capacity expansion
6 beyond that which can be accommodated by existing LAX facilities, and support for
7 developing the capacity of other commercial airports within Southern California; and,

8 WHEREAS, the Los Angeles World Airports (LAWA) and the FAA prepared a
9 joint Draft EIS/EIR to address the potential environmental impacts caused by the proposed
10 LAX expansion, which was released for public review and comment on January 18, 2001;
11 and,
12

13 WHEREAS, the Draft EIS/EIR analyzes four project alternatives: 1) No
14 Action/No Project; 2) Alternative A, Additional runway to the north airfield, 3) Alternative B,
15 an additional runway to the south airfield, and 4) Alternative C, no additional runways but
16 reconfiguration of existing runways including either lengthening, widening, and relocating;
17 and,
18

19 WHEREAS, a City Staff Team, consisting of various City Departments as well
20 as a noise consultant and a traffic consultant hired by the City of Culver City, was
21 established to evaluate and comment on the adequacy of the Draft EIS/EIR in addressing
22 potential impacts to Culver City; and,
23

24 WHEREAS, the City Council of the City of Culver City, accepted public
25 comments and considered the Draft EIS/EIR at public meetings on May 29, 2001, and
26 June 25, 2001.
27

1 NOW, THEREFORE, the City Council of the City of Culver City, California,
2 DOES HEREBY RESOLVE as follows:

3 SECTION 1. The following key findings are hereby made by the City Council
4 of the City of Culver City. These findings are described more fully and augmented in
5 greater detail in "Exhibit A", which is attached to this Resolution.

6 1. The Draft EIS/EIR inadequately and inaccurately addresses the
7 substantial adverse environmental impacts potentially affecting the City of
8 Culver City. The Draft EIS/EIR is inadequate and inaccurate as an
9 informational document based on but not limited to the following issues:

10 a. Aircraft Overflight Noise: There are potential aircraft
11 overflight noise impacts from two new arrival paths and a new
12 departure path. A major problem with the Draft EIS/EIR regarding
13 aircraft noise is the lack of key data and detailed analysis of the
14 overflight noise impact to Culver City and other communities in close
15 proximity. The degree of impact cannot be determined because noise
16 levels and flight frequency information for aircraft overflights is not
17 provided in the Draft EIS/EIR.

18 b. Traffic: The Draft EIS/EIR is totally inadequate in
19 evaluating traffic impacts in the City of Culver City. Only one
20 intersection in Culver City was analyzed. The analysis should have
21 included other intersections within the radius of influence of the Airport
22 Expansion, to determine at which point in Culver City, impacts can be
23 mitigated to a to a level of insignificance, if possible. Assessment of
24
25
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1 additional significant intersections should have been included, all of
2 which currently are operating at unacceptable levels of service. Not
3 only is there a lack of acceptable analysis, the failure to address these
4 issues results in a failure to address potential mitigation measures
5 which might have the effect of reducing the levels of adverse impacts.

6 c. Air Pollution: The Draft EIS/EIR totally fails to evaluate
7 localized air pollution impacts on Culver City. No mitigation measures
8 are proposed for Culver City from increased air and mobile sources
9 from auto traffic, aircraft operations, construction, and in particular from
10 freight and cargo operations. Without this critical analysis, the Draft
11 EIS/EIR fails to comply with the minimum requirements of the California
12 Environmental Quality Act (CEQA) and the National Environmental
13 Policy Act (NEPA).
14

15 d. LAX Expressway Traffic: It is anticipated that there will be
16 more congestion on Culver City arterial streets and creation of
17 "congestion nodes" on the I-405 resulting from anticipated traffic friction,
18 as well as weaving impacts on the I-405 immediately north of SR-90
19 freeway as a result of the proposed Expressway. However, an
20 assessment of these impacts is completely absent from the Draft
21 EIS/EIR.
22

23 e. LAX Expressway Traffic Noise: There are potential
24 adverse impacts due to increased noise from vehicular traffic within
25 residential, park, and school properties located near Coolidge Avenue
26
27

1 and Culver Park Place. These noise-sensitive sites are located
2 abutting or adjacent to the alignment of the proposed Expressway.
3 However, no noise analysis, no noise measurements, and no mitigation
4 measures or sound barriers are proposed for these noise-sensitive
5 uses in Culver City.

6 f. LAX Expressway Construction Activities: Construction of
7 the Expressway is anticipated in Phase II of the Master Plan. The
8 document fails to analyze any cumulative construction impact on Culver
9 City from both the I-405 widening project and the proposed LAX
10 Expressway. The duration of the construction will be 10 years, from
11 2005 to 2015. Despite the long duration of the construction period,
12 there is inadequate analysis and no construction mitigation measures
13 proposed for the affected areas in Culver City.

14 g. LAX Expressway Land Use: Based on evaluation of the
15 proposed LAX Expressway, there are potential land use impacts to
16 residential, business, school, and park uses. The Draft EIS/EIR fails to
17 demonstrate that the proposed Expressway will be compatible with
18 certain sensitive receptor uses due to the lack of analysis and noise
19 mitigations proposed for areas in Culver City. Also, it is apparent from
20 Figure 3.1-7 of Appendix K, that some areas in Culver City will require
21 property acquisition with Expressway Alternative No. 3, particularly on
22 the east side of the I-405 Freeway, north of the SR-90/I405 freeway
23 interchange. However, the Draft EIS/EIR fails to provide adequate
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28

1 information, analysis, and mitigation measures regarding this matter.
2 Furthermore, there is also potential visual/shade and shadow/aesthetics
3 impacts from the placement of the elevated Expressway and column
4 supports in Culver City but no analysis or mitigation measures are
5 provided in the document.

6 h. Cumulative Impacts: The Draft EIS/EIR fails to
7 adequately analyze the cumulative impacts of other projects, which will
8 be under construction during the same time period as the proposed
9 expansion of LAX such as Playa Vista. For example, the cumulative
10 impacts of the LAX expansion along with the Playa Vista project,
11 including their cumulative construction impacts, would result in
12 significant adverse impacts to the I-405, Sepulveda Boulevard, and
13 other arterials, resulting in adverse impacts to local circulation and air
14 emissions.
15

16 i. Regional Context: The Draft EIS/EIR presumes that a
17 vast majority of the region's growth in air passenger and air cargo
18 demand will be directed to LAX. A number of commercially viable
19 airports in the Southern California area currently exist and are
20 underutilized relative to their capacity. A fully regional solution to this
21 air passenger and air cargo capacity has not been adequately
22 addressed in the Draft EIS/EIR.
23

24 j. NOP/NOI Comment Letter: In response to the NOP/NOI
25 to prepare the Draft EIS/EIR issued in June 1997, Culver City
26

1 requested in a letter dated July 31, 1997, that major issues and
2 concerns related to traffic, air quality, overflight operations, regional
3 context, and other subject areas impacting Culver City be analyzed in
4 the preparation of the Draft EIS/EIR. None or minimal analysis of the
5 issues the City requested to be analyzed are contained in the Draft
6 EIS/EIR. Further, Culver City's NOP/NOI comment letter is not
7 contained in Appendix A of the Draft EIS/EIR, where copies of written
8 comments from affected agencies are contained.
9

10 2. The magnitude of omissions in the Draft EIS/EIR is so extensive
11 that attached hereto as "Exhibit A" of this Resolution, are significant additional
12 comments which detail the failure of the lead agencies to adequately address
13 the complete array of adverse environmental impacts this project is anticipated
14 to have on Culver City.
15


16 SECTION 2. Pursuant to the foregoing recitation and findings, the City
17 Council of the City of Culver City, California, hereby:

18 1. Determines that the Draft EIS/EIR is substantially inadequate
19 and inaccurate for certification by the Lead Agencies and that a complete and
20 proper level of environmental data and analysis must be incorporated into the
21 Draft EIS/EIR to address the identified deficiencies.
22

23 2. Establishes that this Resolution, including attached Exhibit "A,"
24 constitutes the City of Culver City's formal position and comments on the Draft
25 EIS/EIR that was prepared for the proposed LAX Master Plan.
26
27
28


3. Directs and authorizes Staff to transmit the position and comments of the City of Culver City on the Draft EIS/EIR to LAWA and FAA.

APPROVED and ADOPTED this 25th day of June 2001.


EDWARD M. WOLKOWITZ, Mayor
City of Culver City, California by:
CAROL GROSS, VICE MAYOR

ATTEST:

APPROVED AS TO FORM:


TOM CRUNK
City Clerk by:
ELA VALLADARES, DEPUTY CITY CLERK


CAROL A. SCHWAB
City Attorney

RLAX

EXHIBIT A
CITY OF CULVER CITY RESOLUTION NO. 2001-R068
Culver City Comments on the L A X Master Plan Draft EIS/EIR
June 25, 2001

SURFACE TRANSPORTATION

Intersection and Street Segment Traffic Impact Analysis

- The impacts of LAX expansion traffic within Culver City were not given sufficient analysis. The most thorough method of analyzing the traffic flow quality and impacts on a street network is the evaluation of the operations at the critical intersections. They are the locations that act as valves for the flows on the intersecting streets. The flow along the street segments between the important intersections does not yield a true picture, because the interruptions to flow at the critical intersections are not properly accounted for in that type of analysis. Only one intersection in Culver City was included in the Draft EIS/EIR impact analysis – Sepulveda Boulevard / Centinela Avenue, at the southern edge of the City [Figure 2-1, following page 2-4]. We feel additional and critical Culver City intersections listed in the table below should be analyzed in the Draft EIS/EIR.

1. Braddock Drive	@ Overland Avenue
2. Braddock Drive	@ Sepulveda Boulevard
3. Bristol Parkway	@ Centinela Avenue
4. Bristol Parkway	@ Slauson Avenue
5. Buckingham Parkway	@ Slauson Avenue
6. Centinela Avenue	@ Green Valley Circle
7. Centinela Avenue	@ Washington Boulevard
8. Centinela Avenue	@ Washington Place
9. Culver Boulevard	@ Main Street/Washington Boulevard
10. Culver Boulevard	@ Overland Avenue
11. Culver Boulevard	@ Sawtelle Boulevard
12. Culver Boulevard	@ Sepulveda Boulevard
13. Duquesne Avenue	@ Jefferson Boulevard
14. Glencoe Avenue	@ Washington Boulevard
15. Green Valley Circle	@ Sepulveda Boulevard
16. Hannum Avenue	@ Playa Street
17. Hannum Avenue	@ Slauson Avenue
18. I-405 NB Ramps s/o Venice Boulevard	@ Sepulveda Boulevard
19. I-405 SB Ramp n/o Culver Boulevard	@ Sawtelle Boulevard
20. Inglewood Boulevard	@ Washington Boulevard
21. Jefferson Boulevard	@ Overland Avenue

22. Jefferson Boulevard	@ Sepulveda Boulevard (N)
23. Jefferson Boulevard	@ Slauson Avenue
24. La Cienega Boulevard	@ Washington Boulevard
25. Marina Freeway	@ Slauson Avenue
26. Matteson Avenue/I-405 SB Ramps	@ Sawtelle Boulevard
27. Motor Avenue	@ Washington Boulevard
28. Overland Avenue	@ Washington Boulevard
29. Playa Street/Jefferson Boulevard	@ Sepulveda Boulevard
30. Redwood Avenue	@ Washington Boulevard
31. Sawtelle Boulevard	@ Sepulveda Boulevard
32. Sawtelle Boulevard	@ Venice Boulevard
33. Sawtelle Boulevard	@ Washington Boulevard
34. Sawtelle Boulevard	@ Washington Place
35. Sepulveda Boulevard	@ Slauson Avenue
36. Sepulveda Boulevard	@ Washington Boulevard
37. Sepulveda Boulevard	@ Venice Boulevard
38. Sepulveda Boulevard	@ Washington Place
39. Walgrove Avenue	@ Washington Boulevard

2. Only six street segments in Culver City were included in the analysis – 1) Sawtelle Boulevard, south of Venice Boulevard; 2) Sepulveda Boulevard, south of Venice Boulevard; 3) Overland Avenue, south of Venice Boulevard; 4) Sepulveda Boulevard, south of Sawtelle Boulevard; 5) Centinela Avenue, west of Sepulveda Boulevard; and 6) Washington Boulevard, east of Lincoln Boulevard. [Figure 2-1].
 - a. Other streets that are components of routes to/from the airport, such as Jefferson Boulevard (west of Sepulveda Boulevard and east of Overland Avenue), Culver Boulevard, and Centinela Avenue (toward the east), are not included, although they are likely to carry meaningful volumes of airport traffic. These streets should also be studied.
 - b. Of the streets that are included, some of the segments are not the most critical in evaluating impacts of airport traffic. For example, Overland Avenue, south of Jefferson Boulevard would have far higher impacts of airport traffic than the segment of Overland Avenue that was chosen for analysis. The same could be said about Sawtelle Boulevard, south of Culver Boulevard, and about Washington Boulevard, east and west of Sepulveda Boulevard.
 - c. There is only one study segment along the entire length of La Cienega Boulevard, although that is one of the most attractive routes to/from LAX carrying 15% of LAX traffic, as shown in Draft EIS/EIR Table II-7.13.
 - d. According to Table II-7.4 on page II-7.13, the “existing” (1996) operations in the afternoon peak hour were at:

- Level of Service (LOS) A or B along Sepulveda Blvd., south of Venice Boulevard.
- LOS A and B along Overland Avenue, south of Venice Boulevard.
- LOS A along La Cienega Boulevard, south of Slauson Avenue.
- LOS A and B along Washington Boulevard, east of Lincoln Boulevard.
- LOS B and C along Sepulveda Boulevard, south of Slauson Avenue.

Those calculated levels do not conform to actual experience on the streets. The actual, observable operations are at lower levels, even though traffic signal enhancing equipment (ATSAC) has been installed. The street segment analysis has not taken account sufficiently of the interruptions to flow that occur at the critical intersections along the segments.

- e. Many of the findings of current and future Levels of Service on street segments [Table II-7.4, page II-7.13; Attachment C, unnumbered pages] are not credible and should be re-evaluated in light of current experience.
- La Cienega Boulevard, south of Slauson Avenue is shown at LOS A or B during all peak hours to the year 2015, although the road is observably congested during peak hours and many non-peak hours now.
 - Washington Boulevard, east of Lincoln Boulevard, is shown at LOS A during all peak hours to 2015, although that high level of operations has not been the experience since the opening of the Costco store in that street segment. Apparently, the calculations, which are based on pre-Costco counts, did not take the new retail traffic into account, despite Costco being highlighted in the report text as a related project.
 - Sepulveda Boulevard, south of Slauson Avenue is shown at Loss's A and C in the afternoon peak hour of 2015 with the Alternative C traffic included. The street is already operating at LOS's below those levels, and the additional traffic with no mitigation will not improve operations.

Again, those findings demonstrate the weakness of analysis using street segments instead of intersections. The interruptions of flow at the critical intersections are not fully accounted for in the segment methodology.

3. The "No Action/No Project" (NA/NP) alternative includes large volumes of traffic that would have been generated by LAX Northside and Continental City [page 4-293], assuming these developments were going to be built. However, they have not been built and are not part of the background or base conditions against which the proposed expansion traffic should be measured. Therefore, no credit should be allowed for those non-existent trips. As shown on page 3-10, the Draft EIS/EIR trip generation estimates for Alternative C of the LAX expansion were 22% to 26% lower than the NA/NP trip generation estimates. With such assumptions of base

conditions, the LAX expansion is being treated as if it were a traffic mitigation project, rather than a traffic generating development.

4. According to the Draft EIS/EIR, LAX Alternative C will result in a significant impact at the Sepulveda Boulevard/Centinela Avenue intersection in the year 2015. Two distinct and conflicting mitigation measures are proposed in different parts of the document.
 - a. In Table 4.3.2-28 on page 4-350, pavement widening, etc. is recommended to provide a third left-turn lane for northbound Sepulveda Boulevard. That measure would not be available, because it has already been assigned to the Playa Vista Phase II development.
 - b. In Attachment F [pages are unnumbered], ATSAC traffic signal enhancement equipment is recommended. That equipment is already in place and has been for several years. Therefore, it cannot be considered as a mitigation measure for Alternative C traffic.

Since both of the conflicting mitigation measures that are recommended in different parts of the Draft EIS/EIR are invalid, the impacts at the Sepulveda Boulevard/Centinela Avenue intersection must be considered unmitigated.

5. There is no recommendation or offering of mitigation measures for the Alternative C traffic impacts on the street segments, although such measures are presented for the street segments that would be impacted by Alternatives A and B.
 - a. In 2005, Alternative C traffic will have significant impacts at Sepulveda Boulevard, south of Venice Boulevard, and on Overland Avenue, south of Venice Boulevard (with final mitigation). [Attachment C, pages are unnumbered]
 - b. In 2015, Alternative C traffic will have significant impacts at three segments: 1) Sepulveda Boulevard, south of Venice Boulevard; 2) Overland Avenue, south of Venice Boulevard; and 3) Sepulveda Boulevard, south of Slauson Avenue. Even with the "final mitigation" in place, the second and third segments would have significant impacts residual [Attachment C, pages are unnumbered]. These impacts need to be addressed.
6. For Alternative A, street segment mitigation measures include ATSAC traffic signal enhancement at the Sepulveda Boulevard/Slauson Avenue intersection and at the Sepulveda Boulevard/Centinela Avenue intersection [Table 4.3.2-20, page 4-325]. The ATSAC equipment at those two locations, and at all other intersections along Sepulveda Boulevard, has been in place for several years. Therefore, the mitigation measures are invalid, and the impacts would remain un-mitigated.
7. One of the stated accomplishments of the "congestion relief package" would be to increase the average arterial speed by 3% [Page ES-24]. That would be trivial and

of no real value to individual drivers. For example, at 30 miles per hour, a 3% increase would lead to an average of 30.9 miles per hour, which would not be noticeable to individual drivers.

8. **Supplemental Environmental Evaluation for LAX Expressway and State Route 1 Improvements, Paragraph 2.2.3 on Page 8.** This section describes Pershing Drive as a six-lane arterial. While that statement is true immediately adjacent to the airport, the section of Pershing Drive that connects to Culver Boulevard is a narrow two-lane winding road that will feed the six-lane arterial. This has been left out of the report or ignored. It will be Culver Boulevard and probably Manchester that drivers will use to access the proposed terminals adjacent to Pershing Drive. Culver Boulevard itself is a two-lane road from the 90 Marina Freeway to the Jefferson intersection, and that two-lane road creates congestion in the morning all the way through Playa del Rey and along Vista del Mar all the way back up to Imperial Boulevard. The Playa Vista Traffic Mitigation will address some of this congestion, but Playa Vista is not mitigating anticipated traffic that will be generated by the LAX exchange. This situation needs to be addressed in the Draft EIS/EIR.
9. **4.4.4 Overview, "Community Disruption", also 5.1 Technical Report 3b, page 43, last bullet, 1st paragraph.** Closing Pershing Drive to through traffic places additional morning and evening rush-hour traffic onto Vista Del Mar. The LAX Master Plan shows no connection from eastbound Imperial to Pershing Drive northbound, or a connection from Pershing Drive southbound to the Ring Road (it diverts the traffic over the dunes at Sandpiper) onto Vista Del Mar. How does someone driving from Vista Del Mar turn onto the Ring Road to use the new West Terminal? How does someone driving south on Pershing Drive gain access to the Ring Road to use the new West Terminal? What happens to all the am/pm commuter traffic using Pershing Drive between Imperial and Manchester?
10. **Overview Sections 4.14 & 4.4.4 "Community Disruption", page 4-20.** There is no mention of increased traffic volume on Vista del Mar under the Coastal Zone Management and Coastal Barriers. Section 4.4.4 says "...but adjacent Vista del Mar would provide suitable north/south alternative access." This information needs to be provided in the document.
11. **Overview, Section 4.21 'Design, art...', page 4-47, Key Conclusions, Views and Vistas.** The document says that aesthetic quality along Vista de Mar would not be affected and that the popular ocean and airport views from Sandpiper St. within the dunes area would also be retained. If the traffic southbound on Pershing Drive is not allowed to travel to Imperial and is diverted over Sandpiper to Vista del Mar, Sandpiper will become a well-used and dangerous street. It should be noted that it would be dangerous for vehicles to slow down or stop on Sandpiper to catch the view.

LAX Expressway

12. The reason drivers seek alternative routes to/from LAX, instead of using the San Diego Freeway, is not the lack of a direct connection between the freeway and the airport. It is because the freeway, itself, north of the airport and through Culver City and West Los Angeles, is congested during much of the day, both on weekdays and on weekends. Sepulveda Boulevard and other north-south streets are attractive alternative routes for distances far north of Centinela Avenue. When Playa Vista is developed, the freeway congestion will increase and extend into more hours of the day, as well as further north.
13. The LAX Expressway will not add to the capacity of the freeway. The expressway will essentially be a long off and on-ramp between the airport and the San Diego Freeway. The expressway will not reduce freeway congestion north of the expressway. It may actually add to the congestion by giving airport-oriented drivers the false expectation of a convenient, fast route between the freeway and the airport. The expressway should not be considered a mitigation measure for traffic flows on the surface streets that would serve traffic to/from the airport. Most drivers who currently use the surface streets will continue to do so to avoid freeway traffic congestion, and many new drivers will be attracted to the surface streets because of significantly increased freeway congestion.
14. The first San Diego Freeway ramps north of the juncture of the LAX Expressway and the freeway will be in Culver City. Drivers leaving the airport heading north on the expressway and encountering congestion as they enter the northbound freeway will want to leave the freeway at the first convenient off-ramps, that is, within Culver City. The problem of airport traffic using surface arterial and local streets will have been moved north from Los Angeles into Culver City; the problem will not be eliminated. This issue needs to be addressed in the Draft EIS/EIR.
15. Impacts to Culver City's major intersections should be analyzed under the assumption that the LAX Expressway may not go forward. The analysis should then correlate how the proposed Expressway will mitigate the identified impacts to a level of insignificance.

Freeway Impacts

16. There has been no consideration or analysis of the traffic friction and weaving impacts that will result from the addition of the expressway ramps to the already poorly operating freeway-to-freeway interchange of the San Diego and Marina Freeways. When future Playa Vista traffic is added by way of the San Diego Freeway's Jefferson Boulevard ramps, which are part of that entire interchange, the impacts will be significant.
17. The analysis of the impacts of airport expansion traffic on the freeways is cursory and difficult to ascertain. Although Figure II-7.3 shows study links along two of the

freeways, the results of the impact analyses are not covered in the report text. The results must be found in tables in Attachment C, as follows:

- a. On the San Diego Freeway, the impacts of LAX expansion traffic will be significant both north or south of the airport, even "with final mitigation" in place.
- b. On the Glenn Anderson Freeway (I-105), the impacts east of the airport will be significant.

In neither case are mitigation measures for those impacts presented.

18. There is no analysis of the impacts of LAX expansion traffic on the Santa Monica Freeway (I-10). Although the I-10 is somewhat north of the airport, it serves airport traffic from throughout the region to the northeast and northwest. Analysis of the impacts on the I-10 Freeway should be included in the Draft EIS/EIR.

Construction Traffic Impacts

19. The analysis of construction related impacts is perfunctory, particularly when it is expected that the airport expansion construction will be spread over at least 14 years. The following points need to be addressed:
 - a. Although "The general construction concept is to have many of the transportation improvements completed within the first five years after construction begins ..." [page 4-318], the important LAX Expressway and the northeastern portion of the ring road from the San Diego Freeway to Sepulveda Boulevard would not be available to traffic until well after the first five years [Table 4.3.2-18, page 4-318].
 - b. The Draft EIS/EIR admits to a flow of 2.8 trucks per minute for 10 hours per day in a six-day work schedule or 1.2 trips per minute for 20 hours per day in a seven-day work schedule [Page 4-319]. That is a large number of trucks to be imposed on the current traffic flows on the streets and freeways, particularly when Playa Vista truck trips are also added. The mitigation recommended is to divide the truck trips among four locations at the construction site. But, that does not address the impacts of the trucks on the streets and freeways that are even a short distance away from the construction site. Those impacts are ignored.
 - c. Scheduling truck deliveries to not occur during four peak hours of the day [page 7-3] does not address the truck traffic problem. Many truck drivers will travel from remote supply depots to the airport vicinity during the peak periods in order to enter the airport boundaries during the allowable periods. When leaving, they will exit before the starts of the peak periods, but they will still be traveling on the freeway/street network to the remote locations during the peak periods. Additionally, the freeways and streets serving the airport area are congested during periods far longer than four peak hours per day.

- d. The construction employees will work in three shifts. The workers for the second shift will arrive before the first shift ends [Page 4-319]. Therefore, there would have to be employee parking for, perhaps, 8,000 workers during the period each day when the two shifts overlap. Will that magnitude of employee parking be feasible?
- e. Remote parking areas are recommended for construction employees in Palmdale, Van Nuys, and Ontario [Page 4-319]. Aside from the improbability of those remote areas being attractive to and extensively used by employees, there is no analysis of the impacts of the added traffic at those remote locations, nor is there analysis of the impacts of the shuttle traffic between those locations and the airport.
- f. There is no analysis of the impacts of the construction worker traffic on the entire street/freeway network. Those traffic flows, which will extend through most of the 14-year construction period, will be substantial six or seven days each week.
- g. There is no definition of the work shift schedules upon which to evaluate the potential overlap with the network peak periods, which currently extend for much longer durations than the typical 7 to 9 a.m. and 4 to 6 p.m. Therefore, the impacts of employee traffic cannot be evaluated with any assurance of accuracy or high probability.
- h. The assurances that "Construction traffic during all other times can be managed ..." [page 4-320] and "Traffic patterns around the airport for the general public would be largely maintained ..." [Page 4-320] are weak substitutes for actual measures that should be described and analyzed.
- i. "However, even with these commitments in place, the project would still cause sufficient construction-related traffic to cause noticeable disruption of normal traffic flows near the airport." [Page 4-320]. That will last over most of the construction period of 14 years, and will result in delays to air passengers, cargo deliveries, and the general public bound for other destinations within the sub-region or just passing through.
- j. The construction of the LAX expansion will coincide with the construction of Playa Vista, approximately two miles north of the airport [4-320]. Both construction contractors will use Sepulveda Boulevard and the San Diego Freeway for major haul routes. The LAX Draft EIS/EIR mitigation measure is to expand the "... traffic coordination office ..." to minimize the impacts of construction traffic [4-320]. That is likely to be an ineffective measure, as construction companies schedule operations for their own convenience and efficiency without regard to the real impacts on the general public.
- k. The Draft EIS/EIR authors admit "... significant and temporarily unavoidable ..." impacts [page 4-320]. The construction periods during which the two projects

(airport expansion and Playa Vista) will overlap will be a minimum of 10 years. That is a long period to be labeled "temporarily".

- i. Depending upon scheduling, the impact of closing all or part of Sepulveda Boulevard could be a major disruption to traffic flow in Culver City especially if Playa Vista and LAX Northside are being constructed simultaneously.

Airport Expansion Phasing

20. The anticipated phasing schedule for the airport expansion should be more realistic, because the analyses of expansion traffic are for certain specific study years, and if the study years are not realistic, the analyses are not correct. The Draft EIS/EIR analysis is divided into two airport expansion development phases [Page 2-12]. The traffic impact study and report should be revised extensively to coincide with realistic study years.

- a. Phase I would be 5 to 6 years long and would end in 2005, according to the document. That is now impossible. The EIS/EIR will not be approved before late 2001, and Phase I of the actual construction could not begin before 2002. Therefore, Phase I would end in 2007 or 2008, not 2005.
- b. Phase II, which would end 10 years after the completion of Phase I, according to the document, would extend to 2017 or 2018, not 2015, as stated throughout the Draft EIS/EIR.

Related Projects Analysis

21. The accuracy of the related projects analysis is questionable when the following mistakes about several of the highlighted entries [page 2-16] are considered:
- a. Sony Pictures Studio – "2 miles north of LAX" [It is 5 miles north of LAX.]
 - b. Costco Center – "City of Los Angeles" [It is in Culver City.]
 - c. Marina del Rey – "City of Los Angeles" [It is in unincorporated County area.]

If the report authors made mistakes with significant information regarding large and well-known projects near their study site, about which there is substantial public information, what is the potential for accuracy of the remainder of the list that includes many smaller projects and many more remote projects?

Transit Systems

22. **Page 4-241, Transit Systems.** The date used for this analysis is based on 1993 data. This data is old and thus inaccurate. Culver CityBus Line 6 serving this corridor had grown over 20% in ridership since 1993 to over 2 million passengers annually. We recommend that the LAX study use current municipal / regional transit

data in the study to best reflect the true impact of transit service in and around the airport.

23. Page 4-254, 4.3.1.6.2 Alternate A- Added Runway North: Relocation and expansion of the LAX Transit Center. The City would like to be involved in the decision making process for its proposed relocation of the transit center. .
24. **Page 4-274 Environmental Action Plan (Proposed) Last Paragraph.** This paragraph and globally throughout the document, should propose the use of signal transponders for all Municipal and Regional transit services in and around the airport. LADOT is currently using its Intelligent Transportation System (ITS) infrastructure and the ATCS system for the Rapid Bus along Wilshire and Ventura Boulevards. This technology used with transponders on transit buses serving the airport area could improve mobility.
25. **Tables 4.3.2-8, 4.3.2-9, 4.3.2-12, 4.3.2-13 and 4.3.2-15.** These tables reflect the circulation / LOS impact at major intersections in and around the LAWA project. As the tables note, a LOS of "F" is predicted along Sepulveda Blvd. and surrounding Culver City arterials and streets. In fact, the vehicle to capacity ratio (V/C) is significantly higher than the 1.00 used to define intersections as LOS "F". In some cases the V/C exceeds 1.5 on arterials in proximity to Culver City and along Culver CityBus routes.
26. **Page 4-320 Section 4.3.2.9 Mitigation Measures.** All Alternatives (A, B and C) should propose to install transponders for all transit operations serving the airport area. This should be coordinated with the proposal to mitigate impacts on mobility and LOS at surrounding intersections as identified in Tier 1 and 2 with the installation of LADOT's ATCS or priority control system.
- Additionally, if a negative impact is determined at an intersection creating a LOS of .85 or greater as a result of the implementation of either Alternative A, B, or C a mitigation should be required to improve that intersection to an acceptable LOS; or its previous LOS.
27. **Page 4-236, Environmental Action Plan and Page 4-252, Phase I Construction Commitments (2000 – 2005): ST-4 Limited Short Term Lane Closures.** Master Plan Commitment ST-4 states that the lane closures at key Century Blvd. / Sepulveda Blvd. intersections would be limited to 12 hours and would be scheduled for less congested non-summer and non-holiday periods. This expected closure would severely hurt the on-time performance of Culver CityBus Line 6. We recommend work to commence during non-peak traffic periods as well, such as nights and weekends. This impact was addressed in the Draft EIS/EIR.
28. **Page 4-269, 4.3.1.7.2 Alternatives A, B, and C: Phase I (Year 2004).** The Culver City Transportation Department has concern with the proposal's mention to divert traffic off Sepulveda Blvd. onto Century Blvd. during the construction of the

Sepulveda tunnel. With the assumption of LOS F, this would greatly affect the service of Culver CityBus Line 6 serving the Metro Green Line Station at Aviation and Imperial via Sepulveda Blvd.

29. **Page 4-270, 4.3.1.9.3 Alternative C- No Additional Runway.** The Culver City Transportation Department has concern that no mitigation measures are identified for the construction impacts on inbound upper level ramp to the CTA from south Sepulveda Blvd. This will have a significant impact of bus services and general mobility along Sepulveda Blvd.
30. **Page 4-320, Section 4.3.2.8 Cumulative Impacts.** As noted in this section, other projects might be under development concurrently, such as Playa Vista. If both projects use the same truck routes, such as the I-405, Sepulveda Blvd. or other arterials a significant adverse impact to local circulation will result. If at all possible the LAWA Traffic Coordination Office should plan for truck trips during non-peak periods or at night.
31. **Page 4-263, Consistency with other Adopted Plans.** Alternatives A, B, and C do not mention or include information contained in the plans of Culver City (General Plan or Short Range Transit Plan) or information contained in the MTA Long Range Plan.

AIR QUALITY

32. **Page 4-496, Table 4.6-9.** The table represents unmitigated off-airport emission inventories. Should we assume the significant increase in PM 10 is a result of increased cargo operations and additional trips over the base?
33. **Page 4-509, Overall Significance of Alternative C.** Under Alternative C, conformity requirements are met. However, there is concern with the amount of emissions brought to the eastside of the airport under this Alternative. Under Alternative C mobile source emissions from cargo carriers, additional passenger trips, and increased flights cannot be mitigated.
33. **Page 4-511, 4.6.7 Cumulative Impacts.** This expansion of LAX should take into consideration other planned developments such as Playa Vista. During the initial construction year (2004), Playa Vista Phase II will likely be under construction. This would increase truck traffic as well as emissions relating to construction duties.
34. **Section 4.6, Draft EIS/EIR.** The plan provides mitigations only for the immediate area around LAX and not for the surrounding areas which could have impacts from increased congestion and air quality from increased air and mobile sources. We can only assume from the magnitude of this project that both air pollution and traffic congestion will increase. Whether the proposed mitigation measures will ease both (air pollution & congestion) is hard to say since the mitigation measures need to be

approved by other entities (i.e. shuttle services, airlines, LAX employees, hotels, etc.).

NOISE

Overflight Noise

35. Reviewing the "Current Standard and projected Assumed Flight Tracks" for No Action and Alternatives A, B and C, Appendix D of the Draft EIS/EIR indicates a change in flight tracks over Culver City. Currently, there are two departure flight tracks (airplanes headed east) and no arrival flight tracks passing over Culver City. The current aircraft over-flight noise level impact and flight frequency within Culver City from the two departure flights paths is not addressed in the Draft EIS/EIR documents.
36. For each build alternatives, the Draft EIS/EIR proposes two arrival and one departure flight tracks passing over portions of Culver City. There is no data in the Draft EIS/EIR indicating projected aircraft over-flight noise levels or flight frequency within Culver City from these flight tracks. Existing and proposed aircraft over-flight noise data is needed to evaluate the noise impact of the flight track route changes over Culver City.
37. The documents indicate that aircraft taking off in a westerly direction for an eventual destination in the east will follow what is referred to, as Loop 1 Departure Procedure, which may potentially impact Culver City. All aircraft flying the Loop 1 Departure Procedure routes climb immediately to 5,000 feet west of the airport over the Pacific Ocean and cross the shoreline. The aircrafts will then make a sharp loop resulting in an eastbound route directly above LAX. The aircraft will then follow an easterly departure route crossing directly over Culver City. This procedure is expected to be put in place during the next decade, regardless of the disposition of the LAX Master Plan Alternatives. The degree of negative impact to Culver City is uncertain at this time, as over flight noise levels or frequency of flights within Culver City were not addressed in the Draft EIS/EIR. Therefore inadequate information was given to effectively evaluate the noise impacts of the Loop I Departure route over Culver City. A complete analysis is needed to quantify the potential for overflight noise impacts on Culver City.
38. The Draft EIS/EIR noise sections needs to expand its discussion on the effect of aircraft noise on the quality of life and health, including the effects of sleep disturbance and education, on persons within the areas impacted primarily by CNEL 65 levels. There are no CNEL 65 areas within Culver City but the discussions of sleep disturbances from aircraft over flights of Culver City should be considered as a potential impact on the health and well being of some Culver City residents.

39. The critical point concerning noise and Culver City is that the 65 CNEL noise measurement customarily used in assessing noise from airports does not fully capture the noise exposure likely to be experienced by the population. It represents a weighted average, and therefore discounts single noise events, that can be much higher in sound level. This is of significant concern relative to aircraft overflights over Culver City where short term, high level noise events add little to average sound levels but can impact a large population with intrusive noise impacts. The Draft EIS/EIR fails to adequately address this issue.

Lax Expressway Traffic Noise

40. LAX Expressway Alternative No. 3 has the potential to increase the traffic noise impact on a larger and more noise sensitive area within Culver City than LAX Expressway Alternative No. 2. The Draft EIS/EIR reports the traffic noise from Alternative No. 3 will potentially impact numerous properties within Culver City from Port Road at the I-405 freeway south to Green Valley Circle. Sensitive areas anticipated to have an increase in traffic noise impact with this Alternative are residential or school properties located adjacent to the freeway, north of Segrell Way.
41. The Draft EIS/EIR report indicates a potential residential zone impact on the west side of Coolidge Avenue between Diller Avenue and Port Road. After reviewing the reports and completing an inspection of the neighborhood, there are additional residential parcels on Culver Park Place/Culver Park Drive between Segrell Way and Diller, which could be impacted by an increase in traffic noise. It is also believed that the El Marino School and Park will be affected by an increase in traffic noise with the completion of the Alternative 3 Expressway Viaduct. These additional "affected" areas should be analyzed and included in Figures 3.1-1 to 3.1-10 of Appendix K.
42. The LAX Expressway Noise Abatement section states that the implementation of the Alternative 3 project could increase traffic noise by a small increment at several residences located along Coolidge Avenue and that a screening analysis was conducted. The report also states that the existing and future-without-project traffic noise level is likely to approach or exceed the FHWA Noise Abatement Criteria (NAC) due to the major highway facilities and interchange/on ramps in the vicinity of these residential uses. The report suggests that any noise abatement in the form of sound walls in this area would be deferred and evaluated as part of the Caltrans project development process for sound walls.

It is understood that this statement means that although LAWA predicts an increase in traffic noise from the Expressway Alternative No. 3 to residential properties, noise mitigation in the form of sound walls would not be included in the Expressway design, but included in the Caltrans sound wall project development list. Any noise mitigation measures such as the construction sound walls should be independent of

Caltrans sound wall project development process and included as a separate mitigation measure in the Draft EIS/EIR and Appendix K documents.

Lax Expressway Construction Noise

43. Construction noise and vibration impacts are likely when a construction site is located within 300 feet of residences or schools. Based on the preliminary construction plan indicated in the Appendix K of the Draft EIS/EIR, there is the potential for short-term impact from construction noise within Culver City. Also, it indicates that construction crews, on occasion, will be scheduled to work during the evening hours utilizing high-powered lights for illumination.

A complete and thorough analysis of construction impacts and required mitigation measures associated with the LAX Expressway is needed in Appendix K. During the preliminary engineering, a detailed analysis of construction noise impacts and mitigation measures must be developed and provided to the City of Culver City for inclusion in the construction contract documents. The mitigations should include, but not be limited to, the following:

- Requiring the contractor to construct temporary construction sound walls.
- Placing restrictions on construction during nighttime hours.
- Limiting the use of particularly noisy activities such as impact pile driving and jack hammering.
- Requiring the construction to be performed in compliance with specific equipment and property line noise limits.

Approaches to ensure that construction is performed in compliance with specified requirements include:

- Construction noise monitoring by the construction management firm.
- Requiring contractors to retain acoustical engineers to perform noise control plans.
- Limiting specific noisy construction activities, particularly during early morning and nighttime hours.
- Requiring contractor to have temporary noise barriers stockpiled.
- Performance of all construction in a manner to minimize noise.
- Use of equipment with high performance mufflers.
- Minimization of the need for the use of back-up alarms.
- Selections of haul routes and schedules to minimize impact to residential neighborhoods.
- Positioning of staging areas away from noise sensitive areas.

LAND USE

44. **Draft EIS/EIR, Section 4.2, Page 4-76 to 4-234.** The land use study area discussed in the Draft EIS/EIR is limited to those communities immediately surrounding LAX (i.e. Cities of LA, Inglewood, El Segundo, and Hawthorne). The City of Culver City is not included in the land use study area. Therefore, the evaluation and land use mitigation measures regarding land use impacts is limited to the Cities listed above. The land use study area and discussion should however, be expanded to include communities such as Culver City, which although is not directly adjacent to the LAX boundary, are close enough where potential significant noise, traffic, air quality and more impacts from the proposed LAX Master Plan could occur. There is inadequate information in the Draft EIS/EIR to effectively determine whether individual or combined impacts associated with the Master Plan alternatives could render land uses in Culver City incompatible.
45. **Draft EIS/EIR, Section 4.0, Figure 4-1, Page 4-3.** The Expressway is shown in this figure to be part of the "Master Plan Boundaries". However, the Expressway is only drawn up to the area near the Howard Hughes Parkway on and off ramps. As Appendix K states, the LAWA preferred Expressway extends all the way up to areas north of the SR-90/I-405 Interchange. Include and expand this Master Plan Boundary figure to show the entire length of the proposed Expressway roadway, in particular the neighborhoods of Culver City.
46. **Appendix K, 4.1 Land Use, Page 19-24 and Appendix K, 5.1 Land Use, Pages 64-68.** Adequate analysis of land use impacts is lacking and required mitigation measures for the proposed LAX Expressway on Culver City is not addressed in Appendix K. LAX's primary mitigation measure is the Expressway. The Expressway could cause significant impacts to Culver City and therefore the analysis of the Expressway on Culver City is essential and critical. Figure 3.1-1 and 3.1-7, highlights only some of the potentially affected parcels which may require partial or full acquisition for right-of-way purposes. For instance, the affected parcel labeled as "P" for Public Facility Parcels on the east side of the I-405 Freeway between Bristol Parkway and Green Valley Circle is NOT entirely a flood control channel. Portions of this highlighted area are private property. The figures need to be revised and include all affected land uses in Culver City.
- a. There should be specific mention and analysis of land use impacts to the single-family homes on Coolidge Avenue, Culver Park Place, and Culver Park Drive, as well as the El Marino School and the El Marino Park. Also, there is no mention of potential property acquisition at this location, despite the closeness of this proposed roadway.
 - b. Under both the Single Viaduct and Split Viaduct Alignment for the LAX Expressway, additional areas in Culver City along the I-405 could be subject to land use impacts. Impacts to Culver City will start slightly north of the SR-90 interchange down to the City limits at Green Valley Circle, with elevated

crossovers at Centinela, Sepulveda, Bristol Parkway, and Jefferson Boulevards. Due to the need for placing column structures, there could also be significant impact to the industrial properties along Bankfield Avenue as well as to some industrial/commercial properties that are on Jefferson Boulevard. There could also be column placements in the parking lots that are in the vicinity of Bristol Parkway and Centinela Avenue. Supports for the elevated structure will, most likely, be located in the CHP parking lot, in the area of Bankfield Avenue-Selmarine Drive, and the west side of Slauson Avenue north of Jefferson Boulevard.

There are multiple environmental impacts to Culver City that must be addressed along the east side of the I-405 right-of-way in the vicinity of Bristol Parkway and Green Valley Circle. There are commercial, light manufacturing, and office uses along the east edge of the I-405 that would be subject to land use impacts from the LAX Expressway. Hotels located within the City of Culver City such as the Radisson, the Sheraton Four Points, and the Ramada Plaza Hotel located on Centinela and Sepulveda Boulevard could also be impacted. An application for a new car dealership (Airport Marina Ford) has been submitted to the City of Culver City for initial review. This new facility is proposed to be located on private property and partially in the current LA County Flood Control easement area as well as some portion of the existing Centinela Avenue right of way. This proposed development would be in conflict with the proposed alignment of both the build alternatives of the LAX Expressway.

47. **Appendix K, 4.1 Land Use, Page 19-24 and Appendix K, 5.1 Land Use, Pages 64-68.** In Appendix K, there is a limited amount of discussion and analysis of adopted Culver City land use, circulation, and noise policies.
48. **Appendix K, Section 5.5.1.2, Page 65, 1st paragraph, Alternative 2 (Split Viaduct).** Under Lax Expressway Alternative 2, the report states *"Although this alternative would likely require the acquisition of additional Right-of-Way along both the east and west side of the 405 FWY would not be considered a high priority roadway improvement under Culver City's General Plan Circulation Element. Irrespective of the emphasis the city places on the priority of the LAX Expressway project Alternative 2, no specific conflict with Culver City's Circulation Element have been identified."* This statement is confusing, misleading, and needs to be clarified. It should be noted that the City's Circulation Element was updated in 1996. At this time, any off airport roadway improvements such as the LAX Expressway was not analyzed or included in our Circulation Element. Therefore, to state there is no specific conflict with the Circulation is not correct.
49. **Appendix K, Page 66, Section 5.1.1.3, Second Paragraph, Last Sentence.** Correct and revise the last sentence to include the language in bold brackets. "However the reduction to noise levels to 66 dBA would not be consistent with the City Inglewood and **[City of Culver City]** General Plan Noise Element." Also, nowhere in the document does it discuss or explain or provide mitigations as to how

noise generated from the proposed Expressway will be reduced to 66 dBA or lower in those areas in Culver City.

50. **Appendix K, Figure 4.1-6 on page 4-65.** Any figure(s) illustrating the location/map of the proposed LAX expressway should include and highlight those communities or uses that would be impacted by the ENTIRE length of the proposed expressway.
51. **Appendix K, Page 23, Section 4.1.2.1.** – Correct language on this page to state that the City of Culver City, not “community of Fox Hills” bounds the northeast portion of the LAX Expressway.
52. **Preliminary Section 4F of the Supplemental Environmental Evaluation for LAX Expressway and State Route 1 Improvements.** On Page 6, *Table B*, it lists Fox Hills Park as a part of the City of Fox Hills. This should be corrected to show that Fox Hills Park is in the City of Culver City. Again, on *Page 6, Table B*, El Marino Park should be added to the list, as should El Marino School.
53. **Draft EIS/EIR Page 3-44, Master Plan Chapter V Page V-3.111, Appendix K page 2.** The referenced documents contain no or minimal discussions on the proposed Expressway under Alternative B (Additional runway to the South). Under Master Plan Alternative B, will the Expressway also extend up to the Howard Hughes Parkway ramps or to the SR-90/I405 interchange? Where is the terminus of the Expressway under Alternative B?

Parks and Schools

54. **Volume 3, Section 4.26.3 Parks and Recreation Section in Paragraph 4.26.3.3 Affected Environmental/Environmental Baseline.** Culver City is not included in the list of analysis. An expressway on the east side of the 405 would be adjacent to the El Marino Elementary School, and would be adjacent to El Marino Park. This is of concern for environmental and noise related issues and needs to be further analyzed in the EIR as to what impacts the expressway would create and how it would affect both the school and the park.
55. **Section 4.27, Schools.** The analysis of this section includes distant schools in San Pedro and Banning, but does not mention Culver City at all. How can a major report such as this can ignore a city close to LAX while including schools in San Pedro, Carson, etc.? There is no consideration of El Marino School, which is literally within 100 feet of the existing freeway and the proposed Expressway would be built very close to the school. This issue needs to be addressed as a part of the Draft EIS/EIR.
56. **Preliminary Section 4F of the Supplemental Environmental Evaluation for LAX Expressway and State Route 1 Improvements.** The *Figure A* diagram of the Expressway on the east side of the freeway shows that there will be impacts to El

Marino School and the adjacent El Marino Park; yet it is not mentioned elsewhere in the report.

Since the impacts to El Marino School and El Marino Park are not addressed and in fact are ignored in the document, there is no way to comment on the adequacy of the impact analysis without seeing this specific analysis that should have been done as part of the Draft EIS/EIR document. The document needs to provide an analysis to be able to comment on.

4.4 Social Impacts

57. **Section 4.4.2 Relocation of Residences or Businesses.** Under the build alternatives, the LAX expressway would impact residences and businesses in Culver City (i.e. Marina Ford, etc.). How will these impacts be mitigated? What would be the tax impacts for these uses if relocated, acquired, etc.?

58. **Section 4.4.4 Community Disruption and Alteration of Surface Transportation Patterns, Page 4-20.** It should be acknowledged under "The Transportation System Improvements Under Build Alternatives" section, that certain northern portions of the LAX Expressway are proposed to extend out of the I-405 and MTA right of way onto non-ROW land in Culver City boundaries.

59. **Section 4.18 Light Emissions, Page 4-824.** There is no mention or analysis in the Draft EIS/EIR or Appendix K of potential light spill (light that shines beyond the area intended for illumination, can be a source of annoyance particularly for residences where light spill might disturb sleep or privacy) from the proposed LAX Expressway onto adjoining properties in the City of Culver City (i.e. residential properties on Coolidge Avenue and near Culver Park Place). Also, there are no mitigation measures required for potential light emission impacts from the LAX Expressway in the City of Culver City.

4.20 Construction Impacts

60. Significant negative impacts to Culver City are anticipated with the construction of the LAX Master Plan and in particular the LAX Expressway. There will be construction impacts within Culver City related to noise, land use, surface transportation, air quality, schools, aesthetics, lighting, public safety, and other environmental subject areas. However, the Draft EIS/EIR and associated appendices and technical reports neither address nor mention these impacts onto Culver City. From review of the documents, the evaluation and discussion of construction related impacts and mitigation is geared toward the immediate area surrounding the LAX boundary (i.e. Westchester, El Segundo, Inglewood, etc.). Therefore, it is uncertain whether the mitigation measures and master plan commitments related to construction of LAX apply to affected areas in Culver City. Clarify and specify in the Draft EIS/EIR and associated documents any construction impacts and mitigation measures applicable to affected areas in Culver City.

61. **Construction Schedule, page 4-859, 4-860.** Include a discussion under Alternative A and Alternative B, explaining under which phase the LAX Expressway will be constructed.
62. **Appendix K.** There is minimal and inadequate discussion of construction impacts and mitigation measures of the LAX Expressway.

4.21 Design, Art and Architecture

63. **Page 4-921, Lax Expressway.** This section should discuss visual/aesthetic impacts to land uses in Culver City. The Single Viaduct alignment (Alternative 3) for the LAX Expressway would parallel the I-405 right-of-way from approximately Arbor Vitae Street to areas slightly north of the SR-90. Figure 3.1-7 in Appendix K only highlights some and not all the affected areas in Culver City. In the area particularly northeast of the I-405/1-90 freeway interchange, the LAX Expressway would be visible from sensitive receptors such as single-family homes on Coolidge Avenue, Culver Park Place, Culver Park Drive, as well as the El Marino School and El Marino Park. At present, there is a densely landscaped area, which provide a visual buffer between the I-405 freeway and the homes on Coolidge Avenue. The proposed LAX Expressway would be closer than the existing freeway, if not on top of some of the homes and yards, and will eliminate the landscape buffer. Notwithstanding potential property acquisition at this location, the closeness of this proposed roadway will impact views from the residential area as well as the El Marino School and Park. Therefore significant aesthetic and view impacts from the LAX Expressway are expected.

Additional areas in Culver City along the I-405 would be subject to visual impacts under both the Single Viaduct and Split Viaduct Alignment for the LAX Expressway. The light manufacturing, commercial, office, research and development uses would be subject to visual impacts and shade and shadow effects from the LAX Expressway. Hotels located within the City of Culver City such as the Radisson, Four Points Sheraton Hotel, and the Ramada Plaza Hotel on Centinela and Sepulveda Boulevard would also view the proposed LAX Expressway.

Impacts to Culver City will start from slightly north of the SR-90 and I-405 freeway interchange down to the City limits at Green Valley Circle, with elevated crossovers at Centinela, Sepulveda, Bristol Parkway, and Jefferson Boulevards. Due to the need for placing column structures, there could also be significant impact to the industrial properties along Bankfield Avenue as well as to some industrial/commercial properties that are on Jefferson Boulevard. There would also be visual impacts, including shade and shadow effects and column placements in the parking lots that are in the vicinity of Bristol Parkway and Centinela Avenue. Supports for the elevated structure will, most likely, be located in the CHP parking lot, in the area of Bankfield Avenue-Selmarine Drive, and the west side of Slauson Avenue north of Jefferson Boulevard.

These impacts to Culver City are not mentioned in the Draft EIS/EIR or in Appendix K. Conduct a view analysis within Culver City areas, provide adequate mitigation measures, and include discussion within the Draft EIS/EIR of the visual/aesthetic/shade and shadow impacts to these sensitive receptors as well as other commercial and other types of uses in Culver City impacted by the LAX Expressway.

64. **Page 4-898, Environmental Action Plan and Page, 4-926 MM-DA-1 & MM-DA-2.** The two proposed mitigation measures (MM-DA-1 & MM-DA-2) designed to address aesthetic and visual impacts from the construction of the LAX Expressway should include areas and roadways in Culver City such as Coolidge Avenue, Culver Park Drive, Culver Park Place, Slauson Avenue, Selmarine Avenue, Bankfield Avenue, Jefferson Boulevard, Bristol Parkway, Green Valley Circle, and Centinela Parkway. Ensure in the language of the proposed mitigation measures that any construction fencing, pedestrian canopies, and view analysis be provided for these roadways listed above as they will be directly and significantly impacted by the proposed LAX Expressway.
65. **Appendix K, Page 60 and 110, Visual.** The visual analysis section does not analyze or evaluate view impacts or shade and shadow effects of the LAX Expressway to those areas in Culver City northeast of the I-405/I-90 freeways.
66. **Appendix K, Figure 4.17-1, Photo Locations.** Figure 4.17-1, stops short of depicting the entire northern length of the Expressway adjacent to Culver City. As such, the photo analysis conducted did not analyze those areas north of the freeway interchange in Culver City. Modify this figure to show additional photo locations and show the proposed Expressway extending slightly north the I-405/I-90 interchange, consistent with Figure 3.1-7, Segment A.

4.24 Human Health and Safety (CEQA)

67. **4.24.2.6, Environmental Consequences, Page 4-1046.** Provide an explanation or time frame in the phasing out of older, noisier aircraft. How long will this take?

PUBLIC SAFETY

Police:

68. The primary concern of the Police Department with the LAX Expansion Project proposals is traffic congestion. Traffic Congestion impacts the response time of Police vehicles to emergency calls, which impacts the quality of life in Culver City. The only two routes for response to the Fox Hills area from the East Portion of Culver City are La Cienega Avenue and Sepulveda Boulevard. Both of those streets

are congested during peak traffic hours and impact the response time of emergency vehicles to or from the above-described areas.

69. **Executive Summary IV-8.28 and IV-8.31.** The document describes traffic conditions, during peak hours of certain road segments. The segment of Sepulveda between Venice and Centinela is described in the report as follows. "Low volumes; primarily free-flow operations. Density is low, and vehicles can freely maneuver within the traffic stream. Drivers can maintain their desired speeds with little or no delay." That Report is not accurate. In fact, the actual traffic conditions during peak hours fit the description of the Impact Report's worst conditions, as follows. "Forced-flow operations with high approach delays at critical signalized intersections. Speeds are reduced substantially, and stoppages may occur for short or long periods of time because of downstream congestion."

70. All of our major roads lead to LAX. The LAX Expressway is proposed to accommodate traffic flow in and out of LAX. It directly feeds outbound LAX traffic to the San Diego Freeway, connecting N/B traffic to the 405 Freeway between the Jefferson Blvd and Culver Blvd ramps. There are no proposals for modifying that portion of the freeway for the added volume. The overflow traffic will exit into Culver City from the next two northbound ramps (Culver and Venice). That volume of traffic will add to the already congested Sepulveda Blvd, Washington Blvd, Washington Place, Culver Blvd and Venice Boulevards during peak traffic hours. It will also cause increased traffic congestion and delays on all of Culver City's North/South through streets. As the LAX grows, added traffic congestion will result in slower response times to emergency police calls.

Fire:

71. Both LAX Expressway proposals have southbound lanes beginning north of SR 90 freeway and continuing south to Arbor Vitae Street. There are no on- or off-ramps to provide emergency access along the way. Arriving at the emergency scene may prove difficult as traffic backs up with no way to divert vehicles. Culver City will be responsible for providing coverage on the southbound expressway unless farther distanced Los Angeles City Fire Department units are expected to handle all calls. The draft EIS/EIR needs to adequately address how emergency vehicles (fire trucks) can access/respond in a timely manner along the entire length of the proposed Expressway under non-peak and peak travel times.

72. The Report does not address additional traffic congestion on Sepulveda Boulevard through Culver City or the merging Expressway onto northbound San Diego Freeway. Any new traffic will have a significant impact on the Culver City Fire Department's response into the Fox Hills neighborhood, Centinela Avenue, I-405 Freeway north, etc. from the current location of Culver City Fire Station 3 located at 11304 Segrell Way.

73. Overviews 4.24.3 Safety, page 4-58, under LNG/CNG Facility, last paragraph, last sentence. Under all three Alternatives, the existing LNG Facility would be relocated to a site in the southeast portion of the airport near the East Imperial Cargo Complex. CNG storage would be constructed in conjunction with the LNG facility. The hazard radius for the LNG/CNG Facility would remain at a maximum of approximately 1,300 feet. As the location shown is in close proximity to the I-105 Freeway, the document does not mention the freeway as a possible exposure.

ENERGY

74.4.17 Energy Supply and Natural Resources. The projections are all based on 1997, 1998 figures, before deregulation set in. What are the environmental impacts on electricity and natural gas usage based on current generation and transport capacity projections?

75.4.17.1.8 Mitigation Measures. There is repeated reference to a Master Plan Commitment E-1, Energy Conservation and Efficiency Plan that would be implemented by LAWA which therefore eliminates the need for any mitigation measures. Has any portion of the plan been implemented to date, and if so what has the effectiveness been in energy reduction? Is it feasible to indicate that LAWA is capable of reducing energy consumption?

REGIONAL CONTEXT

76. The Draft EIS/EIR presumes that a vast majority of the region's growth in air passenger and air cargo demand will be directed to LAX. A number of commercially viable airports in the Southern California area currently exist and are underutilized relative to their capacity. A fully regional solution to this air passenger and air cargo capacity has not been adequately addressed in the Draft EIS/EIR.

77.1.13.3 Future Demand for Air Passenger and Cargo Transportation. What is the impact the Alameda Corridor and the East Alameda Corridor projects on shifting the transport of cargo to other airports from manufacturing centers?

78.1.2.4 Forecast Distribution of Demand. Where is the scenario that LAX is constrained to its current MAP and the demand has to be distributed to other airports? Only discussion is that air traffic will decrease overall, not about distribution.

79.1.3 Meeting the Demand for Transportation. The length of the driving time to various cities is unrealistic. Assumes less than 50 mph speed on open freeways.

80.1.4 The Need to Expand LAX. Statements do not indicate the benefit to the region with a freeze on LAX expansion – reduced traffic, pollution, noise, etc.

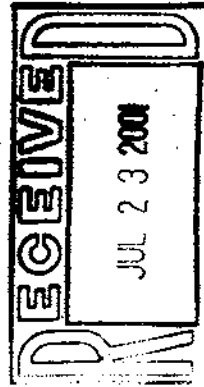
81.2.6 Non-LAX Development. Costco Center is located in Culver City not City of Los Angeles.

OTHER

82. In response to the NOP/NOI to prepare the Draft EIS/EIR issued in June 1997, Culver City requested in a letter dated July 31, 1997, that major issues and concerns related to traffic, air quality, overflight operations, regional context, and other subject areas impacting Culver City be analyzed in the preparation of the Draft EIS/EIR. None or minimal analysis of the issues the City requested to be analyzed are contained in the Draft EIS/EIR. Further, Culver City's NOP/NOI comment letter is not contained in Appendix A of the Draft EIS/EIR, where copies of written comments from affected agencies are contained.

RESOLUTION NO. 98- R087

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
CULVER CITY, CALIFORNIA, CALLING FOR A REGIONAL
AIRPORT PLAN FOR SOUTHERN CALIFORNIA.



WHEREAS, the Los Angeles Department of Airports has initiated a revision of the Master Plan for Los Angeles International Airport (LAX) which anticipates expanding its passenger activity from a current 60 million passengers per year to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year; and

WHEREAS, expanding the passenger and cargo activity as proposed will greatly increase the number of flights and nearly double ground traffic going to and from LAX; and

WHEREAS, communities in the vicinity of LAX which already experience enormous adverse environmental impacts from operations of the Airport can expect greatly increased noise and air pollution from overhead aircraft, greatly increased congestion and air pollution from ground traffic, especially from dramatic increases in the activity of diesel trucks around the Airport; and

WHEREAS, airport officials estimate LAX improvements will cost as much as \$12 billion dollars, not including the costs of transportation improvements required to facilitate access to LAX which will be paid for by regional taxpayers; and

WHEREAS, there are many other commercial airports in Southern California; some with significant histories as commercial airports, some recently converted to commercial or joint military and commercial airports; and

WHEREAS, several of these airports are located in areas of Southern California expected to experience the greatest growth in population and employment over the next twenty years, while LAX is near the communities expected to experience the least growth in the same period; and


1 WHEREAS, developing airport capacity near high growth communities
2 rather than concentrating airport development at LAX may be an environmentally
3 superior, lower-cost and more equitable strategy for serving future growth in air
4 commerce in Southern California; and

5 WHEREAS, the development of these regional airport resources will
6 help spread jobs and economic development opportunities more equitably
7 throughout the region, and reduce the public health and environmental burdens on
8 communities near LAX.

9 NOW, THEREFORE, the City Council of the City of Culver City,
10 California, DOES HEREBY RESOLVE, as follows:

11 SECTION 1. The City of Culver City calls upon the communities of
12 Southern California, including the City of Los Angeles; the Counties of Los Angeles,
13 Orange, San Bernardino, Riverside, and Ventura; the State of California; and our
14 congressional representatives to join together in developing the Regional Airport
15 Plan for Southern California that constrains LAX to operate within the capacity of its
16 existing facilities and develops the capacity of the many other commercial airports in
17 Southern California to serve the expanding air commerce marketplace.


18 APPROVED and ADOPTED this 14th day of September, 1998.

19 
20 SANDRA J. LEVIN, Mayor
21 City of Culver City, California

22 ATTEST:

23 APPROVED AS TO FORM:

24  9/28/98
25 TOM CRUNK
26 City Clerk

27 
28 CAROL A. SCHWAB
City Attorney

CAS:eh
rlax



HILLSIDE

MEMORIAL PARK AND MORTUARY ★

A COMMUNITY SERVICE OF TEMPLE ISRAEL OF HOLLYWOOD

RECEIVED

JUN 20 2001

**CULVER CITY
PLANNING DIVISION**

06/11/2001

REC'D JUN 12 2001

Ed Wolkowitz, Mayor
And City Council
City of Culver City
9770 Culver Blvd.
Culver City, CA 90232

Dear Mayor Wolkowitz and Councilmembers:

Attached you will find our letter to the Lax Master Plan Office in response to the EIS/EIR. In it, we elaborate on our concerns regarding the proposed LAX Expressway. For the Council's convenience we are providing the following summary. We hope that our concerns mirror yours and will be reflected in the response that the City makes to the LAWA.

1) Noise

In spite of the fact that Culver City requires noise barriers to be part of any new development or improvement, the EIR/EIS only proposes noise barriers along the 405 between La Tijera and La Cienega, not all the way to Sepulveda.

The Noise Study did not include a portion of the area in Culver City that will be dramatically affected by the Expressway. The study's Northern boundary was Howard Hughes Parkway. The noise impact will extend further North to either Bristol Parkway (Alternative 2) or even beyond Jefferson (Alternative 3). Both of these alternatives include Hillside Memorial Park, where any increase in noise will have a dramatic effect on funeral services.

2) Cultural Resources

The Study did not include Hillside Memorial Park as a possible Historical, Architectural Resource in the affected area. The Hillside Memorial Park Waterfall and Jolson Memorial were designed by Paul Williams (the same architect responsible for the Theme Building at the Airport) in 1950. We have been operating as a cemetery in this location since 1941. We are an important part of the history of the Jewish culture in Los Angeles. In addition, for over 50 years the waterfall and Jolson Memorial have been highly visible landmarks from either Sepulveda or the 405 Freeway. We feel we deserve at least as much consideration as Randy's Donut, which has been considered a historic property.

3) Visual Impact

The EIS/EIR stated that "views of the road" were more important than "views from the road" for purposes of assessing the impact of the expressway. Our rolling hillsides and majestic buildings are very impressive when viewed from the 405. The loss or disruption of this view is a significant factor to be considered; at least as much as the item deemed most visually dominant by the EIS/EIR (the multi-story office building on the west side of the I-90 junction).

We are very concerned that given the proposed height of the expressway and its location (particularly in Alternative 3) we will be dramatically impacted by shade, shadow and aesthetically at the entrance area and Southwest corner of our Park.

4) Traffic

The EIS/EIR states that during construction "inconvenience (delays, etc) may occur particularly at intersections where the expressway crosses or connects to Florence, La Cienega, La Tijera, Bristol Parkway & the 405". The EIS/EIR also states that the intersection at Centinela & Sepulveda is already the lowest level of service rating for peak periods. With the exception of the Florence intersection, all of this is taking place in a small section of surface streets that are major arteries used to access our location.

5) Social & Economic

Although all of the above concerns have the potential to severely affect us financially, we have one additional concern. The visibility of the waterfall, Jolson Memorial and our signage from the 405 is tremendously important to us in maintaining our place in a highly competitive market. We use the Jolson Memorial as our corporate logo on all of our advertising and it has become a landmark and a symbol we refer to with pride. Compromising the view of this historical feature would be a tremendous blow for us economically.

Sincerely,



Barry Berlin

Executive Director, Planning and Development
Hillside Memorial Park & Mortuary

Cc: Max Paetzold
Culver City Chamber of Commerce
Westchester Chamber of Commerce

AL00018



P.O. Box 92216
Los Angeles, CA 90009-2216

Public Comments

Name (First MI Last, or Organization): Hillside Memorial Park & Mortuary **Date:** 06/11/01

Address: 6001 Centinela Ave. /P.O. Box 451035

City: Los Angeles **State:** CA **Zip Code:** 90045

Telephone (Optional): (310) 641-0707 **E-Mail (Optional):**

Document: Draft Master Plan Draft EIS/EIR

Subsection (if applicable): Supplemental Environmental Evaluation for LAX
Number: Appendix K **Title:** Expressway and State Route 1 Improvements

Comments:

SEE ATTACHED

Office Use Only

Attach additional sheets if necessary.

Hillside Memorial Park & Mortuary is located on the North side of Centinela, between Bristol Parkway and Green Valley Circle in Culver City. We were established in 1941 and purchased by Temple Israel of Hollywood in 1956. We are a religious, not for profit organization, which employs 65 people, and provides approximately 950 burials and 850 mortuary services per year. We are very concerned about the potential impact of the LAX expansion on the quality of service and the environment we provide to families who come to us to mourn and remember their loved ones who have died.

The Draft EIS/EIR states that LAWA prefers Expressway Alternative 3, which transitions traffic to and from the 405 at the junction with the 90 freeway, rather than Expressway Alternative 2, which transitions traffic to and from the 405 at Howard Hughes Parkway (Appendix K, page 2). The remainder of Appendix K presents the analysis of Alternative 3 in much more detail than the "less desirable" Alternative 2. This makes it more difficult for anyone adversely impacted by Alternative 3 to respond to the Draft EIS/EIR. However, after careful study, we at Hillside Memorial Park and Mortuary have the following concerns regarding the methods and conclusions reached by the EIR/EIS.

1) Noise

The Culver City General Plans Land Use Element requires noise barriers to be part of any new development or improvement (Appendix K, page 23). The EIR/EIS proposes noise barriers along the 405 between La Tijera and La Cienega (Appendix K, page 71). The EIS/EIR clearly shows that the areas of Culver City to be affected by the Expressway stretch from Green Valley Circle North to either Bristol Parkway (Appendix K, Figure 3.1-2) or beyond that to a point North of Jefferson (Appendix K, Figure 3.1-7). Therefore, we believe that the proposed noise barriers are not in compliance with the requirements of Culver City

A category "A" land use or activity level is defined as "Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose" (Appendix K, page 39). According to the EIR/EIS there are no category "A" uses identified in the project area (appendix K, page 39). Having conducted funeral services at this location since before there was a 405 Freeway, we assure you that the need for serenity and quiet are of extraordinary significance here. As a matter of fact, we can not imagine what land use could fit more completely and clearly into Category A than that of a Memorial Park.

The area included in the Noise Study extended from just South of the 105 to Howard Hughes Parkway. Since the area affected by the expressway extends North to either Bristol Parkway (Appendix K, Figure 3.1-2) or beyond that to a point North of Jefferson (Appendix K, Figure 3.1-7), we feel a second study needs to be done to include the areas that will actually be adjacent to all of the Expressway.

2) Cultural Resources

The Area of Potential Effects (APE) shown in Appendix K includes all of Hillside Memorial Park & Mortuary (Appendix K, figure 4.15-1). However, the Section 106 report does not include Hillside Memorial Park & Mortuary; only the area of Centinela that runs along the front of our Park (Appendix I, map 7). The EIR/EIS did not list Hillside Memorial Park as a possible Historical, Architectural Resource in the affected area. The Hillside Memorial Park Waterfall and Jolson Memorial were designed by Paul Williams (the same architect responsible for the Theme Building at the Airport – Appendix K, page 57) in 1950. We have been operating as a cemetery in this location since 1941. We are an important part of the history of the Jewish culture and community in Los Angeles. In addition, for over 50 years the waterfall and Jolson Memorial have been highly visible landmarks from both Sepulveda and the 405 Freeway.

One of the stated reasons that the LAWA prefers Alternative 2 is that it “minimizes the disruption to Historic Resources”. We feel Hillside deserves at least as much consideration as Randy’s Donut, which has been considered a historic property by the EIR/EIS.

Alternative 3 would be more disruptive to Hillside Memorial Park & Mortuary than Alternative 2. (Appendix K, figures 3.1-2 and 3.1-7) It overhangs our property, it impacts traffic, it impairs lines of sight, it increases the noise level in the Park, and it will cause additional vibration, glare and all of the other detrimental effects listed in the EIR/EIS.

3) Visual Impact

The EIS/EIR stated that “views of the road” were more important than “views from the road” for purposes of assessing the impact of the expressway (Appendix K, page 60). We do not understand why only one of these can be considered. As the stewards of a large green area in the middle of a community of commercial and residential properties, we are always aware that we are responsible for providing a beautiful landscape for travelers on the 405. Our rolling hillsides and majestic buildings are very impressive when viewed from the 405. The loss or disruption of this view is a significant factor to be considered; at least as much as the item deemed most visually dominant by the EIS/EIR (the multi-story office building on the west side of the I-90 junction-Appendix K, page 61).

We are very concerned that given the proposed height of the expressway (6 meters or 20 feet: Appendix K, page 16) and its location in Alternative 3, we will be dramatically impacted by shade, shadow, noise, vibration and aesthetically at the entrance area and Southwest corner of our Park (Appendix K, photo 10). In addition, we wonder about the safety of having an elevated expressway located above an open area and adjacent to two chapel buildings that are used for funeral services. We did not see the potential effect of a large accident on the area below the expressway addressed in the EIR/EIS.

4) Traffic

The EIS/EIR states that the intersection at Centinela & Sepulveda has the lowest level of service rating for peak periods (Appendix K, page 9). Both of the proposed Alternatives include pillars 2 meters wide along the freeway (Appendix K, page 16). We feel the addition of more surface obstacles to the intersection of Centinela and Sepulveda (where there is already a freeway underpass) would make this intersection considerably more congested and, more significantly, very dangerous. We did not see the analysis of the impact of these pillars in the document at all.

The EIS/EIR states that during construction "inconvenience (delays, etc) may occur particularly at intersections where the expressway crosses or connects to Florence, La Cienega, La Tijera, Bristol Parkway & the 405" (Appendix K, page 69). With the exception of the Florence intersection, all of this is taking place in a small section of surface streets that are major arteries used to access our location. In addition, the intersections involving Bristol Parkway and the 405 are within yards of the aforementioned Centinela & Sepulveda intersection. We are not convinced that the true catastrophic nature of the impact for traffic along Centinela between Sepulveda and La Tijera has been addressed. Nor do we find any mitigation plans for this problem.

5) Social & Economic

Although all of the above concerns have the potential to severely affect us financially, we have one additional concern. The visibility of the waterfall, Jolson Memorial and our signage from the 405 is tremendously important to us in maintaining our place in a highly competitive market. We use the Jolson Memorial as our corporate logo on all of our advertising and it has become a landmark and a symbol we refer to with pride. Compromising the view of this historical feature would be a tremendous blow for us economically.

Thank you for the opportunity to provide comment on this issue which is critical to the future of Los Angeles, and to the lives of our client families.



City of
Santa Monica

Big Blue Bus
1660 Seventh Street
Santa Monica, California 90401-3324



**COMMENTS ON
DRAFT ENVIRONMENTAL IMPACT STATEMENT/
ENVIRONMENTAL IMPACT REPORT
LOS ANGELES INTERNATIONAL AIRPORT
PROPOSED MASTER PLAN IMPROVEMENTS**

Background

The Big Blue Bus operates Line 3, connecting Santa Monica, Venice and Marina del Rey with LAX Transit Center via Lincoln Boulevard. Line 3 has over 12,000 passenger boardings on a typical weekday. The Lincoln Boulevard corridor has been one of our fastest growing routes since it was extended beyond the airport to the Metro Green Line at Aviation. This service provides a vital link between the growing job market in Santa Monica and residents of southeast Los Angeles County. Every weekday, approximately 3,500 passengers travel through LAX on Line 3. Line 3 has more passenger boardings in the LAX area than any other bus route.

Summary of Comments

The City of Santa Monica Big Blue Bus concludes that the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) addresses public transit in only the most superficial and cursory manner. It is unacceptable.

The principal shortcomings are summarized as follows.

- The DEIS/EIR states that the current LAX Transit Center will be eliminated in all Master Plan alternatives. However, no location for a replacement facility has been identified. The facility in Lot C currently has approximately 525 Big Blue Bus passenger boardings each weekday.
- There is no discussion, not even on an abstract policy level, of how transit passengers would access the terminals.

- There are no dedicated lanes proposed anywhere for Bus Rapid Transit. This is inconsistent with county-wide policy to develop roadway priority measures for transit buses on major corridors. The Master Plan alternatives do not address transit bus circulation on the re-engineered roadway system. There is no discussion of convenient bus access to any replacement transit center facility .
- The extension of the Metro Green Line to a new passenger terminal on the west side of the airport does not provide for transfers between trains and transit buses.
- The implementation of a Green Line extension is not tied to the opening date of the new terminals it is supposed to serve.

Recommendations

- The Metro Green Line should be extended further than is proposed in the alternatives, to the intersection of Lincoln boulevard and Manchester Boulevard. This would provide a convenient connection between the Metro Rail system and bus service to the Westside. By avoiding roadway congestion in the airport area, transit users traveling through LAX would benefit from a reduction in their daily commute time of at least 25 minutes,. This Green Line extension should already be operational during airport construction to mitigate disruptions to through traffic.

The provision of a rail tunnel under the north runways is consistent with the overall Project because Alternatives A, B, and C all feature a series of a new tunnels. There is a new tunnel for Sepulveda Boulevard included in the Master Plan under the north runways. For Aviation Boulevard, there are two tunnels under new taxiways on the north and south sides of the airport.

The alignment of a Green Line extension from the West Terminal to the intersection of Manchester Boulevard at Lincoln Boulevard is entirely within airport property, except for the final quarter mile which is owned by the City of Los Angeles. Funding could come primarily from Airport revenues.

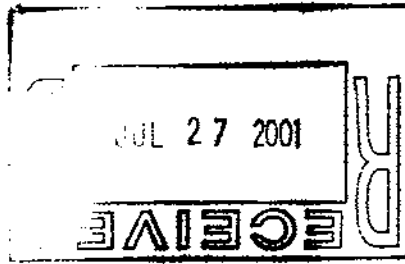
- The new transit center should provide cross platform transfers between buses and the automated people mover system. There should be curb space for at least ten buses to board passengers. Access to and from the transit center should not require circuitous routing for buses traveling from any direction. There should be no unprotected left turns for buses servicing the new transit center. Layover space for at least five buses should be located no more than two minutes drive from the transit center. A transit customer service center should be provided at the transit center where employees and arriving passengers could get travel information and purchase tickets and passes.

The Big Blue Bus is willing to work with Los Angeles World Airports to create viable on-airport and off-airport surface transportation elements for the Proposed Master Plan Improvements.

Sincerely,


Paul Casey

c: Steve Cunningham, Director of Transportation, Culver CityBus
Roderick Goldman, Transportation Planning Manager, LACMTA
Anthony Rose, Staff Assistant, Torrance Transit



City Manager's Office

City Hall
14177 Frederick Street
P.O. Box 88005
Moreno Valley, CA 92552-0805
Telephone: (909) 413-3000
FAX: (909) 413-3750

July 25, 2001

Jane L. Benefield
Senior City Planner
Master Plan LAX
1 World Way
P.O. Box 92216
Los Angeles, CA 9009-2216

Re: Draft LAX Master Plan EIS/EIR

Dear Ms. Benefield:

Thank you for providing us a copy of the LAX Master Plan and accompanying EIS/EIR. The City of Moreno Valley is concerned that the EIS/EIR fails to adequately address the feasibility of March GlobalPort, as well as other Inland Empire airports.

Chapter I, Regional Context, Section 1.2.2.11 of the EIS/EIR states that "March Air Reserve Base/March Inland Port" is currently marketed only for cargo operations. Consequently, the EIS/EIR concludes, March GlobalPort's ability to attract scheduled passenger air service is untested and uncertain. However in Section 1.2.2.9 of that same chapter, the EIS/EIR dismisses the feasibility of passenger air travel at the San Bernardino International Airport because it would need to compete with well-established service at other airports, and with proposed commercial air service at March Air Reserve Base/March Inland Port. The EIS/EIR provides no discussion of the proposed commercial air service operations at March GlobalPort, and provides no data to support its dismissal of the feasibility of increased passenger travel at March GlobalPort as well as other Inland Empire airports.

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The City of Moreno Valley requests that the EIS/EIR be amended to clearly document its findings regarding the feasibility of Inland Empire airport expansions and the regional impacts of the proposed LAX Master Plan on Inland Empire airport existing and proposed facilities. In addition, the City requests that the EIS/EIR include in its review of project alternatives an expanded passenger air travel facility at March GlobalPort. To assist your agency in this effort, the City of Moreno Valley requests the EIS/EIR consider the following information:

According to state of California Finance Department estimates, San Bernardino and Riverside Counties' combined population reached 3.34 million in 2001, a population greater than 21 of our nation's states. By 2020, SCAG forecasts that the Inland Empire's population will grow by an additional 1.83 million residents, to over 5 million, a population that will exceed that of 47 of our nation's states.

The state of California Employment Development Department reports that as of 2001, the Inland Empire has an economy with over 1 million jobs. According to SCAG, the Inland Empire will expand to a 1.8 million-job economy by 2020. Many of these jobs will be in the manufacturing and logistics sectors, adding more truck and commuter traffic to our already clogged freeways.

This future growth will create a huge increase in demand for inland passenger and cargo flights. Recent SCAG research on air passenger demand predicts an enormous increase in volume for airports in the Inland Empire. Between 2000-2020, annual airport passenger volume at inland airports will rise from 6.7 million to 43.4 million. Similarly, SCAG's research shows air cargo demand will soar. Between 2000-2020, annual air cargo at inland airports will rise from 0.6 million to 5.2 million tons. This increase is expected to be greater than in Los Angeles County, and in Orange, San Diego, Ventura and Imperial Counties combined.

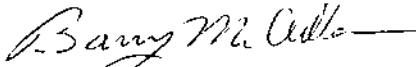
Yet despite this current and expected demand for airport services in the Inland Empire, most airlines concentrate their airport planning efforts in the highly urbanized Los Angeles and Orange Counties. Efforts to expand aviation services in these urbanized counties are hampered by environmental concerns and community resistance. At the same time, these efforts draw much needed airport services away from the Inland Empire.

Page 3
July 25, 2001

The price for concentration of airline activity in Los Angeles and Orange Counties is both increased traffic congestion and air pollution. March GlobalPort, as well as San Bernardino International Airport, Southern California Logistics Airport, Ontario International Airport and Palm Springs Regional are inland airport facilities that are well located to serve future Southern California aviation needs. Each of these inland airports has great unused capacity, and is located within communities that are generally supportive of those airports and that would greatly benefit from the increased use of those facilities.

Should you have any questions concerning the issues raised in this letter, please contact Craig Neustaedter, City Traffic Engineer at (909) 413-3140.

Sincerely,



fr Gene Rogers
City Manager

Cc: Mayor Flickinger
City Council
Trent Pulliam, Public Works Director
Linda Guillis, Economic Development Director
John Terell, Planning Official
Craig S. Neustaedter, City Traffic Engineer

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AL00020



June 9, 2001

Mr. David Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Worldway Postal Center
Los Angeles, CA 90009-2007



Dear Mr. Kessler:

I am gravely concerned about the inadequacy of the Draft EIR/EIS, in terms of fulfilling the responsibility of informing the public of the potential effect of airport expansion. Given the limited time I have available, I will focus on a few of my most serious concerns.

The manner in which Environmental Justice is addressed, I believe, is completely inadequate. Requirements to mitigate Environmental Justice are not firmly stated, rather the approach is that it is an issue to be handled later. Therefore, it is impossible to determine whether or not Environmental Justice mitigation is adequate. Furthermore, there is no comparison between the options presented and an alternative for the development of regionalized expansion of areas throughout the Los Angeles basin. This is a glaring flaw in the document because the regionalized airport approach should be presented as an alternative for discussion, and should also be evaluated relative to the comparative impact on Environmental Justice.

Additionally, in terms of Environmental Justice, there should be an analysis of the degree of usage of LAX by Lennox residents, as well as the surrounding communities, to determine the degree to which use of the airport is serving the needs of its most immediate neighbors, as opposed to meeting the needs of others who do not feel the impact of the environmental concerns associated with the airport.

On a different topic related to the issue of noise, I was not able to find in the report any analysis of single-flight noise, and only the average calculation of CNEL noise effects is utilized. This, once again, is a glaring error in that single-flight noise levels do have a tremendous impact on Lennox residents and students within the Lennox School District. This analysis should be a part of the Draft Report.

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AL00021

Mr. David Kessler, AICP

Page 2

June 9, 2001

The issue of noise is a serious concern to the Lennox School District in that a variety of studies have confirmed that children who live near LAX are hindered in their academic performance due to exposure of excessive aircraft noise. This negative effect occurs even though the school program offers noise-abated classrooms. The document should more fully explore the negative effects of noise on schoolchildren, and should provide specific mitigation measures to offset this negative effect on students. The proposed remedy, to be credible, needs to be based on existing research findings.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ed Urrutia".

Mr. Ed Urrutia

Board Member

Lennox School District Board of Trustees

AL00021

c: JR

MEMBERS OF THE BOARD

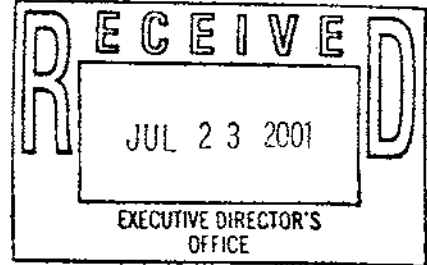
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**BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES**

383 KENNETH HAHN HALL OF ADMINISTRATION / LOS ANGELES, CALIFORNIA 90012

VIOLET VARONA-LUKENS, EXECUTIVE OFFICER
(213) 974-1411

July 13, 2001



Ms. Lydia H. Kennard
Executive Director
Los Angeles World Airports
One World Way
P.O. Box 92216
Los Angeles, CA 90009-2216

Dear Ms. Kennard:

Consistent with unanimous action of our Board on July 10, 2001, we formally submit the attached document as the County of Los Angeles' final comments on the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) for Proposed Master Plan Improvements at Los Angeles International Airport (LAX).

We continue to believe that LAX is vitally important to the City, County, and to this region, and that there is need for some improvements at this facility. However, the deficiencies reflected in the Draft EIS/EIR, as detailed in the attached, are serious, pervasive, and systematic. Notably, the Draft EIS/EIR fails to explore the preferred and more economically, environmentally, and socially salutary alternative of a regional approach to planning for and meeting airport demand and capacity. In this regard, we believe that Los Angeles World Airports and the Federal Aviation Administration should support the efforts of the Southern California Regional Airport Authority, which has recently reactivated and is preparing a comprehensive work plan of activities over the next 18 months that will employ a consensus-building process to develop a regional airport strategic master for Southern California.

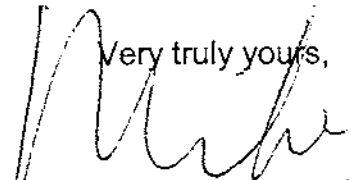


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Ms. Lydia H. Kennard
July 13, 2001
Page 2

Over 100 other local and regional governmental agencies have gone on record supporting a regional approach to airport expansion. Therefore, we respectfully request that the Los Angeles World Airports and the Federal Aviation Administration restart the process and incorporate a regional approach to airport expansion, and resolve the deficiencies in the Draft EIS/EIR, including those involving noise, transportation, air quality, and environmental justice impacts.

Very truly yours,



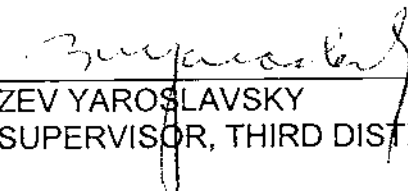
MICHAEL D. ANTONOVICH
MAYOR, COUNTY OF LOS ANGELES



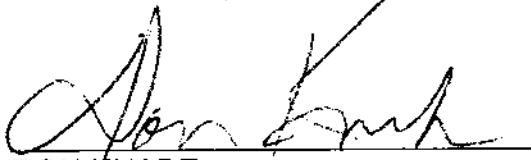
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SUPERVISOR, FIRST DISTRICT



YVONNE BRATHWAITE BURKE
SUPERVISOR, SECOND DISTRICT



ZEV YAROSLAVSKY
SUPERVISOR, THIRD DISTRICT



DON KNABE
SUPERVISOR, FOURTH DISTRICT

5071001-58caoltr

Attachment

c: Jane Garvey, Administrator, U.S. Federal Aviation Administration

AL00022



County of Los Angeles
CHIEF ADMINISTRATIVE OFFICE

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DAVID E. JANSSEN
Chief Administrative Officer

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Fifth District

ADOPTED

BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

July 10, 2001

58

JUL 10 2001

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Violet Varona-Lukens
VIOLET VARONA-LUKENS
EXECUTIVE OFFICER

Dear Supervisors:

**FINAL REPORT ON DRAFT EIS/EIR FOR PROPOSED MASTER PLAN
IMPROVEMENTS AT LAX
(ALL DISTRICTS AFFECTED) (3 VOTES)**

IT IS RECOMMENDED THAT YOUR BOARD:

1. Approve the final report on the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) for the Proposed Master Plan Improvements at Los Angeles International Airport (LAX) submitted by A.C. Lazzaretto & Associates as the County's official comments on the Draft EIS/EIR.
2. Send a five-signature letter to Los Angeles World Airports (LAWA) and Federal Aviation Administration (FAA) submitting the final report as the County's final comments on the Draft EIS/EIR and requesting LAWA and the FAA to restart the process and incorporate a regional approach to airport expansion.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of this recommended action is to accept the attached final report as the County's official response to the Draft EIS/EIR and present it to LAWA and FAA prior to the July 25, 2001 comment period deadline. Submission of the County's official response allows for the concerns and suggestions detailed in the final report to be addressed by LAWA and FAA. If County's concerns and suggestions are not adequately addressed and/or incorporated into the final EIS/EIR, the County retains the ability and opportunity to challenge the LAX Master Plan Improvement project based on those issues discussed in the final report.



Honorable Board of Supervisors
July 10, 2001
Page 2

It is important to stress that, although LAX is entirely within the jurisdiction of the City of Los Angeles, as proposed the Master Plan Improvement is an airport expansion project that impacts the region as a whole. It is for this reason that the Board of Supervisors on April 4, 1998 went on record to "oppose restricting further air traffic expansion at Los Angeles International Airport only, and supporting instead, a regional approach to expansion including Palmdale Regional Airport." A regional approach does not stop expansion at LAX, but rather addresses the limits of LAX in meeting the region's air travel needs, and promotes a more collaborative and balanced approach to meeting regional needs by distributing air service to airports around the region. The consultants state in the final report that the "process needs to begin with a scoping process that acknowledges the regional nature of the undertaking and follows with a fresh look at Alternatives that include regional options."

The position on incorporating a regional approach to any expansion plan to LAX is one that is shared by many cities within Los Angeles County. In addition, the County of Los Angeles is a member of the Southern California Regional Airport Authority (SCRAA), which is a Joint Powers Agreement with the Counties of Orange, San Bernardino, Riverside, and City of Los Angeles. The SCRAA, which is chaired by Supervisor Knabe, has conceptually endorsed a work plan to develop a regional aviation master plan.

The recommendations in this letter are consistent with actions taken by your Board on June 5, 2001, based on the initial findings of the consultant's review of the Draft EIS/EIR. Among these actions, your Board took a "do not support" position on the Draft LAX expansion plan, supported a cap of the annual number of landings and take offs at LAX of 790,000, and instructed County staff attending the June 9, 2001 public hearings on the Draft LAX expansion plan to request that a rewritten plan also include viable regional airports as a means to mitigate increased air traffic.

Honorable Board of Supervisors
July 10, 2001
Page 3

Implementation of Strategic Plan Goals

These recommendations are consistent with the following Strategic Plan Goal and Strategy:

Goal: **Organizational Effectiveness:** *Ensure that service delivery systems are efficient, effective, and goal-oriented.*

Strategy: *Collaborate across functional and jurisdictional boundaries.*

By promoting a regional approach to air service, the County is seeking to collaborate and work with other city and county jurisdictions to ensure that any air service expansion plan is environmentally, economically, and socially beneficial to the region as a whole.

FISCAL IMPACT/FINANCING

Not applicable.

FACTS AND PROVISIONS

On March 13, 2001, this office entered into an agreement with A.C. Lazzaretto & Associates to provide expert technical assistance in reviewing and commenting on the Draft EIS/EIR for the Proposed Master Plan Improvements at LAX. In accordance with that contract, the consultant assembled a team of environmental experts to review the document for consistency and accuracy, with special attention to the major areas of noise, traffic, air and water quality, and environmental justice.

On June 5, 2001, the consultant presented the Board of Supervisors with a preliminary report outlining major flaws and inadequacies with the Draft EIS/EIR. On June 9, 2001, Board members Burke, Knabe, and Antonovich, and/or their representatives, presented verbal comments regarding these flaws and inadequacies of the Draft EIS/EIR at LAWA's and FAA's public hearing.

Honorable Board of Supervisors
July 10, 2001
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Consistent with their contract, the consultant is presenting the attached final report to the Board of Supervisors commenting on the Draft EIS/EIR for the Proposed Master Plan Improvements at LAX. The consultant concludes that LAX is vitally important to the City, County, and to this region, and that there is need for some improvements. However, the problems associated with this Draft EIS/EIR are so serious, pervasive, and systematic that the only practical remedy is to start the process over again. The following are key findings supporting this conclusion:

- The preferred Project Alternative C has more significant unavoidable adverse effects than either of the other two Alternatives, yet fails to meet the projected demand, as do the other Alternatives.
- The EIS/EIR conclusion that the development of regional airports is an unreasonable Alternative is not supported by evidence provided in the EIS/EIR.
- The scoping outreach effort did not include a single agency within the County governments of Los Angeles, San Bernardino, Orange, Riverside, or Ventura.
- The Alternatives fail to acknowledge changes occurring at regional airports, such as the favorable marketing study regarding activating commercial air service at Palmdale; Ontario's ability to accommodate international flights as well as possible expansion in capacity; increased cargo capacity at Southern California Logistics Airport (formerly George Air Force Base); the expiration of the cap on John Wayne; and the recently invalidated Measure F at El Toro, which would have required a two-thirds vote of approval to construct a civilian airport in the future.
- The EIS/EIR fails to comply with the intent of California Environmental Quality Act (CEQA) to facilitate an understanding of changes in the environment associated with the proposed project by using a "baseline" that was five years old at the time of the EIR/EIR release date.
- The EIS/EIR contains numerous comments and conclusive statements that create an appearance of project advocacy.

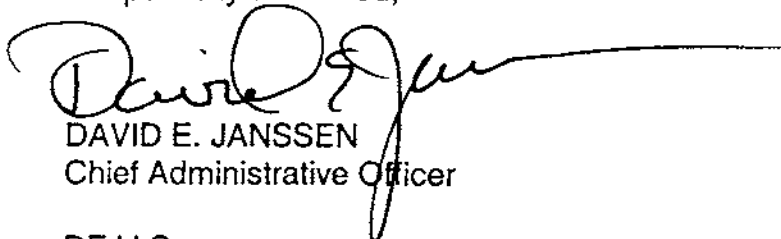
Honorable Board of Supervisors
July 10, 2001
Page 5

- Many impacts in the Environmental Justice analysis were not addressed, reportedly because the preparers were not able to quantify or analyze the impacts.
- The on-site traffic, noise, and air quality impact analyses are inadequate.
- Although the EIS/EIR indicates the Alternatives may have significant human health effects, no mitigation measures are offered.

IMPACT ON CURRENT SERVICES

Although this action will not have a direct impact on current County services, the promotion of a regional approach to air service expansion may provide a positive stimulus to the regional economy, while enhancing and meeting air service demand in a responsible measured manner.

Respectfully submitted,



DAVID E. JANSSEN
Chief Administrative Officer

DEJ:LS
MKZ:JR:os

Attachment

c: County Counsel
Director of Planning
Director of Public Works
Interim Director of Health Services
City of Los Angeles

County of Los Angeles

**Comments on Draft EIS/EIR for Proposed
Master Plan Improvements at LAX**

Prepared By:



A.C. Lazzaretto & Associates

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Burbank, CA 91504
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Fax: (818) 558-7088

Project Manager:
Andrew C. Lazzaretto

June 28, 2001

AL00022

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1 Executive Summary

A.C. Lazzaretto & Associates has been retained by the Los Angeles County Chief Administrative Office to review and comment on the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) prepared for Los Angeles World Airport's (LAWA) Proposed Los Angeles International Airport (LAX) Master Plan. A.C. Lazzaretto & Associates assembled a team of environmental review experts to review the document for consistency and accuracy. Throughout the review process, the team paid special attention to the major issues of noise, traffic, air and water quality, and environmental justice. In addition, the information was evaluated using the following criteria: reasonableness of input data and assumptions, appropriateness and accuracy of analysis, appropriateness and adequacy of mitigation measures, and conformity with State and Federal standards. In performing the task of reviewing the Draft EIS/EIR, every attempt has been made to offer objective, constructive comments concerning the major elements of the Draft EIS/EIR.

1.1 Project Alternatives

The stated project purpose identifies only three Master Plan objectives, which is unusually limited for a project of this scale. Moreover, the objectives omit any mention of environmental goals, such as enhanced access, or improved quality of life. The Draft EIS/EIR fails to comply with the cornerstone element of California Environmental Quality Act (CEQA) – that an EIR must describe a reasonable range of Alternatives that would feasibly meet most objectives, but would avoid or lessen significant effects of the project. In terms of ability to reduce significant effects for key impact categories such as noise, land use, environmental justice, and air quality, there is no substantive difference among the Alternatives. For instance:

- ◆ Of the 25 impacts identified as significant and unavoidable for any one of the project Alternatives:
- ◆ 22 are significant and unavoidable for all 3 Alternatives;
- ◆ 1 impact is cited as unknown for all 3 Alternatives; and
- ◆ Only 2 impacts show variation among the Alternatives in the level of impact severity.

Most significantly, the preferred Project Alternative C has more significant unavoidable adverse effects than either of the other two Alternatives yet fails to meet the projected demand, as do the other Alternatives. In effect, LAWA is recommending approval of the Alternative that would cause the greatest number of adverse impacts, while meeting the fewest number of project objectives. A full discussion of how and why Alternative C became the preferred Alternative, recognizing that it offers fewer benefits than the remaining Alternatives without any substantive reduction in adverse impacts, is necessary to justify its utility as the Preferred Project Alternative.

The Alternatives contain several assumptions that are inconsistent and lack justification. For example, the Alternatives assume that new cargo facilities are less efficient than the old LAX facilities and fail to recognize that modern facilities may handle twice the amount of cargo per

square foot. In addition, the Draft EIS/EIR nearly doubles the terminal space yet assumes a very modest increase in passengers and operations. The All Weather Peak Hour Operations is greater in the baseline than in Alternative C and the All Weather Average Delay is shorter in the baseline than in Alternative C. All of these assumptions are illogical and challenge the credibility of the forecasts upon which the analyses are based.

1.2 No Project Alternative

The No Project Alternative provided in the Draft EIS/EIR poorly serves the goals of CEQA and National Environmental Policy Act (NEPA). On the one hand, the analysis takes unwarranted liberty in defining this Alternative to include improvements that are only in the “planning stages” at this time. On the other hand, the analysis provides an excessively narrow definition of the improvements that may occur at LAX under the No Project Alternative and thereby understates the improvements that would likely occur at LAX without the Master Plan. In both cases, the resulting assessment is impaired, skewing comparison with project Alternatives.

In addition, LAWA has pursued numerous significant improvements at LAX since 1997. Nevertheless, in defining the No Project Alternative, the Draft EIS/EIR assumes that “only minor improvements” would be made. If the proposed expansion project is not approved, it is far more reasonable to assume that LAWA will continue to identify and pursue a wide range of improvements intended to optimize the ability of LAX to meet air service demands. The Draft EIS/EIR should more accurately reflect this situation.

The No Project Alternative is indicated to have more significant health and safety impacts than any of the build Alternatives. This conclusion is surprising given that aircraft emissions account for 97% of total overall emissions and the No Project Alternative is estimated to have 1.8% less total annual aircraft operations versus Alternative C and 17.3% less total operations than Alternatives A and B.

1.3 Regional Alternatives

The Draft EIS/EIR conclusion that the development of regional airports is an unreasonable Alternative is not supported – and in fact may be refuted – by evidence provided in the Draft EIS/EIR. At the same time it stresses the strength of the regional economy in the global setting and the scope of the regional market demand for international travel, the Draft EIS/EIR contains a series of statements apparently intended to cast doubt on the ability of these demands to be met through regional solutions. This is all the more questionable in light of data indicating that the highest overall demand capture rate is calculated to occur under the scenario with the lowest share allocated to LAX.

The project is primarily a landside development project with no new runways. A major assumption in the document is that some other airport in the region will absorb the unmet aviation demand. The Draft EIS/EIR does not identify which airports will meet this demand or any mechanism to ensure that this assumption is valid. LAWA, as proprietor of multiple airports, is the lead agency for the EIR and the Federal Aviation Administration (FAA) is a lead agency for the EIS. Both agencies have the ability to commit to or fund airport projects outside of LAX. The project either needs to discuss means of ensuring traffic goes to regional airports,

as discussed below, or to investigate the impacts of LAX absorbing this extra demand. In addition, SCAG has recently voted to support regional airport development coupled with maintenance of baseline conditions at LAX. Although the actions taken by the Southern California Association of Governments (SCAG) occurred after the release of the Draft EIS/EIR, these considerations should be included in the project analysis.

As mentioned, LAWA needs to evaluate and consider at least one regional alternative among its options. As part of this consideration, the proposal should link improvements at LAX to improvements at other airports in the five-County region. This proposal could be structured in many ways, and the following hypothetical example is offered only to illustrate the concept. Improvements at LAX could be grouped into discrete phases (e.g., Phase 1 might include lengthening a runway, or expanding an existing terminal; Phase 2 might include new cargo handling facilities; Phase 3 might include a new perimeter roadway). Similarly, conceptual "phases" would be defined to describe thresholds of increased service at other regional facilities. There would be no need to specify where such improvements occur, merely that they must occur at an airport facility (or combination of airport facilities) within the defined five-County regional study area. Each of the LAX improvement phases would then be linked to the regional facility improvements (e.g., Phase 1 of LAX improvements can be undertaken when the regional facilities offer a combined capacity for 25 million annual passengers (MAP); Phase 2 of LAX improvements can be undertaken when regional facilities offer a combined capacity for 30 MAP; etc.). This requirement would provide the means to strengthen LAX, within the framework of an incentive program that balances both the burdens and the benefits of expanded air service throughout the region.

The Alternatives also fail to acknowledge changes occurring at regional airports such as Ontario's ability to accommodate international flights as well as a possible expansion in capacity, increased cargo capacity at Southern California Logistics Airport, the expiration of the cap on John Wayne, and the recently invalidated Measure F at El Toro. The document also fails to account for the potential of High Speed Rail systems that could come online within the planning horizon.

Finally, there are several locations within the Draft EIS/EIR where the possibility of remote terminals is mentioned; however, no analysis is undertaken to determine their impacts. The Draft EIS/EIR should be expanded to include a full characterization of these remote terminals, as well as a description of the baseline setting for the proposed locations, the impacts of their construction and use, and mitigation measures to address any adverse effects.

1.4 Definition of Baseline

The Draft EIS/EIR complies with the CEQA requirement that the baseline be defined by conditions extant at the time the Notice of Preparation was released. However, because the baseline was already five years old at the time of the Draft EIS/EIR release, the Draft EIS/EIR fails to comply with the intent of CEQA to facilitate an understanding of changes in the environment associated with the proposed project. Use of the five-year old baseline, coupled with the document's frequent assumption that mitigative actions addressing air quality, noise, traffic, water quality, and other topical issues will occur primarily (or only) through project-related activities, tends to consistently overstate the impacts of the No Project Alternative

relative to other Alternatives. Moreover, CEQA clearly intends that the baseline should reflect the existing level of actual development to the maximum extent possible; since the Draft EIS/EIR baseline is set at 58 MAP versus the 68+ MAP at present, this intent is clearly not met. In addition, the baselines used for analysis are poorly defined and shift timeframes, using 1996 for traffic, air and aircraft noise, while using 2000 for biology, earth and water resources. The frequent shifting from one baseline nomenclature and timeframe to another is, at best, confusing; at worst, it confuses the underlying impacts that this Draft EIS/EIR is intended to clarify.

1.5 Project Phasing

A phasing program that is outdated further complicates the difficulty of tracking an outdated baseline. The Draft EIS/EIR notes that considerable increases in travel activity would occur even without the expansion project and it is unclear to what extent the Phase 1 objectives have already been met, and to what extent they will be surpassed by 2005 even without project approval. It is clear that 2005 is an unrealistic target date for Phase 1 improvements at LAX. Given the year-by-year summary provided, Phase 1 would now be complete in 2009. Given the level of "natural growth" that can be anticipated in air travel services at LAX over the next seven years, the phasing plans will most likely differ significantly from what is described in the Draft EIS/EIR.

The phasing of the project also appears to make access circulation improvements in Phase 2 after the new West Terminal, runway extension, new cargo areas, and the mid-field concourse are built in Phase 1. This format would seem to offer more significant impacts at LAX than if the situation were reversed (circulation improvements before terminal and runway improvements).

1.6 Inconsistency

Throughout the document and associated materials, the numbers and assumptions that are provided do not present a cohesive picture. When compared with data provided throughout the baseline and impact analyses, the information appears to be fundamentally lacking in logical internal consistency. For instance, in describing assumptions made for the No Project Alternative, the peak period is shown to exceed the airfield's capacity and that congestion, delays, and passenger inconvenience would be common all year, not just during peak holiday periods. However, another section shows that the No Project Alternative would have fewer all-weather delays than Alternative C, fewer annual cancellations than Alternatives A and C, more public parking stalls than Alternative B, and the same number of all-weather peak operations and three-hour average operations.

1.7 Appearance of Advocacy

The Draft EIS/EIR contains numerous comments and conclusive statements that create an appearance of project advocacy. This is inappropriate given the policy guidelines contained in CEQA and NEPA and it undermines confidence in the objectivity of the Draft EIS/EIR and its commitment to full disclosure. Some of the technical assumptions contained in the Draft EIS/EIR serve to overstate project benefits and/or overstate the adverse impacts of the No Project Alternative. For example, the discussion notes that the airlines will establish additional service at regional airports only if the local market generates sufficient demand and the text indicates

that such demand already exists. This would seem to create justification for studying the development of other regional airports as a reasonable Alternative rather than providing the basis for the conclusion that it is not a viable Alternative.

1.8 Scoping

With respect to the scoping process, the Draft EIS/EIR is inadequate for a number of reasons. LAWA first initiated this project in 1996 and released scoping information to the public; however, the Preferred Project Alternative was never identified in the scoping process. The scoping outreach process did not include input from Los Angeles County Government or the public at large with regards to Alternative C. The assessments provided for this Alternative reflect no public input as to what should be included in the scope of analysis. In effect, this project lacks proper scoping, which is an integral and essential element of the NEPA review process.

In addition, the Draft EIS/EIR makes frequent mention of the regional significance of LAX and this emphasis is an integral part of the Purpose and Objectives statement. Nevertheless, the scoping outreach effort did not include a single agency within the county governments of San Bernardino County, Orange County, Riverside County, or Ventura County. This is a serious omission, particularly in light of the NEPA mandate to establish close nexus between project goals and project Alternatives.

1.9 Mitigation Measures

In several instances, the Draft EIS/EIR states that mitigation programs will be developed prior to final project approval. This approach fails to advance public discourse and deprives reviewing agencies of the opportunity to review and comment on important project issues. Moreover, the mitigation measures may in themselves have impacts that require consideration and analysis. The vague and general mitigation concepts addressed within the Draft EIS/EIR do not meet the CEQA and NEPA requirement to avoid, minimize, rectify, reduce, or compensate for adverse project impacts. All identified adverse impacts need to be accompanied by specific and defined mitigation measures that are evaluated thoroughly.

1.10 Environmental Justice

Many impacts in the Environmental Justice analysis were not addressed, reportedly because LAWA was not able to quantify or analyze the impacts. According to NEPA, this information needs to be provided to the greatest extent possible. The Environmental Justice discussion simply fails to meet these requirements and the review demands a more rigorous analysis than is currently provided in the Draft EIS/EIR. As currently written, valid review is not possible. In addition, the Environmental Justice analysis only addresses census tracts surrounding LAX; no regional analysis was completed, although the area of study was clearly identified in the Purpose and Objectives Statement to include the region as a whole.

1.11 Traffic

A major concern is the trip generation assumptions used in the traffic analysis; there does not appear to be any mechanism for limiting airport activity to the stated MAP level and the relationship between the assumed MAP and the trip generation is difficult to understand. In addition, the Master Plan includes development of a new terminal on the west side of the airport. Since this will replace existing uses in that area, the Draft EIS/EIR projects a reduction in trips due to those non-aviation uses being replaced by aviation uses. It is difficult to find an explanation of how this reduction would occur and the degree to which existing and future traffic is broken out.

As identified in each of the Alternatives, the congestion relief package includes direct freeway access to all parts of the airport via the Ring Road. However, the feasibility of funding and constructing the extensive package of traffic mitigation measures, the impacts on Interstate 405 and parallel north/south arterials (in build and not build scenarios), the impact on nearby unincorporated areas, adequate access to Main Street in El Segundo, and the configuration of Imperial Highway as the south part of the Ring Road are all in need of further discussion.

The Department of Transportation Act section should include the No Project/No Action Alternative for purposes of comparison with the build Alternatives, and should note that it would avoid impacts to resources, specifically the Centinela Adobe.

1.12 Noise

If increases in outdoor noise levels within the 65-75 Community Noise Equivalent Level (CNEL) contours are perceptible and could affect outdoor speech as well as the quality of outdoor activities, then effects should be considered significant. Therefore, the Level of Significance thresholds need to be modified to reflect appropriate levels.

CEQA does not mandate or endorse a specific decibel standard to determine if a project engenders a significant adverse environmental impact for aircraft noise; however, the Draft EIS/EIR should have employed available standard criteria to allow a survey of a larger area and reveal the true pervasiveness of sound that was not identified in the Draft EIS/EIR. This would be important in the discussion of impacts and mitigation of noise to show that "average" threshold levels were not sufficient to show the chronic and long term effects within the LAX flight path. It is apparent that there will be exacerbated and disproportionate levels of impacts on unincorporated neighborhoods under the flight path approaches to LAX.

There is a significant discrepancy in the number of dwelling units and population impacted between the Draft EIS/EIR baseline year impacts and data published by LAWA. Since the 1970's, California law as required the airport to publish a Quarterly Report that describes noise impacts. The difference between the impacts as defined by the Draft EIS/EIR for the 4th quarter of 1996 and the impacts as identified by LAWA in its 4th quarter 1996 report is dramatic and significant (15,000 homes/37,000 residents).

The document also identifies that the noise contours are adjusted to reflect noise monitoring data. The results of the noise monitoring data show noise in sites east of the airport, primarily in

Inglewood, at significantly higher level than the models predict. This makes it difficult to establish a credible disclosure statement to the general public and no attempt is made in the Draft EIS/EIR to examine the reason for the noise model underprediction of aircraft noise. Both of these errors tend to underestimate noise impacts.

The operational assumptions in the Draft EIS/EIR are unreasonable and lack justification, making any analysis of the noise impacts speculative and lower than might actually occur. The following areas are of concern: passengers per departure, cargo activity/cargo building space, maximum airside capacity, peak hour operations/delay, terminal space/number of gates, and regional airports.

The proposed project includes no noise mitigation recommendations. While LAWA has an ongoing noise mitigation program, it is not clear why the proposed project does not address any new noise mitigation programs. Several are discussed but not recommended. In addition, the expansion of the sound insulation program to homes within 60 CNEL contour should be given consideration. Because community concerns about the impact of aircraft noise goes so far beyond the boundary of the 65 CNEL contour, consideration of expanding the program should be given a thorough evaluation in the Draft EIS/EIR. Such a program may not qualify for traditional Federal funding but other opportunities may exist.

Substantial reliance is placed on Mitigation Measure LU-1 "Implement Revised Aircraft Noise Mitigation Program (ANMP)." This measure is broad in scope, and depends upon the cooperation and funding of agencies outside of LAWA. Consequently, the ability of LAWA to implement this measure in a timely manner is by no means assured. Moreover, a number of commitments to properties already included within the ANMP current boundaries have not yet been fulfilled. A discussion of unmet commitments from prior actions is appropriate for this document along with an evaluation of the impacts that would result if LAWA were unable to fulfill the new commitments described in this Draft EIS/EIR.

1.13 Air Quality

The maximum carbon monoxide (CO) concentrations for future scenarios from on-airport sources are predicted to increase by as much as 400% compared to the Environmental Baseline data, and nitrogen dioxide concentrations are forecast to increase by as much as 1,000%. Given the projected change in airport operations and the expected decrease in background concentrations, these predicted impacts for the future scenarios do not appear to be reasonable. In addition, nitrogen oxides (NO_x) were determined to have significant impacts before and after mitigation and the Draft EIS/EIR indicates that NO_x emissions will be reduced the least under the proposed mitigation measures. Thus, the proposed mitigation measures do not appear to successfully address this issue.

LAWA did not analyze the mitigated CO concentrations at off-airport intersections because the projected unmitigated concentrations were relatively low. However, the projected unmitigated concentrations appear to be unreasonably low when compared to the estimated background concentrations. Further, the direct use of hourly wind data from the airport may be questionable for use in modeling air quality at off-airport roadway intersections. Adjusting to correct for the

difference between airport wind speeds and the wind speeds at off-airport intersections would likely increase the predicted concentrations by as much as 200%.

In discussing the impact of toxic air pollutants associated with current airport operations, the Draft EIS/EIR notes that LAWA is initiating an "independent" study of air quality in the area around LAX to examine impacts. Given that the results are necessary to establish the baseline setting, the Draft EIS/EIR needs to include consideration of toxic air pollutants associated with current airport operations.

1.14 Social Impacts

The analysis assumes that productivity gains will be the same for all Alternatives. In reality, productivity rates are variable over time and highly sensitive to changes in the economy's overall growth rate. When Gross Domestic Product growth is decelerating, productivity slows. Given the repeated emphasis throughout the Draft EIS/EIR that failure to pursue the expansion project would have a negative ripple effect throughout the southern California economy, it would have been more logical to link the No Project Alternative with productivity gains lower than those associated with the build Alternatives.

The Socioeconomic Trend Report (STR) notes that since 1972, as LAX has grown, the services and tourism/entertainment sectors showed substantial employment gains. The Draft EIS/EIR assumptions regarding the No Project Alternative show passenger volumes increasing. In combination, these facts would point to positive employment gains in at least those sectors. Nevertheless, the STR forecasts losses in direct LAX-related employment for the service industry. This contradiction needs to either be explained or corrected.

1.15 Hydrology and Water Quality

The document indicates an overall increase in pollutant loads resulting from the development of LAX Northside. Conversely, for other developments at LAX, the Draft EIS/EIR states that a detailed drainage plan that would prevent a net increase in pollutant loads is expected. It needs to be explained why the program developed for the Northside would perform so poorly, while a similar program for LAX expansion would have no net increase in pollutant loads.

1.16 Human Health and Safety

The Human Health Risk Assessment indicates that Alternatives might have significant human health impacts and that there are no mitigation measures proposed for human health effects. In this context, it is difficult to understand how the Human Health Risk Assessment determined that the build Alternatives, with mitigation, would have no significant human health impacts.

1.17 Conclusions

The Los Angeles International Airport is vitally important to the City, the County, and to this region. There is a need for some improvements at LAX; however, the problems associated with this Draft EIS/EIR are so serious, pervasive, and systemic that the only practical remedy is to start the process over again.

Baselines are inconsistent and inappropriate, selected Alternatives have not met CEQA and/or NEPA mitigation requirements, and the depth of analysis has not been sufficient to support the adoption of the Master Plan, as proposed. The project's stated objectives have not been met through the preferred Alternative, biases are evident, and the No Project Alternative is consistently misleading and inaccurate. As such, the only appropriate action is for LAWA to issue an entirely new Draft EIS/EIR that properly and effectively explores viable Alternatives and identifies appropriate mitigation measures to lessen environmental impacts. This process needs to begin with a scoping process that acknowledges the regional nature of the undertaking and follows with a fresh look at Alternatives that include regional options.

2 Introduction

A.C. Lazzaretto & Associates has been retained by the Los Angeles County Chief Administrative Office to review and comment on the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) prepared for Los Angeles World Airport's (LAWA) proposed Master Plan for Los Angeles International Airport (LAX). In reviewing this extensive set of studies and findings, the consistently high quality of writing and the thoughtful organization and presentation of materials were evident in many of the technical reports; nonetheless, the Draft EIS/EIR is substantially – and perhaps fatally – compromised by significant errors, omissions, and biases that are evident throughout the main text and its attachments.

In order to assemble a team of the highest quality, A.C. Lazzaretto & Associates contracted with Michael Brandman Associates, Bauer Environmental Services, Austin-Foust Associates, and Mestre Greve Associates to assist in the review of the Draft EIS/EIR. Each of these firms is a leader in the field of environmental review and key members have extensive experience working with the environmental review of airport projects. The assembled team reviewed the document for consistency and accuracy and paid special attention to the major areas of noise, traffic, air and water quality, and environmental justice. Throughout the review process, the team evaluated the information using the following criteria: reasonableness of input data and assumptions, appropriateness and accuracy of analysis, appropriateness and adequacy of mitigation measures, and conformity with State and Federal standards.

In performing the task of reviewing the Draft EIS/EIR, every attempt has been made to offer objective, constructive comments concerning the major elements of the Draft EIS/EIR. In some cases, other experts might have different opinions as to the correct solution, assumption, or approach to solving or assessing an environmental problem. An effort has been made to identify those issues that may involve a difference of scientific opinion.

2.1 Organization of Report

The following report is arranged in order to increase the ease of reading the issues that are raised. As such, the general flow of this review document follows the topic pattern of the Draft EIS/EIR; however, there are many sections that have been rearranged in order to emphasize a particular point or to clarify the issue at hand. This is particularly true in the following section, which deals with general issues that are evident throughout the Draft EIS/EIR document and are not specific to any single section.

This document only identifies those areas of greatest concern from a legal and/or impartiality and does not attempt to specifically identify those sections in the Draft EIS/EIR that meet State or Federal guidelines. This is not to say that those sections not mentioned in this document can be assumed adequate or appropriate; rather, the sections are omitted from this document in order to focus on those areas of greatest concern to the review team and the Los Angeles County Board of Supervisors.

3 General Issues

This section identifies issues that are evident throughout the entire Draft EIS/EIR document. Typically, the issues that are raised in this section deal with the backbone of the Draft EIS/EIR document and, therefore, the errors, omissions, and faulty conclusions identified herein are those that compromise the validity of the entire Draft EIS/EIR document.

3.1 Purpose and Need Statement

The stated project purpose identifies only three Master Plan objectives, which is unusually limited for a project of this scale. Moreover, the objectives omit any mention of environmental goals, such as enhanced access or improved quality of life. Either the factors considered in developing this discussion need to be discussed to justify these limitations or the Purpose and Need Statement needs to be expanded to include a greater number of clearly identifiable objectives and goals. Without these modifications, the document cannot be defensible.

3.2 Alternatives

3.2.1 Definition and Evaluation of Project Alternatives

The Draft EIS/EIR fails to comply with the cornerstone element of the California Environmental Quality Act (CEQA) – that an EIR must describe a reasonable range of Alternatives that would feasibly meet most objectives, but would avoid or lessen significant effects of the project.¹ This failure is evident in the following facts:

- ◆ Of 25 impacts identified in the Summary Comparison of Environmental Impacts from Alternatives A, B, and C as significant and unavoidable for any one of the project Alternatives:²
 - ◆ Twenty-two are significant and unavoidable for all three Alternatives;
 - ◆ One impact is cited as “unknown” for all three Alternatives; and
 - ◆ Only 2 impacts show variation among the Alternatives in the level of impact severity.

In terms of ability to reduce significant effects for key impact categories such as noise, land use, environmental justice, and air quality, there is no substantive difference among the Alternatives.

Ironically, the preferred Project Alternative C has more significant unavoidable adverse effects than either of the other two build Alternatives (25 for C; 23 for A; 22 for B), yet fails to meet the projected demand (as do the other two Alternatives, with marginally fewer impacts). In effect, LAWA is recommending approval of the build Alternative that would cause the greatest number of serious impacts, while meeting the fewest number of project objectives.

¹ CEQA Guidelines Section 15126.6(f), the Rule of Reason, states, “Alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.”

² Pages ES-40 through ES-59.

Two of the three Alternatives show an additional runway at LAX; the fact that the preferred Alternative omits a fifth runway is clear evidence that this particular element is not essential to meeting the project objectives. It follows that the Draft EIS/EIR should provide in-depth analysis for at least one additional non-runway Alternative – one that has specifically been developed to avoid or substantially lessen the significant effects of the project as proposed.

3.2.2 No Project Alternative

The goals of CEQA and the National Environmental Policy Act (NEPA) are very poorly served by the No Project Alternative provided in this Draft EIS/EIR. On the one hand, the analysis takes unwarranted liberty in defining this Alternative to include improvements that are only in the “planning stages” at this time. Clearly, projects in the planning stages may not materialize. On the other hand, the analysis provides an excessively narrow definition of the improvements that may occur at LAX under the No Project Alternative, and thereby understates the improvements that would likely occur at LAX even without the Master Plan. In both cases, the Draft EIS/EIR assessment would be impaired, skewing comparison with project Alternatives.

Given the length of the planning horizon, the scope of the project elements, and the extent of the planning area, this analysis should have offered two separate No Project Scenarios. One of these scenarios should have confined the definition of No Project to improvements that are now underway or have been formally approved for implementation. The other scenario should have expanded the definition of No Project to include not only those underway or approved, but also those that are in the planning stages and those that can be reasonably anticipated to occur over the project horizon, based on past practices. As noted on page 3-8, LAWA has pursued numerous improvements at LAX since 1997, including taxiway improvements, construction of new cargo building space, and additions to onsite and offsite parking facilities. Nevertheless, in defining the No Project Alternative, the Draft EIS/EIR assumes that “only minor improvements that are currently approved or in the planning stages would be made at the airport.”

If the proposed expansion project is not approved, it is far more reasonable to project that LAWA will continue to identify and pursue a wide range of improvements intended to optimize the ability of LAX to meet air service demands. Moreover, this assumption is consistent with CEQA,³ which indicates:

If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this ‘no project’ consequence should be discussed [and] the analysis should identify the practical result of the project’s non-approval.

Because of the importance of this analysis to the assessment of other Alternatives, LAWA needs to revise the No Project condition to incorporate these two approaches and then compare these Alternatives to the Project Alternatives in the document.

The Draft EIS/EIR contains numerous analyses of the No Project Alternative that assume that mitigative actions addressing air quality, noise, traffic, and the like will occur primarily (or

³ CEQA Guidelines, Section 15126.6(e).

solely) through project-related activities. In fact, the larger share of environmental remediation occurs through legislative action affecting codes, ordinances, standards and regulations at the local, regional, State, and Federal levels. To the extent that it minimizes this larger framework, the approach taken in the Draft EIS/EIR tends to consistently overstate the impacts of the No Project Alternative relative to other Alternatives. To remedy this shortcoming, the Draft EIS/EIR needs to state explicitly, for each topical issue, the quantitative assumptions made concerning improvements that: (1) would result from defined mitigation measures; (2) those that would result from ordinances and regulations unrelated to the project; and (3) those that would occur as a result of technology or investment decisions unrelated to the project. Only in this way will it be possible for readers to evaluate the merit of conclusions presented throughout this Draft EIS/EIR.

Finally, Executive Summary Table, titled "Summary Comparison of Environmental Impacts From Alternatives A, B, and C"⁴ should be expanded to include the No Action/No Project Alternative for comparison purposes.

3.2.3 Inconsistency of Alternatives with Baseline Data

On close review, the numbers provided in the Tables entitled "Summary of Activity, Comparison of Alternatives and Summary of Features, Comparison of Alternatives"⁵ do not present a cohesive picture. When compared with data provided throughout the baseline and impact analyses, information contained in this summary statement appears to be fundamentally lacking in logical internal consistency. For example, in describing assumptions made for the No Project Alternative, the Socioeconomic Technical Report⁶ indicates, "The schedule of operations would still show variations throughout the day but the peak period would be at or exceed the airfield's capacity. Congestion, delays and passenger inconvenience would be common all year, not just during peak holiday periods." However, the "Summary of Features, Comparison of Alternatives" indicates that the No Project Alternative would have: (1) fewer all-weather delays than Alternative C (13.2 vs.13.59); (2) fewer annual cancellations than Alternatives A and C (9,969 vs. 15,477 and 15,814); (3) more public parking stalls than Alternative B; and (4) the same number of all-weather peak operations and 3-hour average operations.

3.2.4 Preferred Alternative

It is not clear that Alternative C substantially reduces impacts in comparison with Alternatives A and B. In fact, the Alternatives have very little differentiation in terms of significant effects, as discussed further in a previous comment. The Preferred Alternative section needs to be greatly expanded with supporting documentation and references to the technical analyses in order to justify its inclusion as the preferred Alternative. Recognizing that it offers fewer benefits than the remaining Alternatives without any substantive reduction in adverse impacts, a discussion of how and why Alternative C became the preferred Alternative is essential.

⁴ Pages ES-41 through ES-59.

⁵ Pages ES-9 through ES-11.

⁶ Section 5.1.1.

3.2.5 Regional Alternatives

The Draft EIS/EIR conclusion that “development of other regional airports is not a reasonable Alternative to increasing the capacity of LAX” is not supported – and in fact may be refuted – by evidence provided in the Draft EIS/EIR. There are numerous factors cited in the document that explain the strength of air transportation demand in the L.A. region,⁷ and the strength of the region as an international gateway.⁸ While some of these factors apply specifically to LAX, many are generalized characteristics of the region as a whole – characteristics that apparently are unique. Indeed, one of the first statements contained in the Draft EIS/EIR notes that “the geographic size of the Los Angeles region coupled with the widespread distribution of population and employment has caused the evolution of a multi-airport system found in only a few large metropolitan areas.”⁹

The Draft EIS/EIR simultaneously stresses the strength of the regional economy in the global setting and the scope of the regional market demand for international travel, and contains a series of statements apparently intended to cast doubt on the ability of these demands to be met through regional solutions.¹⁰ These statements often include the threat of economic dislocation if such Alternatives are seriously entertained. For example, the document states, “the health of the economy in the Los Angeles region depends in large part on the continuing role of LAX as an international gateway.”¹¹

It is implied that essentially all of the intra-regional options within the L.A. Basin have a lower chance of success than any number of extra-regional options in the western states: “Although LAX’s role as an international gateway cannot readily be duplicated by other airports within the region, there is a chance that future growth in international service – and the jobs and investment stimulated by this activity – could be lost to airports outside the region, perhaps outside the State.”¹² Page 2-8 takes this theme further, without substantiating or citing a reference, through the statements that “23% of the unconstrained potential increases in international air service will be lost to the region” under the No Project Alternative and, “without Master Plan improvements, air service and activity will be constrained... This lower air service and activity potential will mean an annual loss to the region of \$20 billion in economic activity and 98,000 jobs as described in Section 4.4.1, Employment/Socio-Economics.”

Inherent in all of these statements is the little-examined presumption that regional Alternatives cannot succeed in place of the proposed project. The Summary of Comments Received contains two sections (Impacts on Reliever Airports and Alternatives) that indicate that the Draft EIS/EIR

⁷ These factors are indicated to include (1) characteristics of the passengers – high percentage of local O&D, (2) relative accessibility of local airports to meet O&D demand, (3) the amount and type of air service at each of the airports, and (4) the availability and quality of air service at each of the airports.

⁸ These factors are indicated to include (1) historic position as an ocean port with strong associations to countries served, (2) local market strength with a high percentage of O&D passengers, (3) air service to meet connecting passenger demands, and (4) airport facilities and infrastructure.

⁹ Section 1.1, Page 1-1.

¹⁰ Pages 1-23, 2-8, and elsewhere.

¹¹ Section 1.4, Page 1-29.

¹² Section 1.2.3, Page 1-23.

will analyze regional impacts; however, the Draft EIS/EIR does not provide such an analysis, as indicated below.

3.2.5.1 Impacts of Reliever Airports

Several cities commented that increased aircraft operations at LAX could increase airport activity at reliever airports (e.g., Santa Monica Airport and Torrance Airport). The response in Appendix B was: "To the extent increased operations at nearby airports can be predicted the EIS/EIR will consider the potential associated environmental impacts." In fact, the EIS/EIR does not attempt to estimate or predict increased operations at nearby airports, nor does it consider the environmental ramifications thereof.

3.2.5.2 Potential Regional Growth

Several persons commenting on the EIR scoping argued that all variations of potential growth were not presented in the Alternatives. They felt there should be Alternatives that would utilize other airports in the region (e.g., Palmdale, Ontario, a future facility at El Toro, or Long Beach). The response in Appendix B was:

The EIS/EIR will include an expanded analysis of the regional airport system. The initial feasibility study undertaken prior to the LAX Master Plan proposal assumed expanded operation would occur at all airports within the regional system. The EIS/EIR will consider the feasibility and analyze the associated impact of further expanding operations at those airports. The analysis will compare the ability of such Alternative scenarios to meet the purpose and need of the proposed project, including time and economic constraints.

Although the Draft briefly discusses the feasibility of expanding operations at other airports in the region, it does not examine the degree to which component elements (i.e., demand management, aviation activity shifts, and transportation nodes) might offset the need for increased capacity at LAX. Nor does it examine how implementation of Alternative C would impact the other airports, even though Alternative C would fall short of meeting project demand by an estimated 8 million annual passengers (MAP).

Had the Draft EIS/EIR contained a detailed analysis of one or more Regional Airport Alternatives, it may have been possible to evaluate the merit of these key statements; however, the Regional Airport Alternative was not examined and consequently a central thesis of the Draft EIS/EIR cannot be validated by the information provided. Indeed, the very brief regional airport analysis contained in Draft EIS/EIR¹³ is all the more intriguing in light of data contained in Table 1-13, indicating that the highest overall demand capture rate is calculated to occur under the scenario with the lowest share allocated to LAX.

The EIS/EIR needs to be amended to include at least one regional airport alternative among the primary project Alternatives evaluated. It should be defined and formulated in a manner that optimizes the ability of the region to capture its full potential for market share in the international, domestic, and cargo travel sectors. Such an analysis may conclude that the L.A. Basin is in a position to reinforce the role of LAX as an international gateway and increase the

¹³ Section 1.2.4 "Forecast Distribution of Demand".

market share of the region generally. That is, by escalating the role of secondary airports, Los Angeles would be able to compete more effectively as a region than LAX can do alone against other major U.S. markets. If, after reasoned analysis, the assessment concludes that regional Alternatives cannot capture future growth in international service, the results would carry far more weight than do the ominous but unsubstantiated claims now made in the Draft EIS/EIR. Without such analysis, this Draft EIS/EIR is unable to meet the minimum level of adequacy required by CEQA and NEPA.

3.2.5.3 Proposed Regional Project Alternative

In order to be a defensible and realistic document, the LAX Master Plan and Draft EIS/EIR needs to consider an Alternative and/or mitigation measures that would be linked to increased use of other airports in the region. To illustrate this concept, a sample mitigation measure that is regional in concept and flexible in design is proposed below. It is acknowledged that the measure could be structured many ways, and the following is offered purely as a hypothetical example.

Improvements at LAX would be grouped into discrete phases, or increments. For example, Phase 1 might include lengthening a runway, or expanding an existing terminal; Phase 2 might include a designated number of square feet of new cargo handling facilities; Phase 3 might include a new perimeter roadway or any other logical sequencing of phases. Similarly, conceptual "phases" would be linked to thresholds of increased service at other regional facilities. There would be no need to specify where such increases occur, merely that they must occur at an airport facility (or combination of airport facilities) within the defined five-County regional study area. Each of the LAX improvement phases would then be linked to the increase in passenger utilization at the other regional facilities (e.g., Phase 1 of LAX improvements can be undertaken when the regional facilities increase in passengers by 5 MAP relative to Year 2000 traffic levels; Phase 2 of LAX improvements can be undertaken when regional facilities are handling 10 MAP more than they were in the year 2000, etc.). The threshold levels here are mere examples, and it may be desirable to link the final phase to a threshold that corresponds to the difference between the desired MAP level at LAX and the estimated regional demand.

A key aspect of this mitigation measure is that the thresholds are tied to actual increases in passenger traffic at other regional airports and not to added capacity available in the region. In this way, airlines that may benefit from improvements at LAX have a strong incentive to offer and maintain service at the other airports in the region. This requirement would provide the means to strengthen LAX, under the aegis of an incentive program that balances both the burdens and the benefits of expanded air service throughout the region. As it stands today, the Draft EIS/EIR relies on demand being absorbed regionally but does not have any stated mechanism for ensuring that this occurs.

3.2.6 Additional Alternatives

In addition to a regional concept, it may be worthwhile to revisit an Alternative that was considered and rejected during the review of project options. Alternative C (as well as all of the build Alternatives) incorporates a plan to lengthen the inboard runway on the north side of the airport. While the importance of a longer runway is not in question, the proposal to extend the runway to the east, with all of the costs and impacts that will entail (including a new bridge over Sepulveda, massive property acquisition, and dislocation of essential airport services) is in need of further justification. It seems that other options may achieve the same goals with far fewer

impacts. In particular, LAWA considered at least one Alternative that would have extended the outboard runway on the north side to the west. This earlier proposal would have extended the runway into a westerly area that is outside of the existing butterfly habitat zone (albeit in an area proposed for future butterfly habitat).

This concept should be revisited by developing at least one Alternative in which the runway extension is on the outboard runway on the north side and the extension is to the west. The Alternative should be specifically developed with the goal of avoiding or substantially lessening the significant effects of the project as proposed. The resulting analysis should be recirculated for public review and comment as a revised (or entirely new) Draft EIS/EIR. Note that this assessment would be in keeping with CEQA's requirement that a lead agency must pursue Alternatives that would feasibly reduce the significant environmental impacts of a proposed project. Certainly, the differential magnitude of impacts between these two concepts is sufficient to warrant reconsideration.

3.2.7 Project Alternatives Sequence

Section 3.1.3 of the Draft EIS/EIR provides a good overview of the iterations that were conducted in the review of Alternatives; however, this section does not provide a sequence that would allow readers to understand how much time was given to each stage. With the information provided, it was not possible to piece this sequence together, even after reviewing the detailed and lengthy scoping materials contained in Appendix A including the Notice Of Preparation (NOP), the Notice Of Intent (NOI), and the (apparently undated) Supplemental Notice. LAWA needs to provide a timeline that indicates the number of months associated with each of the three primary iterations, the sub-phases within each stage, and the planning and environmental review process as a whole that has occurred to date.

3.3 Baseline Data

3.3.1 Outdated Baseline Assessment

The Draft EIS/EIR complies with the CEQA requirement that the "baseline" be defined by conditions extant at the time the NOP was released. However, because the baseline was already five years old at the time of the Draft EIS/EIR release, the Draft EIS/EIR fails to comply with the intent of CEQA relative to the Baseline Analysis – i.e., to facilitate an understanding of changes in the environment associated with the proposed project and project Alternatives. Using a five year old baseline tends to consistently overstate the impacts of the No Project Alternative relative to other Alternatives. When coupled with the Draft EIS/EIR's frequent assumption that mitigative actions addressing air quality, noise, traffic, water quality, and other topical issues will occur primarily (or only) through project-related activities, the error is even more apparent. Moreover, CEQA clearly intends that the baseline should reflect the existing level of actual development to the maximum extent possible; since the Draft EIS/EIR baseline is set at 58 MAP (vs. 67+ MAP at present – a 15%+ discrepancy), this intent is clearly not met.

In order to be a usable document, LAWA needs to provide an updated baseline for all topical sections where data that is more current is available. Doing so will minimize the risk of an

unfavorable ruling such as the situation encountered by Logan Airport in Boston. The United States Environmental Protection Agency rated the 1999 Logan Airport EIS as “Environmental Objection, Insufficient Information” for, among other concerns, the use of the outdated baseline year of 1993.

3.3.2 Inconsistent Baseline

The baseline data itself appears to be equally inconsistent. This problem extends not only to the many different years used as the “baseline”, but also to incorrect identification of the base year for given data sets. For example, the 4th quarter 1996 database cited for the noise calibration does not match actual 4th quarter data according to published noise contours.

Table 3.1
Difference Between Draft EIS/EIR Noise Impact and LAWA 1996 Quarterly Report

	Dwellings Inside 65 CNEL	Population Inside 65 CNEL
LAWA 1996 Fourth Quarter Report	31,968	85,907
EIS/EIR Table 4.1-2 For 1996	16,900	49,000
Difference	15,068	36,907

Therefore, the question arises as to how the “Environmental Baseline” is actually defined. That is, is it the same as the “Adjusted Environmental Baseline”? Or the Future Without Project Scenario (i.e., cumulative without project)? Or the No Action/No Project Alternative? Or none of these? Does the environmental baseline include the phase-out of older, noisier Stage 2 jets, as assumed with the build Alternatives? The forecast reduction in noise exposure for Alternatives A and C, as compared with the No Action/No Project Alternative,¹⁴ appears to conflict with the numbers cited in the penultimate paragraph on page ES-21. It is not clear which of the congestion relief package features are scheduled for completion in Phase 1 and which will be deferred to Phase 2.

The Summary of Alternatives¹⁵ notes, in discussing baseline conditions, that “physical conditions are represented as they existed in 1997 and in more current years when possible to provide the most up-to-date information available.” It is not clear why “up-to-date” information is possible in some categories but not others. LAWA has had five years to update the information and is anticipating spending significant amounts of funds to implement the project; therefore, neither time nor cost would be a justifiable reason for exclusion of current information.

Each of the different baseline and future condition scenarios used in the Draft EIS/EIR need to be clearly defined, with the rationale for its use made explicit. Referenced scenarios include “environmental baseline,” “environmental baseline (1996),” “environmental baseline (2000),” “adjusted environmental baseline,” “environmental baseline (2015),” “non-LAX development having cumulative impact,” and “No Action/No Project”. None of these terms are defined in the Glossary and the analysis constantly shifts the baseline time frame to inaccurately limit the impacts of projects, using 1996 for traffic, air and aircraft noise, while using 2000 for biology,

¹⁴ First bar chart on Page ES-22 titled, “Population Exposed to Noise Above 65 CNEL in 2015.”

¹⁵ Section 3.2.1, Pages 3-8 through 3-18.

earth, and water resources. The frequent shifting from one baseline nomenclature and timeframe to another is, at best, confusing; at worst, it confuses the underlying impacts that this Draft EIS/EIR is intended to illuminate.

3.3.3 "Unconstrained Forecast" and "Adjusted Baseline"

There is no clear definition of the term "Unconstrained Forecast" anywhere in the Environmental Summary or in Sections 1, 2 or 3. Therefore, it is not known what the term is intended to portray, where it fits into the long-range forecasts for LAX and other regional airports¹⁶ or the estimates of rising aviation demand.¹⁷

This lack of definition and intent extends to the term "Adjusted Baseline." This condition has never existed, and will never exist (i.e., 1996/97 airport activity and physical facilities plus 2005 and 2015 land use activity and regional traffic). The utility and basis in CEQA and/or NEPA for this term is not known and therefore either requires clarification or should be removed from the document in favor of more traditional, clearly defined comparative data.

3.4 Project Phasing

3.4.1 Baseline and Project Phasing

The difficulty of tracking an outdated baseline is further complicated by a phasing program that is also outdated. For example, the discussion indicates that Phase 1, scheduled to be completed by 2005, would "accommodate approximately 785,000 total aircraft operations, 71.2 MAP, and 3.1 million tons of cargo annually."¹⁸ Elsewhere, the Draft EIS/EIR notes that considerable increases in travel activity would occur even without the expansion project, and it is unclear to what extent the Phase 1 objectives have already been met, and to what extent they will be met (or surpassed) by 2005 even without project approval. What is clear, however, is that 2005 is an unrealistic target date for Phase 1 improvements at LAX. Given the year-by-year summary provided on Draft EIS/EIR,¹⁹ it can be surmised that Phase 1 would now be complete in 2009 at the earliest if the environmental process is complete in 2002. Through this same assumption, it can be concluded that the sixteen-year development schedule anticipated in the Draft EIS/EIR would not be completed by the horizon year of 2015. This fact alone calls for the complete reworking of the document.

Given the level of natural growth that can be anticipated in air travel services at LAX over the next seven years, the phasing plans may differ significantly from what is described in the Draft EIS/EIR. Delays are often unavoidable, but it would be appropriate to have a more current and accurate understanding of baseline conditions and phasing goals than what is currently provided.

¹⁶ Table 1-13.

¹⁷ Depicted in the Exhibit on Page ES-3.

¹⁸ Section 2.4, Page 2-12. Also note the inconsistency on Page 2-10 that shows a 2005 cargo load totaling 2.4 million annual tons.

¹⁹ Pages 2-12 through 2-14.

3.4.2 Phasing Plan

It appears that virtually all access and circulation improvements are planned to occur in Phase 2 after LAWA has developed the new West Terminal, the runway extension, the new cargo areas and the mid-field concourse in Phase 1. These east side activities will involve a large number of significant construction-related impacts affecting a wide range of land uses – many of which are services essential to airport operation. Nevertheless, construction in this area is proposed to be undertaken before provision is made for interim alternate parking or satisfactory relocation of businesses and services. A more practical staging plan would incorporate all of the west-side improvements first, to create interim parking and allow for a more orderly relocation of airport services and local businesses. The east side improvements could then be completed with fewer impacts and dislocations to local residents, businesses and services, and less inconvenience to all who work at and use LAX. At a minimum, the document needs to consider other provisions that could be made to minimize the impacts on circulation and access associated with the proposed Phasing Plan.

3.5 Appearance of Advocacy

The Draft EIS/EIR contains numerous comments and conclusive statements that create an appearance of project advocacy. This is inappropriate given the policy guidelines contained in CEQA and NEPA, and it undermines confidence in the objectivity of the Draft EIS/EIR and its commitment to full disclosure.²⁰ Some of the technical assumptions contained in the Draft EIS/EIR serve to overstate project benefits and/or overstate the adverse impacts of the No Project Alternative. The appearance of advocacy is also evident in the many instances of phrasing that create – intentionally or otherwise – an inappropriate aura of urgency regarding the purpose and need for LAX expansion.

Project advocacy may also contribute to the circular logic found in portions of the Draft EIS/EIR. For example, the discussion of “Allocation of Air Service Among Regional Airports” on Page 1-14 notes, “Airlines will establish additional service at secondary airports in the region only if the local market generates sufficient demand.” The text on Page 1-17 appears to strongly indicate that such demand does in fact exist, stating that:

LAX's domestic O&D [origin and destination] activity in 1997 was approximately 33 MAP, 7 MAP greater than the passenger market within the airport's 60-minute access zone; that is, it drew 7 MAP from outside its own access zone, from the access zones of the other regional airports.

Yet the discussion of “Alternative Airport Locations” concludes, on Page 3-2, that:

Analysis by SCAG [the Southern California Association of Governments] indicates that limiting the growth of LAX in an attempt to force the development of other airports would result in air service leaving the region, which would result in a loss of 6 MAP to 26 MAP. While it is recognized that other commercial service airports in the region will continue to grow and to serve a greater share of the regional demand, development of other regional airports is not a reasonable Alternative to increasing the capacity of LAX.

²⁰ CEQA Guidelines, Section 15003(i), Policies.

The fact that more than 20% of passengers are traveling outside of their "catchment area" to use LAX is evidence of significant demand for service at other regional airports, and would seem to create justification for studying the development of other regional airports as a reasonable Alternative rather than providing the basis for the conclusion actually provided. Repeatedly, the Draft EIS/EIR gives ample basis for the analysis of a regional airport development Alternative.

Another example of circular logic that shows the bias of advocacy can be seen in the discussion in Section 2.3.9, on Page 2-12, where it is stated that various airport improvements have been identified to limit the negative impacts on noise, air pollution, and traffic associated with the proposed airport development. Although the "various airport improvements" (including reduced development intensity along LAX Northside, with incorporation of a community commercial "village" and business park to receive displaced businesses) are intended to mitigate adverse project impacts, the text claims that, "without the improvements to LAX, positive aspects of the program cannot be implemented." This is a deceptive statement, akin to claiming that the benefits of radiation treatment cannot be implemented in the absence of cancer. This statement is further refuted given that LAWA often exercises its right to propose and pursue improvements independent of the proposed LAX Expansion Project or other major proposals.

3.6 Scoping

The Draft EIS/EIR makes frequent mention of the regional significance of LAX and of the Master Plan process. This emphasis on regional context is evident not only in the discussions and analyses provided throughout the text, but more significantly is an integral part of the Purpose and Objectives statement.²¹

The purpose and objectives of the Master Plan are to provide, in an environmentally sound manner that is compatible with surrounding land uses, sufficient airport capacity for passengers and freight in the Los Angeles region to sustain and advance the economic growth and vitality of the Los Angeles region. In particular, the proposed project intends to achieve these objectives:

- ◆ To respond to local and regional demand for air transportation during the period 2000 to 2015, taking into consideration the amount, type, location, and timing of such demand.
- ◆ To ensure that new investments in airport capacity are efficient and cost effective, maximizing the return on existing infrastructure capital.
- ◆ To sustain and advance the international trade component of the regional economy and the international commercial gateway role of the City of Los Angeles.

Nevertheless, the scoping outreach effort did not include a single agency within the county governments of San Bernardino County, Orange County, Riverside County, or Ventura County.²² Nor did the scoping outreach include any municipal agencies, airport officials, businesses, or services within any of these four counties, although many such entities could be expected to have had an interest in the regional issues addressed and in the development and analysis of project Alternatives. This is a serious omission, particularly in light of the NEPA

²¹ Section 2.1, Page 2-1.

²² Based on a review of the EIS Agency Scoping Coordination Letter Mailing List and other materials provided in Appendix A.

mandate to establish close nexus between project goals and project Alternatives. It may also explain why none of the project Alternatives incorporates even minimal regional elements.

Furthermore, the scoping process is intended to identify and disclose all of the potential Alternatives under consideration by the lead agency. This provides the public with the greatest ability for input and understanding into the potential project and offers an opportunity to comment. In fact, it is common for Alternatives to be removed between the scoping process and the distribution of the Draft EIS/EIR after the initial outreach. In this case, the scoping outreach did not include Alternative C, which became the preferred Alternative. This not only denies the public the opportunity to comment, but it brings into question how the Alternative became the preferred Alternative between the scoping outreach and the circulation of the Draft EIS/EIR. If the objectives and the scope of the project changed so drastically between the initial outreach and the circulation of the Draft that the document included a preferred Alternative that was not even included in the original outreach, then the scoping process should have started again. If the scope and objectives did not change, why was the Alternative not included in the scoping process in 1996? Either way, the preferred Alternative was not disclosed to the public prior to the release of the Draft document; this fails to meet CEQA/NEPA standards.

3.7 Affected Environment, Consequences, and Mitigation Measures

The analytic framework of the Draft EIS/EIR is described as one in which the current document is meant to set the basis for "tiered" environmental review pursuant to both NEPA and CEQA.²³ The tiered concept assumes that subsequent environmental documents will be required to focus the analysis on site-specific, project-level issues, impacts, and mitigation measures. However, in light of the program-level analyses and vague mitigation commitments, the Federal Aviation Administration (FAA) will not have an adequate basis on which to issue an "unconditional approval" of the airport layout plan (ALP). An unconditional approval assumes that appropriate analysis has been completed for all development actions and the circulated document does not meet this requirement.

²³ Section 4, Pages 4-5 and 4-6.

4 Environmental Justice

The analysis of environmental justice fails to meet the most elementary NEPA requirements for this topical issue. The specific concerns are identified below.

4.1 Scoping

Scoping is a public process required by NEPA, which should be conducted as early as possible after a Lead Agency decides to prepare an EIS. The scoping process is designed to determine the scope of issues to be addressed in an EIS, and should be conducted as early as possible after a Lead Agency decides to prepare an EIS. It is intended to be an open process, incorporating the views of other agencies and the public regarding the scope of an EIS.

Environmental Justice issues are usually a major component of the scoping process, and the Draft EIS/EIR does list 126 outreach efforts with low-income and minority communities. However, the Draft EIS/EIR provides no indication of the specific environmental justice concerns or issues for which these groups were contacted. The Draft EIS/EIR needs to be expanded to include: (1) a description of the efforts made to gather information from low-income and minority communities; (2) copies of materials provided in languages other than English; and (3) a table that identifies the specific concerns raised by each of these groups.

4.2 Level of Analytic Detail

Many impacts in the Environmental Justice analysis were not addressed, reportedly because LAWA was not able to quantify or analyze the impacts. NEPA states that when information is incomplete or unavailable, the information must be obtained if costs are not exorbitant.²⁴ According to CEQA, the analysis must be specific enough to permit informed decision-making and public participation. The following subsections include some of the impact discussions considered inadequate.

4.2.1 Air Quality and Health Effects

The Draft EIS/EIR states:

Due to the lack of available background data and limited information on the cumulative effect of multiple air pollutants, the effect of the LAX Master Plan on cumulative health risks among minority and low-income population cannot be quantified or fully analyzed.²⁵

All available data should be included, consistent with the mandate of NEPA. The report should document efforts made to obtain needed data. Where data is found to be unavailable or limited, the report should identify the cost associated with developing original data and indicate why such cost was determined to be exorbitant in the context of overall project costs.

²⁴ NEPA Guidelines, Section 15022.22.

²⁵ Section 4.4.3, Page 4-425.

The document further asserts,

Due to the lack of available background data, the cumulative or synergistic health effects of [toxic air pollutants (TAP)] emissions associated with the build Alternatives and other environmental hazards could not be quantitatively analyzed within the scope and timeframe of this Draft EIS/EIR.²⁶

The Draft EIS/EIR could and should have made assumptions in order to determine such impacts. These assumptions need to be developed and applied to quantitatively analyze the cumulative and synergistic health effects of TAP emissions associated with the build Alternatives and other environmental hazards. Without these assumptions, fair environmental review is not possible.

4.2.2 Relocation

The Draft EIS/EIR proposes,

Minority-owned businesses or businesses with a high proportion of minority employees or minority/low-income customers may face special challenges that need to be considered in developing a Business Relocation Plan.²⁷

The document provides no further explanation or definition of “special challenges”. The term needs to be clarified and LAWA needs to indicate how these challenges should be considered in developing a business relocation plan.

The document further states, “Data is currently not available regarding the number of minority owned businesses or minority employees that might be affected by proposed acquisition.”²⁸ In fact, the referenced data is generally available and can be obtained with reasonable effort. This data needs to be obtained and analyzed.

4.2.3 Noise

The circulated Draft asserts,

Certain areas affected by noise would still be faced with significant impacts due to constraints that apply most directly to minority and/or low-income communities. These include residential areas ineligible for mitigation due to inconsistent zoning or land use designations and substandard housing that may be infeasible to insulate.²⁹

At the very least, the Draft EIS/EIR needs to clearly delineate where these areas are located. A more appropriate solution would be to identify and implement specific mitigation measures to reduce impacts on minority neighborhoods; the document did not contain any noise mitigation measures, as discussed in detail later in this report.

²⁶ Section 4.4.3, Page 4-426.

²⁷ Section 4.4.3, Page 4-430.

²⁸ Section 4.4.3, Page 4-428.

²⁹ Section 4.4.3, Page 4-430.

4.2.4 General Comments

The impacts associated with Environmental Justice, demand a more rigorous analysis than is currently provided in the Draft EIS/EIR. As noted above, NEPA requires that information be included in the EIS if costs of obtaining the information are not exorbitant. Where such costs are exorbitant, NEPA requires that the EIS: (1) state that the information is complete or unavailable; (2) state the relevance of the information to the analysis; (3) summarize credible scientific information about the impacts; and/or (4) use other methods of assessing impacts that are generally accepted by the scientific community. CEQA also addresses the issue of analytic detail, requiring that an EIR provide information and analyses with a sufficient level of detail to permit informed decision making and public participation. These very basic NEPA and CEQA requirements need to be applied to the Draft EIS/EIR assessment of Environmental Justice.

4.3 Outdated Source Materials

The Draft EIS/EIR notes that the year 2000 estimates of population suggest that the area's population has increased by 10% and reflects a higher proportion of Hispanic influx into the area. This phenomenon may have resulted in more census tracts comprised of predominantly minority or low-income communities, but these issues have not been analyzed. The Draft EIS/EIR should be revised to incorporate the 2000 Census data on population, which was released in March of this year, along with an assessment of impacts based on the current data.

4.4 Area of Analysis

The Environmental Justice analysis only addresses existing conditions and impacts on census tracts surrounding LAX. No regional analysis was completed, although the area of study was clearly identified to include the region as a whole. The analysis needs to be expanded to incorporate the region that is referenced in Section 2.1, the Purpose and Objectives of the Project of the Draft EIS/EIR.

4.5 Deferral of Mitigation Measures

The Draft EIS/EIR fails to put forth Environmental Justice mitigation measures, as required by CEQA and NEPA. Instead, the Draft EIS/EIR states:

Once LAWA has committed to specific measures as part of its Environmental Justice Program, the FAA will make its final determination as to whether the Master Plan has a disproportionately high and adverse human health or environmental effect on minority or low-income populations, taking into account mitigation and offsetting benefits.³⁰

The Draft EIS/EIR also indicates that,

FAA and LAWA will work with the affected communities to develop mitigation programs tailored to the needs of these communities prior to final project approval. Should the FAA conclude that disproportionately high and adverse human health or environmental effects on minority and low-income populations would still occur as a result of the LAX Master plan, findings under the DOT

³⁰ Appendix F, Environmental Technical Report, Page 5.

Order would have to be made prior to project approval. The final EIS/EIR will disclose those findings.³¹

This approach fails to advance public discourse, and deprives reviewing agencies and the public of an opportunity to review and comment on information about this important project issue. Moreover, the mitigation measures may in themselves have impacts that require consideration and analysis. For these reasons, new mitigation measures cannot be introduced in a final version of an environmental document.

4.6 Use of Mitigation Concepts

It also does not suffice to outline tentative mitigation concepts as “a starting point for the public involvement process that will lead to the development of the Environmental Justice Program.”³² Nonetheless, the Draft EIS/EIR frequently offers concepts in lieu of defined mitigation measures, as evidenced by the following quotes from the Draft EIS/EIR:

Noise

Accelerate or expand sound insulation offered under the existing LAX Aircraft Noise Mitigation Program.³³

Offer increased opportunities for residents to move out.³⁴

Increase annual funding.³⁵

Incorporate newly exposed areas into the LAX Aircraft Noise Mitigation Program.³⁶

Air Quality and Health Effects

Support and participate in long-term studies that would contribute to an understanding of air quality and health effects on low-income and minority populations.³⁷

In 2015, all of the build Alternatives would exceed thresholds of significance for non-cancer health risks, with the areas of significant impact falling on minority community's east/northeast of the north runway and largely west of I-405.³⁸

Surface Transportation

LAWA will take into consideration the special needs of minority and low-income individuals who rely heavily on public transportation in implementing traffic mitigation measures.³⁹

³¹ Appendix F, Environmental Technical Report, Page 5.

³² Section 4.4.3, Page 4-432.

³³ Section 4.4.3, Page 4-432.

³⁴ Section 4.4.3, Page 4-432.

³⁵ Section 4.4.3, Page 4-432.

³⁶ Section 4.4.3, Page 4-432.

³⁷ Section 4.4.3, Page 4-433.

³⁸ Section 4.4.3, Page 4-426.

³⁹ Section 4.4.3, Page 4-433.

Remote Terminals

In furtherance of the Environmental Justice Program, LAWA would undertake to avoid locating remote terminals in locations where they might have disproportionate adverse environmental impacts on minority or low-income communities.⁴⁰

In general, the "mitigation measures" identified in these quotes require deeper definition as to how and when they will be implemented as well as a clear statement as to how they mitigate the adverse impacts that are created by the project. Mitigation measures are needed that are designed to address impacts on minority and low-income communities.

The vague and general mitigation concepts addressed within the Draft EIS/EIR do not meet the CEQA and NEPA requirement to avoid, minimize, rectify, reduce, or compensate for adverse project impacts. All identified adverse impacts need to be accompanied by specific and defined mitigation measures. The proposed measures must then be evaluated in terms of their efficacy in reducing the identified primary impacts as well as any secondary impacts that may result from their implementation. With respect to impacts for which no measures are proposed, the Draft EIS/EIR should indicate that this is the case and state that the impacts shall remain unmitigated along with an indication of their severity.

When completed, the revised analysis must be recirculated for public review and comment as part of a revised (or entirely new) Draft EIS/EIR. Only by these means can the Draft EIS/EIR achieve adequacy with respect to the analysis of Environmental Justice. Absent these changes, valid review is simply not possible.

⁴⁰ Section 4.4.3, Page 4-433.

5 Traffic

Overall, the traffic review indicates that the detailed analysis work has been thorough and has followed accepted traffic modeling and analysis principles; however, there are several serious deficiencies that compromise the entire section. These issues are described below.

5.1 Baseline

The baseline used for the traffic analysis is 1996. It is recognized that the use of 1996 data was necessary due to the time involved in collecting information, developing traffic models, and preparing the Draft EIS/EIR. However, the environmental documentation would be strengthened with the inclusion of recent benchmark data with respect to traffic. It would be useful to include data in the form of volume comparisons at key locations and verification of overall current airport trip generation compared to 1996. In particular, it would strengthen the validity of the 2005 projections. The validity of the model used is not conclusive without the comparison between current data and the data figured from the 1996 models. Furthermore, without comparison to recent data, it is not clear whether the model achieves an acceptable replication of the baseline results.

5.2 Unconstrained Forecasting

The analysis does not provide any assurance that the Master Plan will not exceed the stated MAP level of 89.6. The Draft EIS/EIR shows an unconstrained forecast of 97.9 MAP, but estimates 78.7 for the No-Action Alternative and 89.6 MAP for Alternative C, the preferred Alternative. The Master Plan is essentially a set of physical improvements that do not in themselves imply a level of usage; for Alternative C, the Draft EIS/EIR simply notes, "it would accommodate only 89.6 million passengers (a shortfall of 8.3 million passengers) in 2015."⁴¹ The Draft EIS/EIR needs to specify the actions that will limit the usage of the preferred Alternative to 89.6 MAP, versus the unconstrained forecast of 97.9. Alternatively, some evaluation needs to be made as to the outcome that would occur if the 89.6 MAP figures were exceeded. That is, identification of the most serious deficiencies that would occur if more people were to use LAX than anticipated in Alternative C.

5.3 Future Traffic Forecasts

The traffic forecasts use 2005 and 2015 as their projection years. Of importance as far as the Master Plan is concerned is the year 2015 since this represents the design year for the proposed Master Plan. In order to authenticate the projections, the Draft EIS/EIR should provide a clearer overview of the underlying assumptions and basic data used to carry out this analysis. The following headings give some examples of where this should be strengthened.

⁴¹ Page ES-12.

5.3.1 Trip Generation

It is difficult to find trip generation summaries for the No Project and the project Alternatives. While there are overall figures given in the Executive Summary, there is no tabular summary that shows the airport-generated trips separated into the various components. The onsite traffic analysis (apparently carried out by a different consultant than the offsite) does not provide a table that coincides exactly with the trip generation assumptions used by the offsite transportation consultant. The offsite transportation information does include a trip generation summary; however, the sum of the various items for the onsite trip generation gives similar, but not exactly the same, results. The Draft EIS/EIR should include a summary of both the onsite and offsite traffic analyses to demonstrate that they are identical or to identify the reasons for the apparent discrepancy.

In addition, the underlying trip generation relationships need to be explained. For example, identification of the variables involved and the sensitivity to various assumptions would have aided the validity of the review. The trip generation information related to the estimated MAP levels needs to be fully explained, particularly in light of the assumptions used to estimate the trip generation (e.g., change in passenger mix). While there is discussion regarding the model that was used for this derivation process, it is not possible to verify the relationships involved. The trip generation estimate is a fundamental starting point for the detailed traffic analysis and a clear explanation and justification need to be included. Without this basic information, valid review is not possible.

5.3.2 Collateral Trips

The Master Plan includes development of a new terminal on the west side of the airport. The proposal suggests that the new terminal will replace existing uses in that area, resulting in a reduction in trips due to the non-aviation uses being replaced by aviation uses. It is difficult to find an explanation of how this reduction occurs and the degree to which it is existing traffic versus future potential traffic. This again pertains to the difficulty in finding trip generation summary tables that demonstrate the trip generation estimates and assumptions used in the analysis.

5.3.3 Peak Hour Relationships

The future peak hour relationships differ from those measured in the baseline. This is apparently due to different air passenger market segments in the future and is derived from the air transportation/ground transportation model use in the analysis. The Draft EIS/EIR needs to include an explanation of how this difference occurs and should identify the relationships involved.

5.4 Transportation Improvements

The Master Plan proposes an ambitious set of transportation improvements, particularly those related to the new west terminal. There are also major roadway facility improvements proposed, including new freeways and freeway connections. The detailed traffic modeling analysis appears to have satisfactorily matched this system with the needed capacity. However, in order to ensure

the estimated traffic demand is served, it is important that a formal commitment to implement such facilities is secured. In addition, this is an important economic consideration in the overall financing of the Master Plan. The extensive transportation improvement program is a key element of the Master Plan and is the basis for the offsite analysis in the Draft EIS/EIR. Therefore, it is essential that assurance of funding and implementation of the improvements be included in the form of a mitigation program.

Also of importance is the phasing of improvements; there is minimum discussion in the Draft EIS/EIR on this topic. There is a perception that traffic is bad today; however, it is difficult to verify to what extent traffic problems exist considering the 1996 baseline does not measure traffic increases that have occurred over the past five years. Without a phasing or mitigation monitoring program, there is no assurance that traffic conditions will be improved as a result of the proposed improvement program.

5.5 Discussion of Impacts

While the Traffic section identifies several major improvements to circulation around the airport through the construction of the Ring Road and the LAX Expressway, there are many key areas that need to be discussed, but were apparently not considered. These include: (1) the impacts on the Interstate 405 (I-405) Freeway north of the LAX Expressway; (2) the impact of spillover traffic from the overloaded I-405 Freeway onto parallel north/south arterials, Lincoln, Sepulveda, and La Cienega Boulevards; (3) the impact of the spillover from the I-405 Freeway onto streets in Culver City; (4) the impact on nearby unincorporated areas of Marina del Rey, Lennox, Ladera Heights, Baldwin Hills, Athens, Del Aire, and El Camino Village; (5) the impact of not constructing the Arbor Vitae/I-405 Freeway ramps; (6) the configuration of Imperial Highway as the south part of the Ring Road; (7) the method of providing direct access to Main Street in El Segundo from the Ring Road; and (8) the impacts on the freeways, arterials, and communities if the proposed project is not approved and the mitigation measures are not implemented. As previously stated, the Draft EIS/EIR requires full disclosure and is intended to insure that all significant impacts are considered prior to project approval; without addressing the issues presented above, the Draft EIS/EIR cannot be considered adequate.

5.6 Department of Transportation Act

The Department of Transportation Act section should include the No Project/No Action Alternative for purposes of comparison with the build Alternatives and should note that it would avoid impacts to Section 4(f) resources. In addition, impacts on the Centinela Adobe, a listed National Register site, can be avoided with the "Single Viaduct LAX Expressway options" (Alternatives A or C), but not with the "Split Viaduct LAX Expressway option." It appears that there are internal inconsistencies throughout the document with regard to the LAX Expressway component of the Master Plan. In Section 3, it is discussed as a feature of each of the build Alternatives (A, B and C). In other sections, it appears to have been deleted from Alternative B. This situation requires further clarification.

6 Noise

It is important to note that the findings of the Draft EIS/EIR include a finding of significant noise impact that cannot be mitigated to a point of insignificance. The issues raised in our analysis do not change this finding of significance. The comments presented here address whether or not the Draft EIS/EIR adequately discloses the extent and magnitude of the impact and whether or not mitigation issues are addressed adequately.

6.1 Determination of Potentially Significant Impacts

CEQA requires that the Draft EIR identify all impacts that could arise to significant levels and must employ the proper "thresholds of significance" to make that identification. CEQA also requires that the document "challenge" and "update" thresholds that may not be current or protective of the public interest. This notion includes the idea of setting thresholds that will improve the quality of life of residents. As it relates to the impacts identified below, LAWA should seize this opportunity to push the Draft EIS/EIR beyond mere minimum standards or code compliance, and assert a more conservative approach to identifying significant impacts. The following identified impacts relate to the use of minimum standards.

The California Environmental Quality Act does not mandate, require or endorse a specific decibel standard or noise metric to determine if a project engenders a significant adverse environmental impact with respect to aircraft noise; however, a significant aircraft noise impact is said to have occurred if one or both of the following conditions exist as described in the California Aircraft Noise Standards:⁴² noise sensitive areas (such as residences, churches, and hospitals) are newly exposed to 65 Community Noise Equivalent Level (CNEL) or greater; and, noise sensitive uses within the 65 CNEL contour of a "build" alternative experience an increase of 1.5 CNEL or greater compared with the environmental baseline conditions.

The Airport Noise Compatibility Planning guideline⁴³ is the primary Federal regulation guiding and controlling planning for aviation noise compatibility on and around airports. It establishes, for most land uses and noise sensitive uses, the standard of < 65 day-night average noise level (DNL or Ldn) as "acceptable," although it recognizes that local communities may choose to mitigate impacts below the Ldn of 65 dB.

The Federal Interagency Commission of Noise (FICON) has identified 65 Ldn as the 24 hour day-night average sound level at which most people become highly annoyed by noise. However, FICON has acknowledged that people may and do become highly annoyed by noise levels well below 65 Ldn. Indeed, many commentators and acoustic researchers are seriously questioning the validity of the 65 dB Ldn criteria for planning purposes, as research has shown that at this level about 15% of the population remains "highly annoyed" and that the standard is an average sound level, not a measurement of individual sound events which tend to effect people more than average levels.

⁴² Title 21 of the California Code of Regulations.

⁴³ Title 14 of the Code of Federal Regulations, Part 150.

The Draft EIS/EIR should have employed these conservative criteria to allow a survey of a larger area and reveal the true pervasiveness of sound that was not identified in the Draft EIS/EIR. This would be important in the discussion of impacts and mitigation of noise to show that "average" threshold levels were not sufficient to show the chronic and long term effects within the LAX flight path. It is likely that there will be exacerbated and disproportionate levels of impacts on unincorporated neighborhoods under the flight path approaches to LAX.

6.2 Number of People Impacted by Noise

There is a significant discrepancy in the number of dwelling units and population impacted between the EIS/EIR baseline year impacts and data published by LAWA. Under California law, the airport must publish a quarterly report that describes the noise impact of the airport. This law has been in effect since the early 1970s and LAWA has published the Quarterly Reports as required. Appendix D of the EIS/EIR states that the base year noise impact is based on data published by LAWA in the 1996 Fourth Quarter Report.⁴⁴ Chapter 4, Section 4.1.3.1.2 states that the EIS/EIR relies on the Fourth Quarter 1996 operational data but does adjust the EIS/EIR contours to reflect the noise monitoring data that are collected by the airport. The difference between the impacts as defined by the EIS/EIR and the impacts as identified by LAWA in its Quarterly Report is dramatic and significant. The following data compare the number of dwellings and population impacted as defined by LAWA in the 1996 Fourth Quarter Report and as defined in the EIS/EIR for baseline year 1996:

Table 6.1
Difference Between Draft EIS/EIR Noise Impact and LAWA 1996 Quarterly Report

	Dwellings Inside 65 CNEL	Population Inside 65 CNEL
LAWA 1996 Fourth Quarter Report	31,968	85,907
EIS/EIR Table 4.1-2 For 1996	16,900	49,000
Difference	15,068	36,907

The differences shown in the above table are not presented, reconciled, or explained in the Draft EIS/EIR. The population and dwelling data shown in the LAWA 1996 Quarterly Report are not mentioned in the Draft EIS/EIR even though the Quarterly Report shows noise impacts nearly twice as large as those reported in the Draft EIS/EIR. Sections 4.1.3.1.2 and Appendix D Section 2.2 include discussions of the LAWA Quarterly Reports and the fact that the noise contours in the Quarterly Reports are adjusted to reflect noise monitoring data. Appendix D presents the difference between the noise monitoring results and the EIS/EIR noise model results in the terms of dB CNEL in Table 5. The average difference between the two is presented as an underprediction in the model of approximately 1.1 dB. Examination of the data shows that the noise monitor sites east of the airport, primarily in Inglewood, consistently show noise levels nearly 3 dB greater than the EIS/EIR noise modeling predicts. While the differences are smaller in other communities, the bulk of the population impacted is in the area where the monitors show that the noise model has underpredicted the impact.

⁴⁴ Appendix D Section 2.1, Appendix D Section 2.2.

LAWA operates a permanent noise monitoring system as required by the California Airport Noise Regulations that has been approved by the State of California Division of Aeronautics. LAWA has been monitoring noise on a continuous basis and submitting Quarterly Reports since the early 1970's and every Quarterly Report includes noise impact data based on noise contours that have been adjusted to match noise monitoring data. Nevertheless, the Draft EIS/EIR relies on a noise computer model output that has not been adjusted to reflect the noise monitoring data even though the noise monitoring data show a consistent 3 dB bias in the east approach corridor to LAX.

There is no doubt that there is a consistent bias in modeling data in the Inglewood approach corridor; the size of the difference in the Inglewood area compared to the system accuracy is significant. Appendix D, in the paragraph just below Table 6 makes the misleading and inaccurate statement that the Draft EIS/EIR noise contours "were generally confirmed by the actual noise measurements." This statement is based on the overall average difference at all sites, and fails to recognize the bias in the Inglewood approach corridor. The Draft EIS/EIR contours underpredict the noise impact as measured by the number of dwellings and population within the 65 CNEL contour by an amount that makes it difficult to establish a credible disclosure statement to the general public.

No attempt is made in the Draft EIS/EIR to examine the reason for the noise model underpredicting aircraft noise. The Draft EIS/EIR rationalizes the lack of contour adjustment by stating, "draft FAA Order 1050.E indicates that measurements should not be used to calibrate noise contours."⁴⁵ However, no attempt is made to identify the cause of the discrepancy. The difference could be due to errors in input data to the noise model, not a calibration issue. Failure to adequately account for flight track dispersion could cause the kind of discrepancies the data shows. The model has the capability to report noise levels by aircraft type at each location. Such data should be compared to measurement data for those aircraft and a rational and detailed explanation of the model/measurement differences should be made. At the least, the source of the difference would then be identified (i.e., input data errors, model database differences, or model algorithm shortcomings).

The FAA has a history of being reluctant to adjust noise contours based on measurement data. This policy was based on historical attempts to use short term monitoring data to make adjustments that are not statistically justified. Such a policy is justified, in particular when attempts are made to use a few hours of monitoring data to move noise contours; however, in this case LAWA operates noise monitoring sites 24 hours a day, measuring every aircraft and has been doing so for over 20 years. These data do justify adjusting the noise contours; either by correcting input errors or modifying model databases, such as noise curves and aircraft profiles. These changes are not prohibited by the FAA. The FAA provides a mechanism for user changes to the database. The "INM Users Guide,"⁴⁶ contains Appendix B, "FAA Profile Review Checklist." The first paragraph of that appendix contains the following statement,

⁴⁵ Appendix D, Page 17.

⁴⁶ For INM Version 6, dated September 1999.

The Office of Environment and Energy (AEE) requires prior written approval for all user changes to the Integrated Noise Model (INM) standard profiles for FAR Part 150 studies. A similar requirement under National Environmental Policy Act (NEPA) will take effect pending FAA Order 1050.1E.

Following that paragraph is a detailed list of information required for the FAA review of user made changes. It is not known if any attempt was made to seek FAA approval of changes needed to make the model better match measurement data. If there was no attempt, the decision should be explained. This last comment is especially appropriate if input errors have already been eliminated as a possible source of the difference.

6.3 Change in Number of People Impacted by Noise

The Draft EIS/EIR relies on the noise model to identify relative changes between baseline and future Alternative conditions. The Draft states, "the modeled noise levels associated with environmental baseline conditions will have consistent relative relationships to future noise patterns prepared with the INM."⁴⁷ This statement, while possibly true for changes in noise level, is not accurate with respect to the area of noise impact, the number of dwelling units, and the population within the noise contours. The implication of the statement quoted above is that the increased number of people identified as impacted will be the same whether or not the noise contours are adjusted to reflect noise monitoring results. This is not true and fails to reflect that area, dwelling units, and population are second order functions of the size of the contour. The change in the number of people residing inside the 65 CNEL contour will be much larger than reported in the Draft EIS/EIR. The percent change may remain nearly constant, but the absolute magnitude will be larger.

If the Draft EIS/EIR contours are not adjusted to reflect monitoring data then the document should attempt to estimate the correct number of dwellings and people inside the contours by using an adjustment factor based on the differences identified for the baseline conditions. While this is far less satisfactory than adjusting the contours, the impacts identified would be a far better disclosure of the magnitude of the impact than is now included in the document.

6.4 Use of 1996 as Base Year

There is reason to question the use of 1996 as the baseline year. Use of the 1996 baseline appears to underestimate the impact of the project (in addition to the contour adjustment issue identified above). The following table compares 1996, 1999, and Year 2000 noise impacts at LAX:

**Table 6.2
LAWA 1996, 1999 and 2000 Quarterly Report Noise Impacts**

	Dwellings Inside 65 CNEL	Population Inside 65 CNEL
1996 Fourth Quarter Report	31,968	85,907
1999 Fourth Quarter Report	26,422	78,026

⁴⁷ Appendix D, Page 17.

2000 Fourth Quarter Report	27,312	80,211
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The above data show that the use of the 1996 baseline, with its larger impact area, would result in underestimating impacts compared to using 1999 or 2000. The difference in the number of people impacted for the year 1996 and the year 2000 is potentially large enough to change the conclusions as to whether future year contours impact a larger or smaller number of people than baseline conditions. As a result, the noise study should be updated to a more current year.

6.5 Project Description/Operational Assumptions

The noise analysis is a comprehensive analysis that attempts to identify cumulative and single event noise impacts as well as detailed tables of time above specific thresholds. However, in addition to failing to adjust the contours to reflect noise monitoring data, there is substantial uncertainty associated with the future operational assumptions. The operational assumptions are in many cases counterintuitive and lack justification. This makes any analysis of the noise impacts speculative, and potentially underpredicts the impact. The following are examples of areas of concern and point to a need to do a "worst case" analysis in the event that these assumptions can't be assured or justified. The following data were taken from the Executive Summary, Pages ES-9 and ES-10.

6.5.1 Passengers Per Departure

The baseline passengers per departure are 90.76 while Alternative C assumes 145.09. It is not explained how LAWA expects the project to result in a relocation of short haul operations to some other airport and an increase in average aircraft size. There is no component of Alternative C that results in a nearly 60% increase in passengers per departure. This increase is extraordinarily large given that no part of the project forces commuter or short haul aircraft to move or even includes a design feature that discourages these aircraft. In light of this, the Draft EIS/EIR should contemplate the noise impacts if this assumption proves to be false and commuter and short haul carriers do not move to some other airport. Further, the extent to which the passenger per departure increase is due to increased load factors needs to be addressed and a discussion of whether or not this increase in load factor (expressed as an increase in aircraft weight) was included in the INM input for the future case scenarios needs to be explored.

6.5.2 Cargo Activity/Cargo Building Space

The baseline cargo activity is 1.9 million tons of cargo using 1.9 million square feet of space. Alternative C activity is 4.1 million tons using 5 million square feet. The future ratio assumes that new cargo facilities are no more efficient than the old LAX facilities and fails to recognize that modern facilities may handle twice the amount of cargo per square foot. The basis for the assumption is not provided. The noise analysis should be based on the potential impact of far more cargo traffic than is currently estimated.

6.5.3 Maximum Airside Capacity

The Draft EIS/EIR nearly doubles the terminal space and assumes a very modest increase in passengers and operations. This is based on the assumption that future technology will not

increase the capacity of existing runways. However, the opposite should be explored. That is, what would the result be if improved technology results in increases in airside capacity? Given the increase in terminal space, how much air traffic could those terminals handle? Noise impacts should be disclosed for air traffic estimates based on maximum terminal capacity for the proposed project.

6.5.4 Peak Hour Operations/Delay

The All Weather Peak Hour Operations are identified as 150 for the baseline condition and 145 for Alternative C. The All Weather Average Delay is identified as 8.69 minutes while the Alternative C delay is identified as 13.59 minutes. This is counterintuitive and at the very least challenges the credibility of the aviation forecasts upon which the noise analysis is based.

6.5.5 Terminal Space/Number of Gates

Alternative C increases terminal space from 4 million square feet to 7.3 million while gates increase from 165 to 172 (186 to 228 narrow body equivalents). The narrow body equivalent ratio increases from 21,500 square feet per narrow body equivalent gate (baseline) to 32,000 square feet per gate, which is nearly a 50% increase. It appears that the project will have a larger gate capacity than is being reported and, if so, this needs to be accounted for in the noise analysis.

6.5.6 Regional Issues

The project is primarily a landside development project (terminals and roads) with no new runways. A major assumption in the document is that some other airport in the region will absorb the unmet aviation demand. The Draft EIS/EIR does not identify which airports will meet this demand or any mechanism to ensure that this assumption is valid. LAWA, as proprietor of multiple airports is lead agency for the EIR and the FAA is a lead agency for the EIS. Both agencies have the ability to commit to or fund airport projects outside of LAX. The document needs to address the noise issues in the event that future airport capacity is not developed elsewhere in the region. The Draft EIS/EIR should include an Alternative that meets the aviation demand for the region – either through committing to a regional solution or anticipating additional runways in Alternative C – and discloses the noise impact of that Alternative.

6.6 Health Effects of Noise Technical Report

Technical Report 14b contains a generalized discussion of the effects of noise on people. In the last paragraph of Section 1, the report concludes with the statement, "It is, therefore, assumed that compliance with the compatibility criteria is sufficient to protect human health." The statement in itself is correct, but is misleading in its implication that LAX complies with the compatibility criteria. The report fails to make a most important conclusion related to health effects of noise: LAX does not comply with the compatibility criteria. Based on this factor, it can then be concluded that noise levels associated with aircraft operations at LAX have adverse health effects on people. This should be addressed in the Technical Report and the Draft

EIS/EIR should identify the health effects associated with high noise levels including the fact that in 1996 over 85,000 people resided in areas that exceeded the compatibility criteria.

6.7 Mitigation of Noise Impacts

The proposed project includes no noise mitigation recommendations for the proposed project. It should be noted and clearly recognized that LAWA has an ongoing noise mitigation program that has been in place for many years and has periodically introduced new programs as appropriate. What is not clear is why the proposed project does not address any new noise mitigation programs. Several are discussed in detail in Appendix D but not recommended. These include the following that should be given further consideration for inclusion as recommended programs for the proposed project:

- ◆ Shorten downwind leg approach to reduce number of overflights to communities well east of the airport.⁴⁸
- ◆ Eliminate early turns over El Segundo.
- ◆ Reevaluate the benefit of restricting outboard runways to arrivals only in terms of number of people and dwellings inside the 65 CNEL contour.

The analysis in Appendix D only describes benefits and impacts in general terms of change in noise level but not in area impacted. Further, the analysis appears to rely on questionable economic data to estimate the mitigation cost. Specifically, the analysis assumes that the delay of 2 to 4 minutes associated with the measure would apply to all flights independent of time of day. It would be more logical to assume that the delay would be longer during peak periods and shorter during the off peaks.

An important aspect of the existing LAX noise mitigation program is the preference for west flow departure operations. The project assumptions presented in Appendix D appear to assume some degradation in the amount of time that the airport is in west flow for departures. Figure 10 of Appendix D shows 5.71% of operations in east flow for the proposed project. Table 3 of Appendix D indicates that less than 1% of departures are to the east for baseline conditions. Figure 10 and Table 3 are in different formats, so the above comparison may not be fair; however, the Draft EIS/EIR does not provide assurance that the project will not result in an increase in east flow departures.

The last mitigation measure that should be given consideration is the expansion of the sound insulation program to homes within the 60 CNEL contour. Such a program may not qualify for traditional Federal funding but there may be an opportunity to use passenger facility charge (PFC) funding for such a program. Because community concerns about the impact of aircraft noise goes so far beyond the boundary of the 65 CNEL contour (particularly when the contour is not adjusted to match noise measurement data), consideration of expanding the program should be given a thorough evaluation in the Draft EIS/EIR. Figure 4.2-5 shows the 1992 65 CNEL contour upon which the insulation program is based. The Draft EIS/EIR should compare this

⁴⁸ Exhibit 29 of Appendix D.

contour with the project 60 CNEL contour and evaluate the cost of expanding the program to include the 60 CNEL contour.

6.8 Miscellaneous Noise Comments

6.8.1 Data Sources and Assumptions

In Section 2.1, the third from last sentence of the second paragraph states, "this EIS/EIR will rely on the results of the Noise Management Bureau's system in the definition of environmental baseline noise levels (per the Fourth Quarter 1996 Report)." This statement is categorically wrong and misleading. It implies that the report relies on the calibrated noise contours produced by LAWA. The report relies on uncalibrated noise contours generated by the noise model that are considerably smaller than the contours presented in the Fourth Quarter 1996 Report.

6.8.2 Environmental Baseline vs. Quarterly Noise Report

Section 2.2 attempts to downplay the differences between the Quarterly Report contours and the baseline contours in the Draft EIS/EIR. The first paragraph cites a Figure⁴⁹ that would help the reader understand that the Draft EIS/EIR baseline is considerably smaller than the Quarterly Report contours, but the figure is missing from the report. The statistical analysis of the noise measurement data and noise model results from Table 6 is completely inadequate and fails to identify the bias in the noise model to underpredict noise levels in the approach corridor over Inglewood.

6.8.3 Impact on Schools

Section 3.3 of Technical Report 14b, Health Effects of Noise, has a footnote explaining the 1980 lawsuit settlement with the school district. The analysis appears to assume that because of this settlement there is no impact on schools. The noise analysis should identify which schools have been insulated, which schools remain to be insulated, and how many more schools will need to be insulated as a result of the project.

6.8.4 Federal Standards

Section 4.1.4.1.2 in the last sentence states that the "...FAA has adopted standards and guidance governing airport noise compatibility." The FAA has only published land use compatibility guidelines and has not adopted noise standards. It is up to the local authorities to adopt noise/land use compatibility standards.

6.8.5 Construction Noise

Section 4.1.4.3.1 should reference the City of Los Angeles and the County of Los Angeles Noise Ordinances which contain noise limits and limits on the hours of activity. The noise limits in the ordinance should be identified as a threshold of significance.

⁴⁹ Figure 2.3.

6.8.6 Operations Data

In the discussion on noise patterns,⁵⁰ the first bullet point outlines an increase in heavy aircraft and a decrease in small aircraft. There is no explanation as to how Alternative C accomplishes this transition and there are no explicit features of Alternative C that would appear to encourage it. If the assumption cannot be justified, the noise analysis should be based on trends that reflect a fleet mix that does not rely on heavy aircraft for achieving the passenger demand.

6.8.7 Construction Scheduling

The City and County of Los Angeles have ordinances that limit the hours of construction activity. Section 4.1.8.3, MM-N-9, should reference those ordinances and identify the hours that construction is permitted.

6.8.8 Location Impact Analysis

The last sentence of the last paragraph on Page 87 states that only CNEL and DNL have a regulatory function. This is a very limiting assumption and fails to recognize that for some types of impacts, these metrics may be inadequate. Specifically, FICON identifies these metrics as potentially inadequate for assessing noise impacts on sleep or noise impacts on the classroom environment. FICON recommends the use of supplement metrics for analysis of these impacts and that should have been done in this Draft EIS/EIR. While the document does present some Sound Exposure Level (SEL) contours and tables of time above data at specific points, the Draft EIS/EIR fails to use these data to assess sleep disturbance or school impacts.

6.8.9 No-Action/No Project Comparisons

The first sentence of Section 5.1.3 identifies that 11 grid points will be exposed to increases of 1.5 dB. This comparison of the number of grid points is used throughout the analysis. This type of analysis fails to account for the land use that may occur at the grid points. In effect, the grid points, while regularly spaced, are located on random land uses. It would be more accurate to use INM to construct a different contour that shows all areas exposed to a change of 1.5 dB or more, and this contour should be used to quantify the land use impact. The INM has the ability to construct such a different contour.

6.8.10 Noise Mitigation

The first sentence of Section 7 identifies the need for mitigation of significant impacts. Since the project is shown to have a significant impact, noise mitigation measures should be proposed.

6.8.11 Alternative C Figures

Alternative C, Figure 11, does not use flight track dispersion in the noise model; however, LAWA has radar-tracking ability. A 24-hour period of actual radar tracks should be provided so the reader can see an example of the extent of track dispersion over the affected areas.

⁵⁰ Section 4.1.6.1.2.2, Alternative C, Aircraft Noise Pattern At 2015.

6.8.12 Area Wide Flight Paths

Alternative C, Figure 17 should be supplemented with one chart for existing conditions so the reader can identify differences. At a minimum, the text should describe how this chart changes paths relative to existing conditions.

6.8.13 Appendix D

Table 7 of Appendix D identifies the forecast year 2005 baseline conditions as 2,107 operations per day and year 2015 are shown as 2,124 operations per day.⁵¹ The Quarterly Report for the Fourth Quarter of the year 2000 shows that current operation levels are 2,280 operations per day (201,347 quarterly operations). Existing operations are already exceeding the 10 and 20-year projections for the No Action/No Project case. Noise analyses and comparisons should be based on realistic descriptions of future no project conditions.

6.8.14 Reduced Impact of Approach Overflights

Exhibit 29, Reduced Impact of Approach Overflights, shows (and the accompanying text contains) an analysis of this approach procedure and there appear to be community benefits to this procedure. Therefore, it is concerning as to why is it not included as a recommended mitigation measure.

⁵¹ Table 8.

7 Air Quality

The key input data used by LAWA in the air quality analysis fall into three major categories. These included the following:

- ◆ Ambient air quality data
- ◆ Emission data
- ◆ Meteorological data

The reasonableness of these data and some of the assumptions that were used in the air quality analysis are discussed in the following subsections.

7.1 Ambient Air Quality Data

Ambient air quality data were used for two purposes in the study. One purpose was to define baseline conditions and the other was to estimate background concentrations. Baseline conditions in this case were defined as the maximum air quality concentrations in the vicinity of the airport for existing conditions (an approximate 1996-98 timeframe). Background concentrations, on the other hand, are defined as the concentrations present in the absence of nearby sources. In other words, the concentrations due to multiple small sources and distant large sources not directly accounted for in the air quality impact assessment. Estimates of background concentrations were used in the analysis to add to the concentration estimates generated by computer dispersion models for the airport and other nearby sources to arrive at estimates of total ambient concentrations.

Data from two air quality monitoring stations were used to characterize both baseline and background ambient air quality conditions. One station was located onsite and immediately to the east of the airport runways in the South Airfield Complex. This station was operated by LAWA for approximately 7.5 months, from August 1997 until March 1998, and measured carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂) and particulate matter (PM₁₀). The other station was located approximately 0.6 mile south of LAX. This station, located in Hawthorne and designated as Station No. 094, was operated by the South Coast Air Quality Management District (SCAQMD) and measured ozone (O₃), lead (Pb), sulfates, CO, NO₂, SO₂ and PM₁₀.

The Draft EIS/EIR does not provide any justification for the location of the onsite ambient air quality monitoring station or any information concerning the primary purpose of the station. Typically, a monitoring station will be located and operated to either measure background concentrations or maximum source impact. Given the location of the station with respect to the prevailing wind direction and the airport runways, the station appears to be situated near the likely maximum source impact area. Data from the station are used to describe "Environmental Baseline" conditions, which is apparently intended to mean maximum source impact for existing conditions. In most cases, computer modeling would be done to identify the locations of maximum concentrations for baseline conditions, and then one or more monitoring stations would be positioned at these locations. If the onsite monitoring station was not positioned at the

expected location of maximum concentration, then it is possible that concentrations higher than those reported at the station occurred in the area.

The Draft EIS/EIR does not discuss this, but maximum concentrations from the nearby SCAQMD station are comparable to the concentrations reported onsite by LAWA for the same timeframe. This suggests either that maximum concentrations do not vary significantly in the area or that both stations are similarly effected by nearby sources. The document shows that the maximum concentrations from the onsite monitoring station actually occurred when the station was upwind of the airport.⁵² Thus, the maximum 1-hour CO concentration shown as the Environmental Baseline value in Table 4.6-11 was apparently due to other sources in the area and not the airport. This needs to be rectified.

The basis for locating the onsite ambient air quality monitoring station needs to be explained. If it was located at, or near, the expected location of maximum concentration (for all pollutants) an explanation of how this location was determined should be provided.

It is not clear whether the data from the onsite monitoring station characterize the true maximum baseline (existing) concentrations in the area or only the maximum concentrations at the monitoring site location. If the data do not characterize the existing maximum concentrations, they need to be identified. Finally, the Environmental Baseline concentrations shown in Table 4.6-11 need to identify whether they represent maximum impacts from the airport emissions or if they are due to other sources in the area.

7.2 Emission Data

LAWA put substantial effort into both identifying and quantifying all on- and off-airport emission sources associated with LAX. Aircraft emissions of the criteria pollutants (except particulate matter) were estimated based on the FAA-approved computerized emission model, EDMS Version 3.2, and the existing aircraft operations. EDMS does not provide emission estimates for particulate matter. Therefore, emissions of particulate matter were estimated based on fuel usage. As part of this review, the resulting baseline estimates for aircraft operations at LAX were compared to emission estimates that have been made for other airports, and they compare very favorably when scaled for activity level. Thus, it appears that the baseline estimates given for aircraft emissions are reasonable but the emission estimates for particulate matter from aircraft operations are probably not highly accurate.

Table 4.6-8 indicates that CO and volatile organic compound (VOC) emissions will decrease by 2015 with or without the project, while nitrogen oxides (NO_x), SO₂, and PM₁₀ will increase. Thus, even in the no-action case, CO and VOC emissions are predicted to decrease by 2015 despite a projected increase of 3 percent in the total aircraft operations. NO_x emissions in the year 2015 are projected to increase by 22 percent in the no-action case and even more in the build Alternatives. The Draft EIS/EIR mentions these changes, but it does not offer any explanations. Presumably, these are due to airport improvements that will occur with or without the project; however, the Draft EIS/EIR needs to identify why these changes occur as they are reported.

⁵² Technical Report 4, Attachment Y.

Appendix G, page 11, indicates that a memorandum of agreement setting forth goals for reducing emissions from ground support equipment was due to be finalized by the end of 2000 and that the air quality analysis does not necessarily reflect the final agreement. Emissions from ground support equipment are estimated to account for a substantial portion of the on-airport emissions, and thus this agreement could be an important factor. The document should identify the status of this agreement and, if it has been finalized, its affect on results of the air quality analysis should be identified.

7.3 Meteorological Data

Meteorological data used in the analyses were obtained from SCAQMD and consisted of 12 months of hourly surface and upper air data collected by the National Weather Service (NWS) at LAX between March 1996 and February 1997. These data were collected onsite at the NWS station located in the South Airfield Complex. Section 4.6 of the Draft EIS/EIR does not specify, but presumably, the wind data were obtained at the standard measurement height of 10 meters (33 feet).

These data were used as input for the dispersion modeling of both the on-airport and off-airport sources. While the correctness of the data for the modeling of on-airport sources probably cannot be questioned, the use of these data for off-airport analyses is of some concern. This is a result of the many off-airport sites that were studied, which likely have much more surface roughness that may cause reduced wind speeds and may also cause the wind direction to be somewhat deviated. Also, if the wind data at LAX pertains to a measurement height of 10 meters, it is likely the winds at 1 meter (the relevant height for modeling offsite intersections) would be lower. For the type of analysis that was conducted at offsite intersections, reduced wind speeds would result in higher predicted concentrations. Therefore, it is not known whether the wind data used for the dispersion analyses at offsite roadway intersections is representative of these locations.

If the wind data from the NWS station at LAX was collected at the standard measurement height of 10 meters, the data needs to be adjusted for the relevant height (approximately 1m) for the dispersion modeling analyses at offsite intersections. If this was not done, the effects on the predicted concentrations need to be explored.

7.4 Appropriateness Of Analysis Methodology

Computer modeling was used to predict future maximum air pollutant concentrations in public areas of the airport and at critical off-airport locations for each of the future scenarios. The predicted concentrations were then added to the estimated background concentrations and compared with State and Federal standards. Mitigation measures were then identified and additional modeling was performed to evaluate their effectiveness. This is a very logical and reasonable approach with the exception that the Draft EIS/EIR should have also modeled existing conditions. The modeling of existing conditions and the comparison of the predicted concentrations with existing ambient air quality monitoring data could have provided very useful information concerning how well the models were performing in this particular application. Once it has been established that the analysis methodologies are performing reasonably well for

the existing case, there can be more confidence in the results for the future scenarios. In addition, modeling the existing situation would have provided information concerning the location of existing maximum concentrations and would have determined whether these locations correspond to the locations identified as containing monitoring data. Without this or multiple onsite monitoring stations, it cannot be concluded that the current maximum concentrations have been identified. LAWA needs to model the existing situation at LAX and compare the model predictions to existing ambient air quality monitoring data to obtain a benchmark of how well the models were performing.

7.4.1 Aircraft Operations

Perhaps one of the most critical issues in using EDMS to perform dispersion modeling of emission from aircraft and related sources is the queuing of aircraft for takeoff. This is because aircraft take off into the wind and thus queue for takeoff on the downwind end of the runway, which is typically near the airport boundary. In addition, for jet aircraft, CO emissions predominantly occur when the aircraft engines are at or near idle. At higher engine speeds, CO emissions are usually substantially reduced. Unfortunately, EDMS does not have the capability to estimate queue lengths or queue times. This information must be provided by the user. The Draft EIS/EIR indicates that queue lengths were estimated from simulation model (SIMMOD) data.⁵³ Hence, the accuracy of the EDMS results will depend largely on the accuracy of the SIMMOD projections. Details concerning how the SIMMOD estimates queue lengths were not provided. Queue times were estimated based on the estimated runway takeoff capacity and queue length, which is a reasonable approach, but the runway takeoff capacity may present a problem.

Visual Flight Rules (VFR) conditions were assumed for estimating annual emissions since peak activity would occur during these conditions.⁵⁴ This is probably a reasonable approach for estimating annual emissions, but for identifying short-term maximum ambient concentrations, this assumption could be questionable. During Instrument Flight Rules (IFR) conditions, runway capacity will likely be significantly reduced, causing longer aircraft queues to form and longer queue delay times to occur. This issue does not appear to be adequately addressed. LAWA needs to examine the potential short-term impacts that might occur during IFR conditions when runway takeoff capacity is reduced and aircraft queue lengths and queue times increase and should identify the prevalent meteorological dispersion conditions during IFR conditions at LAX.

The Draft EIS/EIR indicates that a coarse receptor grid with 500m spacing was used and that additional receptors were placed no more than 300m apart along the airport boundary.⁵⁵ Unless a receptor spacing of not more than 100m was used in the areas of probable maximum impact, it is doubtful that the maximum predicted concentrations were identified.

Post processing of the hourly concentrations generated by EDMS is discussed in Section 2.2.5.4 of Appendix G. A portion of this discussion involves the post processing of concentration

⁵³ Appendix G, Section 2.2.5.1.

⁵⁴ Appendix G, Section 2.1.3.1.

⁵⁵ Appendix G, Section 2.2.2.

estimates generated by EDMS during calm wind conditions, which could be important in identifying periods of maximum concentration. Calm wind conditions were defined as winds less than 1 meter per second. In reviewing the hourly meteorological data given in Attachment S of Technical Report 4, it appears that periods when the wind speed was less than 1 meter per second have been set equal to 1 meter per second. Thus, it appears there were no calm conditions, as defined, and the discussion of calm processing may not be relevant. Setting the wind speed to a value of 1 meter per second during low-wind speed periods is an accepted practice for air quality modeling, although with the type of wind sensors used at the NWS weather station at LAX, it is doubtful that the wind direction is accurate during such periods.

7.4.2 Use of ISCST3 Model

The Industrial Source Complex Short-Term Model, Version 3, (ISCST3) was used to estimate ambient concentrations of particulate matter from aircraft operations and various other on-airport sources. ISCST3 is an Environmental Protection Agency (EPA) Guideline model, but it is not designed specifically for airport use. It is probably not exceptionally accurate in this type of application.

7.4.3 Off-Airport Motor Vehicles

The assessment of air pollution concentrations from motor vehicles at off-airport locations was performed using CAL3QHCR, which is an EPA Guideline model. One year of hourly meteorological data from the airport, along with one week of traffic data, were used to perform a "refined" analysis, as opposed to a worst-case analysis. In a worst-case analysis, generally, a wind speed of 1 meter per second is assumed and all possible wind directions are examined. A refined analysis is less conservative and attempts to more accurately mimic the actual conditions that cause maximum concentrations. Seventeen roadway intersections were selected for analysis. As mentioned previously, the direct use of hourly wind data from the airport to model emissions from off-airport traffic may be questionable. At a minimum, it would probably be appropriate to adjust the wind speed if the measurement height at the airport was 10 meters.

In Section 2.2.4 of Appendix G, it is indicated that to comply with CalTrans CO modeling protocols specified by the SCAQMD, four receptors (one at each corner of each intersection) were used. If only one receptor was used at each corner in the modeling, as indicated in the document, it is unlikely that the maximum concentrations were accurately identified. Several receptors would need to be placed on each roadway approach to be able to ascertain that the maximum concentration had been located.

7.5 Accuracy Of Analysis

The accuracy of the analysis is a function of both the computer dispersion models that were used and the data that were used as input to those models. Of the three computerized atmospheric dispersion models that were utilized (EDMS, ISCST3 and CAL3QHCR), EDMS has probably received the least amount of validation. The FAA has in fact budgeted money to perform additional validation studies during the next few years; however, it should be understood that the accuracy of the analysis for LAX depends not only on the inherent accuracy of the computer models but also on how they were applied and the quality of the input data that was used to drive

the models. In the case of EDMS, the accuracy of the predicted concentrations is also substantially dependent on the accuracy of the SIMMOD data. The accuracy of the predicted concentrations for CO and NO_x is probably the most critical in this analysis.

Table 4.6-11 shows the Environmental Baseline concentrations and the predicted unmitigated concentrations for the future Alternatives for on-airport sources. At least in the case of the 1-hour CO concentration, it is almost certainly inappropriate to compare the future predicted concentrations to the Environmental Baseline concentration because the latter was apparently not due to on-airport sources. The indicated maximum 1-hour CO concentration from on-airport sources⁵⁶ was most likely only about one-half the value shown in the table. If this is the case, the predicted unmitigated 1-hour CO concentrations for the 2005 and 2015 No-Action Alternatives are three to four times higher than the maximum concentration that was measured onsite during 1997-98. Given that the projected increase in airport operations is only a few percent and that the background concentration is projected to decrease substantially, this seems very improbable, unless perhaps the onsite monitoring station was not located at or near the location of maximum impact. From this perspective, it appears that the predicted impacts may be very conservative.

Table 4.6-11 also shows that the predicted unmitigated maximum 1-hour NO₂ concentrations for the 2005 and 2015 No-Action Alternatives are eight to ten times higher than the Environmental Baseline value. These concentrations are predicted to occur in the same general area where the onsite monitoring station was located. A review of Attachment Y of Technical Report 4 shows that the measured NO₂ concentrations were not substantially different whether the station was upwind or downwind of the airport. Again, given the projected change in airport operations and if the Environmental Baseline concentration is representative of existing maximum concentration, it seems difficult to justify a concentration increase of this magnitude.

Another method of examining the predicted impacts for the future scenarios is to examine the ratio of the estimated 8-hour and 1-hour maximum CO concentrations. For the existing case, the Environmental Baseline data, based on monitoring given in Table 4.6-11, show that the ratio is about 0.8:1.0. This is typical for monitoring data reported for many locations. The predicted maximum 1-hour and 8-hour CO concentrations for the future scenarios occur at different locations except in the case of the 2005 scenarios for the build Alternatives. In these scenarios, the examination of the ratio is probably most valid, and the 8-hour to 1-hour CO ratio is approximately 0.5:1.0. This appears to be low compared to the existing case, unless airport activity will change substantially. This again may be evidence that the estimated future 1-hour concentrations are too high.

Table 4.6-12 shows the unmitigated maximum CO concentrations at off-airport intersections that are predicted for the future scenarios. These values appear to be unrealistically low when compared to the estimated future background concentrations given in Table 4.6-2. A comparison of these two tables reveals that many of the predicted maximum CO concentrations are equivalent to, or even lower than, the background concentration.

LAWA attempted to quantify the impacts from PM₁₀ emissions; however, it should be recognized that there are even more uncertainties in the predicted PM₁₀ impacts than there are for

⁵⁶ Attachment Y of Technical Report 4.

the other criteria pollutants. This is due to both the emission estimates and the dispersion techniques are more uncertain. It may be noteworthy that although the 2015 No-Action Alternative has approximately the same total annual unmitigated emission rate as the build Alternatives, the unmitigated maximum concentrations shown in Table 4.6-11 are substantially lower for all of the build Alternatives. It may be appropriate to explore the reasons for this, especially considering the background concentration accounts for a large portion of the predicted concentrations.

As mentioned previously, the direct use of hourly wind data from the airport may be questionable for use in modeling air quality at off-airport roadway intersections. Wind data from the airport were presumably obtained at the standard measurement height of 10m (33ft). The relevant height for the wind speed when modeling roadway intersections is usually 1m (3ft). Wind speeds at 1m above grade at off-airport roadway intersections will generally be much lower than wind speeds measured at 10m at the airport. This is partly due to the height difference and the fact that off-airport areas will generally be more aerodynamically rough (i.e., off-airport areas will have more buildings and trees that will disturb and slow the wind). At a minimum, it would be appropriate to adjust the wind speed for height if the measurement height at the airport was 10 meters. This adjustment would likely lower the wind speeds that were used in the modeling by about one-half. In the CAL3QHCR model that was used, the predicted concentrations are inversely proportional to wind speed. Thus, the predicted concentrations might increase by a factor of two if the adjustment for wind speed is made.

7.6 Gaps In The Analysis

While the analysis appears to be extremely comprehensive, the lack of evaluation of the existing conditions using the same models used to assess future conditions is a shortcoming. The comparison and correlation of model results for the existing situation with the available monitoring data would have provided confidence that the models were, in fact, performing reasonably. Once this was established, there would be more confidence in the accuracy of the results for the future scenarios, which cannot be corroborated with monitoring data.

Typically, the evaluation of existing conditions is performed using the same methodologies that are used to assess future conditions, both to better evaluate the methodologies for reasonableness and to make the estimates of concentrations for future and existing conditions more directly comparable. Existing (or baseline) conditions in the Draft EIS/EIR are derived from monitoring data, while future conditions are based on modeling results. The baseline concentrations are the maximum values that were measured at the single onsite monitoring station, but it cannot be known if these are the maximum concentrations that occur in the area without having multiple monitoring sites. The modeling results, on the other hand, are based on a network of receptors at many locations, enabling the location of maximum concentration to be accurately identified if receptors are spaced at appropriate intervals.

The Draft EIS/EIR discusses the thresholds of significance.⁵⁷ In determining the significance of emissions from the project, LAWA separately calculated totals for on-airport and off-airport sources and then compared the separate totals for each category to the significance thresholds to

⁵⁷ Section 4.6.4, Table 4.6-7.

determine if the emissions were significant. It is not clear whether the separate totals for on-airport and off-airport sources should be considered individually instead of combined to determine significance. One reason for taking this approach is due to the consideration that the on-airport and off-airport impacts are evaluated separately, but the Draft EIS/EIR does not appear to discuss this issue. The Draft EIS/EIR should have compared the combined total for on-airport and off-airport sources to the significance threshold criteria.

7.7 Mitigation Measures

The appropriateness and adequacy of the proposed mitigation measures depend, to a substantial degree, on the accuracy of the analysis and the focus of these measures. It appears as though the unmitigated impacts from on-airport sources may be overestimated, while the unmitigated impacts from off-airport sources could be underestimated. If this is so, the emphasis of the proposed mitigation measures and the mitigated analysis may be misdirected or inadequate.

Most of the quantifiable mitigation measures shown in Table 4.6-16 are related to non-aircraft emission sources, which may well be appropriate. With the exception of NO_x emissions, the unmitigated emission estimates for the related off-airport sources are much higher than the unmitigated estimated emissions for the on-airport sources.

Table 4.6-15, NO_x demonstrates the only parameter that was determined to have significant impacts from on-airport sources in terms of both emissions and dispersion estimates. If this is correct, one of the primary goals of the on-airport mitigation measures should be to reduce NO_x emissions. The mitigated emission estimates for on-airport sources shown in Table 4.6-19 indicate, however, that the reductions in NO_x emissions would be relatively small compared to the emissions reductions for most of the other pollutants. Furthermore, Table 4.6-23 indicates that, after mitigation, the NO_x impacts will still be significant. Thus, the proposed mitigation measures do not seem to effectively address the projected NO_x impacts. Appropriate mitigation measures should, therefore, be considered.

Section 4.6.8.4 of the Draft EIS/EIR indicates that the unmitigated maximum CO concentrations at off-airport roadway intersections would meet State and Federal air quality standards, and therefore no additional analysis of mitigation measures was performed. The proposed mitigation measures include Transit and Intermodal Facilities, Clean Motor Vehicle Fleets, and Traffic Congestion Control. As indicated previously, it appears that the maximum CO concentrations at off-airport roadway intersections could be significantly underestimated, and hence LAWA's reasoning for not analyzing the proposed mitigation measures may not be valid and such analysis could be warranted.

7.8 Conformity With State And Federal Standards

Table 4.6-4 indicates that the LAX area is currently considered a nonattainment area with respect to both the State and Federal air quality standards for O₃, CO, and PM₁₀. Section 4.6.3.2 indicates that Federal statutes require the area comply with the national O₃ standard by November 15, 2010, the national CO standard by December 31, 2000 and the national PM₁₀ standards by December 31, 2001. The recent monitoring data suggest that all Federal standards

are actually being met except for the O₃ standard and that all State standards are being met except for the O₃ and PM₁₀ standards.⁵⁸

Table 4.6-20 of the Draft EIS/EIR suggests that in both 2005 and 2015 after mitigation emissions from on-airport sources would meet all Federal ambient air quality standards, but NO₂ and PM₁₀ emissions would not conform with the more stringent State ambient air quality standards. Given that the Environmental Baseline NO₂ shown in this table is well within the State standard, that the background NO₂ concentration is projected to decrease with time and comprise only a small portion of the total concentration, and that NO_x emissions are estimated to increase only marginally by 2015, the predicted five- to eight-fold increase in the NO₂ concentration seems difficult to justify. One explanation might be that the sources are relocated nearer to public access areas, but the large change in the NO₂ concentrations and the predicted nonconformity with the State standard deserves more scrutiny to ascertain the reasons for this. In other words, the Draft EIS/EIR needs to identify the reasons for the NO₂ concentrations increasing so significantly compared to the Environmental Baseline when the with-project emissions are estimated to increase only modestly.

Given that existing PM₁₀ concentrations do not conform to the State ambient air quality standards and that the background concentration appears to account for a large portion of the estimated future concentrations, conformance with the State PM₁₀ standards may not be possible. LAWA needs to identify the ramifications of not conforming to the PM₁₀ standards.

The Draft EIS/EIR shows that maximum off-airport CO concentrations are well within both State and Federal air quality standards, but it appears that these concentrations could be underestimated. If so, conformance with both State and Federal standards could be an issue.

7.9 Additional Air Quality Studies

The Draft EIS/EIR indicates that additional air quality studies are being performed; however, no information was provided concerning any additional air quality studies currently being conducted by LAWA. Additional information needs to be provided.

⁵⁸ Table 4.6-5.

8 Land Use

8.1 SCAG Regional Transportation Plan (RTP)

SCAG has now issued the 2002 Draft RTP for public review. This document should be discussed in the LAX Master Plan Draft EIS/EIR.

8.2 Master Plan Commitments

The referenced Neighborhood Compatibility Program⁵⁹ is vague. The details and “teeth” of this commitment must be clarified in order to allow an assessment of its value. The Program should be linked to the Mitigation Monitoring Program, including identification of a formal role for neighborhood review in the formulation and monitoring of specific development plans at the airport/neighborhood interface.

8.3 Ring Road

Under Alternative A,⁶⁰ there is no discussion of the Ring Road project. Additionally, there are no previous mentions of the component. This issue should be clarified.

8.4 Other Potential Land Use Incompatibilities

The discussion on Page 4-189 asserts that Master Plan Commitments LI-1 and DA-2 will reduce land use conflicts of the Ring Road on the apartments on Morley Road to less than significant; however, these measures are not described in the Draft EIS/EIR, but only referenced. In fact, throughout the Draft EIS/EIR text Sections 1 through 7, references are made to impacts and mitigation measures described in Appendix K, without any explanation or summary describing such impacts and mitigation measures. Since the LAX Expressway and State Route 1 (SR 1) improvements are integral features of the build Alternatives, the Draft EIS/EIR should be revised to incorporate this information in the body of the text.

8.5 Land Use Assurance

The contents of the Land Use Assurance Letter⁶¹ should be summarized in the text and the document should describe how conflicts would be avoided. This discussion emphasizes noise compatibility considerations and minimizes the combined effects of noise, safety, air quality, lighting, and aesthetics. After acknowledging that land use compatibility is a function of these types of combined effects, very little discussion of combined effects is included in Section 4.2.6. Please identify properties that are subject to such combined effects.

⁵⁹ Page 4-116.

⁶⁰ Page 4-159.

⁶¹ Appendix E.

8.6 Mitigation Measures

Substantial reliance is placed on Mitigation Measure LU-1 "Implement Revised Aircraft Noise Mitigation Program." This measure is broad in scope, and depends upon the cooperation and funding of agencies outside of LAWA. Consequently, the ability of LAWA to implement this measure in a timely manner is by no means assured. Moreover, LAWA does not have an outstanding track record, as a number of commitments to properties already included within the current boundaries of the ANMP have not been fulfilled. A discussion of unmet commitments from prior actions should be provided along with an evaluation of the impacts that would result if LAWA were unable to fulfill the new commitments described in the Draft EIS/EIR.

9 Safety Issues

LAWA's discussion of potentially significant air safety impacts is confined to the airport property and FAA measures that have been completed because of the local aircraft operations history. LAWA contends that it cannot control either the ever-increasing demand for LAX services or operations within the airspace that surrounds it due to FAA jurisdiction. However, LAX is eager to propose a plan to embrace all future demands notwithstanding unknown and potentially significant limitations on the use of regional airspace. To meet this information gap, the Draft EIS/EIR should include and report the results of an airspace safety analysis. While the details are not known, it is understood that the FAA has begun a national airspace analysis to enable comprehensive planning of future operations in the U.S. Apparently, the FAA has focused early efforts on the east coast of the U.S. despite the critical need to accommodate growth of air traffic and expanding levels of operations in this region. The EIS/EIR cannot be complete without knowledge of the level of safe saturation of airspace.

9.1 Environmental Setting

An EIS/EIR must include the baseline physical conditions of the surrounding area in order to assess environmental impacts of the project. At least one component has not been included in the setting statement. Inasmuch as safety is a concern and a potentially significant impact of this project, an airspace analysis should be a part of this Draft EIS/EIR. All parties appear to be waiting for the FAA to create this study as part of a national effort; however, it does not appear that the study will be forthcoming. Therefore, local experts should be retained to complete such a study. Jurisdictional issues involving the FAA should not prevent its critical evaluation from appearing in the Draft EIS/EIR.

10 Social Impacts

10.1 Productivity Variables

The assessment of Employment and Socioeconomic Impacts (and therefore the Growth Inducement Analysis as well) is substantially flawed by assumptions made at the outset of the analysis concerning productivity gains. This conclusion is directed largely at the assumption that productivity gains will be the same for all Alternatives. In fact, productivity rates are variable over time and highly sensitive to changes in the economy's overall rate of growth. These cycles are evident in statistics over the past 50 years, which show national annual productivity growth in the range of 2.8% from 1948-1973, compared with 1.2% during the economic slowdown of 1992-1995.⁶² When Gross Domestic Product growth is decelerating, productivity slows. Given the repeated emphasis throughout the Draft EIS/EIR that failure to pursue the expansion project would have a negative ripple effect throughout the southern California economy, it would have been more logical to link the No Project Alternative with productivity gains lower than those associated with the build Alternatives. The Draft EIS/EIR should provide a reassessment of Employment and Socioeconomic impacts for the No Project Alternative that utilizes a lower estimate for productivity gains.

10.2 Productivity by Sector

The Socioeconomic Technical Report makes note of the labor-intensive nature of many service industries, and identifies the tendency toward stable or reduced productivity (and resulting job growth per unit of service) in hotels, restaurants, and numerous high-end personal, household and business services.⁶³ At the same time, the Draft EIS/EIR assumptions regarding the No Project Alternative show passenger volumes increasing from 71.2 MAP in 2005 and 78.7 MAP in 2015 (about a 10% gain). The Technical Report notes that the services and tourism/entertainment sectors showed the most substantial employment gains between 1972-1992 and again between 1992-1997.⁶⁴ Finally, the Report allocates substantial passenger spending on these services, particularly for hotels and dining facilities, through the 2015 horizon.

In combination, these facts would point to positive employment gains in at least those sectors for which productivity is forecast to slow – eating and drinking establishments, hotels, and amusement and recreation facilities at a minimum. Nevertheless, and in apparent contradiction of its own assessment, the Socioeconomic Technical Report forecasts losses in direct LAX-related employment for both sectors between 2005 and 2015. Eating and drinking establishments are forecast to sustain job losses on the order of 1,725 (a 4% drop); hotels are forecast to sustain job losses on the order of 3,467 (a 7.5% drop); and amusement/recreation facilities are forecast to sustain losses on the order of 4,514 (a 14.8% drop).

⁶² Alejandro Bodipo-Memba, "U.S. Productivity Surged During 1998, Hinting at Escape from 25-Year Slump," Wall Street Journal, February 10, 1999; Steve Cochrane, "Productivity Differences Heighten Regional Risks," The Dismal Scientist, October 26, 2000.

⁶³ Section 3.2.3.

⁶⁴ Section 4.1.1.

An explanation is needed to justify the Technical Report forecasts of job losses that conflict with the discussion of anticipated productivity trends for hotels, restaurants, and services. Job growth in the specified service sectors should be projected.

10.3 Definition of Improvements for the No Project Alternative

The artificially narrow definition of the No Project Analysis weakens the analyses contained in the Socioeconomic Technical Report. As discussed previously, the Draft EIS/EIR assumes that under the No Project Alternative there would be no new improvements at LAX beyond those now underway, planned, or programmed. This assumption is highly suspect; it is far more reasonable to anticipate that LAWA would pursue a wide range of additional improvements that would in turn boost direct and indirect employment and spending, with far different socioeconomic impacts than indicated in Technical Report estimates for the No Project Alternative. The analysis of Employment and Socioeconomic impacts should be revised to incorporate the expanded assessment of actions that may in the future be taken by LAWA in the event the project is not approved and the outcomes that could reasonably be expected to result from such actions should be addressed.

10.4 Distribution of Regional Spending – Ontario

In estimating the distribution of passenger spending, Section 3.4.3.1 of Technical Report 5 indicates that it was assumed that LAX would represent the sole source for international traffic, based on historical data for the years 1985-1994. Additionally, the Section notes that:

As a working assumption, it was assumed that there was no connecting traffic at any of the other 4 major airports in the region...the single exception to this rule results from the fact that Ontario 'International' Airport did serve an estimated 50,000 international passengers during late 1993 and early 1994.

It is unclear how the "working assumption" and exception were applied in estimating future contributions under the 2005 and 2015 scenarios. Did the analysis treat the 50,000 international passengers as a one-time event, or did it assume that Ontario would continue to serve 50,000 international passengers (per year) through 2015? In either case, the document should have explored the factors that allowed Ontario to successfully enter this competitive market, with the goal of assessing Ontario's ability to accept future unmet need in the region as a whole. This analysis would have been especially relevant to the socioeconomic analyses of the No Project Alternative, and may have resulted in far different conclusions. If the Socioeconomic Technical Report did base its 2005 and 2015 No Project Alternative scenarios on the assumption that Ontario would serve 0 or 50,000 international passengers (but no more), the analysis should be expanded to provide a more detailed assessment of the potential role of Ontario in meeting international travel demand.

In general, and although the Technical Report promises such an assessment, the Socioeconomic Technical Report did not contain any sustained effort to determine the degree to which the No Project Alternative might result in a redistribution of air services and associated economic activity to other airports in the region. As it stands, the analysis shines a very bright light on

variables influencing the LAX growth scenarios, but does little to apply its powerful tools on the potential future role of other facilities in the region. This approach shortchanges the No Project Alternative. The Draft EIS/EIR should be expanded to take a closer look at this issue, considering the amount and type of activity that could reasonably be expected to shift within region, and the direct and indirect economic effects that might result. An update on Ontario's request to increase its cap from 125,000 to 180,000⁶⁵ should also be included in the document.

10.5 Distribution of Regional Spending – Resident Expenditures

Section 3.4.3.1 notes,⁶⁶

Parking costs are the only local impacts attributed to Resident passengers in the current analysis...[and to] the extent that such passengers spend money at restaurant and retail establishments during the time they spend in one of the region's airports, this analysis may, to a small degree, have underestimated the impacts of Resident passengers.

The analysis also discounted resident expenditures on transportation to and from the airport:

To the extent that such transportation is provided by a private taxicab, limousine or shuttle service will cause some additional impacts on the local economy. This does not apply to connecting and visitor passengers, for whom these impacts have been measured.

On the surface, these assumptions would be expected to impact regional spending estimates in a neutral manner, because it is applied to all airports in the region. However, since the analysis: (1) assumes that facilities other than LAX will be essentially limited to resident passengers; (2) discounts the retail, restaurant and travel expenditures of these passengers; and (3) measures such expenditures for connecting and visitor passengers, the net effect is to disproportionately minimize the regional spending contributions of airports other than LAX. Once again, the assumptions would cast an artificially unfavorable light on the No Project Alternative.

⁶⁵ Section 2.2.1.

⁶⁶ In Footnote 32.

11 Hydrology and Water Quality

11.1 BMP Efficacy

The assessment of Hydrology and Water Quality for the No Project Alternative indicates an overall 3-11% increase in pollutant loads, noting that most of this increased pollutant load is "attributed to the development of LAX Northside from open space to mixed use development." Nevertheless, the report also indicates that LAX Northside and Continental City would be required to comply with Standard Urban Stormwater Mitigation Plan requirements, including best management practices (BMPs) designed to reduce water quality impacts "to the maximum extent practicable."⁶⁷ On the other hand, the Draft EIS/EIR states that the build Alternatives would be accompanied by an (as-yet undefined) detailed drainage plan that would include BMPs to minimize the effect of airport operations on surface water quality and prevent a net increase in pollutant loads. It is curious why the BMP program developed for the Northside would perform so poorly as to be largely responsible for an overall 3-11% increase in pollutant loads from LAX, while a similar (but undefined) program for LAX expansion would have no net increase in pollutant loads. As noted in the Draft EIS/EIR,⁶⁸ BMPs vary widely in their pollutant removal efficiency; few approach 100% efficiency even under ideal conditions. These considerations raise reasonable doubt as to the likelihood that the proposed Hydrology and Water Quality (HWQ)-1 BMP program would achieve 100% elimination of pollutant loads above baseline levels.

The BMP program needs to be presented for consideration at this time along with a discussion provided as to why equally effective means (if in fact available) are not being employed by other LAWA-initiated activities such as LAX Northside.

Regarding the statement, "commitment to develop a detailed drainage plan for assessing site-specific drainage flows and identifying appropriate measures to alleviate existing drainage deficiencies, while also accommodating future Master Plan-related increases in runoff,"⁶⁹ this violates the spirit, and possibly the letter, of the CEQA Guidelines. Since there may well be impacts associated with implementation of the mitigation measures, public review of this program should not be deferred. The program ought to be presented for public review and comment as part of the recirculated (or new) Draft EIS/EIR.

11.2 Stormwater Monitoring Program

In a similar vein, Section 4.2.1 notes that a stormwater monitoring program has been developed and implemented as part of the existing Stormwater Pollution Prevention Plan (SWPPP). The results of the monitoring program should be included in the Draft EIS/EIR to illustrate the effectiveness of the BMPs in use.

⁶⁷ Section 4.7.6.1.

⁶⁸ Section 4.7.5.

⁶⁹ Section 4.7, Page 4-532.

11.3 Oil/Water Separator

Section 4.2.2 indicates that an oil/water separator provides primary treatment for stormwater runoff from the Scattergood site, and that the effluent is subsequently combined with secondary treated petroleum process wastewater before discharge to Santa Monica Bay. Most oil/water separators show very poor performance at pollutant removal, and it would be helpful to know what the sampling results have shown under the existing National Pollutant Discharge Elimination System permit in terms of the efficacy of this existing system.

11.4 Aircraft Wash Runoff

Section 4.2.3⁷⁰ notes that BMPs have been developed in the LAX SWPPP to minimize the amount of runoff from aircraft and vehicle washing, but that "such discharges may still occur." It is not known whether this reference to continuing discharges pertains to the non-designated wash areas that may discharge to the stormwater conveyance system or other activities. The significance of these discharges needs to be explored.

11.5 Flood Protection

The flood protection section identifies inadequate flood protection for the LAX onsite drainage system under the Environmental Baseline and No Project Alternatives. With commitments to develop a detailed drainage plan for LAX build Alternatives A, B, and C, the Draft EIS/EIR concludes that the build Alternatives would provide adequate flood protection and are therefore superior to the Baseline and No Project scenario. However, the document does not explore the extent to which the No Project scenario would likely include new facilities and BMPs in conjunction with various airport improvements and related projects that are committed, approved, or underway.

Similarly, the commitment to develop a detailed drainage plan for the build Alternatives is a programmatic measure. It includes objectives and BMP options, but no specifics. No plans are provided that would indicate the location and size of facilities needed. As a result, this program may result in its own environmental impacts – effects that have not been evaluated in the current Draft EIS/EIR and require independent review and assessment. A schedule should be developed that shows when such supplemental measures would be defined, when they would be evaluated under CEQA and NEPA, and how this timing relates to the implementation as part of the Master Plan phasing.

Under the No Project Alternative, surface water runoff and peak flow increases are attributable to the conversion of LAX Northside from open space to mixed uses and development of the Continental City site. Both projects are identified as contributing to localized flooding and/or cumulative increases in runoff that exceed capacities of existing drainage systems. As a result, it appears that adequate flood and drainage commitments have not been applied to these projects. In this light, it is not understood why these project components held to a lesser standard under the No Project Alternative.

⁷⁰ Page 33.

11.6 Recharge

It is not known to what extent, if any, the nominal reductions in recharge associated with the various Alternatives affect the ability to inhibit saltwater intrusion within the West Coast Basin.

12 Regional Transportation Issues

12.1 Southern California Logistics Airport

The text discussion on Page 1-19 notes that the Southern California Logistics Airport (SCLA) is focusing on attracting cargo, but provides no discussion of goals, plans to realize those goals, and success to date; information regarding other airports is limited. Information that is more detailed is necessary concerning the cargo handling goals for SCLA. In addition, the cargo handling objectives of March JPA and other airports in southern California should be provided along with an assessment of the extent to which competition from these facilities could reduce cargo demands at LAX. It is especially interesting that cargo is the only demand that would be fully met by the preferred Project Alternative C (it meets 79% of unconstrained operations demand, 91.5% of passenger demand, and 100% of cargo demand). This information is especially significant in light of the concerns raised above concerning the potential capacity at LAX for much higher cargo capacity than evaluated in the Draft EIS/EIR – potentially as high as 9-10 million annual tons (MAT), or as much as 15 MAT.

12.2 John Wayne Airport

Both the body of the Draft EIS/EIR and the Economic Impacts Technical Report assume that activity at John Wayne Airport (SNA) will reach the existing cap by 2005 and remain at that level thereafter. In fact, the cap is scheduled to expire in 2005. Although policy decisions could vary considerably, recent discussions at the Orange County Board of Supervisors include a proposal to increase the cap from 8.4 MAP to 9.8 MAP by 2016. It would have been prudent in the Draft EIS/EIR to examine at least one scenario incorporating increased activity levels at SNA. The assessment ought to be revised to consider expiration of the cap and how that might influence future operations and Alternatives for LAX.

12.3 No Project Alternative at LAX

The Draft EIS/EIR assumes that cargo volumes would reach 3.1 MAT by 2005 under the No Project Alternative, with no further growth thereafter due to operating constraints at LAX. Under this scenario, it is not clear what assumptions are made regarding cargo services at other regional airports. If it were assumed that growth would stop at 3.1 MAT on a regional basis, an additional calculation would be required that would account for a reallocation of the additional cargo demand (i.e., 1.1 additional MAT) to other facilities in southern California.

12.4 MCAS El Toro

Measure F was recently invalidated by the courts. There is no indication of the impacts of this Measure in the Draft EIS/EIR. There is a need to discuss the resulting impact or significance with respect to LAX.

12.5 Ontario International Airport

The City of Ontario has recently agreed to investigate the feasibility of expanding operations to 30 MAP. The resulting impact or significance of this proposal regarding LAX needs to be discussed in order to validate the conclusions and assumptions made in the Draft EIS/EIR.

12.6 Rail Technology

Section 1.3.2 fails to incorporate any estimate of the demand that would be reallocated from air to High Speed Rail (HSR) in the year 2017 – the earliest year for HSR deployment. This estimate needs to be included in the text and its impacts evaluated. In addition, in the discussion of Alternatives,⁷¹ HSR is dismissed as being “many years off.” Actually, implementation of various segments of HSR in southern California under current plans of the California High Speed Rail Commission is within the LAX Master Plan horizon (i.e., 2015). In this light, the conclusions in Section 3 should be reevaluated.

⁷¹ Section 3, Page 3-2.

13 Biological Resources

Eight distinctive biotic communities were identified without clearly distinguishing among the following: naturally occurring communities; man-influenced/modified natural communities; man-created biotic situations; or areas under complete development, which no longer have biotic value for sensitive plant and animal species. The acreages of biotic habitats were reviewed with value for sensitive species and compared with marginal habitats, non-native habitats, and areas that are developed and no longer supporting habitats. The review indicated that the airport is mostly developed, with open areas that are highly disturbed and offers little or no viable habitat for sensitive plant and animal species. The Los Angeles/El Segundo Dunes and, to a lesser extent, the non-restructured dunes north of this area stand out as the only areas having high biological value that merits recognition and a conservation effort by LAWA. It is therefore recommended that the Master Plan include a "conservation element" dictating how the Los Angeles/El Segundo Dunes will be managed. This goes beyond the requirements to manage the Habitat Restoration Area for the El Segundo Blue Butterfly.

13.1 Mitigation Measures

Section 4.10.8 lists several mitigation measures that, if successfully implemented, would reduce potential impacts to sensitive biological resources to a less than significant level. The mitigation measures that are implemented will be determined by which Alternative is chosen. It is expected that a mitigation monitoring program (MMP) will be developed and implemented; however, from a biological perspective, as well as for a more secure point for future negotiations with United States Fish & Wildlife Service (USFWS) regarding potential take issues with listed species, all biological mitigation measures should be separated from the MMP and be integrated into a Conservation Program for LAWA with a focus on the Los Angeles/El Segundo Dunes and surrounding areas. This will provide LAWA with a stronger negotiating position with USFWS on future projects.

Section 4.11.2 mentions that a formal Section 7 consultation with USFWS was initiated on September 5, 2000. The remainder of Section 4.11 discusses several mitigation measures that will be implemented to reduce impacts to listed species to below a significant level. It is not clear whether these mitigation measures are the basis for the formal Section 7 or if they have been included in the required Biological Assessment. Although completion of the Section 7 consultation process by the FAA is not required to be a part of the Draft EIS/EIR analysis, the level of analysis and detail presented in this Draft would suggest that it has been included.

Apparently, USFWS and LAWA have not come to terms on the level of mitigation required to mitigate impacts to the Riverside Fairy Shrimp and its habitat. There is a brief mention of this divide at the top of page 4-691. The FAA is rightly concerned that the creation/restoration of fairy shrimp habitat (vernal pools) will create significant safety issues for aircraft by attracting birds (bird air strike hazards). However, the final endangered species mitigation measures and/or conservation management strategies will depend on the final resolution of this issue between USFWS and the FAA.

The Draft EIS/EIR does not give an indication whether the present mitigation measures will be satisfactory to USFWS; or whether these measures will allow the FAA to complete its obligations under the Endangered Species Act. If this is the case, it should be clearly stated. If it is not, the reader needs to know that the mitigation measures have not been approved by USFWS and could change significantly before the Section 7 consultation process is completed and a Biological Opinion is issued by the USFWS.

As discussed above under comments for Section 4.10.5 Master Plan Commitment, all biological mitigation measures should be integrated into a Conservation Program for LAWA with focus on the Los Angeles/El Segundo Dunes and the Riverside Fairy Shrimp.

13.2 Wetlands

Only U.S. Army Corps of Engineers jurisdiction was found to occur within the Air Operation Area or the Los Angeles/El Segundo Dunes; no California Department of Fish and Game (CDFG) jurisdiction was determined to occur. The permanent conversion/loss of the 1.3 acres of atypical wetlands is a significant impact that will require a 404 permit. It will also require a Section 7 consultation between the Corps and USFWS because of the presence of embedded Riverside Fairy Shrimp cysts in soil samples.

The biological concerns associated with wetlands should also be included in a Conservation Program rather than addressed as a separate biological issue for which no Master Plan commitments are made. Although there is very limited natural habitat at LAX, any loss of these remaining natural habitats will be considered significant by USFWS, CDFG, and local wildlife protection groups. It would seem an opportune time to develop a long-term management plan for biological resources on airport lands. Once in place, this plan/strategy would set policies and procedures (officially approved by the resources regulators) for the next several years. As the Draft EIS/EIR currently reads, LAWA has identified several biological concerns that are being addressed separately and on a one-time basis. This would leave LAWA vulnerable to future challenges as unanticipated development/programs are proposed.

13.3 General Comments

Overall, as a NEPA/CEQA document, the biological analysis is well done. Unfortunately, given the amount of time and effort devoted to assessing baseline biological conditions, the remaining step of integrating and folding this information into a long-term Conservation Program is missing. This may be a conscious choice by LAWA management and the City of Los Angeles; however, this approach may deprive LAWA of the opportunity to gain long-term control of its own biological resources.

14 Additional Issues

14.1 Historical, Architectural, Archaeological, and Cultural Resources

Illustration of the different impacts associated with the Single v. Split Viaduct LAX Expressway Alternatives should be carried forward from the Appendices to the Historic/Architectural section of the Draft EIS/EIR.

The commitment to have a qualified architectural historian supervise noise abatement of historic properties does not assure that the historic values and character of such properties will not be altered or lost. This possibility should be discussed and alternate mitigation measures or a revised significance finding should be attached, if appropriate.

14.2 Floodplains

The discussion of floodplains⁷² indicates that the 13-acre parcel currently shown as being within a 100-year floodplain no longer exhibits applicable drainage characteristics. For this reason, the City has initiated consultation with the Federal Emergency Management Agency regarding a "letter of map revision" to remove the floodplain designation for this parcel. Based on the manner in which the Draft EIS/EIR discusses the floodplain issues, it would appear that the consultation process is at this point a mere formality. If this is an incorrect statement, what are the substantive issues yet to be resolved? In the event that the map revision is not approved, a discussion of the potential consequences should have been evaluated in the Draft EIS/EIR.

Each of the build Alternatives is proposed to fill the floodplain for roadways and parking facilities, and no avoidance Alternatives are proposed. Although development of the site may not result in significant floodplain impacts, it appears that LAWA has not given any consideration to use of this area as a detention facility, consistent with identified hydrology and water quality objectives. This should be given consideration, or explained why it was given consideration and rejected.

14.3 Human Health and Safety

In discussing the impact of toxic air pollutants associated with current airport operations, the Draft EIS/EIR notes that, "The HHRA [Human Health Risk Assessment] did not evaluate impacts of toxic air pollutants associated with current airport operations. LAWA is initiating an independent study of air quality in the area around LAX for the purpose of examining these impacts."⁷³ The timing of this independent study should be identified, and a discussion of why it is considered "independent" even though it is certainly relevant and apparently proceeding on a parallel timeframe is merited. In addition, it is not known why the HHRA excluded consideration of toxic air pollutants associated with current airport operations given that the results are necessary to establish the baseline setting.

⁷² Section 4.13.

⁷³ Section 4.24.1, Page 4-999.

The HHRA indicates, "The three build Alternatives might have significant human health impacts, under pre-mitigation conditions for both horizon years." It also states, "the build Alternatives with mitigation would have no significant human health impacts at either horizon year." The Assessment also asserts that there are no mitigation measures proposed for human health effects, but does state that the Air Quality mitigations would apply to health impacts as well as air quality. However, the Technical Report for Air Quality indicates that mitigation measures have not yet been fully formulated. The extensive list of mitigation options identified in Attachment X of the Air Quality Technical Report does not quantify the anticipated efficacy of the measures listed. Moreover, many of the measures listed in Attachment X of the Technical Report are either already in place, now in progress, supportive in character (i.e., proceeding independent of the Master Plan, and not to be quantified), or not applicable.

Less than one-quarter of the mitigation measures are listed as "in the Master Plan." Many in this group (for example, increase number of aircraft seats) are beyond the control of the Master Plan, and at least one (i.e., consider regional Alternatives to Master Plan) has in fact been rejected. Furthermore, roughly half of the measures are identified as "Applicable" (i.e., measures that "may be assessed for AQ benefit"). Many of the measures included in this group would be expected to occur regardless of what happens with the proposed Master Plan (e.g., parking pricing policies to encourage single trips or minimize idle time at the curb; encourage employee telecommuting, expand off-airport intermodal services to other airports), while others would have no air quality benefit (e.g., unmitigated impacts result in payments to trust fund for community improvements).

In this context, it is difficult to understand how the HHRA determined that the build Alternatives, with mitigation, would have no significant human health impacts at either horizon year. A clarification of the assumptions that were made in order to reach this conclusion is necessary to validate this conclusion.

The No Project Alternative is indicated to have more significant health and safety impacts than any of the build Alternatives. Notwithstanding the points raised in the preceding comment, this conclusion is surprising given the fact that: (1) Phase I analyses indicated that aircraft emissions account for about 97% of total emissions and also contribute most to emissions of individual TAPs;⁷⁴ (2) predicted reductions in incremental human health impacts are indicated to result from an "anticipated reduction in older, more polluting engines in aircraft and vehicles resulting from Federal mandates to phase-in cleaner engines," among other factors;⁷⁵ and (3) The No Project Alternative is estimated to have 783,430 total annual aircraft operations, versus 797,249 total annual aircraft operations for Alternative C (1.8% higher), and 935,140 total operations for Alternatives A and B (17.3% higher).⁷⁶ This apparent inconsistency requires clarification and the weight given to each of the factors cited should be included in the discussion.

⁷⁴ Technical Report 14a, Section 3.3.

⁷⁵ Section 4.24.1, Page 4-1000.

⁷⁶ Page ES-9.

14.4 Environmental Action Plan

Many of the key Master Plan Commitments and mitigation measures in the Environmental Action Plan (EAP) are broad and programmatic in nature. Many will require further study, with choices among specific options deferred to the Final EIS/EIR and other stages of the decision making process. The EAP needs to be expanded to identify when and where such subsequent environmental reviews will be required, with discussion as to how these timeframes relate to the improvement phasing plan set forth by LAWA, and to the sequence for FAA and LAWA consideration of required discretionary actions.

By its own admission, the Draft EIS/EIR indicates that key commitments and mitigation measures are merely “performance standards with a range of options.” The EAP, including all Master Plan Commitments and mitigation measures, should be refined and detailed to adequately serve as the CEQA Mitigation Monitoring Program, pursuant to Public Resources Code 21081.6.

14.5 Video-Conferencing Calculations

In the Section 1.3 discussion of Alternatives to air travel, the Draft EIS/EIR notes a study by Apogee Research that contains key findings that video-conferencing has potential to satisfy (1) from 5-30% of non-discretionary travel; and (2) less than 5% of discretionary travel. The discussion in Section 1.3 concludes with: “Given that 50% of LAX users are leisure travelers, it is projected that less than 5% of air travel demand at LAX could be satisfied by communication technologies in 2015. These amounts were factored into the assumptions of the LAX Master Plan forecasts.” This appears to be an error. The total amount of air travel demand at LAX that could be satisfied by communication technologies should equal the combined amounts for discretionary travel PLUS non-discretionary travel (i.e., [5-30% of demand x 50% of travel = 2.5% to 15%] + [$<5\%$ of demand x 50% of travel = $<2.5\%$] = $\sim 2.5\% - 17.5\%$). It seems that a higher number should be factored into the assumptions of the LAX Master Plan forecasts.

14.6 Reliance on SCAG

The Draft EIS/EIR refers on a number of occasions to analyses by SCAG that suggest a loss of significant air travel demand would result if an attempt is made to limit growth at LAX in order to “force the development of other airports.”⁷⁷ Earlier studies notwithstanding, SCAG has recently voted to support regional airport development coupled with maintenance of baseline conditions at LAX. The basis and importance of SCAG’s recent actions should be considered and included in the document, including specific reference to how this would change statements and conclusions in the Draft EIS/EIR that are based on SCAG’s earlier findings and positions. The conclusions should be updated in light of the SCAG Board’s action recommending a 78 MAP limit on LAX and encouraging growth at other airports.

14.7 Sixty-Minute Access Zone Map

The Zone Boundaries shown in Figure 1-3 showing the 60-minute travel time accessibility zones for airports in southern California appear to overstate driving times for at least some of the

⁷⁷ Page 3-2.

airports shown. The assumptions that were used in developing this map need to be discussed and clarified in order to support the map, as drawn.

14.8 Weather Conditions

The Draft EIS/EIR notes that only one of the four runways is sufficiently long to serve the largest aircraft when fully loaded under adverse weather conditions (hot days with little wind).⁷⁸ However, there is no discussion as to how many days of the year, on average, are characterized by these adverse weather conditions. There is also no discussion as to how many runways can accommodate the largest aircraft when fully loaded. Both of these issues require further explanation and investigation by LAWA.

14.9 Remote Terminals

There are several locations within the Draft EIS/EIR where mention is made of the possibility of remote terminals. However, no analysis is undertaken to determine their impacts. LAWA should expand the Draft EIS/EIR to include a full characterization of these remote terminals as well as a description of the baseline setting for the proposed locations, the impacts of their construction and use, and mitigation measures to address any adverse effects.

⁷⁸ Section 2.2.2, Page 2-6.

15 Conclusions

There is no doubt that Los Angeles International Airport is vitally important to the City of Los Angeles, to the County of Los Angeles, to the region, and to California generally. There is an obvious need for improvements at LAX; however, throughout the Draft EIS/EIR, baselines have been inconsistent and inappropriate, selected Alternatives have not met CEQA and/or NEPA requirements, and the analysis has not been sufficient to support the adoption of the LAX Master Plan, as proposed.

The fundamental requirements of this process require a lead agency to begin with comprehensive scoping. Input from the scoping process should then be used to define alternatives that would avoid or substantially lessen the significant effects of the proposed project. These requirements have not been met in the circulated document. The stated objectives would not be realized through the preferred Alternative, biases are evident, and the No Project Alternative is misleading and inaccurate.

The problems associated with this Draft EIS/EIR are so serious, pervasive, and universal that the only practical remedy is to start the process over again. The revised EIS/EIR would need to provide comprehensive scoping, include an updated and consistent baseline, identify feasible runway expansion methods, be free of internal inconsistencies, offer proper levels of analysis and explanation, and present an entirely new impact assessment that does not defer critical decisions. Only with these extensive modifications could the LAX Master Plan be rendered adequate.

This process needs to acknowledge the regional nature of the undertaking and follow with a fresh look at Alternatives that include regional options. We have offered an example Alternative approach that can serve the objectives of LAX as well as the many regional facilities throughout the five-county area. Impacts on the area immediately surrounding LAX would be lessened, the region would be able to handle a larger share of the national transportation market, and outlying areas and counties would be able to accommodate their "fair share" of air traffic. SCAG's recent approval of the RTP supports the regional approach. Recent FAA actions seem to support the regional approach. It is time for LAWA to consider an Alternative that encourages regional growth rather than unconstrained expansion on an already heavily impacted site.





**BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES**

383 KENNETH HAHN HALL OF ADMINISTRATION / LOS ANGELES, CALIFORNIA 90012

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(213) 974-1411

July 13, 2001

Ms. Jane Garvey
Administrator
United States Federal Aviation Administration
800 Independence Avenue, Southwest
Washington, D.C. 90591

Dear Ms. Garvey:

Consistent with unanimous action of our Board on July 10, 2001, we formally submit the attached document as the County of Los Angeles' final comments on the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) for Proposed Master Plan Improvements at Los Angeles International Airport (LAX).

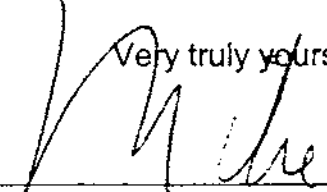
We continue to believe that LAX is vitally important to the City, County, and to this region, and that there is need for some improvements at this facility. However, the deficiencies reflected in the Draft EIS/EIR, as detailed in the attached, are serious, pervasive, and systematic. Notably, the Draft EIS/EIR fails to explore the preferred and more economically, environmentally, and socially salutary alternative of a regional approach to planning for and meeting airport demand and capacity. In this regard, we believe that Los Angeles World Airports and the Federal Aviation Administration should support the efforts of the Southern California Regional Airport Authority, which has recently reactivated and is preparing a comprehensive work plan of activities over the next 18 months that will employ a consensus-building process to develop a regional airport strategic master for Southern California.

AL00022

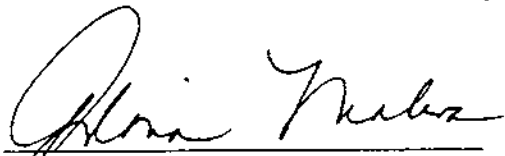
Ms. Jane Garvey
July 13, 2001
Page 2

Over 100 other local and regional governmental agencies have gone on record supporting a regional approach to airport expansion. Therefore, we respectfully request that the Los Angeles World Airports and the Federal Aviation Administration restart the process and incorporate a regional approach to airport expansion, and resolve the deficiencies in the Draft EIS/EIR, including those involving noise, transportation, air quality, and environmental justice impacts.

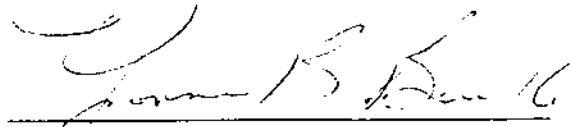
Very truly yours,



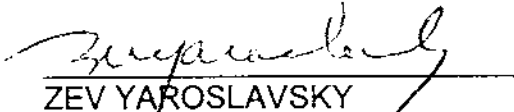
MICHAEL D. ANTONOVICH
MAYOR, COUNTY OF LOS ANGELES



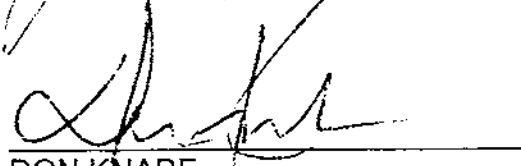
GLORIA MOLINA
SUPERVISOR, FIRST DISTRICT



YVONNE BRATHWAITE BURKE
SUPERVISOR, SECOND DISTRICT



ZEV YAROSLAVSKY
SUPERVISOR, THIRD DISTRICT



DON KNABE
SUPERVISOR, FOURTH DISTRICT

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Attachment

c: Lydia H. Kennard, Executive Director, Los Angeles World Airports

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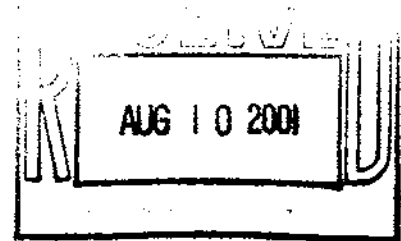


ONE MANCHESTER BOULEVARD / P.O. BOX 6500 / INGLEWOOD, CALIF. 90301

OFFICE OF THE CITY ADMINISTRATOR



August 2, 2001



Mr. Jim Ritchie
Deputy Executive Director – Long Range Planning
Los Angeles World Airports
LAX Master Plan Office
Post Office Box 92216
Los Angeles, California 90009-2216

Dear Mr. Ritchie:

Enclosed are comments that have been forwarded to the City of Inglewood regarding the Draft LAX Master Plan and EIS/EIR Report concerning the expansion of Los Angeles World Airports over the next fifteen years.

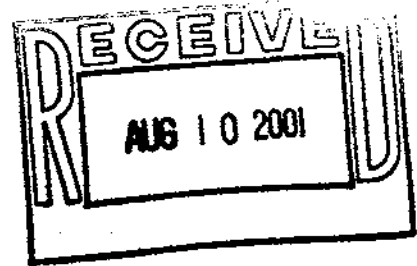
Please record these comments as individual comments from citizens of Inglewood. The attached comments include written remarks from:

- Douglas Fritts, 3674 Kensley Drive, Inglewood, California 90305
- Family Christian Cathedral (Correspondence from this group includes 9 pages of signatures on a "Petition to stop the LAX Expansion Project in the City of Inglewood")

Thank you very much for your assistance. If you have any questions, please phone me at (310) 412-5301.

Sincerely,

Hilda J. Kennedy
Public Information Officer



JULY 26, 2001

TO HILDA KENNEDY,
CITY OF INGLEWOOD PUBLIC INFORMATION OFFICER:

THIS LETTER IS OF CONCERN THAT I HAVE ABOUT THE POSSIBLE
EXPANSION OF THE LOS ANGELES INTERNATIONAL AIRPORT.

OUR CITY AND ITS RESIDENTS ARE ALREADY EXPOSED TO TOO MUCH
POLLUTION, NOISE AND CONGESTION CAUSED BY LAX, AND I
STRONGLY FEEL THAT IT IS UNFAIR TO EXPECT US TO BE SUBJECTED
TO EVEN MORE OF THE SAME.

IT IS HIGH TIME THAT THE SURROUNDING OUTLYING COMMUNITIES
ASSUME THEIR FAIR SHARE OF THIS BURDEN, INSTEAD OF EXPECTING
OUR COMMUNITY TO BEAR THE BRUNT OF IT ENTIRELY.

WHEN LAX CANNOT FOLLOW THE CURRENT GUIDELINES AND CURFEWS
BECAUSE OF ATMOSPHERIC AND WEATHER CONDITIONS, WHY IS ANY
EXPANSION THERE EVEN BEING CONSIDERED AT ALL?

EXPANSION OF LAX IS BEYOND RIDICULOUS AND NOT FAIR TO ITS
NEIGHBORS. IT SHOULD BE OUT OF THE QUESTION ENTIRELY. NO
WAY SHOULD IT EVEN BE UNDER CONSIDERATION.

THE CITY GOVERNMENT OF INGLEWOOD SHOULD DEMAND AN END TO ANY
LAX EXPANSION WHATSOEVER AND SHOULD WE NOT PREVAIL, THEN WE
SHOULD TIE IT UP IN COURT UNTIL THE LAX FORCES LOSE INTEREST
AND GO SOMEWHERE ELSE.

ENOUGH IS ENOUGH!

SINCERELY,

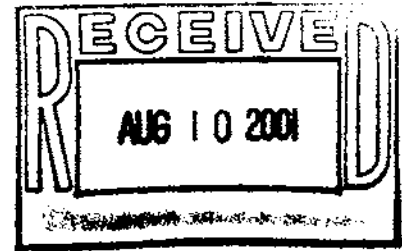
A handwritten signature in cursive script that reads "Douglas W. Fritts". The signature is written in black ink and is positioned above the typed name.

DOUGLAS W. FRITTS
3674 KENSLEY DRIVE
INGLEWOOD, CA 90305

AL00023

July 25, 2001

Hilda Kennedy
Public Information Officer
City of Inglewood
One Manchester Blvd., 9th Floor
Inglewood, CA 90301



Ref: draft Environmental Impact Statement/Environmental Impact Report (dEIS/EIR)

Dear Ms. Kennedy:

I am writing to you upon the request of Assemblyman Jerome Horton, 51st District and on behalf of Dr. Jynona Norwood of the Family Christian Cathedral. I am submitting to your office the original copies of the petition, which opposes the expansion of the Los Angeles Airport into the City of Inglewood.

As stated in Assemblyman Horton's letter dated June 29th of this year, "this expansion project will have a negative impact on our community". It fails to expose the economic and/or moral impact of the would be "displaced residents" as a result of this expansion project.

On behalf of myself and all the members of the Family Christian Cathedral, we say NO to this expansion project as it is of no benefit to our church or our community.

Sincerely,

Family Christian Cathedral

Cc: Jerome E. Horton
Dr. Jynona Norwood

Encl: Expansion Project Petition(s)

AL00023

FCC Mr. J. NOYWOOD

Petition to stop the LAX Expansion project in the City of Inglewood

<p>Name: <u>Clara Holmes</u> Address: <u>1934 S. Western ave</u> City & Zip: <u>LA Calif. 90018</u> Phone#: <u>323 766-8923</u> Signature: <u>Clara Holmes</u></p>	<p>Name: <u>Moulton A. Magers</u> Address: <u>3533 Enville Opt.</u> City & Zip: <u>LA- CA. 90016</u> Phone#: <u>931-318</u> Signature: <u>Moulton A. Magers</u></p>
<p>Name: <u>Branka Holmes</u> Address: <u>1934 S. Western Ave</u> City & Zip: <u>LA, CA 90018</u> Phone#: <u>323 733-6521</u> Signature: <u>Branka Holmes</u></p>	<p>Name: <u>Beverly JACKSON</u> Address: <u>645 Arbo- viable</u> City & Zip: <u>In9 ca 90310</u> Phone#: _____ Signature: _____</p>
<p>Name: <u>Alison JOHNSON</u> Address: <u>1133 E Carson 2</u> City & Zip: <u>Wing Beach 90807</u> Phone#: <u>562 981-3679</u> Signature: <u>Alison Johnson</u></p>	<p>Name: <u>Sean Dawson</u> Address: <u>P.O. Box 1017</u> City & Zip: <u>Kuala, CA</u> Phone#: _____ Signature: <u>Sean Dawson</u></p>
<p>Name: <u>Leleith Middleton</u> Address: <u>1347 West 69 Street</u> City & Zip: <u>Los Angeles, CA 90044</u> Phone#: <u>323 753 6699</u> Signature: <u>Leleith Middleton</u></p>	<p>Name: <u>Maura Stuenkel</u> Address: <u>P.O. Box 1017</u> City & Zip: <u>Kuala CA</u> Phone#: _____ Signature: <u>Maura Stuenkel</u></p>
<p>Name: <u>Hendrea Smith</u> Address: <u>4210 Matira City Dr #727</u> City & Zip: <u>MOL CA 90292</u> Phone#: <u>310-410-1462</u> Signature: <u>Hendrea Smith</u></p>	<p>Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____</p>
<p>Name: <u>Judi Palano</u> Address: <u>1321 N Las Palmas Ave</u> City & Zip: <u>LA CA 90028</u> Phone#: <u>323 466 1696</u> Signature: <u>Judi Palano</u></p>	<p>Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____</p>
<p>Name: <u>Ms. M. M. M. M.</u> Address: _____ City & Zip: _____ Phone#: _____ Signature: _____</p>	<p>Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____</p>

FCC Dr. J. Noywood

Petition to stop the LAX Expansion project in the City of Inglewood

<p>Name: MONICA MAKONNEN Address: 5812 Arbor Vitae St. City & Zip: Los Angeles, CA 90045 Phone#: (310) 649-3396 Signature: <i>Monica Makonnen</i></p>	<p>Name: EVA HARVEY Address: 1527 E. Helmsick St City & Zip: 90746 Carson Cal Phone#: 310 6351002 Signature: <i>Eva Harvey</i></p>
<p>Name: Kim Woods Address: 1411 S. 8th St City & Zip: Whamora, 91803 Phone#: 626.458.6685 Signature: <i>Kim Woods</i></p>	<p>Name: LIDA NETTLES Address: 2920 W132 Pl City & Zip: GARDENA CA 90249 Phone#: 310 327 9145 Signature: <i>Lida Nettles</i></p>
<p>Name: Hattie Burrell Address: 849 E Victoria St City & Zip: Carson, CA 90746 Phone#: (310) 538-4360 Signature: <i>Hattie Burrell</i></p>	<p>Name: Verdell Howard Address: 1601 N. Channing City & Zip: Compton, 90220 Phone#: (310) 438-4666 Signature: <i>Verdell Howard</i></p>
<p>Name: Fred Jackson Address: P.O. Box 11764 City & Zip: Carson, 90749 Phone#: (323) 588-7344 Signature: <i>Fred Jackson</i></p>	<p>Name: Dylus Malanson Address: 1637 Upper Wg #109 City & Zip: Santa Monica, Ca. 90401 Phone#: 5 Signature: _____</p>
<p>Name: Sandra Phemmo Address: 534 N. Alexandria Ave City & Zip: L.A. CA 90004 Phone#: 323-913-5833 Signature: <i>Sandra Phemmo</i></p>	<p>Name: Carlean Williams Address: 349 August St. City & Zip: Los Angeles CA 90008 Phone#: _____ Signature: <i>Carlean Williams</i></p>
<p>Name: Cliff Johnson Address: 1717 W. Columbia City & Zip: Long Beach, CA Phone#: 562 426 6463 Signature: <i>Cliff Johnson</i></p>	<p>Name: Yolanda Nancey Address: 1527 E. Helmsick St. City & Zip: Carson 90746 Phone#: (310) 638-1002 Signature: <i>Yolanda Nancey</i></p>
<p>Name: Richard Holmes II Address: 1934 S. Western Ave City & Zip: Los Angeles, 90008 Phone#: 323 766 9223 Signature: <i>Richard Holmes</i></p>	<p>Name: DEBORAH BROWN Address: 2601 S. Western Apt 224 City & Zip: Lomita, CA. 90717 Phone#: _____ Signature: <i>Deborah Brown</i></p>

Family Christian Cathedral

M. J. NOVWOOD

Petition to stop the LAX Expansion project in the City of Inglewood

Name: <u>Brenda Hill</u> Address: <u>2008 N. PARNELLE AVE</u> City & Zip: <u>COMPTON, CA 90223</u> Phone#: <u>(310) 608-0675</u> Signature: <u>Brenda Hill</u>	Name: <u>Kashandra Wilson</u> Address: <u>1220 W. 95th St.</u> City & Zip: <u>LA, CA 90044</u> Phone#: <u>(323) 422-8184</u> Signature: <u>Kashandra Wilson</u>
Name: <u>KRISTAL BRACKEN</u> Address: <u>2004 N. PARNELLE AVE</u> City & Zip: <u>COMPTON, CA 90222</u> Phone#: <u>310 438-1294</u> Signature: <u>Kristal Bracken</u>	Name: <u>DAYAN SPILLER</u> Address: <u>6080 VERNON AVE</u> City & Zip: <u>LONG BEACH</u> Phone#: <u>310-715-1165</u> Signature: <u>Dayan Spiller</u>
Name: <u>KOSHA RIVER</u> Address: <u>2060 WILSON</u> City & Zip: <u>COMPTON CA 90222</u> Phone#: <u>310 438 7294</u> Signature: <u>KOSHA RIVER</u>	Name: <u>MICHAEL TAYLOR</u> Address: <u>2004 N. PARNELLE</u> City & Zip: <u>COMPTON CA</u> Phone#: <u>323-394 2961</u> Signature: <u>Michael L. Taylor</u>
Name: <u>JAMES BRACKEN</u> Address: <u>476 N. ST PALMER ST.</u> City & Zip: <u>COMPTON 90220</u> Phone#: <u>310 635-6353</u> Signature: <u>James Bracken</u>	Name: <u>SOPHIA BRACKEN</u> Address: <u>470 W PALMER ST</u> City & Zip: <u>COMPTON CA 90220</u> Phone#: <u>(310) 713-8014</u> Signature: <u>Sophia Bracken</u>
Name: <u>J. COLBERT</u> Address: <u>2004 N. PARNELLE</u> City & Zip: <u>COMPTON, CA 90222</u> Phone#: <u>310-635-6353</u> Signature: <u>J. Colbert</u>	Name: <u>ANITA M. COLBERT</u> Address: <u>13300 DUTY</u> City & Zip: <u>HAWTHORNE, CA 902</u> Phone#: <u>(310) 675-6591</u> Signature: <u>Anita Colbert</u>
Name: <u>MARQUE WOOD</u> Address: <u>918 W 132 ST</u> City & Zip: <u>90222</u> Phone#: <u>310) 603-9065</u> Signature: <u>Marque Wood</u>	Name: <u>JOE BRACKEN</u> Address: <u>470 PALMER</u> City & Zip: <u>COMPTON, CA 90220</u> Phone#: <u>(310) 587-5615</u> Signature: <u>Joe Bracken</u>
Name: <u>JET COLBERT</u> Address: <u>11096 ROYAL OAK RD</u> City & Zip: <u>ENCINO, CA 91436</u> Phone#: <u>310 718-5377</u> Signature: <u>Jet Colbert</u>	Name: <u>SERVA CARTER</u> Address: <u>14035 NORTHWOOD</u> City & Zip: <u>COMPTON CA 90222</u> Phone#: <u>(323) 823 3825</u> Signature: <u>Serva Carter</u>

Family Chateau Collection
Dr. J. NOV WOOD
 Petition to stop the LAX Expansion project in the City of Inglewood

Name: FRANK TAYLOR Address: CHURCH City & Zip: F. C. C. Phone#: Signature:	Name: WEDDIE MCCOY Address: South Bay City & Zip: Compton CA 90222 Phone#: Signature:
Name: Elizabeth Gibbs Address: Church City & Zip: F. C. C. Phone#: Signature:	Name: B. Lawrence & Joyce Address: 802 W. BAY City & Zip: Compton CA Phone#: B L O - 632-8498 Signature: B Lawrence & Joyce
Name: Super ROSS Address: 3917 Haledale City & Zip: L.A. Ca 900 Phone#: (323) 737-1753 Signature: Super Ross	Name: James E. Dues Jr Address: 1001 W. CRESSET ST #418 City & Zip: Compton CA 90222 Phone#: 310 631-5901 Signature: James E. Dues Jr
Name: Sylvia Jackson Address: Church City & Zip: F. C. C. Phone#: Signature:	Name: George Coulter Address: 1001 W. Cherry St #113 City & Zip: Compton, Ca 90222 Phone#: (310) 635-7552 Signature: George Coulter
Name: Theodore HANF Address: 434 W 223 #211 City & Zip: CARSON - 90705 Phone#: 310-328-6667 Signature: Theodore & Hauja	Name: Latanya Chatman Address: 40 W. 49th St City & Zip: Long Beach, Ca. Phone#: (310) 715-1165 Signature: Latanya Chatman
Name: Debbie Newman Address: 5700 Beckwith Ave City & Zip: AB CA 90805 Phone#: (510) 1634-2545 Signature: Debbie Newman	Name: Michelle Anderson Address: 19719 REINHART AVE City & Zip: CARSON CA Phone#: 310 329-2330 Signature: Michelle Anderson
Name: Geraldine C. Chatman Address: Church City & Zip: Compton, Ca. 90222 Phone#: Signature: Geraldine C. Chatman	Name: Daisy Address: 1001 Cherry St #408 City & Zip: Compton, 90222 Phone#: Signature: Daisy Milling

FCC - Mr. J. Noywood

Petition to stop the LAX Expansion project in the City of Inglewood

Name: <u>Lucia Reed</u> Address: <u>3565 Linden # 343</u> City & Zip: <u>Long Beach, Ca</u> Phone#: <u>562-395-1899</u> Signature: <u>[Signature]</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>ALFONSO SANDER</u> Address: <u>208 W 90th St #2</u> City & Zip: <u>LA CA 90003</u> Phone#: <u>323 7560423</u> Signature: <u>[Signature]</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>SAM FLENS</u> Address: <u>1119 W. 87 St</u> City & Zip: <u>L.A.C. 90044</u> Phone#: <u>323-750-9694</u> Signature: <u>[Signature]</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>CARLA Amos</u> Address: <u>6042 Dauphin Ave</u> City & Zip: <u>Los Angeles 90034</u> Phone#: <u>323-9326023</u> Signature: <u>[Signature]</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>Anturivita Davis</u> Address: <u>200 North Second St</u> City & Zip: <u>La Puente, 91744</u> Phone#: <u>626-369-1185</u> Signature: <u>[Signature]</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____

Family Christian Cathedral

Petition to stop the LAX Expansion project in the City of Inglewood

Name: <u>Jocelyn Robinson</u> Address: <u>225 W Enterprise #2</u> City & Zip: <u>CA Inglewood</u> Phone#: <u>310 966 4437</u> Signature: <u>[Signature]</u>	Name: <u>Robert Lebow</u> Address: <u>1280 N. Laurel Ave</u> City & Zip: <u>Los Angeles CA 90046</u> Phone#: <u>323 - 461 - 5850</u> Signature: <u>Robert C. Lebow</u>
Name: <u>Tim Turner</u> Address: <u>1131 East 67 St</u> City & Zip: <u>Los Angeles CA 90044</u> Phone#: _____ Signature: _____	Name: <u>Julie Fitzgibbon</u> Address: <u>5400 Morella Ave # 10</u> City & Zip: <u>North Hollywood, CA 91607</u> Phone#: <u>818 763-4621</u> Signature: <u>Alice Fitzgibbon</u>
Name: <u>Kadane Johnson</u> Address: <u>5329 Clark St.</u> City & Zip: <u>Lynwood CA 90262</u> Phone#: <u>310 438-5416</u> Signature: <u>Kadane Johnson</u>	Name: <u>ANGELA DARLOW</u> Address: <u>504 W. Hillside Ave # 4</u> City & Zip: <u>Inglewood 90302</u> Phone#: <u>(310) 670-5210</u> Signature: <u>[Signature]</u>
Name: <u>Shanice Williams</u> Address: <u>2633 S FERRIS ST #10</u> City & Zip: <u>LA 90067</u> Phone#: <u>(323) 777-1678</u> Signature: <u>Shanice Williams</u>	Name: <u>Frank Walker</u> Address: <u>1021 ROSWELL AVE #3</u> City & Zip: <u>LONG BEACH, CA 90804</u> Phone#: <u>562 856-5774</u> Signature: <u>[Signature]</u>
Name: <u>DeStoye Harro</u> Address: <u>10701 Cimarron St.</u> City & Zip: <u>LOS Angeles 90047</u> Phone#: <u>(323) 757 2354</u> Signature: <u>DeStoye Harro</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>ALICIA R LARA</u> Address: <u>3165 Broadway</u> City & Zip: <u>Huntington Park CA</u> Phone#: <u>323 732-9124</u> Signature: <u>[Signature]</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>April Cartwright</u> Address: <u>10208 18th St</u> City & Zip: <u>LA CA 90002</u> Phone#: <u>(323) 8644970</u> Signature: <u>April Cartwright</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____

Dr. J. Noxwood

FCC - Mr. J. NOVWOOD

Petition to stop the LAX Expansion project in the City of Inglewood

Name: <u>Eva Aleksey</u> Address: <u>P.O. Box 866</u> City & Zip: <u>Inglewood, Ca. 90307</u> Phone#: <u>323 758-0016</u> Signature: <u>Eva Aleksey</u>	Name: <u>Richard J. Wood</u> Address: <u>141 S. 84th St #4</u> City & Zip: <u>Alhambra</u> Phone#: _____ Signature: <u>R. Wood</u>
Name: <u>Kristal Aleksey</u> Address: <u>12317 W. 77th St.</u> City & Zip: <u>Inglewood, Ca 90305</u> Phone#: <u>323 759-1992</u> Signature: <u>Kristal Aleksey</u>	Name: <u>Karen Crawford</u> Address: <u>16915 S. Vermont Ave APT C</u> City & Zip: <u>Gardena, CA 90247</u> Phone#: <u>(310) 516-1021</u> Signature: <u>Karen Crawford</u>
Name: <u>Tiana Benson</u> Address: <u>430 East Farnwick</u> City & Zip: <u>Inglewood, Ca.</u> Phone#: <u>(310) 674-4133</u> Signature: <u>Tiana Benson</u>	 Name: <u>Jim Woods</u> Address: <u>141 S. 84th St #4</u> City & Zip: <u>Alhambra 91803</u> Phone#: _____ Signature: <u>Jim Woods</u>
Name: <u>Jackie Howard</u> Address: <u>1616 W 75th St #4</u> City & Zip: <u>Los Angeles Ca</u> Phone#: <u>210 7232611</u> Signature: <u>Jackie Howard</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>Patrick Wright</u> Address: <u>12433 S. Figueroa #15</u> City & Zip: <u>O.A. Ca. 90061</u> Phone#: <u>(323) 757-3662</u> Signature: <u>Patrick Wright</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>Mary Miller</u> Address: <u>14126 Lemoli Ave</u> City & Zip: <u>Lawthome, CA. 90258</u> Phone#: <u>310 657648</u> Signature: <u>Mary Miller</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>Krene Conley</u> Address: <u>157 E. Spruce Ave</u> City & Zip: <u>Long Beach (90801)</u> Phone#: <u>310-912-490</u> Signature: <u>Krene Conley</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____

FCC - Dr. J. NOVWELL

Petition to stop the LAX Expansion project in the City of Inglewood

Name: <u>Janette Clemens</u> Address: <u>453 E. Louise St.</u> City & Zip: <u>Long Beach Ca 90805</u> Phone#: <u>(562) 984-5155</u> Signature: <u>Janette Clemens</u>	Name: <u>Fanny Agambath</u> Address: <u>14322 Valerio St #2</u> City & Zip: <u>Vare Nuys Ca</u> Phone#: <u>818-988-6463</u> Signature: <u>Fanny Agambath</u>
Name: <u>Rachel Jefferson</u> Address: <u>16550 W. 157th St #10</u> City & Zip: <u>Gardena Calif 90249</u> Phone#: <u>(310) 783-3215</u> Signature: <u>Rachel Jefferson</u>	Name: <u>FANNIE L. HASSANBATHAN</u> Address: <u>14322 VALERIO ST #27</u> City & Zip: <u>VAN NUYS, CA 91405</u> Phone#: <u>(818) 988-6463</u> Signature: <u>Fannie Hassanbathan</u>
Name: <u>KIM R. DORR</u> Address: <u>12525 BAYBERRY CIL.</u> City & Zip: <u>CERRITOS CA</u> Phone#: <u>(562) 974-5466</u> Signature: <u>Kim R. Dorrr</u>	Name: <u>Antwaine Evans</u> Address: <u>6042 Quaphinst</u> City & Zip: <u>LA 90034</u> Phone#: <u>(323) 932-6023</u> Signature: <u>Antwaine Evans</u>
Name: <u>Kristie Gleese</u> Address: <u>16915 S. VERMONT AVE APT C</u> City & Zip: <u>GARDENA, 90247</u> Phone#: <u>(310) 516-1021</u> Signature: <u>Kristie Gleese</u>	Name: <u>Ruth E. Evans</u> Address: <u>1517 South California St</u> City & Zip: <u>Compton 90221</u> Phone#: <u>(310) 7081558</u> Signature: <u>Ruth Evans</u>
Name: <u>Geornae Natchin</u> Address: <u>12192 Sol Victoria</u> City & Zip: <u>LA</u> Phone#: <u>(323) 931-2032</u> Signature: <u>Geornae Natchin</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>Linda Smith</u> Address: <u>Box 17172</u> City & Zip: <u>ENCINO, CA 91416</u> Phone#: <u>818 901-6557</u> Signature: <u>Linda D. Smith</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____
Name: <u>Judith Cooper</u> Address: <u>921 1/2 S. DAK ST</u> City & Zip: <u>Inglewood 90301</u> Phone#: <u>(310) 677-1819</u> Signature: <u>Judith Cooper</u>	Name: _____ Address: _____ City & Zip: _____ Phone#: _____ Signature: _____

FCC - Mr. J. Noywood


Petition to stop the LAX Expansion project in the City of Inglewood

Name: <u>Tamara Kelly</u>	Name: _____
Address: <u>15105 Victory Blvd # 206</u>	Address: _____
City & Zip: <u>Van Nuys, CA 91411</u>	City & Zip: _____
Phone#: <u>818-469-1641</u>	Phone#: _____
Signature: <u>Tamara Kelly</u>	Signature: _____
Name: <u>AVA HENKIS</u>	Name: _____
Address: <u>345 W. 82nd ST.</u>	Address: _____
City & Zip: <u>L.A. CA. 90003</u>	City & Zip: _____
Phone#: <u>323-753-4828</u>	Phone#: _____
Signature: <u>Ava Henkis</u>	Signature: _____
Name: <u>PATRICIA BENFIELD</u>	Name: _____
Address: <u>1152 W 37th St</u>	Address: _____
City & Zip: <u>Los Angeles 90007</u>	City & Zip: _____
Phone#: <u>323/735-6572</u>	Phone#: _____
Signature: <u>Patricia Benfield</u>	Signature: _____
Name: <u>MARIE MORRISON</u>	Name: _____
Address: <u>15437 LEADWELL ST</u>	Address: _____
City & Zip: <u>VAN NUYS CA 91406</u>	City & Zip: _____
Phone#: <u>818 780 2405</u>	Phone#: _____
Signature: <u>Marie Morrison</u>	Signature: _____
Name: <u>Miguel Leal</u>	Name: _____
Address: <u>15437 Leadwell St</u>	Address: _____
City & Zip: <u>Van Nuys CA 91406</u>	City & Zip: _____
Phone#: <u>818 780 2405</u>	Phone#: _____
Signature: <u>Miguel Leal</u>	Signature: _____
Name: <u>MAZIELLA ROBERTSON</u>	Name: _____
Address: <u>15437 Leadwell St</u>	Address: _____
City & Zip: <u>Van Nuys CA 91406</u>	City & Zip: _____
Phone#: <u>818 780 2405</u>	Phone#: _____
Signature: <u>Mazella Kolata</u>	Signature: _____
Name: <u>GYNORA DOWWOOD</u>	Name: _____
Address: <u>P.O. BOX 3333</u>	Address: _____
City & Zip: <u>HOLLYWOOD, CA 90028</u>	City & Zip: _____
Phone#: _____	Phone#: _____
Signature: <u>Gynora Dowwood</u>	Signature: _____

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

Date: August 7, 2001

To: Jim Ritchie, Deputy Executive Director
Strategic Planning
Los Angeles World Airports

From: 
Adel Hagekhalil, Division Manager
Wastewater Engineering Services Division
Bureau of Sanitation

AUG 13 2001

Subject: TECHNICAL REPORT LAX MASTER PLAN EIS/EIR

We have reviewed the Wastewater Technical Report and the associated alternatives, which include the No Action/ No Project Alternative, and the proposed three Build Alternatives.

No Action/ No Project Alternative

Under this alternative, it is assumed that all improvements to LAX would be completed by 2005. The total wastewater generation within the Master Plan boundaries, including LAX Northside, Continental City, and land within the Master Plan boundaries that would not be acquired under this alternative, would increase by 0.88 mgd (a 44 percent increase) over baseline conditions of approximately 2.0 mgd by 2015. HTP has a design capacity of 450 mgd, and currently has excess wastewater capacity. It is anticipated that the increase in wastewater generation associated under this alternative in 2015, compared to baseline conditions, could be accommodated by the existing HTP wastewater treatment facilities. Currently, the sewers that are scheduled to receive wastewater discharges from LAX can handle the projected flows. However, the Integrated Plan for Wastewater Program projections show that wastewater treatment demands will exceed capacity at the HTP in the year 2020. The City is undergoing an extensive planning effort to address this projected demand.

Alternative A- Added Runway North

The total wastewater generation within the Master Plan boundaries would decrease 15 percent from baseline conditions by 2005 and increase 19 percent over baseline conditions by 2015. The impact associated with increased wastewater generation in 2015 would be less than significant. Discharges would continue to be regulated by the City of Los Angeles Industrial Waste Control Ordinance, requiring that discharges meet the water quality standards and mandating treatment. Construction of subsurface structures as part of alternative A may interfere with existing wastewater collection infrastructure such as three major sewer outfalls, the NCOS, NORS, and COS, underlie LAX.

Alternative B- Added Runway South

The total wastewater generation within the Master Plan boundaries would decrease 22 percent from baseline conditions by 2005 and a 7 percent decrease from baseline conditions by 2015. Wastewater generated under this alternative would not cause an exceedance in the capacity of wastewater treatment facilities and no adverse impacts would occur.

Alternative C- No Additional Runway

The total wastewater generation within the Master Plan boundaries would decrease 9 percent from baseline conditions by 2005 and a 15 percent increase by 2015. Similar to Alternatives A, and B, Alternative C would result in less wastewater generation within the Master Plan boundaries in both 2005 and 2015 than would be the No Action/ No Project Alternative. It is anticipated that the increase in wastewater generation compared to baseline conditions, could be accommodated by the existing wastewater treatment facilities at HTP. Therefore, the impact associated with increased wastewater generation for this alternative would be less than significant.

Should you have any questions, please call Ti Mai Wang or Norman Ronquillo of my staff at (213) 473-8178 and (213) 473-8172, respectively.

AHH:NR/tn

cc: Ara Kasparian, BOE, EMG
Ti Mai Wang, BOS, WCSD
Hagop Yepremian, BOS, WCSD

CITY OF HAWTHORNE



4455 West 126th Street • Hawthorne, California 90250-4482

OFFICE OF THE MAYOR (310) 970-7900

August 22, 2001

Mr. Jim Ritchie
CITY OF LOS ANGELES
LOS ANGELES WORLD AIRPORTS
LAX Master Plan/Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216

Mr. David Kessler, AICP
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
P.O. Box 92007
Worldway Postal Center
Los Angeles, CA 90009-2007

Dear Messrs. Ritchie & Kessler:

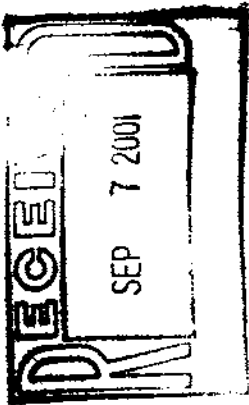
The City of Hawthorne has reviewed the LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) and concurs with the comments that are being submitted under separate cover by the South Bay Cities Council (SBCCOG) of Governments. Accordingly, the City of Hawthorne has adopted the attached Resolution No. 6677 that formally adopts the comments prepared by the SBCCOG as its own.

The City of Hawthorne believes that Los Angeles World Airports should find the Draft EIS/EIR document inadequate for certification and should as a minimum recirculate the document after addressing the deficiencies identified in Resolution No. 6677 and the extensive technical comments that are appended thereto as Exhibit A.

We look forward to your response to these comments and concerns.

Sincerely,

LAWRENCE M. GUIDI
Mayor



RESOLUTION NO. 6677

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HAWTHORNE, CALIFORNIA, FINDING THAT THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED LAX MASTER PLAN IS INADEQUATE AND TRANSMITTING THE OFFICIAL CITY RESPONSE.

WHEREAS, the City of Los Angeles Department of Airports has developed a draft Master Plan for Los Angeles International Airport (LAX) which incorporates capacity enhancements to enable the expansion of passenger activity from a current 60 million passengers per year up to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year through the year 2015; and,

WHEREAS, LAX airport is in close proximity to the City of Hawthorne and the impacts of its operation are of critical interest to the citizens of Hawthorne; and,

WHEREAS, the Los Angeles World Airports (LAWA) and the FAA have prepared a joint Draft EIS/EIR to address the potential environmental impacts caused by the proposed LAX expansion; and,

WHEREAS, on January 18, 2001, the Draft EIS/EIR was released for public review and comment; and,

WHEREAS, the Draft EIS/EIR analyzes four project alternatives, 1) No Action /No Project; 2) Alternative A, Additional runway to the north airfield, 3) Alternative B, an additional runway to the south airfield, and 4) Alternative C, no additional runways but reconfiguration of existing runways including either lengthening, widening, and relocating; and,

WHEREAS, a team of consultants hired by the South Bay Cities Council of Governments has conducted an evaluation and prepared extensive comments on the adequacy of the Draft EIS/EIR as an informational document in addressing potential impacts to the City of Hawthorne and other cities of the South Bay; and,

WHEREAS, the City of Hawthorne considered the Draft EIS/EIR at a public meeting on August 27, 2001.

NOW, THEREFORE, the City Council of the City of Hawthorne, California, DOES HEREBY RESOLVE as follows:

SECTION 1. Pursuant to the foregoing recitations, the following findings are hereby made:

SECTION 2. Pursuant to the foregoing recitation and findings, the City Council of the City of Hawthorne, California, hereby:

1. Determines that the Draft EIS/EIR is inadequate and/or inaccurate and requests the LAX Draft EIS/EIR include a complete and accurate analysis of potential environmental impacts to the City of Hawthorne from the airport expansion. This would constitute significant new information that would require recirculation of the Draft EIS/EIR, Master Plan, Technical Reports and Appendices.
2. Establishes that this Resolution, including attached Exhibit "A" (Comments of the South Bay Cities Council of Governments), constitutes the City of Hawthorne's formal position on the proposed expansion of LAX and its comments on the Draft EIS/EIR prepared by LAWA and the FAA.
3. Directs and authorizes Staff to transmit the position and comments of the City of Hawthorne on the Draft EIS/EIR to the Los Angeles World Airports and Federal Aviation Administration.

APPROVED AND ADOPTED THIS 27th DAY OF AUGUST, 2001.

LAWRENCE M. GUIDI, Mayor
City of Hawthorne, California

ATTEST:

DANIEL D. JUAREZ, C.M.C./AAE
City of Hawthorne, California

APPROVED AS TO FORM



GLEN E. SHISHIDO, City Attorney
City of Hawthorne, California

Exhibit "A"

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Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan/Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216

Mr. David B. Kessler, AICP
Federal Aviation Administration
P.O. Box 92007
World Way Postal Center
Los Angeles, CA 90009-2007

Re: Draft Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements - Comments of the South Bay Cities Council of Governments

Dear Mr. Ritchie and Mr. Kessler:

The following constitutes the comments of the South Bay Cities Council of Governments (.SBCCOG.), pursuant to the requirements of the California Environmental Quality Act, Public Resources Code . 21000, et seq., (.CEQA.) and the National Environmental Policy Act, 42 U.S.C. . 4321, et seq., (.NEPA.), concerning the Draft Environmental Impact Statement/Environmental Impact Report (.Draft EIS/EIR.) for the Los Angeles International Airport (.Airport.) Proposed Master Plan Improvements (.Project.), prepared jointly by the Federal Aviation Administration (.FAA.) and the City of Los Angeles (.Los Angeles.).¹

¹ The FAA and Los Angeles shall, for the remainder of this letter, be referred to collectively as .Project Proponents..

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The issues raised by these comments fall into seven general categories, although they are not limited only to those categories:

(I) the baseline used in the Draft EIS/EIR, against which the various environmental impacts of the Project are compared, is not properly designated;

(II) the discussion of the Project's surface traffic impacts is misleading;

(III) the noise impacts of the Project are inadequately addressed;

(IV) the potential air quality impacts of the Project are not fully disclosed;

(V) the Draft EIS/EIR does not explore all reasonable alternatives, and, thus, paves the way for its ultimate conclusion that expansion of the Airport's airside and groundside facilities are the sole way to meet future demand;

(VI) the Draft EIS/EIR fails to adequately specify mitigation measures or methods to enforce them; and

(VII) the recently articulated project goal of increasing safety obscures the Project's clear capacity-enhancing purpose. As a result of these defects, the Draft EIS/EIR cannot meet the high standards of disclosure that are the gravamen of both CEQA and NEPA.

I. THE DRAFT EIS/EIR DOES NOT PROPERLY DESIGNATE THE BASELINE FOR ANALYSIS.²

The specification of a baseline for comparison with Project impacts is a critical component of analysis under CEQA, because without an accurate specification of the baseline, analysis of impacts, mitigation measures and project alternatives becomes impossible. County of Amador v. El Dorado County Water Agency, 76 Cal.App.4th 931, 953 (1999). A central concept of CEQA is that a baseline figure must represent an environmental condition existing on the property prior to the project. Save Our Peninsula Committee, et al. v. Monterey County

² Later sections II, III and IV more fully discuss the pitfalls arising from the use of the three separate and distinct baseline assumptions used in that analysis; Environmental Baseline, Adjusted Environmental Baseline, No-Project/No-Action.

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Board of Supervisors, et al., 87 Cal.App.4th 99, 124 (2001). The regulations implementing CEQA, 14 Cal. Code Regs. . 15000, et seq., (.CEQA Guidelines.) are specific as to the definition of .prior to the project.:

.An environmental impact report must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or, if no Notice of Preparation is published, at the time the environmental analysis is commenced . . . This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.. CEQA Guidelines . 15125(a).

While the courts have taken the position that the .date for establishing a baseline cannot be a rigid one ., Save Our Peninsula Committee, supra, 87 Cal.App.4th at 125, they have also held unequivocally that .an EIR must focus on impacts to the existing environment, not hypothetical situations., County of Amador, supra, 76 Cal.App.4th at 955. The baseline for analysis in the Draft EIS/EIR does not meet these tests.

A. The Draft EIS/EIR.s Base Year Does Not Reflect the Physical Conditions on the Project at the Time of the Publication of its Notice of Preparation.

The Airport Master Plan, November, 2000, Technical Analysis (.Master Plan.) is the basis of the analysis contained in the Draft EIS/EIR (Master Plan, Preface, page i). The analyses contained in Master Plan, Chapter II, Existing Conditions Working Paper, 4/19/96, use data from the base year 1994 (see, e.g., . 2.3.1, page II-2.1, re: Annual Weather Conditions; Figure II-2.17, page II-2.53, re: Design Day Hourly Distribution of Operations and Tables following). The Notice of Preparation, however, was published in July, 1997 (Draft EIS/EIR, page ES-2), almost three years after the conditions reflected in the original Master Plan data and analysis. Courts have consistently taken the position that a baseline should not .be set a number of years earlier than the commencement of the current project.. Save Our Peninsula Committee, supra, 87 Cal.App.4th at 127.

Moreover, the Master Plan and Draft EIS/EIR contain multiple inconsistent base years such that it is impossible for the public to ascertain which base year is used for a given purpose. On the one hand, the Draft EIS/EIR (page ES-2) states that the environmental analysis normally describes existing conditions as of the July, 1997 date on which the Notice of Preparation was published (even though none of the data in the Master Plan upon which the Draft EIS/EIR is based reflects a 1997 origin). On the other hand, the Draft EIS/EIR states that, where a full

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years worth of data is needed, data from 1996 is used (see, e.g., Draft EIS/EIR Technical Report on Surface Traffic), and sometimes earlier years [unspecified], and sometimes even data from the later years 1999 and 2000 (even though these latter are more than two years after the publication of the Notice of Preparation). Additionally, the Master Plan is unclear as to whether 1994 or 1995 data is used. Finally, different base years are used for different components of the analysis, e.g., 1996 for surface traffic and noise, 2000 for water resources.

Such selective shifting of baselines has substantive consequences. For example, the use of a 1994 (or even 1996) baseline in analysis of aircraft noise impacts artificially elevates the baseline for analysis by incorporating noise from the larger numbers of Stage 2 aircraft in the fleet in 1994/96. These aircraft were totally phased out of the United States fleet by the year 2000. Further, the use of a 1994 (or 1996) baseline year in the air quality analysis potentially overstates the baseline level of criteria pollutants in the L.A. region which has since come into attainment for all criteria pollutants except Ozone and Particulate Matter.³ In short, the nonspecificity of both the Master Plan and Draft EIS/EIR with respect to the base year for analysis renders the results of their analyses questionable.

B. The Master Plan and Draft EIS/EIR Baseline Analyses Are Based On Incomplete and/or Inaccurate Data.

The Master Plan defines the capacity of the Airport's existing airside facilities as the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay. (Master Plan, . 2, page II-2.1) The correct determination of existing airside capacity is critical to identification of the Airport's potential to accommodate future air traffic demand and plan future airport's development. (Master Plan, Chapter 2, page

³ The Draft EIS/EIR also states that its use of earlier years results in a more conservative analysis, because there were fewer passengers and operations in earlier years, and, thus, less noise and fewer emissions to compare against those generated by the Project. This claim is inaccurate at least with respect to noise and air quality analyses as set forth below. In any event, it does not account for the opposite effect of using later years 1999/2000 as the baseline, which would, by the logic used in the Draft EIS/EIR, artificially elevate the baseline and, consequently minimize the environmental impacts of the Project. As neither the Master Plan nor Draft EIS/EIR are specific as to the distribution of various baseline years throughout the analysis, it is impossible to ascertain the degree of distortion that may have occurred through the use of these alternate baselines.

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II-2.1) Various independent variables are used in the modeling of existing airport capacity, including, but not limited to: (1) runway operating configurations; (2) noise abatement procedures; (3) airspace operating assumptions; and (4) airfield operating assumptions. (Master Plan, . 2.3, page II-2.21) Delay is also apparently a contributing variable. The relationships within the model are such that, if the definition of a given variable, or the value assigned to it, are questionable, the capacity determination resulting from the model is prejudiced.

Here, even if, for argument's sake, the Draft EIS/EIR had specifically and accurately designated a base year, critical data used in the Master Plan baseline demand/capacity/delay analysis is incomplete or in some cases inaccurate.

As a threshold matter, the Master Plan demand/capacity/delay analysis is predicated on Aircraft Communications, Addressing and Reporting System (ACARS), and Official Airline Guide (OAG) data sources. These two data sources exaggerate, or, inaccurately characterize, true (airport capacity related) delay. The Master Plan defines delay as the difference between the actual time it takes an aircraft to perform an arrival or departure and the normal time it would take to perform the same operation with no interference from other aircraft. (Master Plan, . 2.1, page II-2.2) ACARS data is generated by the airlines, and is based on activities such as push back, parking at the gate, or opening or closing cabin doors. ACARS data includes information about on-time performance, based on the arrival and departure times developed by each airline for each segment of flight. Since the data is airline-generated, airline definitions of delay are automatically built into the report.⁴

Further, the OAG is published for the express purpose of identifying the arrival and departure times of various airlines. When the airlines set up their schedules, they factor in the average delay for each leg of flight between city pairs. Thus, the OAG also builds delay into the departure and arrival times based on each airline's historical data and operating experience for each flight segment.

⁴ When an aircraft pushes back from the gate or closes the cabin door, the aircraft could be late for a variety of reasons. Many delays are due to factors that are airline-controllable such as late boarding of passengers, customer service delays, maintenance delays, late arriving equipment, catering, fueling, baggage and the unavailability of crew members, to name but a few. Other types of delay would be attributable to airport, runway or taxiway design, airport acceptance rates, airport construction, noise abatement regulations, air traffic control restrictions and weather. These items are also introduced and incorporated into the ACARS report as a delay factor.

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In summary, ACARS data is not original source data but is the product of third party intervention. It is manipulated by various airline functionaries before a final report is released. Similarly, OAG data is manipulated to include delay not after, but before the fact. Therefore, because both sources of data already include a delay factor, their use in the Master Plan's modeling, as set forth below, is likely to cause a double counting of delay.⁵

Instead of ACARS or OAG data, the Master Plan should have relied on radar data. Radar data is a memorialization of the movement of arriving aircraft from a specified distance outside the terminal control area until touchdown and, conversely, for departing aircraft, from the aircraft's lift-off from the runway to the same distance outside the airport's control area. Every operation is tracked in real time without the intervention of third party interpretation, manipulation, or extraneous factors, unrelated to the operational capacity of airport infrastructure.

The effects of this confounding of substantive with non-substantive delay factors are reflected in the Master Plan's modeling of demand/capacity/delay. The FAA's Simulation Model (SIMMOD), Version 2.1, was apparently used in the Master Plan's demand/capacity/delay analysis. SIMMOD simulates the movement of arriving and departing aircraft from their entry/exit into the Los Angeles Terminal Air Traffic Airspace through approach and landing phase, or taxi and takeoff, to their exit from the terminal air traffic airspace. Proper calibration of SIMMOD is essential since the resulting statistics depend upon the data used to develop the baseline assumptions and operating instructions for the model. In this case, ACARS and OAG data were used to calibrate SIMMOD. Because of the potential double counting inherent in these data sources, and the consequent exaggeration of delay in the model, the principal conclusion that is drawn from SIMMOD is that the only way to remedy delay is to build additional airport infrastructure. The most obvious flaw of such an analysis is that it eliminates, at the outset, opportunities to gain efficiency through improvements in operating practices and minor modifications to the air traffic system. Thus, what seems like a relatively minor data collection/designation problem pervades the demand/capacity/delay modeling upon which the Draft EIS/EIR's environmental analysis is based, and subtly biases the results.

C. The Draft EIS/EIR is Based on Implausible Modeling Assumptions.

⁵ In addition, the Master Plan analysis relies on numerous sources other than ACARS or OAG data including personal observations, a small sampling of users and an unique determination of aircraft speeds and routes, none of which is suitable, let alone optimal, for developing baseline analyses or formulating assumptions. (See, e.g., Master Plan, . 2.1.3, pages II-2.5 - II-2.6)

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The accuracy of SIMMOD's results depends on an accurate description of the airport's operating environment. (Master Plan, . 2.1, page II-2.2) Both the Master Plan and Draft EIS/EIR acknowledge that the description is made up not merely of data purporting to represent actual current conditions, but also assumptions arising from that data (see, e.g., Master Plan, . 2, page II-2.1). Therefore, to the extent data and assumptions are incorrect or incomplete, so too will be the results of the model. In addition to the data problems specified above, SIMMOD, as used in the Master Plan, incorporates implausible, or biased, assumptions which, in turn, call into question the integrity of its output.

1. Assumptions Concerning Aircraft Delay Are Unexplained and Unsupported.

The Master Plan's (and Draft EIS/EIR's) definition and description of the delays at the existing (pre-Project) Airport are based on consultants' opinions and not on factual information. First, while the Master Plan acknowledges that a standard definition of acceptable delay is not used in the industry. (Master Plan, . 2.1.3, page II-2.5), it then concludes that delay levels of six to ten minutes indicate the need for additional facilities; that as average aircraft delay increases above six minutes, passengers tend to perceive service reliability problems; as delay approaches ten minutes per operation, further increases in demand are limited, and, flight cancellations were assumed when delays exceed 20 minutes per average annual aircraft operation. (Master Plan, . 2.1.3, pages II-2.5 - II-2.6) These assumptions are apparently based on information derived from prior studies by the Master Plan consultants at airports other than Los Angeles, in years as early as 1988. In other words, the delay standards relied upon in the Master Plan are based on outdated data concerning potentially irrelevant subject airports. All of these have unique characteristics that may have influenced creation or perception of delay, and none of them are discussed in the Master Plan or Draft EIS/EIR.

Further, these unsupported assumptions do not reflect an understanding of the diverse ways in which delay is determined by the airlines, Air Traffic Control and the Department of Transportation. First, a typical airline will develop performance criteria for each phase of flight based on company goals and performance percentages, including arrival and departure delay. Airlines use zero variance as a standard for on time performance (i.e., zero difference between arrival and/or departure times and published schedules). The percentage goal for each activity will be based on the level of performance the airline hopes to, or, in some cases, must attain in order to remain competitive. Some airlines track on time performance plus five minutes and most will track on time performance plus 14 minutes.

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FAA Air Traffic Control, on the other hand, computes delay based on actual delay time en route. An arriving aircraft is considered delayed only if the aircraft is held en route to the destination for 15 minutes or more at any given moment during the flight. It is possible that these aircraft could be held at more than one interval during a flight. However, if each holding period does not exceed the 15 minute threshold, no delay is recorded, even though the total delay might well be in excess of 15 minutes. Further, inbound delay is kept separate from outbound delay. A departing aircraft is not counted as delayed until: (1) the average taxi time for the airport; (2) the time from the gate to the runway; and (3) 15 minutes have cumulatively elapsed. Air Traffic Control delays do not consider airline schedules or internally generated delays in their reporting system. The majority of Air Traffic Control delays are as a result of weather and not system capacity. Finally, the Department of Transportation grades airline performance on the time of arrival at the destination airport within 14 minutes of the scheduled arrival time. The Master Plan utilizes none of those benchmarks. Thus, the Master Plan fails to adequately explain the basis for its demand/capacity/delay analysis.

2. The Master Plan's Assumptions Concerning Turboprop Operations are Manifestly Inaccurate.

Referring to its analysis of existing noise abatement procedures as they pertain to the creation or maintenance of demand/capacity/delay, the Master Plan states that based on actual information obtained by the Los Angeles Noise Management Bureau, turboprop departures were permitted to turn slightly earlier than jet departures at the Airport VOR, which is located between runways 7L and 7R, west of Pershing Drive. (Master Plan, . 2.3.3, page II-2.31). In addition, Figures II-2.11 and II-2.12 indicate that, when the Airport is operating on a west flow, turboprop aircraft turn at the VOR.

These representations are inaccurate and lead to incorrect assumptions about flight paths. In fact, if such a turn were permitted, it would occur prior to the shoreline, contrary to current noise abatement procedures. Turning the turboprops early allows faster aircraft to depart behind the turboprops at a more accelerated rate than is currently allowed, thus allowing more aircraft to depart in a given interval. The results of this inaccurate assumption are that: (1) the baseline departure capacity is artificially elevated to a level higher than would be realized had actual air traffic data been used and the noise abatement procedures modeled as they are actually used; and (2) turboprops, as depicted in the Master Plan and Draft EIS/EIR, are directed over noise sensitive areas not previously overflown, and, as a result, elevate the baseline noise levels, thereby concomitantly reducing the apparent noise impacts of the Project.

3. The Master Plan's Flight Schedule Assumptions Are Outdated.

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The Master Plan reports the results of a SIMMOD analysis conducted in 1994, using 1994 data and 1994 assumptions. In addition to this obsolete data, the ACARS data upon which the SIMMOD analysis is based includes less than 51% of commercial operations and more than 46% of the total operations in the design day flight schedule. As: (1) operational configurations long pre-date the commencement of the environmental process; (2) current schedules were not used (although available), the assumptions concerning a typical day's traffic are substantially unsupported; and (3) not all of the aircraft operators were considered, the assumptions concerning a typical day's traffic are substantially unsupported.

4. The Master Plan's Fleet Mix Assumptions are Inaccurate.

The Master Plan relies on a fleet mix distribution derived from August 11, 1994 OAG, NMB Do Daily Operations Records and LADOA 1994 Monthly Air Traffic Volumes. (Master Plan, Table II-2.16, page II-2.58). This 1994 fleet mix distribution is outdated and, thus, inadequate for use in SIMMOD. Specifically, it includes a large number of Stage 2 aircraft which are no longer in operation at the Airport. Not only are Stage 2 aircraft noisier, but they have different emissions characteristics from the newer high bypass ratio, Stage 3 aircraft. If a more recent base year had been selected, the proportion of Stage 2 aircraft would have been smaller, and the noise baseline lower, and, thus, more accurate.

5. The Master Plan's Assumptions Concerning Aircraft Speed Are Inaccurate.

The Master Plan's assumptions concerning aircraft speeds were apparently inflated to fit the underlying assumption of unconstrained aircraft flows. The Master Plan model calls for all aircraft to operate at the same constant air speed before proceeding to the Airport and landing. The model further assumes that all aircraft exit the runway at the same point and within the same amount of time in order to reach the modeled flow rate. In actual conditions, the speeds of the aircraft vary, with high airspeed greatly reduced as the aircraft approaches the airport. Nor would all aircraft exit the runway at the same location. In short, this assumption of high constant speed will have an as yet unascertained impact on the model's results but would tend to overstate capacity of the existing facility, and, thus, the baseline for comparison with the Project's improvements.

D. The Master Plan's Model Omits Critical Variables.

Another crucial issue revolves around variables the Master Plan fails to include in its model. Specifically these include: (1) the capacity of the airspace beyond the Airport Terminal Control Area (TRACON); and (2) gate capacity for future scenarios.

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1. The Master Plan Should Have Considered Airspace Capacity Beyond The Airport's Terminal Area Airspace.

According to the Master Plan, airspace considerations were limited to entry (and exit) from the Airport's TRACON airspace. (Master Plan, . 2.1.1, page II-2.3) The failure to consider airspace capacity beyond that point is a material omission from the analysis. This is because the majority of aircraft delays are absorbed in the en route environment before an aircraft arrives in TRACON airspace. By modeling only the terminal area, the results of the model are skewed for both arriving and departing aircraft. For departing aircraft, if the model does not consider the inherent constraints of the en route air traffic system, including differences in aircraft performance and the impacts of other air traffic transiting the area for other airports, the departure flow pictured in the model will remain unconstrained and aircraft can take off at a constant, predetermined rate. When reaching the boundary, the aircraft are dropped from the scenario, and the model does not further consider constraints of the en route system which naturally impact the TRACON airspace. Unfortunately, this unconstrained flow scenario is not normally possible in today's complex air traffic control system.

Similar problems exist in modeling arrivals without consideration of airspace outside the TRACON. Inbound aircraft are assumed, in the Master Plan model, to be at the entry point of terminal airspace when required by the model. Aircraft proceed inbound at a set speed, reduce speed at a predetermined point, land and proceed unimpeded to their gate. This is not a reasonable representation of a typical aircraft arrival. In fact, there is almost no likelihood that aircraft can be delivered to the terminal inbound fix at a rate consistent with the model's assumptions.

Instead, the Master Plan's arrival model appears to have been developed to insure that an arriving aircraft would be at the inbound fix at the specific time required in order to maximize the arrival rate for the airport. Although Air Traffic Control consistently tries to keep the aircraft sequenced as closely as possible in-trail, it is not possible to consistently space aircraft a set distance apart for extended periods of time. The availability of aircraft to fit into the sequence, aircraft speeds, the mix of large and small aircraft, a lack of demand, aircraft deviations due to weather, in-trail restrictions though an en route sector or in-trail restrictions required for an airport approach control facility and other variables cause the in-trail spacing of arrival aircraft to be inconsistent. As a result of these and many other factors, there is unused capacity in each of these arrival sequences. In summary, the Master Plan's failure to adequately consider constraining factors outside the TRACON airspace calls into question the validity of the model's result.

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2. The Master Plan Should Have Modeled Gate Capacity.

The Master Plan did not include in its modeling aircraft gate operations for future activity levels, allegedly because of the inability of the existing gate facilities to accommodate the higher activity levels.⁶ (Master Plan, . 2.5.3, page II-2.104) The Master Plan disclaims the importance of this omission [The inability to model gate operations in detail does not impact the results of the airside capacity analysis since at higher activity levels the runway system tends to be the primary constraint . . . Master Plan, . 2.5.3, page II-2.110]. The Master Plan is in error.

If an aircraft cannot get to the gate unimpeded, the resulting delay must be factored into the analysis. In the Master Plan, taxi patterns are consistent and aircraft are dropped from the model when they reach the gate area. The model does not capture any delays in the gate area or any delays that might occur in reaching the gate due to congestion on the ramp. The same is true for departing aircraft. If a departing aircraft cannot leave the gate due to inbound traffic or other traffic in the gate area, the departure demand at the airport may not be as regular as is assumed in the Master Plan's model.

The importance of this omission is that it precludes development of a clear picture of the delay reduction, and consequent capacity enhancing, attributes of the Project. Without estimation of the potential groundside/terminal structure constraints on operations (capacity), the actual delay reducing, and capacity enhancing, benefits of the Project as a whole cannot be accurately ascertained.

3. The Master Plan Should Have Considered Currently Implemented Air Traffic Procedures.

While the Master Plan acknowledges the existence of the current Dual Civet Arrival procedure, it fails to analyze its delay reducing, or consequent capacity enhancing efficiencies. The procedure is mentioned, then drops off the radar screen. The Dual Civet Arrivals, however, have so greatly reduced arrival delay at the Airport that no national delay program for the airport has been established since the procedure's implementation. Ignoring the impacts of Dual Civet Arrivals results in an exaggeration of existing delay and a consequent exaggeration of the Project's delay reducing, and capacity enhancing benefits.

⁶ Performance measures contained in the Master Plan, . 2.5.1, include outbound ground delay which, in turn, appear to include gate related variables such as gate push-back delay. This performance measure was apparently used in the modeling of existing gate operations but not future ones. (Master Plan, . 2.5.1, page II-2.97)

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E. Demand, as Defined in the Master Plan, is an Identity with Capacity.

Inaccurate data and assumptions are not alone in influencing the outcome of a modeling effort. Inadequate specification of a variable may also lead to an unrepresentative result. In this case, the independent variable, demand, as defined, is not independent but is virtually synonymous with, or surrogate for, the dependent variable, capacity. Thus, the demand variable has an interactive relationship with the dependent variable which influences the model's outcome in significant ways.

For example, the Master Plan defines aircraft demand as a 24-hour flight schedule representative of design day activity. (Master Plan, . 2.1.2, page II-2.3) The 24-hour flight schedule definition is almost identical to the definition of capacity, the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay. (Master Plan, . 2, page II-2.1) The two variables, therefore, vary together, i.e., as capacity increases, demand will also increase, rendering demand useless as a predictor of capacity. The precise degree in which the interaction of the independent and dependent variables in the model affect the analysis cannot be ascertained at this point without re-running SIMMOD. Suffice it to say that a new surrogate for demand, derived, for example, from airline market surveys, or annual enplanements, is necessary to insure the integrity of the model's results.

II. THE DRAFT EIS/EIR DOES NOT FULLY ANALYZE THE PROJECT'S OFF-AIRPORT SURFACE TRAFFIC IMPACTS.

While the Draft EIS/EIR's off airport surface traffic analysis adequately depicts some aspects of the Project's surface traffic generation potential, it is notably deficient in the following ways: (1) the analysis gives little consideration to surface traffic impacts on South Bay Communities other than those directly proximate to the airport; (2) the use of the Adjusted Environmental Baseline for comparison with the Project's surface traffic impacts creates a misleading picture of the magnitude of those impacts; (3) the Draft EIS/EIR improperly equates the direct and cumulative impacts of surface traffic; (4) the Draft EIS/EIR provides inadequate information regarding the Northside/Westchester Southside Project; (5) the Draft EIS/EIR transportation planning horizon is improperly attenuated; and (6) the Draft EIS/EIR lacks a mitigation monitoring program detailing implementation of mitigation measures for the impacts of surface traffic.

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A. The Draft EIS/EIR Lacks Adequate Consideration of Surface Traffic Impacts on South Bay Communities.

The Draft EIS/EIR analyzed 61 intersections, with an additional 15 intersections selected for focused analysis. Only nine of the 76 intersections were south of the I-105 (Century) freeway. The apparent explanation for the focus on the north side of the airport is presented in the Draft EIS/EIR, pages 4-284 - 4-289:

.South of LAX, there is a higher percentage of LAX traffic on I-405 and a lower percentage on the arterials, indicating that airport traffic is in fact staying on the freeway system as desired. However, this is not the result of I-405 operating well, but is more a result of the layout of the roadway network south of LAX. There are no alternative arterial routes that closely parallel I-405 south. In fact, south of LAX, all major arterial routes change to a north/south orientation, while I-405 south of Rosecrans Avenue continues in a northwest/southeast direction..

This explanation does not account, however, for at least three conditions acknowledged in the Draft EIS/EIR which exist south of the Airport: (1) airport traffic south of the airport represents a significant component of traffic on local streets; (2) interviews at freeway intersections south of the airport indicate a large percentage of airport trips; and (3) the Draft EIS/EIR claims a benefit from redistribution of traffic south of the airport off the freeway and onto local streets.

1. Airport Traffic Represents a Significant Component of Traffic on Local Streets South of the Airport.

The Draft EIS/EIR notes that 8% of the afternoon peak on Sepulveda Boulevard south of El Segundo Boulevard is airport related, but concludes . . . even if all the Airport bound traffic were removed, there would be little noticeable difference on most roads outside of the immediate vicinity of the airport, particularly during the morning and evening rush hours.. (Draft EIS/EIR, page 4-289) The 8% reported in the Draft EIS/EIR is, however, more important to traffic flow than it appears. For example, the intersection of Sepulveda and El Segundo Boulevards has a reported 1996 Volume to Capacity (V/C) of .869 and a projected 2005 V/C ratio of 1.062 (Draft EIS/EIR, Table 4.3.2-23, page 4-334). Eight percent of the 1996 traffic represents an airport contribution at this intersection of .069. The benchmark of .significant impact. is defined in the Draft EIS/EIR as a change in V/C ratio of .01 for an intersection operating at Level of Service (LOS.) F (Draft EIS/EIR, page 4-291). Therefore, at the intersection of Sepulveda and El

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Segundo Boulevards, a contribution of .069 to the V/C ratio can hardly be considered as representing . . . little noticeable difference . . .

2. Freeway Ramp Data Shows Traffic Exiting the I-405 South of the Airport.

Master Plan, Chapter II, Section 7.3, reports the results of a survey conducted at area intersections during the A.M. and P.M. peak hours. The results of that survey call into question the assumption that traffic is not diverted off the I-405 onto local streets south of the Airport, where it demonstrates that more than 30% of the trips at northbound I-405 ramps at El Segundo were Airport related.

3. The Draft EIS/EIR Is Internally Contradictory with Respect to Use of Off-Freeway Traffic Routes South of the Airport.

The Draft EIS/EIR states, in pertinent part: .Further, although it would be ideal for airport access to be provided directly via freeways, the dispersion of Airport traffic onto many arterial and freeway routes does have a side benefit in that its impact is minimized on any given route. (Draft EIS/EIR, page 4-289). This statement directly contradicts the Draft EIS/EIR.s initial assumption that the roadway system is designed such that freeway traffic is not diverted to the local street system south of the airport. If, in fact, airport traffic is diverted from the freeway, as claimed for traffic to and from the north, would not a similar set of traffic solutions be applicable to the south as well?

In addition, Master Plan, Table II-7.12 also sets forth data that calls into question the assumption of the limited diversion of freeway traffic onto local streets south of the airport. Table II-7.12 illustrates that, by absolute volume, only 3 of 30 .key roadway segments. carry more Airport related morning peak hour traffic than does Sepulveda Boulevard north of Rosecrans Avenue, and in the afternoon only four key segments carry more peak hour traffic than that intersection.

In short, the failure to consider traffic impacts south of Rosecrans Avenue appears arbitrary. At a minimum, the Draft EIS/EIR and its technical appendices need to provide a much clearer statement of why the intersections evaluated were selected, and why no consideration was given to areas south of Rosecrans Avenue.

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B. The Use of the Adjusted Environmental Baseline for Comparison With the Project's Surface Traffic Impacts is Misleading.

Three scenarios were used as baselines against which to evaluate the surface traffic effects of the proposed Master Plan improvements: (1) Environmental Baseline; (2) Adjusted Environmental Baseline; and (3) the No-Project/No-Action alternative. The Environmental Baseline is the existing condition pre-project. It includes existing roadways and land uses, and the current airport configuration. The year used in this baseline changed during the development of the Master Plan. At the initiation of the Master Plan process, the baseline year used was 1994. Information is reported in different Master Plan sections for 1994 and 1995. For the third iteration of the Master Plan, the baseline became 1996. The technical reports for the Draft EIS/EIR used 1996.

The Adjusted Environmental Baseline uses the current airport configuration but assumes that future off airport roadways and land uses already in the pipeline will be completed (see Section B.1 below). As with the Environmental Baseline, the definition of Adjusted Environmental Baseline changed with the development of the Master Plan. The existing condition section of the Master Plan (Chapter IV, Section 7) used horizon years of 2000 to 2015. The constrained alternatives section (Chapter V, Section 3) used the years 2005 and 2015. Finally, the No-Action/No-Project Alternative is the converse of the Adjusted Environmental Baseline and assumes that off-airport development will remain constant, but currently approved airport projects will be completed.

There are at least two issues of importance raised by reliance on the Adjusted Environmental Baseline: (1) accuracy of the Adjusted Environmental Baseline and its resulting projections; and (2) applicability of the Adjusted Environmental Baseline to the environmental impact analysis.

1. The Uncertain Definition of the Adjusted Environmental Baseline Makes the Results of its Comparison With Project Impacts Questionable.

The initial question about the Adjusted Environmental Baseline is the accuracy of the definition of Existing Condition/Environmental Baseline on which it is purportedly based. There are significant differences between the 1995 data concerning the Existing Condition/Environmental Baseline contained in the proposed Master Plan and the 1996 data contained in the Draft EIS/EIR. A comparison of Master Plan, Table II-7.2 and Draft EIS/EIR, Table 4.3.2-24, for the a.m. peak hour, shows changes in the Existing Conditions/Environmental Baseline between 1995 and 1996. As illustrated in the following Table, some intersections got significantly better and some significantly worse. In all but one case, the difference in V/C

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ratios between 1995 and 1996 exceeds thresholds used for determining significance in the Draft EIS/EIR.

Intersection	Master Plan Table II 7.2 1995 V/C*	EIS/EIR Table 4.3.2-24 1996 V/C	V/C Difference
Aviation/El Segundo	0.981(E)	0.835(D)	-.146
Aviation/Rosecrans	0.915(E)	1.121(F)	.206
Highland/Rosecrans	0.714(C)	1.069(F)	.335
Sepulveda/El Segundo	0.840(D)	0.869(D)	.029
Sepulveda/Mariposa	0.776(C)	0.730(C)	-.046
Sepulveda/Rosecrans	1.238(F)	1.220(F)	-.018
Vista Del Mar/Grand	0.755(C)	0.749(C)	-.006
Vista Del Mar/Imperial	0.821(D)	0.465(A)	-.356

* In Master Plan Table II 7.2 the first column heading is apparently mislabeled

Moreover, the adjustments to the Existing Conditions/Environmental Baseline involved adding additional roadways and additional traffic to the system based on anticipated projects. The definitions of these adjustments is not consistent within the Draft EIS/EIR, or between it and the Master Plan. For example, the Draft EIS/EIR states that: A list of approved development projects were developed . . . (Draft EIS/EIR, page 4-279). [Emphasis added.] The traffic technical report on which the Draft EIS/EIR is based states: A list of planned development projects was developed . . . (Technical Report, 3b, page 2-3). [Emphasis added.] Master Plan, Table IV-8.3; Master Plan, Chapter V, Appendix L; and Technical Report, 3b, Table 2-3, present projected regional roadway improvements. Master Plan, Chapter V, Section 2.6 indicates that the future roadway network used in the analysis includes those projects . . . currently funded and approved or which have a high probability for completion by 2015 . . . Clearly, the distinction between approved and planned projects is critical to a functional definition of Adjusted Environmental Baseline. The baseline will be set much higher (and the consequent relationship of the Adjusted Environmental Baseline with the Project's impacts much lower) if all planned projects are included in addition to all approved projects.

Finally, Chapter IV of the Master Plan (Table VI-8.1, page IV-8.5) provides a preliminary list of related projects that differs from the list presented in Table 2.2 of the Draft EIS/EIR Traffic Technical Report, 3b. While differences are to be expected between the 1996 version of the Master Plan and the Updated 2000 version of the Traffic Technical Report, one

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difference may be more crucial than others - the projected size and resulting traffic impact of the Playa Vista Project. For example, according to the Master Plan, Table IV-8.1, the Playa Vista Project will contain 13,156 single-family units and 8,262 multi-family units. Master Plan, Chapter V, Appendix L, and the Draft EIS/EIR Traffic Technical Report specifies 13,085 multi-family units and no single-family units for the same Project. There is no explanation for the change, nor any reference to the source of either number. The difference is crucial because the traffic analysis assumed three people for each single-family home, and only two for each multi-family residence. The change therefore results in a significant diminution in traffic if the latter multi-family numbers are correct. Considering the potential of over 13,000 housing units for traffic generation, a complete explanation is needed to render the Draft EIS/EIR surface traffic analysis.

2. The Applicability of the Adjusted Environmental Baseline to the Draft EIS/EIR Traffic Analysis is Questionable.

As set forth above, the off airport surface traffic analysis in the Draft EIS/EIR uses the Adjusted Environmental Baseline as the basis of comparison under CEQA for future mitigation for the three build alternatives. (Draft EIS/EIR, page 4-276). The Adjusted Environmental Baseline reflects projected conditions in the years 2005 and 2015 with off airport land use activities completed and regional circulation improvements in place, but without any increased use of the airport. This approach minimizes the potential direct impact from the adoption of the proposed Master Plan because: (1) the future traffic volumes without the Project increase thereby reducing the proportional effect of the added airport traffic from the Project and (2) additional circulation system improvements provide additional capacity. While it is reasonable to assess particular impacts at the time at which they might occur, relying on this approach requires assurances that the projected circulation improvements will actually be in place. No such assurances are provided in the Draft EIS/EIR.

The Off Airport Technical Report lists circulation system improvements that were included in the modeling process. This listing provides an indication of when certain improvements are anticipated. Without these improvements, the circulation system for the Adjusted Environmental Baseline would, apparently, be the same as for the 1996 condition, and many more intersections and roadway segments would be subject to significant adverse impacts as a result of the proposed Master Plan. It is important, therefore, that the Draft EIS/EIR traffic analysis include projected phasing of the anticipated improvements relative to the additional traffic resulting from airport use. This should include a discussion of the phasing of airport improvements as they pertain to traffic generation with respect to the circulation improvements used in the Adjusted Environmental Baseline. Limitations should be placed on airport traffic generation if anticipated circulation improvements off-airport do not occur. Once the Adjusted

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Environmental Baseline is accepted as accurate and the conditions to achieve it are assured, the next issue concerns the significance of surface traffic impacts and the mitigation measures needed to reduce those impacts.

C. The Direct and Cumulative Impacts of Surface Traffic Are Improperly Equated.

The surface traffic analysis uses traffic volumes from airport and non-airport projects. (See, e.g., Master Plan . 2.6.2, page V-2.279). Therefore, it is at least partially a cumulative impact analysis.⁷ Because the surface traffic analysis is based on cumulative traffic volumes, the significance of the direct impacts and the cumulative impacts are equated. However, the use of the Adjusted Environmental Baseline makes this equation between direct and indirect effects inappropriate. While comparing the Project to the adjusted future conditions may be appropriate for assessing direct impacts, the cumulative impact is the impact of all traffic relative to the existing condition, not expected future conditions as contained in the Adjusted Environmental Baseline.

The result of this improper equation of direct and indirect effects is material. The following Table (derived from Draft EIS/EIR, Table 4.3.2-24) for the a.m. peak hour illustrates the problem. The reported change in congestion between the existing conditions and Alternative C, the preferred project alternative, is often significant, while the comparison of Alternative C with the Adjusted Environmental Baseline (which incorporates future conditions) is not.

⁷ The cumulative impact from several projects is the change in the environment which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects.. (CEQA Guidelines, . 15355(b))

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Intersection ⁸	Existing V/C(LOS)	Adjusted Baseline V/C(LOS)	Alternative C (w/mit) V/C(LOS)	Difference (w) Existing	Difference (w) Adjusted
Aviation/El Segundo	0.835(D)	1.097(F)	0.865(F)*		
Aviation/Rosecrans	1.121(F)	1.164(F)	1.171(F)	+050	+007
Highland/Rosecrans	1.069(F)	1.211(F)	0.947(E)	-.122	-.264
Sepulveda/El Segundo	0.869(D)	1.190(F)	1.161(F)	+292	-.029
Sepulveda/Mariposa	0.730(C)	0.772(C)	0.803(D)	+073	+031
Sepulveda/Rosecrans	1.220(F)	1.275(F)	1.243(F)	+023	-.032
Vista Del Mar/Grand	0.749(C)	0.918(E)	0.729(C)	-.02	-.189
Vista Del Mar/Imperial	0.465(A)	1.098(F)	0.903(E)	+438	-.195

* Apparent error in Table 4.3.2-24 of the EIS/EIR (page 4-340)

Using this concept of the Adjusted Environmental Baseline, the result is that the cumulative impacts of the Project are often significant and not mitigated even when the Project's direct effects have been.⁹

D. The Draft EIS/EIR Inadequately Documents the Northside/Westchester Southside Project.

The Draft EIS/EIR's impact analysis for off airport surface traffic is dependent upon the assumption that there will be a substantial reduction in the number of trips generated from the Northside Project. By reconstituting the Northside Project into the Westchester Southside Project, the Draft EIS/EIR projects that there will be a significant decrease in collateral trips with the adoption of the proposed Master Plan.

⁸ Change in V/C Rates of .01 defines significant impact for intersections at LOS F (Draft EIS/EIR, p. 4-291).

⁹ Note that if the comparison had been between Alternative C and the No-Project/No-Action Alternative, the difference would have been even greater, as the No-Project/No-Action Alternative provides for on-airport, potentially capacity-enhancing, improvements, but not off-airport surface traffic impact mitigation.

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The source of the collateral trip reduction is the change in the land use for the Northside Project and Continental City Project. Attachment A of Technical Report 3b provides the basis for the reduction in collateral trips.

	AM PEAK			PM PEAK		
	Adjusted Baseline	No Project	Adjusted C	Adjusted Baseline	No Project	Adjusted C
Northside	0	7,217	3,922	0	7,131	4,423
Continental City	0	5,323	0	0	5,348	0
Manchester Square	0	0	212	0	0	233
Total	0	12,540	4,134	0	12,479	4,656

The issue here is the same as that concerning the Adjusted Environmental Baseline, i.e., the actions needed to insure that the reduction is achieved. The principal question is what specific discretionary actions are required to modify the allowable land uses in the Northside Project and in Continental City property, and how will compliance be assured?

The land use component of the Draft EIS/EIR and Condition LU-1 in Chapter V, Environmental Action Plan, presents a Master Plan commitment. that:

.To the maximum extent feasible, all [Q] conditions . . . from the City of Los Angeles Ordinance No. 159,526 that address the Northside project area will be incorporated by LAWA into the Zoning Code Amendment and LAX Master Plan Implementing Ordinance for the Westchester Southside Project. Accepting that certain conditions may be updated, revised, or determined infeasible as a result of changes to the LAX Northside project, the final [Q] conditions for the Westchester Southside Project will ensure that the level of environmental protection afforded by the full set of LAX Northside projects [Q] conditions is maintained.. (Draft EIS/EIR, Chapter V, page 5-2).

Since this traffic reduction is critical to the projected Master Plan trip generation, the detail associated with this property needs to be firmly established. It is unacceptable to assume that certain conditions may be updated, revised or determined infeasible. if they are necessary to bring about the decrease in collateral trips upon which the Master Plan projections are based.

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While there are some discussions of the Northside/Westchester Southside Project in the Draft EIS/EIR.s purpose and need chapter and Master Plan, Appendix Q, these are brief, general presentations lacking in specificity as to the actions needed to commit the City to limit these uses.

The importance of this lack of specificity in the definition of Project actions, as they relate to the Northside/Westchester Southside Project, is that there is no commitment by Los Angeles to insure that the traffic reduction represented by the changes in allowable land use will occur. The surface traffic capacity for the Project claimed through the reduction of traffic generation from the Westchester Southside Project is significant. Without a more adequate demonstration of the Master Plan.s ability to achieve that reduction, and a concrete commitment to meeting those goals, the Draft EIS/EIR will remain inadequate.

E. The Transportation Planning Horizon Used in the Draft EIS/EIR is Improperly Shortened So As To Minimize the Full Build Out Surface Traffic Impacts of the Project.

The Draft EIS/EIR modeled future conditions for the years 2005 and 2015. The current regional transportation plan, however, uses 2025 as the horizon year. The use of a later year between 2015 and 2025 for analysis is proper in light of the fact that the Project is anticipated to take 16 years to complete.¹⁰ If the Project commences as early as 2002, it will not be completed until 2018, three years after the 2015 horizon has expired. With the year 2013 being the second greatest peak construction year (Draft EIS/EIR, page 4-270), the proposed Master Plan improvements will not be complete by the time the present horizon year of 2015 is reached. The import of the choice of 2015 as horizon year, before the Project is completed, is that the full build-out (.worst case.) impacts of the Project will remain unanalyzed.

Further, while the impacts resulting from the adoption of the proposed Master Plan are generally evaluated against the Adjusted Environmental Baseline, much of the Draft EIS/EIR.s discussion of surface traffic is compared to the No-Project/No-Action alternative (i.e., the alternative that assumes growth in operations and passenger demand at the Airport, along with completion of improvements already planned, but no off airport traffic or other development improvements). The comparison of the Project with two separate baselines in the years 2015 presents a misleading picture. While the reconstitution of the Northside Project may provide a reduction in the traffic generated in 2015, the existing airport improvements clearly permit

¹⁰ The Draft EIS/EIR, Purpose and Need Section (Chapter 2, pages 2-12 through 2-13) indicates that the Project will be implemented in two phases. The first phase will last six years and the following phase 10 more years.

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growth beyond that currently possible. Therefore, the further into the future conditions are projected, the greater the effect of the proposed Master Plan improvements on traffic.

F. The Impacts of Construction Traffic Are Largely Ignored.

While the Project's construction will stretch over a period of 14 years, the impacts of the numerous construction vehicles that will be in use during that period remain unexplored. First, the Draft EIS/EIR acknowledges a volume of construction vehicles which includes 2.8 trucks per minute, 10 hours per day, 6 days per week, or 1.2 trips per minute, 20 hours per day in a 7 day work schedule (Draft EIS/EIR, page 4-319). While the Draft EIS/EIR purports to address mitigation by recommending that trucks trips be divided among four locations on the construction site, that purported mitigation does not consider the trucks' impacts on surrounding arteries even a short distance from the construction site.

Moreover, the Project will admittedly coincide with the construction of Playa Vista, located approximately 2 miles north of the airport (Draft EIS/EIR, page 4-320). The Draft EIS/EIR contains little or no analysis of the cumulative impacts of the construction of these two projects on surface traffic on surrounding arteries and the San Diego Freeway. Moreover, the mitigation offered is slight. The Draft EIS/EIR offers to expand the . . . Traffic Coordination Office . . . to minimize the impacts of construction traffic (Draft EIS/EIR, page 4-320). This purported mitigation measure, even when combined with other assurances including that .construction traffic . . . can be managed . . . (Draft EIS/EIR, page 4-320), and .traffic patterns around the airport for the general public would be largely maintained . . . (*Id.*), does little, if anything, to assure that the manifest impacts of construction will be mitigated. The Draft EIS/EIR admits as much where it states .however, even with these commitments in place, the Project would still cause sufficient construction-related traffic to cause notable disruption of normal traffic flows near the airport.. (*Id.*) Since construction is planned to last more than 14 years, the Draft EIS/EIR is basically stating that for that entire period, traffic is expected to be disrupted, and the Project's purported mitigation will be insufficient to restore stability.

Finally, the Draft EIS/EIR pays little or no attention to the traffic impact of vehicles used by construction workers. It states that construction employees will work in three shifts, and that the second shift will arrive before the first shift ends (Draft EIS/EIR, page 4-319). Using simple math, it appears that at some points during the day, parking would have to be provided for more than 8,000 workers when these two shifts overlap. While remote parking areas are suggested for construction employees, they are as far away as Palmdale, Van Nuys and Ontario (*Id.*). The likelihood of construction workers using such remote parking is slim to none. Therefore, the mitigation measure is largely useless. However, even if remote parking were utilized to any extent, the Draft EIS/EIR fails to discuss the traffic impacts of the shuttles which would bring

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the construction workers from these remote locations to the airport. In short, even though construction is expected to last for 14 years, the Draft EIS/EIR contains little, if any, analysis of the impacts of construction worker traffic which will take place on the entire street/freeway system 6 or 7 days a week during that period.

In summary, while the general construction concept is to have many of the transportation improvements completed within the first five years after construction begins . . . (Draft EIS/EIR, page 4-318), the LAX Expressway and northeastern portion of the ring road from the San Diego Freeway to Sepulveda Boulevard would not be available to traffic until well after the first five years (Draft EIS/EIR, Table 4.3.2-18, page 4-318). Therefore, there would be no new routes available for mitigating the above impacts during the heaviest construction period.¹¹ As a consequence of the above omissions, the Draft EIS/EIR's analysis of construction traffic impacts is materially deficient.

G. The Draft EIS/EIR Lacks a Mitigation Monitoring Program.

The Draft EIS/EIR, Chapter V is entitled Environmental Action Plan. It is not specific as to whether this constitutes a Mitigation Monitoring Program required by CEQA (CEQA Guidelines . 15091(d)). If it does represent a Draft Mitigation Monitoring Program, it is inadequate. The Section lacks a clear statement of the party responsible for implementing the mitigation, the mechanism for enforcement of the mitigation and the timing of implementation. Moreover, it lacks detailed explanation of the way in which the diminution of traffic from the Northside Project, as well as other surface traffic mitigation measures will be achieved.

¹¹ The Draft EIS/EIR states that Phase 1 of the Project would be 5-6 years long and end in 2005. As the Draft EIS/EIR cannot be approved before late 2001, at the earliest, and Phase 1 of the construction could not then begin before 2002, Phase 1 could not end until at least 2007 or 2008. Similarly, Phase 2 which is estimated to extend 10 years past the completion of Phase 1, would end in 2017 not 2015, as assumed in the Draft EIS/EIR. This is important because the impacts of construction, and associated traffic, will now be extending well past the period anticipated in the Draft EIS/EIR.

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III. THE DRAFT EIS/EIR NOISE ANALYSIS UNDERSTATES THE PROJECT'S AIRCRAFT NOISE IMPACTS.

The Draft EIS/EIR minimizes the Project's noise impacts by artificially inflating the Environmental Baseline and by failing to disclose the Project's overflight noise impacts.¹²

A. The Draft EIS/EIR Does Not Designate the Proper Baseline for Its Noise Analysis.

As noted earlier, a threshold issue in environmental analysis is the establishment of a baseline. The function of a baseline is to provide a benchmark of existing conditions against which the environmental impacts of a project may be measured. If the baseline is incorrectly designated at too high a level, the impacts of the Project will be improperly minimized. In this case, the Draft EIS/EIR utilizes three separate and distinct baselines for analyzing the impacts of the Project: (1) the Environmental Baseline (1996), i.e., the purported conditions in existence before implementation of the Project; (2) No-Project baseline for 2005 (and 2015) which includes natural growth on the airport resulting from implementation of already approved airport projects continued in the current Master Plan that purportedly would have occurred even if the Project is not implemented; and (3) Adjusted Environmental Baseline predicated on projected conditions in the years 2005 and 2015 with off-airport land use activities completed and regional circulation improvements in place, but without any improvement to airport facilities.

The Draft EIS/EIR chooses 1996 (i.e., the Environmental Baseline) as the base year for evaluation of aircraft noise impacts, and states that in 2015, the Project's horizon year, Alternative C would reduce the total number of people exposed to aircraft noise above 65 CNEL compared to current conditions as represented by the Environmental Baseline year. (Draft EIS/EIR, page 4-11) By using 1996 as the benchmark, the Draft EIS/EIR's noise analysis artificially minimizes the apparent growth in noise impacts associated with the Project. This is because, in 1996, many noisy Stage 2 aircraft remained in the fleet (which were then phased out in late 1999). When the Notice of Preparation was published in July 1997, the Project proponents knew with certainty at that time that some of the noisiest aircraft in its fleet would not operate after December 31, 1999, and that the removal of these aircraft from the fleet serving

¹² Project proponents apparently did not use the most recent Integrated Noise Model (INM) Version 6.0 to calculate aircraft noise as the Draft EIS/EIR discusses INM, Version 5.1a. Draft EIS/EIR, Appendix D, page 6.

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the Airport would reduce the size of the airport's noise exposure contours. The Draft EIS/EIR concedes that the reduction in noise exposure is the result of a federally mandated phase out of older, noisier Stage 2 jets, and not the implementation of the Project. Despite that fact, the Draft EIS/EIR consciously skews the analysis by using 1996 as the Base Year for its noise analysis.

The Draft EIS/EIR disregards the fleet mix changes brought about by the Stage 2 phase out. The Draft EIS/EIR's Average Annual Day Operations and Fleet Mix - Environmental Baseline. (Draft EIS/EIR, Appendix D, page 11) includes a total of 139 noisy Stage 2 aircraft in the daily operations mix. In other words, nearly 7% of the aircraft included in the calculation of the baseline noise contour analysis are high noise producing aircraft the inclusion of which will increase the size of the baseline noise contours and, thereby minimize the apparent impacts of the Project.

Courts have displayed flexibility in dealing with cases involving complex long term environmental review. They have agreed that, for lengthy environmental review such as that at issue here, the analysis of such impacts as surface traffic (and aircraft operations) which normally fluctuate over time are properly assessed against a later baseline than the time of the publication of the Notice of Preparation. (*Save our Peninsula Committee*, *supra*, 87 Cal.App.4th at 125-126) Therefore, Project proponents are not tied to the 1996 baseline, the last full year of data before the year of Notice of Preparation Publication, but should, more properly, have used a year no earlier than 1999, the last full year of data available before publication of the Draft EIS/EIR. Moreover, that data should have been updated with available data from the year 2000. Absent such an update, the Draft EIS/EIR noise analysis is incomplete and, thus, inadequate.

B. The Draft EIS/EIR Fails to Disclose the Project's Overflight Noise Impacts.

Under FAA Rules, changes in operations above an altitude of 3,000 feet Above Ground Level (AGL) are categorically excluded from environmental review under NEPA. FAA Order 1050.1D, Appendix 3, paragraph 3.a.¹³ However, FAA Order 1050.1D, paragraph 32 also mandates that extraordinary circumstances, such as actions which are likely to have a significant impact on noise levels over noise sensitive areas, or a significant impact on coastal zones, shall be the subject of an environmental assessment.. (*Id.*, paragraph 32)

¹³ The Draft EIS/EIR improperly relies on *draft* FAA Order 1050.1E and the City of Los Angeles. Draft L.A. CEQA Thresholds Guide (May 14, 1998) as authority for several of its assertions.

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Here, the noise analysis in the Draft EIS/EIR narrowly focuses on cumulative aircraft noise impacts created by aircraft approaching the Airport from the east, and from start-of-takeoff roll. However, it completely disregards the impact of single event overflight noise on the South Bay communities: (1) by failing to depict and analyze the noise impacts from additional new routes over areas not previously over-flown; (2) by failing to acknowledge a potential increase in lateral separation of aircraft which could lead to an increase in overflight noise; (3) by failing to report or study the noise impacts of increased operations over coastal zones; and (4) by using an outdated modeling system to justify the decision not to study the noise impacts to South Bay communities.

1. The Draft EIS/EIR Depicts Additional New Routes Over Noise-Sensitive Areas Within the South Bay Communities but Fails to Analyze the Noise Effects of These New Routes.

CEQ Guidelines . 1502.15¹⁴ state that [t]he environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. [emphasis added] The Draft EIS/EIR.s failure to comply with this mandate is two-fold. First, the Preferred Alternative includes new routes over areas not previously impacted. Second, the Draft EIS/EIR does not analyze the noise impact created by these new routes over noise sensitive areas, thereby failing to describe the environment of the areas to be affected or created.

Master Plan Maps (pages II-2.36 - II-2.37, Figures II-2.11 and II-2.12) illustrate that when the Airport is operating on a west flow, M-class or turbo-prop aircraft turn at the VOR. This is contrary to stated airport policy and noise abatement procedures which require aircraft to proceed past the shoreline before starting a turn. In fact, twelve of the departure tracks for turbo-props used to establish the baseline integrated noise monitor data are routed over residential areas not previously overflowed. (Draft EIS/EIR, Appendix D, page 7, Exhibit 2). The use of these incorrect flight tracks and early turns potentially affects the noise contour on both sides of the airport.

Moreover, if the turbo-prop aircraft turn early, the designated routes will cause them to fly over noise sensitive areas such as parts of El Segundo, thus requiring further review under the .extraordinary circumstances. exception of FAA Order 10501.1D, paragraph 32. In short, the

¹⁴ The Draft EIS/EIR is also a federal document subject to the requirements of the National Environmental Policy Act, 42 U.S.C. . 4321, et seq., and its implementing regulations, 40 C.F.R. . 1500, et seq. (.CEQ Guidelines.).

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development of these new routes could potentially violate Airport noise abatement policy and could create unacknowledged impacts which must be analyzed.

2. Greater Lateral Dispersion of Aircraft Will Potentially Occur to Accommodate the Increase in Operations at the Airport Which May Lead to Premature Easterly Turns Over the South Bay Communities and Consequent Increases in Overflight Noise.

Even if no new routes were contemplated, the Draft EIS/EIR states that over 90% of the operations at the Airport are in a west flow with climb out over the ocean. The aircraft then turn either south-east or north-east towards their easterly destination. The Draft EIS/EIR anticipates that the Project will lead to an increase in operations. The Draft EIS/EIR does not, however, discuss the way in which these increased operations will be integrated into the existing Airport air traffic flows. If it did, it would also have to reveal the potential for increased overflights of South Bay communities.

To accommodate this increase in air traffic, more airspace will probably be required to maintain adequate separation between aircraft during climb out. Air traffic controllers separate aircraft in two ways, laterally and vertically. Generally speaking, since heavy departing aircraft are resistant to an increase in vertical separations for reasons of both cost and performance, aircraft are dispersed laterally. As lateral separation between departing aircraft must be maintained, a greater number of offshore aircraft may come closer and over the shoreline, which may also lead to premature easterly turns from the initial southerly headings of departing flights. These premature turns will potentially lead to an increase in overflight noise over South Bay Communities, noise sensitive areas not previously included in standard departure tracks. At a minimum, the Draft EIS/EIR should contain a supplementary single-event noise analysis for communities south of the airport.

3. The FAA Fails to Study the Project's Noise Impacts over Coastal Zones.

FAA Order 1050.1D, paragraph 32, Extraordinary Circumstances, mandates that a normally categorically excluded proposed Federal action which is likely to have a significant impact on natural, ecological, cultural, or scenic resources of national, state, or local significance, including... coastal zones, (FAA Order 1050.1D, paragraph 32) shall be the subject of, at a minimum, an environmental assessment. Included in South Bay communities are the coastal zones south of the airport. As California's coastal zones are of national, state, and local significance, they fall within the mandate contained in FAA Order 1050.1D. Nevertheless, the Draft EIS/EIR fails to acknowledge, let alone analyze, impacts on South Bay coastal zones.

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4. The Draft EIS/EIR Ignores FAA Order 1050.1D, Paragraph 32 and Uses a Modeling System Which Lacks Any Legal or Scientific Basis in Order to Justify the Draft EIS/EIR.s Failure to Examine the Noise Impacts to Communities in the South Bay.

The Draft EIS/EIR noise analysis assumes that noise in the South Bay communities which lies outside the parameters established for the noise analysis, does not exist. The noise analysis is, therefore, incomplete. First, as discussed above, the turbo-prop routes and the potential for increased lateral separation of aircraft will have a material impact on noise levels of noise sensitive areas including coastal zones. Therefore, FAA Order 1050.1D, paragraph 32 calls for at least an assessment of changes in operations above 3,000 feet AGL. Nevertheless, the Draft EIS/EIR, in two paragraphs, completely dismisses this requirement and categorically states that no further noise review above 3,000 feet is necessary since the noise associated with jet aircraft weighing more than 75,000 pounds will not change more than five decibels CNEL. (Draft EIS/EIR, Appendix D, page 65)

Second, the rationale for this determination is unexplained and unjustified under either legal or scientific standards. The five decibel CNEL standard is not acknowledged in the procedures and policies of NEPA, FAA Order 1050.1D, or FAA Order 5050.4A. The Draft EIS/EIR.s methodology is further flawed by the use of a patently erroneous measure. The FAA.s benchmark for the measurement of overflight is Above Ground Level. (AGL).¹⁵ The measure employed in the Draft EIS/EIR is Above the Airport. (Draft EIS/EIR, Appendix D, page 65). The potential for mischief with the latter measure is clear. If the Project proponents analyze noise at altitudes greater than 3,000 feet above an airport.s elevation, then communities in the South Bay and elsewhere which are located well above the airport.s elevation would be at a severe disadvantage. For instance, Palos Verdes is at approximately 1,480 feet elevation,¹⁶ while the Airport is located at 126 feet.¹⁷ Due to the difference in elevation between Palos Verdes and the Airport, an aircraft may be 3,001 feet above the airport., and its noise not subject to environmental review, while it is only 1,521 feet above Palos Verdes. Thus, while the noise impact may not meet the above the airport. criterion, the noise over Palos Verdes would be significantly greater but remain unaccounted for in the model.

¹⁵ See, in general, FAA Order 1050.1D which uses the benchmark ABOVE GROUND LEVEL. as a starting point for altitude measurements.

¹⁶ <http://pointvicenteinterpretivecenter.com/rpv/recreationparks/content/rpvfactsheet2000.htm> (accessed June 22, 2001).

¹⁷ <http://www.airnav.com/airport/LAX> (accessed June 22, 2001).

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Third, the Draft EIS/EIR claims to have relied upon the Air Traffic Noise Screening Model (ATNS), Version 2.0, to:

.assess the effects of noise level changes associated with air traffic procedure changes at altitudes greater than 3,000 feet above an *airport. s elevation*. This methodology requires that changes in aircraft noise be evaluated if the noise associated with jet aircraft weighing more than 75,000 pounds changes by more than five decibels of DNL (CNEL in California) over residential areas and the aircraft is in flight at an altitude between 3,000 and 18,000 feet *above the airport..* (Draft EIS/EIR, Appendix D, page 65)
[Emphasis added.]

It did not. In fact, it appears that the outdated and obsolete checklist from FAA Notice 7210.360 was utilized instead. ATNS is a computerized version of the former FAA Notice 7210.360, and supercedes the checklist method. It requires actual data input, performs the calculations, and prepares written documentation on the findings. The Draft EIS/EIR contains only a checklist. After checking off five boxes from the *departure. N 7210.360 checklist*, (Draft EIS/EIR, Volume D, pages 79-86) the Project proponents determined that:

.since the flight tracks of the new and relocated runways will be located within close proximity to the present flight tracks of the existing runways, and the aircraft activity on these tracks will not result in an increase of 5 decibels of DNL (CNEL) over any residential area when the aircraft are above 3,000 feet, *the checklist* indicates that no further noise review under this requirement is necessary.. Draft EIS/EIR, Volume D, pg. 65. (Italics added for emphasis.)

The checklist itself is proof that the drafters never used the actual ATNS aircraft noise screening modeling system, but, instead, chose to work with its former outdated and obsolete checklist version. The Draft EIS/EIR misleads the public into believing that an actual, scientific analysis was conducted to determine whether noise decibels would increase above 3,000 feet.

In short, the Draft EIS/EIR does a disservice to the South Bay communities by ignoring the potential noise impacts that the new flight tracks and lateral separation of aircraft will cause to the area. Not only should the Project proponents conduct a full environmental review of the noise impacts to the area under FAA 1050.1D, paragraph 32, but a more accurate, and

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scientifically appropriate methodology should be used to make the determination of the significance of noise impacts over South Bay communities.

IV. THE DRAFT EIS/EIR AIR QUALITY ANALYSIS IS INADEQUATE.

The Draft EIS/EIR's air quality analysis exhibits serious deficiencies, not the least of which is the total absence of a formal air quality conformity analysis required under federal law where, as here, the Project's air quality impacts are not claimed to be insignificant (see 42 U.S.C. . 7506¹⁸). The absence of a conformity analysis necessarily renders the following comments preliminary, and SBCCOG reserves the right to comment further upon issuance of the conformity analysis.

A. The Baseline for the Draft EIS/EIR Air Quality Analysis is Not Appropriately Estimated.

The Draft EIS/EIR assumes that annual aircraft operations will be essentially identical regardless of whether the Preferred Alternative is implemented. Under the No-Action/No-Project Alternative, total operations are expected to be 98 percent of operations under the expanded capacity scenario (air passenger operations activity will actually be *higher* under the No-Action/No-Project Alternative). At the same time, the Preferred Alternative moves about 15 percent more passengers through higher aircraft load factors.

Basic economic theory, however, dictates that under free market conditions demand will reach equilibrium for a given level of supply at a certain market cost (including time costs associated with delays, congestion, etc.). If the supply curve (for air transportation) is then shifted, as would occur under an increased capacity situation such as that proposed,¹⁹ the supply/demand equilibrium for the same level of market cost will shift to a point of higher demand. This shift is often referred to as induced demand, and analyses which do not consider this effect (or which assume demand levels counter to market behavior as appears to be the case with the Draft EIS/EIR) are not accurate in general, or specifically with respect to future air

¹⁸ No department, agency, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license, permit or approve any activity which does not conform to an implementation plan . . . (42 U.S.C. . 7506(c)(1))

¹⁹ The Preferred Alternative lengthens and reconfigures runways, adds a new West Terminal, and improves traffic flow.

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quality conditions under any of the various alternatives. Viewed from a practical rather than theoretical perspective, the Draft EIS/EIR presumes that the Airport will support over 391,000 aircraft landing and takeoff (LTO) cycles in 2015 by doing nothing other than carrying through with those projects already adopted. Although operations without the Project would be constrained by greater delays as well as excessive times to reach the airport, the Draft EIS/EIR does not account for the discouraging effects of these delays, and assumes that under the Preferred Alternative, specifically designed to relieve these problems of congestion and delay, the total number of annual LTOs will increase by less than 2 percent (to 398,000) over the No-Action/No-Project Alternative. There are only two possible explanations for this relationship: (1) either usage under the No-Action/No-Project baseline is overstated; or (2) usage under the Preferred Alternative is understated. Correspondingly, either emissions for the No-Action/No-Project baseline are overstated or emissions for the Preferred Alternative are understated. The result is an artificial (and erroneous) minimization of the difference in emissions between baseline conditions and those of the Project.

This same issue affects stationary source emissions. Increased airport capacity can be expected to attract associated industrial and commercial activity into the area. This attraction would not occur without the increased capacity and, therefore, must be accounted for if a true assessment of airport emission impacts is to be determined. Note that this commercial development is distinct from currently planned commercial development, in that it occurs due to airport capacity expansion, but outside the formal planning process of the airport. One must recognize that the estimates of reduced emissions under the action alternatives (either the preferred or alternative scenarios relative to a No-Action/No-Project scenario) are due almost entirely to flow improvements in the form of reduced taxiway congestion and improved traffic movement both on and offsite. If these congestion reductions are eliminated or reduced through increased air travel or associated demand that is not properly accounted for in the Draft EIS/EIR, the predicted emissions impacts will not be accurate.

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B. Future Background Pollutant Concentrations Are Not Appropriately Estimated.

Background pollutant concentrations are required to accurately estimate the impact of the proposed Airport expansion on National Ambient Air Quality Standards/California Ambient Air Quality Standards (NAAQS/CAAQS) compliance. These concentrations must account for the combined impacts of the universe of emission sources not explicitly accounted for in the airport analysis. In effect, the background concentrations determine the emissions baseline upon which Airport emissions are placed. If this base is underestimated, the overall affect of airport expansion on NAAQS/CAAQS compliance could be similarly understated. Alternatively, if the base is too high, the Draft EIS/EIR analysis could be conservative. While the Draft EIS/EIR implies the latter, it contains no data to support such a conclusion and some reason to believe that the converse may be true.

Current short term (sub-annual) background concentrations for the Draft EIS/EIR are based on measurements taken at an onsite monitoring station located just east of the southern runway configuration. Current annual concentrations are based on data collected at a South Coast Air Quality Management District (SCAQMD) monitoring facility (Hawthorne) located near, but southeast of the Airport. On the premise that measurements from these sites inherently include emissions from the Airport, the Draft EIS/EIR concludes that such emissions represent conservative background concentration baselines for air quality analysis (since Airport emissions will be added on top of a background that already includes Airport emissions).

However, the prevailing wind direction for the Airport area is southwest to northeast. Therefore, there is probably little influence from the Airport on the offsite concentrations used as background, as well as only moderate influence on the onsite-based background concentrations. The bulk of airport activity, including all terminal and motor vehicle operations occur under the influence of a prevailing wind plume that is further north than the onsite monitoring station. While certain aircraft takeoff and queuing emissions are undoubtedly accounted for in the onsite baseline concentrations, these represent only a small fraction of overall airport emissions. Comparative data for concentrations from both monitoring stations could demonstrate the validity of the claim of conservatism, (i.e., do the observed concentrations for identical monitoring periods show a higher background at the onsite station?), but the Draft EIS/EIR apparently contains no data for the offsite monitoring station (other than the specific background concentrations used in the Draft EIS/EIR and associated documents).

More importantly, the emissions inventory rollback techniques used to forecast future background concentrations are of questionable validity for the Airport area. Background concentrations as well as future emission reduction influences around the Airport are constrained by geography. Since the prevailing wind flows southwest to northeast, the Pacific Ocean

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represents a physical constraint that may significantly influence emission reduction impacts on background concentrations. In effect, the implemented rollback procedure to estimate future background concentrations reduces current background concentrations in proportion to expected *regional* emission inventory reductions over the same time period. Therefore, this procedure inherently assumes that inventory reductions are homogeneous throughout the region in terms of their influence on background concentrations. This is perhaps a viable assumption in instances where one part of a region has similar source characteristics with another, but the Airport region is clearly constrained to those source characteristics along the Pacific coastline to the immediate south of the Airport. It is the expected reductions from these sources in particular that should be used to adjust Airport background concentrations.

Generally background concentrations for 2005 are reduced 30 to 40 percent while concentrations for 2015 are reduced 50 to 60 percent from the current measured data. Clearly this assumes significant emission reductions will affect coastal monitoring sites and provides substantial headroom for emissions increases within the confines of the NAAQS/CAAQS. These reductions probably represent the most significant influence on forecast pollutant concentrations in 2005 and 2015. It is critical that the propriety of the assumed background concentrations at least be supported by comparative analysis of current Airport and offsite monitoring data as well as analysis of emissions source classifications for the area immediately to the south of the Airport with the remainder of the air basin. This comparison will either provide the proper support for the currently implemented approach or suggest a more appropriate alternative.

C. Reverse Thrust Emissions from Aircraft Are Not Included in the Draft EIS/EIR Air Quality Analysis.

The Draft EIS/EIR makes an affirmative determination not to address emissions from aircraft reverse thrust operations, ostensibly on the basis of inadequate emission factors and short usage times. Both of these claims are misleading. First, reverse thrust is essentially a high thrust operating mode and emission factors for such modes (i.e., climbout and takeoff) are readily available. Common practice is to use takeoff emission factors. Second, it is true that the time in mode for reverse thrust operations is short, however high thrust modes produce very high unit time NO_x . For example, at a commonly utilized reverse thrust mode time of 15 seconds, overall effective takeoff time would be increased by 35 percent (0.7 minutes plus 0.25 minutes versus 0.7 minutes), which in turn increases NO_x by 35 percent relative to takeoff alone. Since takeoff accounts for about 35 percent of total aircraft NO_x (according to the Draft EIS/EIR), the overall aircraft NO_x inventory could increase by nearly 13 percent simply due to the inclusion of reverse thrust-related emissions. Without some affirmative determination that such operations will be

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prohibited under the action alternatives, reverse thrust emissions should be included in the Draft EIS/EIR air quality analysis.

D. The Applicability of the Construction Equipment NO_x Standard is Overstated.

The Draft EIS/EIR states that only construction vehicles meeting a 2.5 grams per brake horsepower-hour (g/bhp-hr) NO_x standard will be used for airport construction projects by 2005. Furthermore, this requirement will be phased in between 2001 and 2005, beginning at 20 percent of vehicles and increasing at a rate of 20 percent per year. This requirement raises several concerns as it is applied to the construction equipment emissions analysis in the Draft EIS/EIR.

First, the 3.0 g/bhp-hr NMHC+NO_x standard for construction vehicles does not take effect until 2005 for 300-750 horsepower (hp) engines, 2006 and 2007 for 100-300 hp engines, or not at all for engines of other hp. Mandating this equipment beginning in 2001 may or may not be successful and clearly requires some statement of commitment by the regulated parties. Voluntary, so-called Blue Sky Series, engines can be certified by manufacturers before 2005 but there is no requirement to do so (and little incentive since these engines cannot be used in the emissions averaging programs associated with non-Blue Sky engines). In short, construction firms will only be able to provide equipment that is available on the market and it is dubious that the number of engines meeting the suggested standard in the required years will be significant.

Second, the mandatory clean engine standards that do begin in 2001 require NO_x at levels around 4.0 g/bhp-hr (an exact value is not possible since the standard is again expressed as NMHC+NO_x, in this case 4.8 g/bhp-hr). However, these standards also only apply to 300-750 hp equipment. While a number of construction engines fall into this category, many others range from as low as 25 hp up through 300 hp. For these lower hp categories, standards do not begin until 2003 or 2004 and get progressively less stringent as engine size decreases (to 5.6 g/bhp-hr for engines below 100 hp).

Third, even if this low emissions requirement could be enforced (i.e., use of only new Blue Sky Series engines at the Airport), an assumption of 100 percent in-use compliance is overly optimistic. While it is not possible to say with certainty what fraction of equipment may operate at emissions levels above certification standards, experience has demonstrated that engines employing sophisticated engine management strategies and aftertreatment controls (as is expected for these engines) are subject to both malperformances and maintenance effects. For first generation engines, such problems are usually exacerbated. What can be stated with certainty is that construction emissions impacts will be larger than the level acknowledged in the Draft EIS/EIR.

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E. General Emissions Factors for Offroad Equipment are Understated.

In general, it appears that the emission factors employed for offroad engines, even in the absence of the 2.5 g/bhp-hr issue noted above, are significantly underestimated. This underestimation affects not just construction equipment, but both baseline and ongoing Ground Support Equipment (.GSE.) operations, and results from the fact that outdated emission factor sources were utilized. The net effect is that airport emission and air quality impacts are underestimated.

Offroad engine emissions knowledge is currently in a state of rapid development and estimation techniques need to maintain currency with the latest methods. In California, this would imply use of the California Air Resources Board's (.CARB.) OFFROAD emission factor model, while nationally a similar model termed NONROAD has been developed by the U.S. Environmental Protection Agency (.EPA.). While development continues on both, they clearly represent the most up-to-date compendiums of current offroad engine emissions estimation techniques. For example, these models employ the most recent emission factor test data, emissions deterioration test data, and equipment size and activity factors. References cited in the Draft EIS/EIR, such as the EPA's AP-42 and Procedures for Emissions Inventory Preparation documents as well as the SCAQMD's CEQA Handbook, employ less developed and seriously outdated data.

An example of the magnitude of the emissions underestimation can be derived by comparing emission factors across the alternative methods. The Draft EIS/EIR relies on the use of EDMS to generate GSE emission estimates. However, EDMS includes significantly outdated GSE emissions data.²⁰ A quick comparison indicates that CARB OFFROAD model and EPA NONROAD model GSE (average) emission rates (for the same equipment activity distribution assumed in the EIS/EIR) are, for diesel equipment, from 7 to 13 times greater for VOC, 5 to 10 times greater for PM, 5 to 9 times greater for CO, 4 to 5 times greater for NO_x, and 4 to 5 times greater for SO₂. For gasoline GSE, the models produce average emission rates 10 to 20 times greater for VOC, 1 to 6 times greater for PM, 15 to 16 times greater for CO, 6 to 9 times greater for NO_x, and 2 to 4 times greater for SO₂. The impact of using outdated emission rates is clearly significant and should be reevaluated if realistic air quality impacts are to be derived.

²⁰ This may be improved in the latest version released subsequent to the completion of the Draft EIS/EIR.

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F. Ground Support Equipment Populations Are Not Appropriately Specified.

The Draft EIS/EIR uses the FAA's EDMS model to estimate GSE emissions. An inherent assumption within this approach is that EDMS properly estimates GSE populations. Since the current GSE population at the Airport is known, it would be appropriate to determine whether EDMS assumptions are consistent with the Airport's actual population and use-hour statistics. This would provide support for the validity of EDMS equipment estimation algorithms and allow for a more appropriate assessment of the accuracy of the GSE emissions estimates and air quality impacts of the Draft EIS/EIR.

G. Emissions Benefits of Conversion of GSE to Electric, Hybrid, and Alternative Fuels are Overstated.

The Draft EIS/EIR contemplates a widespread GSE replacement program under all three of the action alternatives, while retaining primarily fossil fuel powered GSE for the No-Action/No-Project Alternative. While this could be construed as a mitigation measure and, in fact, is listed as the single most effective mitigation measure on the list of potential mitigation measures included in the Draft EIS/EIR, it is arbitrary to apply the measure only to the action alternatives, as there are no specific constraints to such substitution today or under the No-Action/No-Project Alternative. Electric GSE is cost effective from a market standpoint today. Therefore, whatever incentive or mandate will be offered under the action alternatives to move toward electrification could just as readily apply today. The infrastructure modifications are relatively modest and implicate no limitation of use to any of the action alternatives. But by far the most troubling issue is that the replacement program already appears to be accounted for in the unmitigated emission estimates for all three action scenarios. If this is the case, no additional emission reductions will be achieved through GSE electrification.

H. Incorrect Aircraft PM Emission Factors Are Used in the Draft EIS/EIR Air Quality Analysis.

Two issues exist with respect to the PM analysis that result in an underestimation of the Project's potential air quality impacts. First, it appears that the Draft EIS/EIR is based on the incorrect emission factors from the analysis undertaken to develop those factors. Second, it appears that the approach used to develop PM emission factors for aircraft²¹ produces estimates that are not consistent with previous PM emissions testing results.²²

²¹ The International Civil Aviation Organization emissions certification process does not include PM.

²² Adjustments not employed in the Draft EIS/EIR may compensate for most of this

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Analysis of PM emission factor estimation reveals that the basic estimation approach used in the Draft EIS/EIR yields an emission factor that only considers the basic non-volatile portion of particulate. An adjustment factor (that varies with fuel sulfur content) exists and should be used to correct the estimate to total PM. This factor is calculated to be about 2.6 for low sulfur (about 70 ppmW) jet fuel and 14.7 for high sulfur (about 675 ppmW) jet fuel.²³ Since existing EPA data demonstrates that U.S. jet fuel averages about 600 ppmW sulfur, the appropriate adjustment factor for the Draft EIS/EIR would be about 13.2. However, from figures presented in the Draft EIS/EIR, it appears that the unadjusted emission factors were used for all emissions analysis. If so, PM emission impacts are significantly underestimated and should be reassessed after applying an adjustment to increase the PM emission rate by a factor of 13.

In addition there is a potential deficiency in the approach employed to estimate PM emission factor data. The underlying need for a statistical estimation technique such as that employed cannot be disputed as the available PM emissions testing database is both small and dated. However, the Draft EIS/EIR statement that the age of that data renders it valueless are questionable. Engine technology has advanced relative to the engines represented in the test database, but the fundamental combustion characteristics that give rise to PM formation have not. While advances in reducing one (or multiple) pollutant(s) have occurred, those advances do not come without penalties in regard to other pollutants. For example, several low emission combustors are marketed for aircraft and these do result in substantially reduced NO_x production relative to standard combustor engines. However, they also generate significantly increased HC and CO emissions as a tradeoff. The additional claim that the existing aircraft emission factors are not of value since they reflect total PM as opposed to PM-10 is without merit. Virtually 100 percent of combustion-related PM is PM-10, so any error resulting from the substitution of total PM for PM-10 will be insignificant. In fact, the PM emission factor estimation approach employed in the Draft EIS/EIR requires an assumption of equivalency between total PM and PM-10.

If relationships between aircraft PM and another pollutant can be developed in one or more operating modes, then values for the independent pollutant can be used to estimate PM emission rates in that mode or modes. Such a statistical approach can take advantage of the limited existing PM emissions database while at the same time recognizing the substantial progress that has been made in aircraft engine performance. It is, however, critical that such

deficiency.

²³ This calculation is based on data presented in the Draft EIS/EIR.

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relationships consider possible mode-specific differences, as engine and combustion efficiency vary substantially across modes. For example, one would expect PM emission rates to be inherently low in high efficiency (high NO_x) modes of operation since the same high temperature, high pressure conditions that give rise to high NO_x also favor more complete fuel combustion. Conversely, they would be high in low efficiency combustion modes. It is not clear, however, that the significance of the inter-species relationships are invariant across the full range of operating modes.

A very strong statistical relationship between measured PM and the inverse of measured NO_x is observed in three of the four standard operating modes (approach, takeoff, and climbout), with coefficient t statistics all significant at 99-plus percent confidence. A strong coefficient can also be observed for the taxi mode, but it explains virtually none of the observed variation in PM and NO_x (whereas variance explanatory significance exceeds 99 percent confidence for the other three modes). The magnitude of the relationship coefficients varies from 28.4 in takeoff mode to 45.0 in climbout mode and 33.0 in approach mode. While all three modes exhibit significant relationships, takeoff mode serves as a good relationship basis as it statistically produces the smallest root mean square error based on regression data (an error 35 to 40 percent lower than those of climbout and approach modes). With this lynchpin to the ICAO emissions database in place, PM emission rates for the other three modes (climbout, approach, and taxi) can be developed based on observed statistical relationships with takeoff PM (i.e., PM-to-PM regressions across modes). Linear coefficients for all three modes (1.42 for climbout, 1.53 for approach, and 3.10 for taxi, all in pounds per thousand pounds fuel burned space) are significant at 99-plus percent confidence, with adjusted correlation coefficients for climbout and approach at 0.78 and 0.83 respectively. Taxi mode correlation is poor, but the PM-to-PM relation does account for the observed variance at greater than 99 percent confidence.

The net result of this calculation is a determination that this alternative approach produces PM emission rates that are 4 to 37 times higher than those used in the Draft EIS/EIR. The smallest differentials are observed at the highest thrust modes, and differentials potentially grow with reducing thrust because the Draft EIS/EIR approach does not take operating efficiency differentials between modes into consideration. Nevertheless, for a typical LTO cycle (as per Draft EIS/EIR times-in-mode), the aggregate PM emission factor will be underpredicted by a factor of 17 using the Draft EIS/EIR approach. The effect on PM air quality analyses is obvious.²⁴

²⁴ Interestingly, if the appropriate carbon-to-total PM emission factor correction of 13.2 is implemented as suggested in the support material for the Draft EIS/EIR, the bulk of the emission factor differentials between the two estimation approaches virtually disappear (i.e., a correction factor of 13 versus an underestimation factor of 17 for an aggregate LTO). Nevertheless, significant differences would still exist on a mode specific basis.

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I. Aircraft SO₂ Emissions are Underpredicted.

The Draft EIS/EIR relies on version 3.2 of the EDMS model to predict aircraft SO₂ emissions. This model underestimates aircraft SO₂ emissions by a factor of two due to reliance on an incorrect AP-42 emission factor (the factor was developed without accounting for the factor of two ratio between SO₂ mass and fuel sulfur mass). To the extent that the Draft EIS/EIR already demonstrates potential ambient SO₂ concerns, those concerns would be exacerbated by this underprediction.

J. The Assumption of Gate-Based Power and Air for All Aircraft is Questionable.

The Draft EIS/EIR assumes that 100 percent of air carrier gate power and conditioned air needs will be satisfied by gate-based electrically powered systems as opposed to fossil fuel powered auxiliary power units (APU) or GSE. Experience has shown that even under conditions where gate-based equipment is available, not all airlines or aircraft will utilize it consistently. This seems to be especially true for quick-turnaround airlines such as Southwest. Although the assumption of 100 percent availability and usage affects the no action and action scenarios equally, it is important from an ambient air quality perspective to account for the full range of expected emissions. Without some definitive airport policy that gate-based systems (both power and air) be used and that any on-board APU be shut down until needed for main engine startup, the Draft EIS/EIR would present a more realistic assessment of aircraft emissions if it adjusted the percentage of gate-based system usage to match currently observed use rates at the Airport.

K. APU Emission Factors for SO₂ and PM Not Considered.

APU emission factors for both SO₂ and PM are assumed to be zero. This results from deficiencies in the EDMS model and should be corrected to properly estimate aircraft-related air quality impacts. SO₂ emissions are a function of fuel sulfur and emission rates can be readily calculated and applied. APU PM emission rates can be developed using the same methodology applied to main aircraft engines. The potential impacts of this deficiency would be magnified were the Draft EIS/EIR to properly attribute some fraction of gate power and air support to APU.

L. Aircraft Taxi Times are Not Included in the Draft EIS/EIR or Supporting Data.

Aircraft taxi-idle times are not included in the Draft EIS/EIR, its technical appendices or supporting documentation.²⁵ It can be deduced from the included emissions estimates for aircraft

²⁵ The Draft EIS/EIR contains references to the development of the taxi/idle times using SIMMOD, but no actual indications of what those times were.

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taxiing that those emissions decrease substantially under the action scenarios, but the actual times should be included to allow the public an opportunity to better evaluate their propriety. In addition, the ability of SIMMOD to accurately estimate aircraft taxi times must be demonstrated by comparing SIMMOD predictions for current conditions at the Airport to observed taxi times at the Airport. The issue of aircraft taxi times is critical. The bulk of Aircraft VOC and CO emissions are generated during taxiing. In addition, although NO_x emissions rates are low during taxiing, the amount of time spent in taxi mode results in a significant contribution to overall NO_x emissions. Clearly, it is important that taxi times be accurately modeled. However, sufficient information is not included in the Draft EIS/EIR to determine that accurate modeling occurred.

M. The Project's Conformity Cannot Be Determined from Data and Analysis Contained in the Draft EIS/EIR.

Even without consideration of the various issues noted above, the Draft EIS/EIR presents several air quality concerns relative to the NAAQS/CAAQS under the Preferred Alternative. Although a series of mitigation measures are discussed and preliminary emission reduction estimates presented, these estimates are not documented and methodologies cannot be evaluated. The Draft EIS/EIR defers formal review of potential mitigation measures until a Final EIS/EIR is developed. Similarly, the Draft EIS/EIR acknowledges the applicability of federal conformity requirements, but defers both the conformity analysis and a proposed conformity determination to the Final EIS/EIR. Unfortunately, such an approach makes it impossible to comment constructively on either potential emission mitigation measures or the conformity process, since these processes will be released for comment only after the underlying decision-making has been finalized.

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V. THE DRAFT EIS/EIR'S ALTERNATIVES FAIL TO SATISFY THE PURPOSE AND NEED FOR THE PROJECT.

The mandate to evaluate and compare alternatives is the heart of an EIS (CEQ Guidelines, . 1502.14). FAA Order 1050.1D, paragraph 63, implementing NEPA, mandates that an EIS shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action. The FAA Order further requires that the EIS Alternatives analysis include a rigorous exploration and objective evaluation of all reasonable alternatives. Courts have concluded that to be reasonable, the suggested alternatives must meet the goals of the proposed action.²⁶

The Draft EIS/EIR.s alternatives analysis fails to meet the stated goals of the Project. The Draft EIS/EIR states that the general [p]urpose and objectives of the Master Plan are to provide... sufficient airport capacity for passengers and freight in the Los Angeles region to sustain and advance the economic growth and vitality of the Los Angeles region. (Draft EIS/EIR, volume 1, pg. 2-1) More specifically, the Draft EIS/EIR outlines three objectives which the Project needs to satisfy: (1) .to respond to the local and regional demand for air transportation during the period 2000 to 2015, taking into consideration the amount, type, location, and timing of such demand.; (2) .to ensure that new investments in airport capacity are efficient and cost-effective, maximizing the return on existing infrastructure capital.; and (3) .to sustain and advance the international trade component of the regional economy and the international commercial gateway role of Los Angeles..²⁷

It is not clear, however, that the proposed runway improvements that form an integral part of Alternative C, the Preferred Alternative, constitute a superior, or even an efficient way to accomplish the Project.s stated purposes. For example, all three of the Project.s objectives could potentially be, at least partially, achieved through airspace/air traffic modifications, both within the terminal airspace and in the en route system. This alternative is neither acknowledged nor explored in the Draft EIS/EIR. Nevertheless, this conclusion is supported by the fact that the Dual Civet arrival configuration has reduced arrival delay for operations from the east significantly since 1998 and has resulted in an average time-savings of 4.4 minutes per Civet

²⁶ See, generally, City of Carmel-By-The-Sea v. United States DOT, 123 F.32 1142 (1997); National Wildlife Federation v. Federal Energy Regulatory Commission, 912 F.2d 1471 (1990).

²⁷ Id.

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turbojet arrival aircraft. In fact, since the Dual Civet arrival procedures were implemented, there have been no national delay programs set up for the Airport, since delay has not been an issue. However, the Draft EIS/EIR does neither address nor incorporate the capacity or delay reduction efficiencies gained through this procedure in any of its modeling.²⁸

Moreover, a closer examination of the Master Plan and the Draft EIS/EIR reveals that the Draft EIS/EIR may have ignored relatively inexpensive improvements in air traffic procedures in favor of very expensive, physical changes to the airfield. This is apparently because the Project's true purpose does not include the first two claimed in the Draft EIS/EIR, i.e., the broad ones of providing sufficient airport capacity for passengers and freight in the Los Angeles region. (Draft EIS/EIR, Volume 1, page 2-1), in an efficient and cost effective way (Draft EIS/EIR, page 2-1). Instead, the Project's principal purpose is the narrow and singular one of accommodating New Large Aircraft (NLA) that, with their long haul capabilities, would potentially serve the Airport in order to sustain and advance the international trade component of the regional economy. (Draft EIS/EIR, page 2-1)²⁹

This conclusion is substantiated by the fact that the current aircraft fleet does not require 12,000 feet of runway to take off. Even today's heavy aircraft such as the B-747-400 and the B-777-400 only need 8,000 - 10,000 feet of runway for take-off and landing (under the weather

²⁸ Where the Master Plan does address air traffic procedures, it is in error. The Master Plan states that the Departure Sequencing Program (DSP), a program that provides the capability to sequence departures from Los Angeles basin airports, would enhance capacity at the Airport. (Master Plan, 2.6.1.3, page II-2.137) However, the DSP program has been cancelled by the FAA due to a lack of benefit. Essentially, the Southern California TRACON consolidation effort occurred many years ago and the references to it in the Master Plan and the Draft EIS/EIR are outdated. Many innovations and changes in airspace and procedures at the TRACON over the past few years have occurred, and none are referenced or adequately considered in the Draft EIS/EIR. Basically, the Draft EIS/EIR does not address the changes in airspace design or the new routes that have been developed as a result of airspace enhancements in Southern California.

²⁹ The Draft EIS/EIR comes close to admitting as much: Development of NLA aircraft is driven by increasing demand and constrained international gateway airports around the world, including LAX ... Development of the NLA will allow these airports to continue to meet the growing demand for travel between primary trading partners. As one of the three major (and busiest) gateway airports in the nation, LAX would be one of the first airports to be served by NLA. (Draft EIS/EIR, page 2-11)

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conditions prevailing at the Airport). The Airport's existing runways are 8,295-feet, 10,285-feet, 12,091-feet, and 11,096-feet in length. Thus, even the shortest runway at the Airport can accommodate the heaviest and largest aircraft in the fleet under prevailing circumstances today.

The result of the Draft EIS/EIR's failure to acknowledge the Project's primary purpose, i.e., to increase the proportion of super long-haul aircraft in the fleet, is a concomitant failure to analyze the full range and magnitude of environmental impacts that may arise from the desired change in fleet mix. While it is, as yet, early in the NLA development process, some technical facts about the aircraft are already known, sufficient to make at least some educated projections concerning its impact. For instance, ascertaining the projected climb rate will enable an estimate of whether the NLA can meet current airport noise abatement operational requirements; or whether those will have to be altered; or whether the NLA will, ultimately, overfly noise sensitive communities at lower (or higher) altitudes, resulting in higher (or lower) noise levels over those communities. Similarly, preliminary data concerning engine type and emissions characteristics would enable at least a preliminary analysis of the air quality impact of the NLA, as well as the GSE needed to support it, if different from those categories already in use. Finally, the Draft EIS/EIR should have included the capacity/delay impacts from the increased use of NLA. As the Draft EIS/EIR fails to model ground operations in detail, the delay impacts that may result are not considered in developing an accurate analysis of arrival and departure flows and the congestion which may ensue even after Project implementation.

In summary, because the alternatives analysis is the heart of the NEPA process; because the Draft EIS/EIR fails to consider, or analyze, the impacts of eminently reasonable alternatives such as airspace changes to meet the Project's stated purposes; because Alternative C does not alone meet the Project's stated purposes; and because the most significant result of implementing Alternative C, the increased capacity to accommodate NLAs, remains unanalyzed from an environmental perspective, the Draft EIS/EIR's alternatives analysis is seriously flawed.

VI. THE DRAFT EIS/EIR DOES NOT ADEQUATELY SPECIFY MITIGATION MEASURES OR METHODS TO ENFORCE THEM.

CEQA requires that agencies identify the environmental impacts of a project, and implement mitigation measures to lessen the adverse environmental impacts. (CEQA Guidelines 15002 (a)(3)). However, the Draft EIS/EIR fails to comply with CEQA by (1) failing to provide a complete list of mitigation measures, and (2) failing to specify, at a minimum, a Draft Mitigation Monitoring Program to inform the public of how the project proponents intend to ensure the implementation of mitigation measures.

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A. The Draft EIS/EIR Delays Disclosure of the Full List of Mitigation Measures Until the Final EIS/EIR.

CEQA Guidelines .15126.4(a)(1)(B) mandates that the [f]ormulation of mitigation measures should not be deferred until some further time.. While the Draft EIS/EIR acknowledges the existence of significant unmitigable impacts, it also states that, .A final package of design features, Master Plan Commitments, and Mitigation Measures will be developed ... The resulting Environmental Action Plan will be published in the Final EIS/EIR.. (Draft EIS/EIR, Executive Summary, pg. ES-30) By deferring to the Final EIS/EIR to reveal the mitigation measures, the public's opportunity comment will have been attenuated. The SBCCOG, therefore, reserves the right to comment on items, including the Draft Conformity and Mitigation Monitoring Program that should have been included, but were omitted from the Draft EIS/EIR.

B. The Draft EIS/EIR Fails to Provide a Draft Mitigation Monitoring Program.

California Public Resources Code .21081.6 requires that a public agency .adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.. (Cal. Pub. Resources Code .21081.6 (a)(1)). If an EIR .identifies one or more significant environmental effects of the project, . CEQA Guidelines .15091(a) requires an agency to .make one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding.. With these findings, the CEQA Guidelines mandate that .the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.. (CEQA .15091(d))

The Draft EIS/EIR violates CEQA Guidelines .1509(d) and California Public Resources Code . 21081.6 in that it fails to set forth a program that monitors or reports on each mitigation measure. Although the Draft EIS/EIR cites some mitigation measures to combat the environmental impacts of the Project, it makes no mention of the .permit conditions, agreements, or other measures. (CEQA Guidelines . 15091(d)) which would ensure compliance with mitigation measures. In other words, it does not specify the steps necessary to ensure compliance, the responsible party to ensure compliance, or the resulting consequences should compliance not occur.

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VII. THE UNRELATED ISSUE OF SAFETY SHOULD NOT BE USED AS A SMOKE SCREEN TO PUSH THE CAPACITY-DRIVEN DRAFT EIS/EIR FORWARD.

In recent public statements, the FAA and LAWA have introduced the notion that because of its high number of runway incursions, the Airport is unsafe, and that the Project's improvements are critical to remedying the adverse safety conditions.

Contrary to the FAA's contention, however, runway incursions are largely a function of pilot or air traffic controller error, not airport layout and design.³⁰

In fact, the Airport can eliminate runway incursions only if it builds runways with no entrances and no exits. However, simple solutions such as enhanced marking and lighting for runways, increased awareness and training for pilots and controllers, improvements in communications and procedures, and resolving management issues at the FAA³¹ are all basic and available measures that should be implemented at the Airport. In addition, affordable incursion-reducing technologies currently available to the Airport such as the Airport Movement Area Safety System (presently in use at the San Francisco International Airport), which uses radar to alert controllers to potential collisions, would minimize the problem as well.³² In fact, even the

³⁰ A pilot might enter a runway without proper authorization or clearance; a pilot is unfamiliar with an airport, does not hear an instruction, or fails to acknowledge an instruction to hold short of an active runway; a pilot, when approaching an active runway, crosses the hold line for that runway; a controller may clear an aircraft onto an active runway without ensuring that there are no other aircraft operating on that runway; the controller may fail to coordinate an aircraft crossing a runway with the controller who has the responsibility for approving all operations on that runway; a controller may clear an aircraft to cross a runway and the pilot may take an excessive amount of time crossing and may interfere with another aircraft; and the controller may fail to exercise the proper oversight of the operation and allow two aircraft to occupy an active runway resulting in a runway incursion.

³¹ Transportation Department Inspector General Kenneth M. Mead recently told a House subcommittee that the FAA's director of runway safety has little authority over FAA employees who work on runway safety projects. Result: Almost every FAA runway safety project runs years late at more than double the anticipated cost, often failing to meet original expectations. The Washington Post Company, Runway Alert., page A22, July 7, 2001.

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FAA has even pressed the need for instituting technological improvements at airports to combat the runway incursion issue.³³

While recent incidents have made runway incursions a hot button in the eyes of the public, Congress, and aviation organizations, this recently surfaced safety issue cannot serve as justification for a project which otherwise fails to meet environmental standards.

VII. CONCLUSIONS.

Based on the above analyses, the SBCCOG concludes that the Draft EIS/EIR does not serve its most fundamental purpose as an environmental alarm bell to alert the public and responsible officials to environmental changes before they have reached ecological points of no return. (See, e.g., County of Inyo v. Yorty, 32 Cal.App.3d 795, 810 (1993).) Among other things, the varying baselines, selectively applied to areas of potential impact so as to artificially diminish the apparent impacts of the Project; the virtual absence of any analysis of impacts south of the Airport; and the lack of consideration of imminently reasonable alternatives, including air traffic alternatives, to the expenditure of billions of dollars in what are ultimately only marginally effective airfield improvements, require substantial analytic revisions to the Draft EIS/EIR. The SBCCOG further concludes that, after those revisions are made, significant new information will emerge which will require that the Draft EIS/EIR be recirculated (Center Sensible Planning, Inc. v. Board of Supervisors, 122 Cal.App.3d 813, 822 (1981), so that the public, in general, and the SBCCOG and its members in particular, are not denied their statutorily mandated opportunity to test, assess and evaluate the new data and conclusions contained in the revised Draft EIS/EIR, and to make informed judgments as to their validity.

The SBCCOG thanks LAWA for this opportunity to comment.

Sincerely,

³² It is the first surface detection equipment that really gives an alert to the controller and allows the controller to prevent a collision. CNN, Close Calls on Runways Alarm Aviation Experts, June 27, 2001.

³³ The Director of the FAA's Runway Safety Office, Mr. Bill Davis, expressed that he needs additional authority to coordinate and speed up technological improvements. The Washington Post Company, Runway Alert, page A22, July 7, 2001.

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CHEVALIER, ALLEN & LICHMAN, LLP

By:

Consultant
South Bay Cities Council of Governments

AL00025



City of Rolling Hills

INCORPORATED JANUARY 24, 1957

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GODFREY PERNELL, D.D.S.
Councilmember

September 13, 2001

Mr. Jim Ritchie
City of Los Angeles
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Mr. David B. Kessler, AICP
Federal Aviation Administration
P.O. Box 92007
World Way Postal Center
Los Angeles, CA 90009-2007

Re: Comments of City of Rolling Hills on Draft Environmental Impact Statement/Report, LAX Proposed Master Plan Improvements

Dear Mssrs. Ritchie & Kessler:

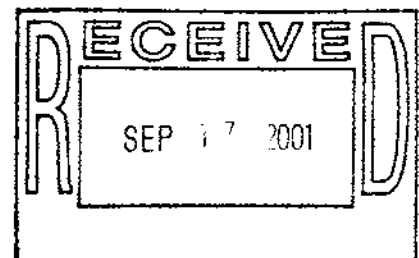
The City of Rolling Hills hereby joins in the comments of the South Bay Cities Council of Governments dated September 4, 2001, pursuant to the requirements of the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*) and the National Environmental Policy Act (42 U.S.C. §§ 4321 *et seq.*) concerning the Draft Environmental Impact Statement/Environmental Impact Report for the Los Angeles International Airport Proposed Master Plan Improvements prepared jointly by the Federal Aviation Administration and the City of Los Angeles. Those comments are incorporated herein by reference as though set forth in full, and represent the City's comments on the above-referenced Statement/Report.

Sincerely,


Jody Murdock
Mayor

JM:mlk
laxeir.ltr

cc: City Council
City Attorney
South Bay Cities Council of Governments

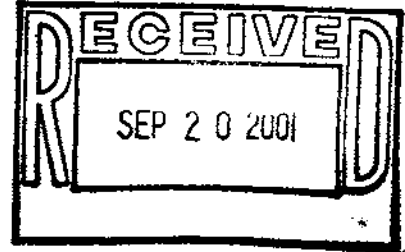




City of El Segundo

August 21, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan / Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216



Elected Officials:
Mike Gordon,
Mayor
Sandra Jacobs,
Mayor Pro Tem
Nancy Wernick,
Councilmember
John G. Gaines,
Councilmember
Kelly McDowell,
Councilmember
Cindy Mortesen,
City Clerk
Ralph Lanphere,
City Treasurer

Appointed Officials:
Mary Strenn,
City Manager
Mark D. Hensley,
City Attorney

Department Directors:
Jim Hansen,
Community, Economic &
Development Services
Bret Plumlee,
Finance
Norm Angelo,
Fire
Jeff Stewart,
Asst. City Manager
Debra Brighton,
Library
Jack Wayt,
Police
Andros Santamaria,
Public Works
Greg Johnson,
Recreation & Parks

Re: Findings of the City of El Segundo LAX Master Plan Advisory Commission Regarding the LAX Master Plan Draft EIR/EIS

Dear Mr. Ritchie:

In 1999, the City Council of the City of El Segundo appointed a seven (7) member LAX Master Plan Advisory Commission (LAXMAC) comprised of local residents to comment on the Draft LAX Master Plan EIR/EIS. The Commission's specific charge was to conduct a series of public hearings to receive testimony regarding the proposed airport expansion's impact on the "quality of life" in the El Segundo community. Toward that end, the Commission held public hearings and received testimony during the months of March and April 2001. The following is a summation of the information gathered during those hearings. Please note that the law firm of Shute, Mihaly & Weinberger will be preparing comments on behalf of the City Council of the City of El Segundo. It is anticipated that those comments will cover a vast array of issues. The primary purpose of this Commission is to communicate to the City of Los Angeles and the Los Angeles World Airports the impact of airport expansion on "quality of life" and "livability" standards in the community.

General Deficiencies In Published Draft EIR/EIS Document

LAXMAC has determined that the Draft EIR/EIS document distributed by Los Angeles World Airports (LAWA) is a superficial document that is deficient in a number of critical areas. For example, the report itself forces the reader to review appendices and technical reports in order to determine the intent and scope of the airport expansion project. However, to complicate matters further, many of the appendices are simply missing, or somehow unusable. One almost humorous example of the latter is one of the appendices in which all of the characters have been transposed and appear backward to the reader. The overall impact of such

deficiencies is to cast doubt on the legitimacy and competency of the core document as a basis for airport expansion. The examples are numerous and will be pointed out elsewhere. As such, LAXMAC will not dwell further on that aspect of the document.

LAXMAC seeks to point out as well that a primary basis for the Master Plan and Draft EIR/EIS is absent in that it is not premised on a comprehensive airspace traffic management study. It is the understanding of the Commission that such a study has been initiated by the Federal Aviation Administration (FAA). However, it has not been possible to determine the present status of that undertaking. As such, LAXMAC has concluded that the Draft EIR/EIS, in its current form, is a fundamentally flawed document that cannot be implemented without major revisions and additions.

With respect to the last point, LAXMAC believes also that the airport, absent a viable Master Plan and required Final EIR/EIS, seeks mainly to continue to grow incrementally, much as it has for the past twenty years. Accordingly, LAXMAC seeks minimally to cap LAX at 68 MAP. The members of the Commission will seek to initiate appropriate measures, including legislative remedies to ensure an enforceable limit on the number of travelers served by LAX.

Draft EIR/EIS Inaccurate In its Estimates of Number of Passengers Utilizing LAX

The Draft EIR/EIS estimates that under the no action/no project scenario, LAX would serve 78.7 Million Annual Passengers (MAP). With 165 gates, that number equates to 477,000 passengers/year/gate on average. Currently, some gates at LAX serve over 800,000 passengers per year. If all current gates handled that passenger volume, LAX would serve 132 MAP. Granted, the existing roads, runways and support services may not be capable of handling 800,000 passengers/gate/year, and the terminals will not have the space to accommodate that volume. However, in all other options, including the preferred "Option C" scenario, the terminal square footage doubles at least, and could run as high as 2.5 times the existing square footage. Therefore, it is logical to conclude that the concomitant construction of a ring road, remote terminals, better rail access, and new gates in larger modernized terminals, that LAX would serve 800,000 passengers/gate/year. Thus, the estimate by LAWA that, under Option C, *only* 89.6 MAP could or would use LAX is a gross understatement.

With no controls on the number of passengers served, LAX will soon exceed 89 MAP just as it exceeded the 40 MAP estimated in the 1978 EIR prepared prior to the last major expansion of the airport. LAX is currently accommodating approximately 50% more passengers than the 1978 estimate. If allowed to proceed with the construction of Option C (or A or B), it is, frankly, inevitable that LAX will soon be serving over 100 MAP. As such, the Draft EIR/EIS does not adequately address the transportation demands on the streets of El Segundo (and surrounding communities), or the levels of pollution that will affect the air, land and water surrounding the airport. It is worth noting that currently LAX is the *second* most prolific NOx emissions producer in the State. The expansion of the airport would serve only to exacerbate that situation. LAXMAC urges that LAWA revise the Draft EIR/EIS and utilize realistic estimates of the impacts stated above.

Draft EIR/EIS is Deficient in its Assessment of Traffic Impact Impacts

With respect to traffic issues, the first concern noted by LAXMAC is that the Draft EIR/EIS does not adequately address the impact of the construction of an airport "ring road" on the quality of life enjoyed by those living and working in El Segundo. The planned closure of Pershing Drive to north/south traffic would have significant impact on other major north/south thoroughfares in the community, such as Sepulveda Boulevard, Vista Del Mar Drive and Aviation Avenue. The ring road would also present major and, heretofore, unexamined challenges to those trying to access El Segundo via Main Street. Currently, the only direct access to the residential western portion of the community is Main Street via Imperial Highway. It is not clear in the Draft EIR/EIS how the ring road will interact with Imperial Highway, and it is impossible to envision a scenario in which there will not be significant and permanent deleterious impacts on the residential portion of the community resulting from the construction of the ring road.

The Draft EIR/EIS discusses a 1.5 mile westward extension of the 105 freeway connector along Imperial Highway. The right-of-way would separate from the north, and a future roadway would replace Imperial Highway west from Sepulveda Boulevard. In addition, the document discusses the construction of a new interchange at Sepulveda Boulevard by 2004. Obviously, that plan would entail significant construction and traffic diversion efforts. However, there is no discussion on the impact of business and residential property during the construction, and it is not clear what property, either north or south of Imperial Highway, would need to be vacated to accommodate the construction of the ring road and the westward extension of the 105 Freeway. Since El Segundo borders the southern boundary of this particular aspect of the proposed LAX Master Plan expansion, LAXMAC remains concerned that the community of El Segundo would suffer a disproportionate share of the dislocation that might result. LAXMAC has concluded that the Draft EIR/EIS should be revised to include specific addenda discussing the unanswered details and impacts of the ring road construction, the 105 extension and elimination of Pershing Drive.

The Draft EIR/EIS analyzed only 61 intersections, with an additional 15 selected for more detailed study. While LAXMAC has determined that number to be artificially low, the problem is compounded by the fact that only nine of the 76 total intersections studied are located south of LAX. The rationale for that decision, as cited in the Draft EIR/EIS, stated erroneously that "south of LAX, there is a higher percentage of LAX traffic on I-405 and a lower percentage on the arterials, indicating that airport traffic is staying on the freeway as desired..." That assumption is supported by the equally specious statement that it is "more a result of the roadway network south of LAX. There are no alternative arterial routes that closely parallel I-405 south. In fact, south of LAX, all major arterial routes change to a north/south orientation, while I-405 south of Rosecrans Avenue, continues in a northwest/southeast direction."

Such assertions, frankly, serve only to undermine LAWA's credibility. To assert that travelers will sit in gridlock on the I-405, rather than exit the freeway to utilize Sepulveda Boulevard, Aviation Boulevard and/or other north/south thoroughfares is ludicrous. To set the record straight, LAXMAC offers the following:

- The I-405 is approximately 2.5 miles east of Sepulveda Boulevard at Artesia Boulevard. Artesia Boulevard is approximately 5 miles south of LAX. Accordingly, Sepulveda Boulevard, south of the freeway is an extremely viable alternative to northbound traffic headed toward LAX.
- More than 20% of travelers utilizing LAX live in Orange County. Virtually all of those individuals utilize the I-405, or alternative northbound routes such as Sepulveda and Aviation Boulevards, to access LAX. Therefore, LAXMAC has determined that LAWA's decision to study only nine intersections south of LAX in the Draft EIR/EIS is simply inadequate. LAXMAC requests that the Draft EIR/EIS be amended to include a more thorough examination of traffic impacts south of LAX.

LAXMAC notes also that since the release of the Draft EIR/EIS, the Arbor Vitae/I-405 project has been removed from the Regional Transportation Plan. Accordingly, it is logical to question the potential sources of funding for that project. Given that project's current non-status, it will not be eligible for Federal and State funds previously thought to be available. Therefore, LAXMAC questions the viability of the ring road concept if funding for a significant portion of that project (e.g. the Arbor Vitae/I-405 project) is not available. LAXMAC requests LAWA to amend the Draft EIR/EIS to reflect the potential that the ring road concept may never be realized.

From a more regional perspective, LAXMAC is also concerned that the Draft EIR/EIS fails to appropriately analyze regional traffic impacts of large planned developments, such the Playa Vista mixed-use project and the intended transition of Hawthorne Airport to a regional shopping center. The traffic impacts from the Playa Vista project alone will impact Sepulveda, Jefferson and Culver Boulevards in a significant manner. To simply not mention such projects is not acceptable. LAXMAC, in turn, requests LAWA to amend the Draft EIR/EIS to reasonably analyze the regional traffic impacts of the Playa Vista project and the planned transition of Hawthorne Airport to a retail use.

Draft EIR/EIS Does Not Establish Appropriate Baseline Years For Analysis

Upon review of the Draft EIR/EIS, LAXMAC has determined that the document utilizes a variety of baseline years for the analysis of separate aspects of the proposed Master Plan expansion project. For example, documentation in the environmental analysis describes existing conditions as of 1997. The "Technical Report on Surface Traffic" appears to pull a full year's data from 1996, and perhaps most troubling, LAWA cites 1994 and 1996 as the baseline years for noise analysis. In short, the use of multiple baseline years is troubling because it makes it all but impossible for the public to determine which year is being used for the different analyses. Even more disturbing to LAXMAC, however, is the appearance that the multiple baseline years were used for the purpose of manipulating the results of the various analyses in an effort to minimize the impacts of the proposed expansion of LAX.

LAXMAC objects specifically to LAWA's decision to use 1994 and 1996 as the baseline years for analysis regarding the impacts of airport noise. The decision to use those years serves to artificially raise the baseline for analysis by incorporating the noise generated by the large number of Stage 2 aircraft used by commercial carriers at that time. Stage 2 aircraft were totally phased out of use by commercial carriers in the United States by the year 2000. Accordingly, it is not inappropriate to assume that the numbers of the noisier aircraft utilizing LAX decreased significantly every year between 1994 and 2000. Thus, LAXMAC has determined that 1994 and 1996 were selected purposely to present baseline data suggesting a noisy status quo and to make the argument that the impacts of airport expansion (with larger numbers of quieter planes) would not significantly influence the existing quality of life for El Segundo residents. LAXMAC, for the record, patently rejects the use of 1994 and 1996 as the baseline years for noise analysis and requests LAWA to revise the Draft EIR/EIS by conducting additional noise analysis using current and relevant data.

It should be noted also that members of LAXMAC have significant concerns regarding similar inconsistencies regarding the use of "baseline years" for analysis throughout the entirety of the Draft EIR/EIS. However, it is clear that other agencies, not the least of which being the City Council of the City of El Segundo, will comment extensively on that particular deficiency regarding LAWA's choice of methodologies in preparing the document. In the interest of brevity, LAXMAC's comments on such matters will be limited to that stated above.

Draft EIR/EIS Fails To Properly Analyze Risks Posed by Hazardous Materials

The last comprehensive audit of hazardous waste production at LAX was completed in 1988. At that time, LAX was producing 278,000 gallons of hazardous waste annually. Because those findings are thirteen years old, it is impossible to utilize that data as a baseline to estimate waste generation at LAX in the year 2015. With fuel consumption of 169 million gallons per year, and increasing with every flight added to the current arrival and departure list, the fuel waste alone during the past thirteen years has increased exponentially. If one adds to those numbers the amounts of liquid and solid hazardous waste generated by facility maintenance operations and the increased aircraft servicing which would result from the proposed expansion, the issue of managing such materials becomes an enormous problem – a problem simply not addressed adequately by the Draft EIR/EIS.

The potential for negative impacts to the environment resulting from a natural disaster, or "spill," remains extant. The plans to construct a new central utility plant, which would hold an additional 700 gallons of sulfuric acid beyond that which is currently being stored at LAX, only adds to such concerns. In addition, the Draft EIR/EIS fails to address properly a plan to construct an additional 5 million gallons of on-site fuel storage at the intersection of Sepulveda Boulevard and Imperial Avenue. The construction of such facilities at that location poses additional risks to the resident and business communities of El Segundo over and above the current situation in which 26 million gallons of fuel are stored at LAX. Granted, the concerns of LAXMAC are expressed from the perspective of a "worst case scenario" outlook. Nonetheless, the Commission maintains that it is valid point of view that should have been addressed in the Draft EIR/EIS.

Finally, with respect to the hazardous waste situation at LAX, it should be noted more than thirty different sites at LAX have been contaminated by hazardous materials releases. Eleven of those releases "may have" resulted in groundwater contamination. The Draft EIR/EIS establishes no projections of possible contamination or public exposure because LAWA has never undertaken a study of hazardous materials releases at LAX. In turn, LAXMAC has concluded that prior to expanding LAX, it would be prudent for LAWA to plan fully for issues that may arise from the hazardous materials currently generated and stored at LAX.

Draft EIR/EIS Utilizes Flawed Air Quality Modeling Data and Emissions Profiles

The Draft EIR/EIS air quality modeling data and emissions profiles are flawed. The flaws are due to assumptions that underestimate the levels of pollutants generated through construction and day-to-day transportation. An examination of the data shows that liberal assumptions were made when a slightly more conservative approach would have provided a more realistic picture of the associated emissions. For example, the construction related emissions excluded solvent emissions from asphalt cut-back. The models assumed a new solvent-free asphalt cut-back would be utilized during all construction phases of the proposed expansion. However, neither cost nor availability analyses were performed to determine if this type of cut-back would be available in the quantities that would be required upon implementation of the plan. Similarly, there was no discussion of the cost-efficiencies having to purchase what might prove to be scarce materials. A more realistic approach would have assumed that the standard asphalt cut-back, representing current industry standards, would be utilized in the proposed construction. Accordingly, LAXMAC requests that such supporting data be amended to include the emissions that would result from that more reasonable assumption.

Another example of flawed modeling data can be seen in the transportation model assumptions. The overall average speed for vehicles assumed by the transportation models is 30 MPH. LAXMAC has concluded that such a number is unreasonably high, especially when current data indicates that average traveling speeds on the I-405 are expected to drop to 12-18 MPH by the year 2015. Additionally, LAXMAC feels that the tenuous viability of the "ring road" also serves to undermine such average speed estimates and that congestion at the existing east terminal is expected to continue as the volume of passengers increases. The overall effect of such trends, of course, is the reduction of average speeds, and lower average speeds would have the effect of increasing the amount of emissions generated by the vehicles on the roads supporting LAX. Accordingly, LAXMAC has concluded that the modeling data should be amended to include this likely reduction in average vehicle travel speeds.

In addition, reliable air toxics studies have not been performed in and around LAX. Without such accurate real time data, all of the models are forced to make general assumptions regarding the existing condition of the air quality. The perceived increase in air pollutants and their potential impact on the environment is based completely upon assumption and computer modeling. There is no corresponding feedback from physical studies conducted in the area which would verify the models as being realistic. In turn, LAXMAC requests that such modeling data be reconfigured to include validation from air toxics studies conducted in and around LAX.

Until the computer generated air pollution models are given realistic assumptions and validated by physical data gathered in the field, the Commission places no confidence in the results of the models used in the Draft EIR/EIS.

Draft EIR/EIS Fails to Properly Analyze Noise Impacts

During the public hearings conducted by LAXMAC in March and April 2001, several residents of El Segundo complained that the increase of single noise occurrences (usually in the early morning hours) resulting from specific aircraft operations were more detrimental to the quality of life in surrounding communities than the overall increase of noise resulting from the increased number of aircraft operations occurring at LAX. In light of those concerns, LAXMAC noted that the Draft EIR/EIS analyzed only average noise levels and concluded that the construction of Alternative C “ would reduce the total number of people exposed to aircraft noise above 65 CNEL compared to current conditions...” In addition to the concerns stated earlier with regard to the use of inappropriate baseline years, LAXMAC has determined simply that an increase in aircraft operations resulting from *any* expansion of the airport will lead to an increase in single noise events that significantly exceed the 65 CNEL threshold. In an effort to obtain an accurate account of true noise impacts that adversely affect the residents of El Segundo, LAXMAC requests that the Draft EIR/EIS be amended to reflect all noise impacts resulting from increased airport operations, and not an analysis of average noise levels occurring throughout the day. LAXMAC has concluded that, in fact, current conditions indicate an increased number of people exposed to *periodic* noise levels exceeding 65 CNEL.

Perhaps more troubling to the members of LAXMAC was LAWA’s failure to address appropriately noise issues specific to children living in communities adjacent to LAX. Beginning in 1980, studies of children who attend schools in the vicinity of LAX demonstrated several disturbing facts. For example, UC Irvine researchers found that children attending schools in the vicinity of LAX experienced higher-than-normal levels of hypertension and loss of motivation. That study showed that children attending schools impacted adversely by airplane noise failed to complete exercises appropriate to their ages and cognitive skill levels more often than similar children who attended schools in quieter neighborhoods. The members of LAXMAC feel that such studies demonstrate that while short term impacts of aircraft noise may be difficult to measure and address, it is clear that there are negative impacts to long-term exposure to aircraft noise. Accordingly, LAXMAC requests that LAWA amend the Draft EIR/EIS and include appropriate analysis and mitigation measures aimed at addressing the long-term psychological and physiological impacts on children attending schools in communities adjacent to LAX.

Additional Deficiencies Noted In Draft EIR/EIS

The members of LAXMAC were troubled by the fact that the Draft EIR/EIS failed to discuss a number of viable issues surrounding the operation of LAX. Those omissions range from a failure to examine current technologies improving operations at the airport to the failure to

discuss a regional approach in meeting the air traffic demands of the Southern California region to the failure to adequately address the handling of air cargo entering the region.

With respect to the first issue, LAXMAC has determined that the Final EIR/EIS developed by LAWA must include a viable consideration of remote baggage handling and ticketing for passengers utilizing LAX. As discussed previously, the Draft EIR/EIS is egregiously deficient in its discussion of the current traffic issues in the areas surrounding LAX, let alone analysis of future traffic impacts resulting from the proposed expansion. It is the Commission's point of view that any objective analysis of traffic issues would lead logically to the implementation of an offsite remote ticketing and baggage handling system for travelers utilizing LAX, and an effective method of moving people from the remote site to LAX, such as an "automated people moving" system.

LAXMAC recommends specifically that LAWA examine the potential of establishing remote passenger check-in, ticketing and baggage handling facilities next to the 405 Freeway, Continental City and Manchester Square with ample parking to accommodate up to 15,000 automobiles, rental car facilities and hotel shuttles. That concept is in keeping with the commitment of the Federal Aviation Administration (FAA) to promote such facilities, as demonstrated by the significant grant money being made available by that agency for remote facilities serving airport passengers. Currently, the Commission is aware of a \$2 million grant to create the software needed to manage remote passenger handling.

LAXMAC also recommends strongly that the Draft EIR/EIS be amended to include discussion of a regional airport approach in Southern California. This issue should be very familiar to LAWA, since it has been a cornerstone of the City of El Segundo's opposition to the current LAX Master Plan approach for airport expansion. As such, the Commission will not dwell on issues that have been and will be articulated more completely by the El Segundo City Council. Nonetheless, the Commission does request formally that the final EIR/EIS document include a credible analysis regarding the utilization of existing airport facilities in El Toro, Palmdale, Ontario, Long Beach, Point Mugu, Riverside, Orange County, Palm Springs and San Bernardino. Frankly, the Commission is bewildered by the seeming intransigence of LAWA in forcing the burgeoning populations living north, south and east of LAX to utilize the I-405, one of the most congested traffic arteries in the world, to use an already crowded airport located at the extreme western edge of the region. That attitude is inexplicable when one considers the availability of functioning airport facilities throughout the region that could accommodate large portions of the anticipated demand for air travel.

With respect to those concerns, LAXMAC recommends specifically that Draft EIR/EIS be amended to consider the beneficial impacts of shifting cargo operations to Ontario International Airport. That concept would serve to mitigate many of the concerns stated by LAXMAC and it would protect LAWA's share of revenues derived from cargo operations utilizing their facilities. LAXMAC has concluded that warehousing and transportation facilities required for increased cargo operations at ONT are currently in place, and that the Draft EIR/EIS will remain significantly deficient until that option is analyzed adequately. Additionally, LAXMAC

recommends that the Draft EIR/EIS be amended to examine the beneficial impacts of instituting an increase in "peak hour" landing fees in an effort to provide incentives to airlines to utilize Ontario Airport and other regional facilities, especially for cargo operations. That option has been espoused by the Secretary of Transportation and is supported fully by LAXMAC.

Additionally, LAXMAC requests that LAWA discuss realistically the longstanding bromide that airports have no control over the numbers of planes that seek to land in their facilities. While it is true that deregulation has resulted in limited control over how much access commercial carriers have to airport facilities, there is limited credence to LAWA's view that it cannot stop them from coming. It is certain that LAWA has the power to create economic incentives for airlines to utilize its other facilities in the region - namely Ontario and Palmdale.

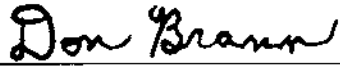
Draft EIR/EIS Seeks To Promote Plan And Not Analyze Alternatives

Finally, the members of LAXMAC have concluded that the Draft EIR/EIS is a document which seeks to promote the ambitions of LAWA with respect to the expansion of LAX, as opposed to being a true study of the alternatives available for handling the Southern California region's air traffic needs. As indicated previously, the Draft EIR/EIS contains little or no study of the regional airport approach promulgated by more than 100 cities and local governmental agencies, increased peak hour landing fees or remote passenger check-in and ticketing centers located away from the airport. As such, LAXMAC has determined that the study is, at best, incomplete, and, at worst, not germane to LAWA's ambitions regarding LAX. The members of LAXMAC in this comment letter have requested several additional areas of study that must be addressed in the Final EIR/EIS issued by LAWA. However, it appears to this Commission, that such issues shall never see the light of day. LAXMAC believes strongly that the Draft EIR/EIS was never intended to be a document that will guide the future development of LAX.

Instead, the Commission believes that LAWA will ultimately release an equally flawed Final EIR/EIS pertaining to the expansion of LAX, and that it will be litigated, criticized by its many opponents and, in the end, never implemented. And, while that issue is being determined during a lengthy legal and political process, LAX will continue to expand incrementally under the guise of "modernization." It should be clear, however, that LAXMAC will be among many interested observers working diligently to ensure that LAX does not continue to expand without complying with California Environmental Quality Act (CEQA) and National Environmental Protection Act (NEPA) requirements.

Submitted by:

The City of El Segundo LAX Master Plan Advisory Commission:



Don Brann, Chair



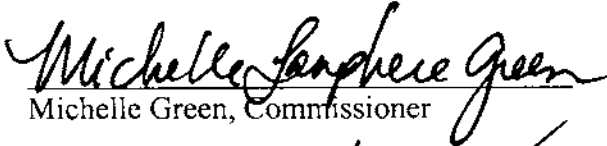
Jeffrey Messinger, Vice Chair



Eric Busch, Commissioner



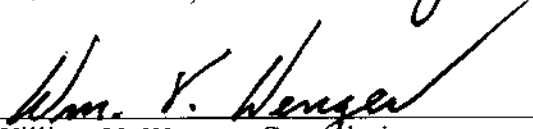
Adrienne Collis, Commission



Michelle Green, Commissioner



Jack Kenton, Commissioner



William V. Wenger, Commissioner

CITY OF HAWTHORNE



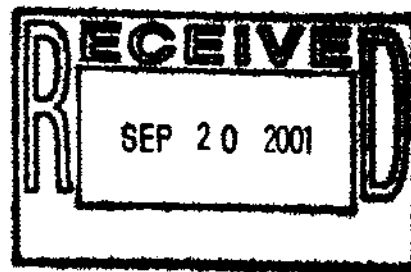
4455 West 126th Street • Hawthorne, California 90250-4482

City Council

August 29, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan/Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216

Mr. David Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Worldway Postal Center
Los Angeles, CA 90009-2007



Dear Messrs. Ritchie & Kessler:

The City of Hawthorne has reviewed the LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) and concurs with the comments that are being submitted under separate cover by the South Bay Cities Council (SBCCOG) of Governments. Accordingly, the City of Hawthorne has adopted the attached Resolution No. 6677 that formally adopts the comments prepared by the SBCCOG as its own.

The City of Hawthorne believes that Los Angeles World Airports should find the Draft EIS/EIR document inadequate for certification and should as a minimum recirculate the document after addressing the deficiencies identified in Resolution No. 6677 and the extensive technical comments that are appended thereto as Exhibit A.

We look forward to your response to these comments and concerns.

Sincerely,

LAWRENCE M. GUIDI
Mayor

GINNY MCGUINNESS-LAMBERT
Mayor Pro-Tem

MARK SCHOENFELD
Councilman

STEVE ANDERSEN
Councilman

ROY MCNALLY
Councilman

AL00028

RESOLUTION NO. 6677

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HAWTHORNE, CALIFORNIA, FINDING THAT THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED LAX MASTER PLAN IS INADEQUATE AND TRANSMITTING THE OFFICIAL CITY RESPONSE.

WHEREAS, the City of Los Angeles Department of Airports has developed a draft Master Plan for Los Angeles International Airport (LAX) which incorporates capacity enhancements to enable the expansion of passenger activity from a current 60 million passengers per year up to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year through the year 2015; and,

WHEREAS, LAX airport is in close proximity to the City of Hawthorne and the impacts of its operation are of critical interest to the citizens of Hawthorne; and,

WHEREAS, the Los Angeles World Airports (LAWA) and the FAA have prepared a joint Draft EIS/EIR to address the potential environmental impacts caused by the proposed LAX expansion; and,

WHEREAS, on January 18, 2001, the Draft EIS/EIR was released for public review and comment; and,

WHEREAS, the Draft EIS/EIR analyzes four project alternatives, 1) No Action /No Project; 2) Alternative A, Additional runway to the north airfield, 3) Alternative B, an additional runway to the south airfield, and 4) Alternative C, no additional runways but reconfiguration of existing runways including either lengthening, widening, and relocating; and,

WHEREAS, a team of consultants hired by the South Bay Cities Council of Governments has conducted an evaluation and prepared extensive comments on the adequacy of the Draft EIS/EIR as an informational document in addressing potential impacts to the City of Hawthorne and other cities of the South Bay; and,

WHEREAS, the City of Hawthorne considered the Draft EIS/EIR at a public meeting on August 27, 2001.

NOW, THEREFORE, the City Council of the City of Hawthorne, California, DOES HEREBY RESOLVE as follows:

SECTION 1. Pursuant to the foregoing recitations, the following findings are hereby made:

1. The LAX Draft EIS/EIR inadequately and/or inaccurately addresses the environmental impacts potentially affecting the City of Hawthorne. The LAX Draft EIS/EIR is inadequate and/or inaccurate as an informational document based upon but not limited to the following listed issues:
 - a. Improper Baseline Designation: The draft EIS/EIR does not properly designate the baseline for analysis in that the draft base year, among other deficiencies, does not reflect the physical conditions on the project area at the time of the publication of its Notice of Preparation.
 - b. Failure to fully analyze the project's off-airport surface traffic impacts: Among numerous other inadequacies the draft EIS/EIR gives little consideration to surface traffic impacts on the City of Hawthorne and other South Bay Communities other than impacts on streets and intersections directly proximate to the airport.
 - c. Noise Impacts are understated: The draft EIS/EIR does not designate the proper baseline for its noise analysis, fails to disclose the project's overflight noise impacts, and it fails to analyze the noise effects of additional new routes over noise-sensitive areas within the City of Hawthorne and the other South Bay communities.
 - d. Air Quality Analysis is inadequate: The draft EIS/EIR fails to appropriately estimate the baseline for air quality analysis, fails to appropriately estimate the future background pollutant concentrations, and fails to include or adequately analyze additional sources of air pollution such as reverse thrust emissions from aircraft, construction equipment, offroad equipment and ground support equipment.
 - e. Mitigation Measures are not adequately specified: The draft EIS/EIR does not adequately specify mitigation measures or methods to enforce them in that it fails to disclose the full list of mitigation measures until the final EIS/EIR and it fails to include a draft mitigation monitoring program.
 - f. Regional Context is not adequately addressed: The Draft EIS/EIR presumes that a vast majority of the region's growth in air passenger and air cargo demand will be directed to LAX. A number of commercially viable airports in the Southern California area currently exist and are underutilized relative to their capacity and a fully regional solution to this air passenger and air cargo capacity has not been adequately addressed in the Draft EIS/EIR.
2. Additional comments, which reflect the above listed issues and other concerns, in greater detail, are attached hereto as "Exhibit A" of this Resolution.

SECTION 2. Pursuant to the foregoing recitation and findings, the City Council of the City of Hawthorne, California, hereby:


1. Determines that the Draft EIS/EIR is inadequate and/or inaccurate and requests the LAX Draft EIS/EIR include a complete and accurate analysis of potential environmental impacts to the City of Hawthorne from the airport expansion. This would constitute significant new information that would require recirculation of the Draft EIS/EIR, Master Plan, Technical Reports and Appendices.
2. Establishes that this Resolution, including attached Exhibit "A" (Comments of the South Bay Cities Council of Governments), constitutes the City of Hawthorne's formal position on the proposed expansion of LAX and its comments on the Draft EIS/EIR prepared by LAWA and the FAA.
3. Directs and authorizes Staff to transmit the position and comments of the City of Hawthorne on the Draft EIS/EIR to the Los Angeles World Airports and Federal Aviation Administration.

APPROVED AND ADOPTED THIS 27th DAY OF AUGUST, 2001.




LAWRENCE M. GUIDI, Mayor
City of Hawthorne, California

ATTEST:



DANIEL D. JUAREZ, C.M.C./AAE
City of Hawthorne, California

APPROVED AS TO FORM



GLEN E. SHISHIDO, City Attorney
City of Hawthorne, California

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) §
CITY OF HAWTHORNE)

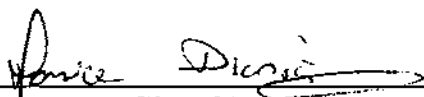
I, **Monica Dicrisci**, the duly appointed Deputy City Clerk of the City of Hawthorne, California, **DO HEREBY CERTIFY** that the foregoing Resolution, being Resolution No. 6677 was duly adopted by the City Council of the City of Hawthorne, at their regular meeting of the City Council held **August 27, 2001** and that it was adopted by the following vote, to wit:

AYES: Councilmembers McNally, Schoenfeld, Lambert, Andersen, Mayor Guidi.

NOES: None.

ABSTAIN: None

ABSENT: None.



Deputy City Clerk
City of Hawthorne, California

AL00028

CITY OF HAWTHORNE



4455 West 126th Street • Hawthorne, California 90250-4482

Department of Public Works, Engineering Division
(310) 970-7955

September 20, 2001

Mr. Jim Ritchie
City of Los Angeles
LOS ANGELES WORLD AIRPORTS
LAX Master Plan / Room 218
P.O. Box 92216
Los Angeles, CA 9009-2216

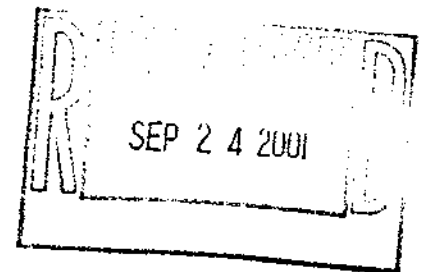
Dear Mr. Ritchie:

This letter is to inform you that a partial package regarding the LAX Master Plan Draft Environmental Impact Statement / Environmental Impact Report (Draft EIS/EIR) was inadvertently sent to you earlier this week. Attached, is the complete set of our City's response.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles D. Herbertson".

CHARLES D. HERBERTSON, P.E.
Chief of General Services and Public Works



CITY OF HAWTHORNE



4455 West 126th Street • Hawthorne, California 90250-4482

CITY COUNCIL (310) 970-7900

August 29, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan/Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216

Mr. David Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Worldway Postal Center
Los Angeles, CA 90009-2007

Dear Messrs. Ritchie & Kessler:

The City of Hawthorne has reviewed the LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) and concurs with the comments that are being submitted under separate cover by the South Bay Cities Council (SBCCOG) of Governments. Accordingly, the City of Hawthorne has adopted the attached Resolution No. 6677 that formally adopts the comments prepared by the SBCCOG as its own.


The City of Hawthorne believes that Los Angeles World Airports should find the Draft EIS/EIR document inadequate for certification and should as a minimum recirculate the document after addressing the deficiencies identified in Resolution No. 6677 and the extensive technical comments that are appended thereto as Exhibit A.

We look forward to your response to these comments and concerns.

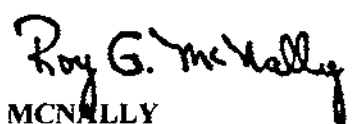
Sincerely,


LAWRENCE MCGUIDI
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GINNY MCGUINNESS-LAMBERT
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MARK SCHOENFELD
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STEVE ANDERSEN
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ROY MCNALLY
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AL00029

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WHEREAS, on January 18, 2001, the Draft EIS/EIR was released for public review and comment; and,

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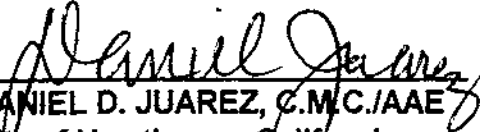
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APPROVED AND ADOPTED THIS 27th DAY OF AUGUST, 2001.

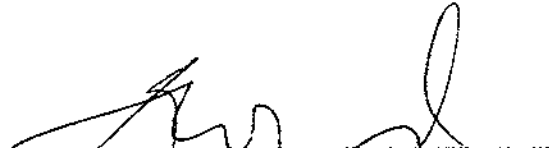


LAWRENCE M. GUIDI, Mayor
City of Hawthorne, California

ATTEST:


DANIEL D. JUAREZ, C.M.C./AAE
City of Hawthorne, California

APPROVED AS TO FORM


GLEN E. SHISHIDO, City Attorney
City of Hawthorne, California

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) §
CITY OF HAWTHORNE)

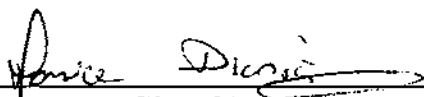
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AYES: Councilmembers McNally, Schoenfeld, Lambert, Andersen, Mayor Guidi.

NOES: None.

ABSTAIN: None

ABSENT: None.



Deputy City Clerk
City of Hawthorne, California

AL00029

Exhibit "A"

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Mr. David B. Kessler, AICP
Federal Aviation Administration
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Re: Draft Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements - Comments of the South Bay Cities Council of Governments

Dear Mr. Ritchie and Mr. Kessler:

The following constitutes the comments of the South Bay Cities Council of Governments (.SBCCOG.), pursuant to the requirements of the California Environmental Quality Act, Public Resources Code . 21000, et seq., (.CEQA.) and the National Environmental Policy Act, 42 U.S.C. . 4321, et seq., (.NEPA.), concerning the Draft Environmental Impact Statement/Environmental Impact Report (.Draft EIS/EIR.) for the Los Angeles International Airport (.Airport.) Proposed Master Plan Improvements (.Project.), prepared jointly by the Federal Aviation Administration (.FAA.) and the City of Los Angeles (.Los Angeles.).¹

¹ The FAA and Los Angeles shall, for the remainder of this letter, be referred to collectively as .Project Proponents..

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The issues raised by these comments fall into seven general categories, although they are not limited only to those categories:

(I) the baseline used in the Draft EIS/EIR, against which the various environmental impacts of the Project are compared, is not properly designated;

(II) the discussion of the Project's surface traffic impacts is misleading;

(III) the noise impacts of the Project are inadequately addressed;

(IV) the potential air quality impacts of the Project are not fully disclosed;

(V) the Draft EIS/EIR does not explore all reasonable alternatives, and, thus, paves the way for its ultimate conclusion that expansion of the Airport's airside and groundside facilities are the sole way to meet future demand;

(VI) the Draft EIS/EIR fails to adequately specify mitigation measures or methods to enforce them; and

(VII) the recently articulated project goal of increasing safety obscures the Project's clear capacity-enhancing purpose. As a result of these defects, the Draft EIS/EIR cannot meet the high standards of disclosure that are the gravamen of both CEQA and NEPA.

I. THE DRAFT EIS/EIR DOES NOT PROPERLY DESIGNATE THE BASELINE FOR ANALYSIS.²

The specification of a baseline for comparison with Project impacts is a critical component of analysis under CEQA, because without an accurate specification of the baseline, analysis of impacts, mitigation measures and project alternatives becomes impossible. County of Amador v. El Dorado County Water Agency, 76 Cal.App.4th 931, 953 (1999). A central concept of CEQA is that a baseline figure must represent an environmental condition existing on the property prior to the project. Save Our Peninsula Committee, et al. v. Monterey County

² Later sections II, III and IV more fully discuss the pitfalls arising from the use of the three separate and distinct baseline assumptions used in that analysis; Environmental Baseline, Adjusted Environmental Baseline, No-Project/No-Action.

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Board of Supervisors, et al., 87 Cal.App.4th 99, 124 (2001). The regulations implementing CEQA, 14 Cal. Code Regs. . 15000, et seq., (.CEQA Guidelines.) are specific as to the definition of .prior to the project.:

.An environmental impact report must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or, if no Notice of Preparation is published, at the time the environmental analysis is commenced . . . This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.. CEQA Guidelines . 15125(a).

While the courts have taken the position that the .date for establishing a baseline cannot be a rigid one ., Save Our Peninsula Committee, supra, 87 Cal.App.4th at 125, they have also held unequivocally that .an EIR must focus on impacts to the existing environment, not hypothetical situations., County of Amador, supra, 76 Cal.App.4th at 955. The baseline for analysis in the Draft EIS/EIR does not meet these tests.

A. The Draft EIS/EIR.s Base Year Does Not Reflect the Physical Conditions on the Project at the Time of the Publication of its Notice of Preparation.

The Airport Master Plan, November, 2000, Technical Analysis (.Master Plan.) is the basis of the analysis contained in the Draft EIS/EIR (Master Plan, Preface, page i). The analyses contained in Master Plan, Chapter II, Existing Conditions Working Paper, 4/19/96, use data from the base year 1994 (see, e.g., . 2.3.1, page II-2.1, re: Annual Weather Conditions; Figure II-2.17, page II-2.53, re: Design Day Hourly Distribution of Operations and Tables following). The Notice of Preparation, however, was published in July, 1997 (Draft EIS/EIR, page ES-2), almost three years after the conditions reflected in the original Master Plan data and analysis. Courts have consistently taken the position that a baseline should not .be set a number of years earlier than the commencement of the current project.. Save Our Peninsula Committee, supra, 87 Cal.App.4th at 127.

Moreover, the Master Plan and Draft EIS/EIR contain multiple inconsistent base years such that it is impossible for the public to ascertain which base year is used for a given purpose. On the one hand, the Draft EIS/EIR (page ES-2) states that the environmental analysis normally describes existing conditions as of the July, 1997 date on which the Notice of Preparation was published (even though none of the data in the Master Plan upon which the Draft EIS/EIR is based reflects a 1997 origin). On the other hand, the Draft EIS/EIR states that, where a full

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years worth of data is needed, data from 1996 is used (see, e.g., Draft EIS/EIR Technical Report on Surface Traffic), and sometimes earlier years [unspecified], and sometimes even data from the later years 1999 and 2000 (even though these latter are more than two years after the publication of the Notice of Preparation). Additionally, the Master Plan is unclear as to whether 1994 or 1995 data is used. Finally, different base years are used for different components of the analysis, e.g., 1996 for surface traffic and noise, 2000 for water resources.

Such selective shifting of baselines has substantive consequences. For example, the use of a 1994 (or even 1996) baseline in analysis of aircraft noise impacts artificially elevates the baseline for analysis by incorporating noise from the larger numbers of Stage 2 aircraft in the fleet in 1994/96. These aircraft were totally phased out of the United States fleet by the year 2000. Further, the use of a 1994 (or 1996) baseline year in the air quality analysis potentially overstates the baseline level of criteria pollutants in the L.A. region which has since come into attainment for all criteria pollutants except Ozone and Particulate Matter.³ In short, the nonspecificity of both the Master Plan and Draft EIS/EIR with respect to the base year for analysis renders the results of their analyses questionable.

B. The Master Plan and Draft EIS/EIR Baseline Analyses Are Based On Incomplete and/or Inaccurate Data.

The Master Plan defines the capacity of the Airport's existing airside facilities as the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay. (Master Plan, . 2, page II-2.1) The correct determination of existing airside capacity is critical to identification of the Airport's potential to accommodate future air traffic demand and plan future airport's development. (Master Plan, Chapter 2, page

³ The Draft EIS/EIR also states that its use of earlier years results in a more conservative analysis, because there were fewer passengers and operations in earlier years, and, thus, less noise and fewer emissions to compare against those generated by the Project. This claim is inaccurate at least with respect to noise and air quality analyses as set forth below. In any event, it does not account for the opposite effect of using later years 1999/2000 as the baseline, which would, by the logic used in the Draft EIS/EIR, artificially elevate the baseline and, consequently minimize the environmental impacts of the Project. As neither the Master Plan nor Draft EIS/EIR are specific as to the distribution of various baseline years throughout the analysis, it is impossible to ascertain the degree of distortion that may have occurred through the use of these alternate baselines.

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II-2.1) Various independent variables are used in the modeling of existing airport capacity, including, but not limited to: (1) runway operating configurations; (2) noise abatement procedures; (3) airspace operating assumptions; and (4) airfield operating assumptions. (Master Plan, . 2.3, page II-2.21) Delay is also apparently a contributing variable. The relationships within the model are such that, if the definition of a given variable, or the value assigned to it, are questionable, the capacity determination resulting from the model is prejudiced.

Here, even if, for argument's sake, the Draft EIS/EIR had specifically and accurately designated a base year, critical data used in the Master Plan baseline demand/capacity/delay analysis is incomplete or in some cases inaccurate.

As a threshold matter, the Master Plan demand/capacity/delay analysis is predicated on Aircraft Communications, Addressing and Reporting System (ACARS), and Official Airline Guide (OAG) data sources. These two data sources exaggerate, or, inaccurately characterize, true (airport capacity related) delay. The Master Plan defines delay as the difference between the actual time it takes an aircraft to perform an arrival or departure and the normal time it would take to perform the same operation with no interference from other aircraft. (Master Plan, . 2.1, page II-2.2) ACARS data is generated by the airlines, and is based on activities such as push back, parking at the gate, or opening or closing cabin doors. ACARS data includes information about on-time performance, based on the arrival and departure times developed by each airline for each segment of flight. Since the data is airline-generated, airline definitions of delay are automatically built into the report.⁴

Further, the OAG is published for the express purpose of identifying the arrival and departure times of various airlines. When the airlines set up their schedules, they factor in the average delay for each leg of flight between city pairs. Thus, the OAG also builds delay into the departure and arrival times based on each airline's historical data and operating experience for each flight segment.

⁴ When an aircraft pushes back from the gate or closes the cabin door, the aircraft could be late for a variety of reasons. Many delays are due to factors that are airline-controllable such as late boarding of passengers, customer service delays, maintenance delays, late arriving equipment, catering, fueling, baggage and the unavailability of crew members, to name but a few. Other types of delay would be attributable to airport, runway or taxiway design, airport acceptance rates, airport construction, noise abatement regulations, air traffic control restrictions and weather. These items are also introduced and incorporated into the ACARS report as a delay factor.

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In summary, ACARS data is not original source data but is the product of third party intervention. It is manipulated by various airline functionaries before a final report is released. Similarly, OAG data is manipulated to include delay not after, but before the fact. Therefore, because both sources of data already include a delay factor, their use in the Master Plan's modeling, as set forth below, is likely to cause a double counting of delay.⁵

Instead of ACARS or OAG data, the Master Plan should have relied on radar data. Radar data is a memorialization of the movement of arriving aircraft from a specified distance outside the terminal control area until touchdown and, conversely, for departing aircraft, from the aircraft's lift-off from the runway to the same distance outside the airport's control area. Every operation is tracked in real time without the intervention of third party interpretation, manipulation, or extraneous factors, unrelated to the operational capacity of airport infrastructure.

The effects of this confounding of substantive with non-substantive delay factors are reflected in the Master Plan's modeling of demand/capacity/delay. The FAA's Simulation Model (SIMMOD), Version 2.1, was apparently used in the Master Plan's demand/capacity/delay analysis. SIMMOD simulates the movement of arriving and departing aircraft from their entry/exit into the Los Angeles Terminal Air Traffic Airspace through approach and landing phase, or taxi and takeoff, to their exit from the terminal air traffic airspace. Proper calibration of SIMMOD is essential since the resulting statistics depend upon the data used to develop the baseline assumptions and operating instructions for the model. In this case, ACARS and OAG data were used to calibrate SIMMOD. Because of the potential double counting inherent in these data sources, and the consequent exaggeration of delay in the model, the principal conclusion that is drawn from SIMMOD is that the only way to remedy delay is to build additional airport infrastructure. The most obvious flaw of such an analysis is that it eliminates, at the outset, opportunities to gain efficiency through improvements in operating practices and minor modifications to the air traffic system. Thus, what seems like a relatively minor data collection/designation problem pervades the demand/capacity/delay modeling upon which the Draft EIS/EIR's environmental analysis is based, and subtly biases the results.

C. The Draft EIS/EIR is Based on Implausible Modeling Assumptions.

⁵ In addition, the Master Plan analysis relies on numerous sources other than ACARS or OAG data including personal observations, a small sampling of users and an unique determination of aircraft speeds and routes, none of which is suitable, let alone optimal, for developing baseline analyses or formulating assumptions. (See, e.g., Master Plan, . 2.1.3, pages II-2.5 - II-2.6)

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The accuracy of SIMMOD's results depends on an accurate description of the airport's operating environment. (Master Plan, . 2.1, page II-2.2) Both the Master Plan and Draft EIS/EIR acknowledge that the description is made up not merely of data purporting to represent actual current conditions, but also assumptions arising from that data (see, e.g., Master Plan, . 2, page II-2.1). Therefore, to the extent data and assumptions are incorrect or incomplete, so too will be the results of the model. In addition to the data problems specified above, SIMMOD, as used in the Master Plan, incorporates implausible, or biased, assumptions which, in turn, call into question the integrity of its output.

1. Assumptions Concerning Aircraft Delay Are Unexplained and Unsupported.

The Master Plan's (and Draft EIS/EIR's) definition and description of the delays at the existing (pre-Project) Airport are based on consultants' opinions and not on factual information. First, while the Master Plan acknowledges that a standard definition of acceptable delay is not used in the industry. (Master Plan, . 2.1.3, page II-2.5), it then concludes that delay levels of six to ten minutes indicate the need for additional facilities; that as average aircraft delay increases above six minutes, passengers tend to perceive service reliability problems; as delay approaches ten minutes per operation, further increases in demand are limited, and, flight cancellations were assumed when delays exceed 20 minutes per average annual aircraft operation. (Master Plan, . 2.1.3, pages II-2.5 - II-2.6) These assumptions are apparently based on information derived from prior studies by the Master Plan consultants at airports other than Los Angeles, in years as early as 1988. In other words, the delay standards relied upon in the Master Plan are based on outdated data concerning potentially irrelevant subject airports. All of these have unique characteristics that may have influenced creation or perception of delay, and none of them are discussed in the Master Plan or Draft EIS/EIR.

Further, these unsupported assumptions do not reflect an understanding of the diverse ways in which delay is determined by the airlines, Air Traffic Control and the Department of Transportation. First, a typical airline will develop performance criteria for each phase of flight based on company goals and performance percentages, including arrival and departure delay. Airlines use zero variance as a standard for on time performance (i.e., zero difference between arrival and/or departure times and published schedules). The percentage goal for each activity will be based on the level of performance the airline hopes to, or, in some cases, must attain in order to remain competitive. Some airlines track on time performance plus five minutes and most will track on time performance plus 14 minutes.

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FAA Air Traffic Control, on the other hand, computes delay based on actual delay time en route. An arriving aircraft is considered delayed only if the aircraft is held en route to the destination for 15 minutes or more at any given moment during the flight. It is possible that these aircraft could be held at more than one interval during a flight. However, if each holding period does not exceed the 15 minute threshold, no delay is recorded, even though the total delay might well be in excess of 15 minutes. Further, inbound delay is kept separate from outbound delay. A departing aircraft is not counted as delayed until: (1) the average taxi time for the airport; (2) the time from the gate to the runway; and (3) 15 minutes have cumulatively elapsed. Air Traffic Control delays do not consider airline schedules or internally generated delays in their reporting system. The majority of Air Traffic Control delays are as a result of weather and not system capacity. Finally, the Department of Transportation grades airline performance on the time of arrival at the destination airport within 14 minutes of the scheduled arrival time. The Master Plan utilizes none of those benchmarks. Thus, the Master Plan fails to adequately explain the basis for its demand/capacity/delay analysis.

2. The Master Plan's Assumptions Concerning Turboprop Operations are Manifestly Inaccurate.

Referring to its analysis of existing noise abatement procedures as they pertain to the creation or maintenance of demand/capacity/delay, the Master Plan states that based on actual information obtained by the Los Angeles Noise Management Bureau, turboprop departures were permitted to turn slightly earlier than jet departures at the Airport VOR, which is located between runways 7L and 7R, west of Pershing Drive. (Master Plan, . 2.3.3, page II-2.31). In addition, Figures II-2.11 and II-2.12 indicate that, when the Airport is operating on a west flow, turboprop aircraft turn at the VOR.

These representations are inaccurate and lead to incorrect assumptions about flight paths. In fact, if such a turn were permitted, it would occur prior to the shoreline, contrary to current noise abatement procedures. Turning the turboprops early allows faster aircraft to depart behind the turboprops at a more accelerated rate than is currently allowed, thus allowing more aircraft to depart in a given interval. The results of this inaccurate assumption are that: (1) the baseline departure capacity is artificially elevated to a level higher than would be realized had actual air traffic data been used and the noise abatement procedures modeled as they are actually used; and (2) turboprops, as depicted in the Master Plan and Draft EIS/EIR, are directed over noise sensitive areas not previously overflown, and, as a result, elevate the baseline noise levels, thereby concomitantly reducing the apparent noise impacts of the Project.

3. The Master Plan's Flight Schedule Assumptions Are Outdated.

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The Master Plan reports the results of a SIMMOD analysis conducted in 1994, using 1994 data and 1994 assumptions. In addition to this obsolete data, the ACARS data upon which the SIMMOD analysis is based includes less than 51% of commercial operations and more than 46% of the total operations in the design day flight schedule. As: (1) operational configurations long pre-date the commencement of the environmental process; (2) current schedules were not used (although available), the assumptions concerning a typical day's traffic are substantially unsupported; and (3) not all of the aircraft operators were considered, the assumptions concerning a typical day's traffic are substantially unsupported.

4. The Master Plan's Fleet Mix Assumptions are Inaccurate.

The Master Plan relies on a fleet mix distribution derived from August 11, 1994 OAG, NMB Do Daily Operations Records and LADOA 1994 Monthly Air Traffic Volumes. (Master Plan, Table II-2.16, page II-2.58). This 1994 fleet mix distribution is outdated and, thus, inadequate for use in SIMMOD. Specifically, it includes a large number of Stage 2 aircraft which are no longer in operation at the Airport. Not only are Stage 2 aircraft noisier, but they have different emissions characteristics from the newer high bypass ratio, Stage 3 aircraft. If a more recent base year had been selected, the proportion of Stage 2 aircraft would have been smaller, and the noise baseline lower, and, thus, more accurate.

5. The Master Plan's Assumptions Concerning Aircraft Speed Are Inaccurate.

The Master Plan's assumptions concerning aircraft speeds were apparently inflated to fit the underlying assumption of unconstrained aircraft flows. The Master Plan model calls for all aircraft to operate at the same constant air speed before proceeding to the Airport and landing. The model further assumes that all aircraft exit the runway at the same point and within the same amount of time in order to reach the modeled flow rate. In actual conditions, the speeds of the aircraft vary, with high airspeed greatly reduced as the aircraft approaches the airport. Nor would all aircraft exit the runway at the same location. In short, this assumption of high constant speed will have an as yet unascertained impact on the model's results but would tend to overstate capacity of the existing facility, and, thus, the baseline for comparison with the Project's improvements.

D. The Master Plan's Model Omits Critical Variables.

Another crucial issue revolves around variables the Master Plan fails to include in its model. Specifically these include: (1) the capacity of the airspace beyond the Airport Terminal Control Area (TRACON.); and (2) gate capacity for future scenarios.

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1. The Master Plan Should Have Considered Airspace Capacity Beyond The Airport's Terminal Area Airspace.

According to the Master Plan, airspace considerations were limited to entry (and exit) from the Airport's TRACON airspace. (Master Plan, . 2.1.1, page II-2.3) The failure to consider airspace capacity beyond that point is a material omission from the analysis. This is because the majority of aircraft delays are absorbed in the en route environment before an aircraft arrives in TRACON airspace. By modeling only the terminal area, the results of the model are skewed for both arriving and departing aircraft. For departing aircraft, if the model does not consider the inherent constraints of the en route air traffic system, including differences in aircraft performance and the impacts of other air traffic transiting the area for other airports, the departure flow pictured in the model will remain unconstrained and aircraft can take off at a constant, predetermined rate. When reaching the boundary, the aircraft are dropped from the scenario, and the model does not further consider constraints of the en route system which naturally impact the TRACON airspace. Unfortunately, this unconstrained flow scenario is not normally possible in today's complex air traffic control system.

Similar problems exist in modeling arrivals without consideration of airspace outside the TRACON. Inbound aircraft are assumed, in the Master Plan model, to be at the entry point of terminal airspace when required by the model. Aircraft proceed inbound at a set speed, reduce speed at a predetermined point, land and proceed unimpeded to their gate. This is not a reasonable representation of a typical aircraft arrival. In fact, there is almost no likelihood that aircraft can be delivered to the terminal inbound fix at a rate consistent with the model's assumptions.

Instead, the Master Plan's arrival model appears to have been developed to insure that an arriving aircraft would be at the inbound fix at the specific time required in order to maximize the arrival rate for the airport. Although Air Traffic Control consistently tries to keep the aircraft sequenced as closely as possible in-trail, it is not possible to consistently space aircraft a set distance apart for extended periods of time. The availability of aircraft to fit into the sequence, aircraft speeds, the mix of large and small aircraft, a lack of demand, aircraft deviations due to weather, in-trail restrictions though an en route sector or in-trail restrictions required for an airport approach control facility and other variables cause the in-trail spacing of arrival aircraft to be inconsistent. As a result of these and many other factors, there is unused capacity in each of these arrival sequences. In summary, the Master Plan's failure to adequately consider constraining factors outside the TRACON airspace calls into question the validity of the model's result.

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2. The Master Plan Should Have Modeled Gate Capacity.

The Master Plan did not include in its modeling aircraft gate operations for future activity levels, allegedly because of the inability of the existing gate facilities to accommodate the higher activity levels.⁶ (Master Plan, . 2.5.3, page II-2.104) The Master Plan disclaims the importance of this omission [.The inability to model gate operations in detail does not impact the results of the airside capacity analysis since at higher activity levels the runway system tends to be the primary constraint Master Plan, . 2.5.3, page II-2.110]. The Master Plan is in error.

If an aircraft cannot get to the gate unimpeded, the resulting delay must be factored into the analysis. In the Master Plan, taxi patterns are consistent and aircraft are dropped from the model when they reach the gate area. The model does not capture any delays in the gate area or any delays that might occur in reaching the gate due to congestion on the ramp. The same is true for departing aircraft. If a departing aircraft cannot leave the gate due to inbound traffic or other traffic in the gate area, the departure demand at the airport may not be as regular as is assumed in the Master Plan's model.

The importance of this omission is that it precludes development of a clear picture of the delay reduction, and consequent capacity enhancing, attributes of the Project. Without estimation of the potential groundside/terminal structure constraints on operations (capacity), the actual delay reducing, and capacity enhancing, benefits of the Project as a whole cannot be accurately ascertained.

3. The Master Plan Should Have Considered Currently Implemented Air Traffic Procedures.

While the Master Plan acknowledges the existence of the current Dual Civet Arrival procedure, it fails to analyze its delay reducing, or consequent capacity enhancing efficiencies. The procedure is mentioned, then drops off the radar screen. The Dual Civet Arrivals, however, have so greatly reduced arrival delay at the Airport that no national delay program for the airport has been established since the procedure's implementation. Ignoring the impacts of Dual Civet Arrivals results in an exaggeration of existing delay and a consequent exaggeration of the Project's delay reducing, and capacity enhancing benefits.

⁶ Performance measures contained in the Master Plan, . 2.5.1, include outbound ground delay which, in turn, appear to include gate related variables such as gate push-back delay.. This performance measure was apparently used in the modeling of existing gate operations but not future ones. (Master Plan, . 2.5.1, page II-2.97)

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E. Demand, as Defined in the Master Plan, is an Identity with Capacity.

Inaccurate data and assumptions are not alone in influencing the outcome of a modeling effort. Inadequate specification of a variable may also lead to an unrepresentative result. In this case, the independent variable, demand, as defined, is not independent but is virtually synonymous with, or surrogate for, the dependent variable, capacity. Thus, the demand variable has an interactive relationship with the dependent variable which influences the model's outcome in significant ways.

For example, the Master Plan defines aircraft demand as a 24-hour flight schedule representative of design day activity. (Master Plan, . 2.1.2, page II-2.3) The 24-hour flight schedule definition is almost identical to the definition of capacity, the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay. (Master Plan, . 2, page II-2.1) The two variables, therefore, vary together, i.e., as capacity increases, demand will also increase, rendering demand useless as a predictor of capacity. The precise degree in which the interaction of the independent and dependent variables in the model affect the analysis cannot be ascertained at this point without re-running SIMMOD. Suffice it to say that a new surrogate for demand, derived, for example, from airline market surveys, or annual enplanements, is necessary to insure the integrity of the model's results.

II. THE DRAFT EIS/EIR DOES NOT FULLY ANALYZE THE PROJECT'S OFF-AIRPORT SURFACE TRAFFIC IMPACTS.

While the Draft EIS/EIR's off airport surface traffic analysis adequately depicts some aspects of the Project's surface traffic generation potential, it is notably deficient in the following ways: (1) the analysis gives little consideration to surface traffic impacts on South Bay Communities other than those directly proximate to the airport; (2) the use of the Adjusted Environmental Baseline for comparison with the Project's surface traffic impacts creates a misleading picture of the magnitude of those impacts; (3) the Draft EIS/EIR improperly equates the direct and cumulative impacts of surface traffic; (4) the Draft EIS/EIR provides inadequate information regarding the Northside/Westchester Southside Project; (5) the Draft EIS/EIR transportation planning horizon is improperly attenuated; and (6) the Draft EIS/EIR lacks a mitigation monitoring program detailing implementation of mitigation measures for the impacts of surface traffic.

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A. The Draft EIS/EIR Lacks Adequate Consideration of Surface Traffic Impacts on South Bay Communities.

The Draft EIS/EIR analyzed 61 intersections, with an additional 15 intersections selected for focused analysis. Only nine of the 76 intersections were south of the I-105 (Century) freeway. The apparent explanation for the focus on the north side of the airport is presented in the Draft EIS/EIR, pages 4-284 - 4-289:

.South of LAX, there is a higher percentage of LAX traffic on I-405 and a lower percentage on the arterials, indicating that airport traffic is in fact staying on the freeway system as desired. However, this is not the result of I-405 operating well, but is more a result of the layout of the roadway network south of LAX. There are no alternative arterial routes that closely parallel I-405 south. In fact, south of LAX, all major arterial routes change to a north/south orientation, while I-405 south of Rosecrans Avenue continues in a northwest/southeast direction..

This explanation does not account, however, for at least three conditions acknowledged in the Draft EIS/EIR which exist south of the Airport: (1) airport traffic south of the airport represents a significant component of traffic on local streets; (2) interviews at freeway intersections south of the airport indicate a large percentage of airport trips; and (3) the Draft EIS/EIR claims a benefit from redistribution of traffic south of the airport off the freeway and onto local streets.

1. Airport Traffic Represents a Significant Component of Traffic on Local Streets South of the Airport.

The Draft EIS/EIR notes that 8% of the afternoon peak on Sepulveda Boulevard south of El Segundo Boulevard is airport related, but concludes . . . even if all the Airport bound traffic were removed, there would be little noticeable difference on most roads outside of the immediate vicinity of the airport, particularly during the morning and evening rush hours.. (Draft EIS/EIR, page 4-289) The 8% reported in the Draft EIS/EIR is, however, more important to traffic flow than it appears. For example, the intersection of Sepulveda and El Segundo Boulevards has a reported 1996 Volume to Capacity (V/C) of .869 and a projected 2005 V/C ratio of 1.062 (Draft EIS/EIR, Table 4.3.2-23, page 4-334). Eight percent of the 1996 traffic represents an airport contribution at this intersection of .069. The benchmark of .significant impact. is defined in the Draft EIS/EIR as a change in V/C ratio of .01 for an intersection operating at Level of Service (LOS.) F (Draft EIS/EIR, page 4-291). Therefore, at the intersection of Sepulveda and El

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Segundo Boulevards, a contribution of .069 to the V/C ratio can hardly be considered as representing . . . little noticeable difference . . .

2. Freeway Ramp Data Shows Traffic Exiting the I-405 South of the Airport.

Master Plan, Chapter II, Section 7.3, reports the results of a survey conducted at area intersections during the A.M. and P.M. peak hours. The results of that survey call into question the assumption that traffic is not diverted off the I-405 onto local streets south of the Airport, where it demonstrates that more than 30% of the trips at northbound I-405 ramps at El Segundo were Airport related.

3. The Draft EIS/EIR Is Internally Contradictory with Respect to Use of Off-Freeway Traffic Routes South of the Airport.

The Draft EIS/EIR states, in pertinent part: Further, although it would be ideal for airport access to be provided directly via freeways, the dispersion of Airport traffic onto many arterial and freeway routes does have a side benefit in that its impact is minimized on any given route. (Draft EIS/EIR, page 4-289). This statement directly contradicts the Draft EIS/EIR's initial assumption that the roadway system is designed such that freeway traffic is not diverted to the local street system south of the airport. If, in fact, airport traffic is diverted from the freeway, as claimed for traffic to and from the north, would not a similar set of traffic solutions be applicable to the south as well?

In addition, Master Plan, Table II-7.12 also sets forth data that calls into question the assumption of the limited diversion of freeway traffic onto local streets south of the airport. Table II-7.12 illustrates that, by absolute volume, only 3 of 30 key roadway segments carry more Airport related morning peak hour traffic than does Sepulveda Boulevard north of Rosecrans Avenue, and in the afternoon only four key segments carry more peak hour traffic than that intersection.

In short, the failure to consider traffic impacts south of Rosecrans Avenue appears arbitrary. At a minimum, the Draft EIS/EIR and its technical appendices need to provide a much clearer statement of why the intersections evaluated were selected, and why no consideration was given to areas south of Rosecrans Avenue.

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B. The Use of the Adjusted Environmental Baseline for Comparison With the Project's Surface Traffic Impacts is Misleading.

Three scenarios were used as baselines against which to evaluate the surface traffic effects of the proposed Master Plan improvements: (1) Environmental Baseline; (2) Adjusted Environmental Baseline; and (3) the No-Project/No-Action alternative. The Environmental Baseline is the existing condition pre-project. It includes existing roadways and land uses, and the current airport configuration. The year used in this baseline changed during the development of the Master Plan. At the initiation of the Master Plan process, the baseline year used was 1994. Information is reported in different Master Plan sections for 1994 and 1995. For the third iteration of the Master Plan, the baseline became 1996. The technical reports for the Draft EIS/EIR used 1996.

The Adjusted Environmental Baseline uses the current airport configuration but assumes that future off airport roadways and land uses already in the pipeline will be completed (see Section B.1 below). As with the Environmental Baseline, the definition of Adjusted Environmental Baseline changed with the development of the Master Plan. The existing condition section of the Master Plan (Chapter IV, Section 7) used horizon years of 2000 to 2015. The constrained alternatives section (Chapter V, Section 3) used the years 2005 and 2015. Finally, the No-Action/No-Project Alternative is the converse of the Adjusted Environmental Baseline and assumes that off-airport development will remain constant, but currently approved airport projects will be completed.

There are at least two issues of importance raised by reliance on the Adjusted Environmental Baseline: (1) accuracy of the Adjusted Environmental Baseline and its resulting projections; and (2) applicability of the Adjusted Environmental Baseline to the environmental impact analysis.

1. The Uncertain Definition of the Adjusted Environmental Baseline Makes the Results of its Comparison With Project Impacts Questionable.

The initial question about the Adjusted Environmental Baseline is the accuracy of the definition of Existing Condition/Environmental Baseline on which it is purportedly based. There are significant differences between the 1995 data concerning the Existing Condition/Environmental Baseline contained in the proposed Master Plan and the 1996 data contained in the Draft EIS/EIR. A comparison of Master Plan, Table II-7.2 and Draft EIS/EIR, Table 4.3.2-24, for the a.m. peak hour, shows changes in the Existing Conditions/Environmental Baseline between 1995 and 1996. As illustrated in the following Table, some intersections got significantly better and some significantly worse. In all but one case, the difference in V/C

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ratios between 1995 and 1996 exceeds thresholds used for determining significance in the Draft EIS/EIR.

Intersection	Master Plan Table II 7.2 1995 V/C*	EIS/EIR Table 4.3.2-24 1996 V/C	V/C Difference
Aviation/El Segundo	0.981(E)	0.835(D)	-.146
Aviation/Rosecrans	0.915(E)	1.121(F)	.206
Highland/Rosecrans	0.714(C)	1.069(F)	.335
Sepulveda/El Segundo	0.840(D)	0.869(D)	.029
Sepulveda/Mariposa	0.776(C)	0.730(C)	-.046
Sepulveda/Rosecrans	1.238(F)	1.220(F)	-.018
Vista Del Mar/Grand	0.755(C)	0.749(C)	-.006
Vista Del Mar/Imperial	0.821(D)	0.465(A)	-.356

* In Master Plan Table II 7.2 the first column heading is apparently mislabeled

Moreover, the adjustments to the Existing Conditions/Environmental Baseline involved adding additional roadways and additional traffic to the system based on anticipated projects. The definitions of these adjustments is not consistent within the Draft EIS/EIR, or between it and the Master Plan. For example, the Draft EIS/EIR states that: A list of approved development projects were developed . . . (Draft EIS/EIR, page 4-279). [Emphasis added.] The traffic technical report on which the Draft EIS/EIR is based states: A list of planned development projects was developed . . . (Technical Report, 3b, page 2-3). [Emphasis added.] Master Plan, Table IV-8.3; Master Plan, Chapter V, Appendix L; and Technical Report, 3b, Table 2-3, present projected regional roadway improvements. Master Plan, Chapter V, Section 2.6 indicates that the future roadway network used in the analysis includes those projects . . . currently funded and approved or which have a high probability for completion by 2015 . . . Clearly, the distinction between approved and planned projects is critical to a functional definition of Adjusted Environmental Baseline. The baseline will be set much higher (and the consequent relationship of the Adjusted Environmental Baseline with the Project's impacts much lower) if all planned projects are included in addition to all approved projects.

Finally, Chapter IV of the Master Plan (Table VI-8.1, page IV-8.5) provides a preliminary list of related projects that differs from the list presented in Table 2.2 of the Draft EIS/EIR Traffic Technical Report, 3b. While differences are to be expected between the 1996 version of the Master Plan and the Updated 2000 version of the Traffic Technical Report, one

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difference may be more crucial than others - the projected size and resulting traffic impact of the Playa Vista Project. For example, according to the Master Plan, Table IV-8.1, the Playa Vista Project will contain 13,156 single-family units and 8,262 multi-family units. Master Plan, Chapter V, Appendix L, and the Draft EIS/EIR Traffic Technical Report specifies 13,085 multi-family units and no single-family units for the same Project. There is no explanation for the change, nor any reference to the source of either number. The difference is crucial because the traffic analysis assumed three people for each single-family home, and only two for each multi-family residence. The change therefore results in a significant diminution in traffic if the latter multi-family numbers are correct. Considering the potential of over 13,000 housing units for traffic generation, a complete explanation is needed to render the Draft EIS/EIR surface traffic analysis.

2. The Applicability of the Adjusted Environmental Baseline to the Draft EIS/EIR Traffic Analysis is Questionable.

As set forth above, the off airport surface traffic analysis in the Draft EIS/EIR uses the Adjusted Environmental Baseline as the basis of comparison under CEQA for future mitigation for the three build alternatives. (Draft EIS/EIR, page 4-276). The Adjusted Environmental Baseline reflects projected conditions in the years 2005 and 2015 with off airport land use activities completed and regional circulation improvements in place, but without any increased use of the airport. This approach minimizes the potential direct impact from the adoption of the proposed Master Plan because: (1) the future traffic volumes without the Project increase thereby reducing the proportional effect of the added airport traffic from the Project and (2) additional circulation system improvements provide additional capacity. While it is reasonable to assess particular impacts at the time at which they might occur, relying on this approach requires assurances that the projected circulation improvements will actually be in place. No such assurances are provided in the Draft EIS/EIR.

The Off Airport Technical Report lists circulation system improvements that were included in the modeling process. This listing provides an indication of when certain improvements are anticipated. Without these improvements, the circulation system for the Adjusted Environmental Baseline would, apparently, be the same as for the 1996 condition, and many more intersections and roadway segments would be subject to significant adverse impacts as a result of the proposed Master Plan. It is important, therefore, that the Draft EIS/EIR traffic analysis include projected phasing of the anticipated improvements relative to the additional traffic resulting from airport use. This should include a discussion of the phasing of airport improvements as they pertain to traffic generation with respect to the circulation improvements used in the Adjusted Environmental Baseline. Limitations should be placed on airport traffic generation if anticipated circulation improvements off-airport do not occur. Once the Adjusted

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Environmental Baseline is accepted as accurate and the conditions to achieve it are assured, the next issue concerns the significance of surface traffic impacts and the mitigation measures needed to reduce those impacts.

C. The Direct and Cumulative Impacts of Surface Traffic Are Improperly Equated.

The surface traffic analysis uses traffic volumes from airport and non-airport projects. (See, e.g., Master Plan . 2.6.2, page V-2.279). Therefore, it is at least partially a cumulative impact analysis.⁷ Because the surface traffic analysis is based on cumulative traffic volumes, the significance of the direct impacts and the cumulative impacts are equated. However, the use of the Adjusted Environmental Baseline makes this equation between direct and indirect effects inappropriate. While comparing the Project to the adjusted future conditions may be appropriate for assessing direct impacts, the cumulative impact is the impact of all traffic relative to the existing condition, not expected future conditions as contained in the Adjusted Environmental Baseline.

The result of this improper equation of direct and indirect effects is material. The following Table (derived from Draft EIS/EIR, Table 4.3.2-24) for the a.m. peak hour illustrates the problem. The reported change in congestion between the existing conditions and Alternative C, the preferred project alternative, is often significant, while the comparison of Alternative C with the Adjusted Environmental Baseline (which incorporates future conditions) is not.

⁷ The cumulative impact from several projects is the change in the environment which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects.. (CEQA Guidelines, . 15355(b))

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Intersection ⁸	Existing V/C(LOS)	Adjusted Baseline V/C(LOS)	Alternative C (w/mit) V/C(LOS)	Difference (w) Existing	Difference (w) Adjusted
Aviation/El Segundo	0.835(D)	1.097(F)	0.865(F)*		
Aviation/Rosecrans	1.121(F)	1.164(F)	1.171(F)	+050	+007
Highland/Rosecrans	1.069(F)	1.211(F)	0.947(E)	-.122	-.264
Sepulveda/El Segundo	0.869(D)	1.190(F)	1.161(F)	+292	-.029
Sepulveda/Mariposa	0.730(C)	0.772(C)	0.803(D)	+073	+031
Sepulveda/Rosecrans	1.220(F)	1.275(F)	1.243(F)	+023	-.032
Vista Del Mar/Grand	0.749(C)	0.918(E)	0.729(C)	-.02	-.189
Vista Del Mar/Imperial	0.465(A)	1.098(F)	0.903(E)	+438	-.195

* Apparent error in Table 4.3.2-24 of the EIS/EIR (page 4-340)

Using this concept of the Adjusted Environmental Baseline, the result is that the cumulative impacts of the Project are often significant and not mitigated even when the Project's direct effects have been.⁹

D. The Draft EIS/EIR Inadequately Documents the Northside/Westchester Southside Project.

The Draft EIS/EIR's impact analysis for off airport surface traffic is dependent upon the assumption that there will be a substantial reduction in the number of trips generated from the Northside Project. By reconstituting the Northside Project into the Westchester Southside Project, the Draft EIS/EIR projects that there will be a significant decrease in collateral trips with the adoption of the proposed Master Plan.

⁸ Change in V/C Rates of .01 defines significant impact for intersections at LOS F (Draft EIS/EIR, p. 4-291).

⁹ Note that if the comparison had been between Alternative C and the No-Project/No-Action Alternative, the difference would have been even greater, as the No-Project/No-Action Alternative provides for on-airport, potentially capacity-enhancing, improvements, but not off-airport surface traffic impact mitigation.

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The source of the collateral trip reduction is the change in the land use for the Northside Project and Continental City Project. Attachment A of Technical Report 3b provides the basis for the reduction in collateral trips.

	AM PEAK			PM PEAK		
	Adjusted Baseline	No Project	Alternative C	Adjusted Baseline	No Project	Alternative C
Northside	0	7,217	3,922	0	7,131	4,423
Continental City	0	5,323	0	0	5,348	0
Manchester Square	0	0	212	0	0	233
Total	0	12,540	4,134	0	12,479	4,656

The issue here is the same as that concerning the Adjusted Environmental Baseline, i.e., the actions needed to insure that the reduction is achieved. The principal question is what specific discretionary actions are required to modify the allowable land uses in the Northside Project and in Continental City property, and how will compliance be assured?

The land use component of the Draft EIS/EIR and Condition LU-1 in Chapter V, Environmental Action Plan, presents a Master Plan commitment. that:

To the maximum extent feasible, all [Q] conditions . . . from the City of Los Angeles Ordinance No. 159,526 that address the Northside project area will be incorporated by LAWA into the Zoning Code Amendment and LAX Master Plan Implementing Ordinance for the Westchester Southside Project. Accepting that certain conditions may be updated, revised, or determined infeasible as a result of changes to the LAX Northside project, the final [Q] conditions for the Westchester Southside Project will ensure that the level of environmental protection afforded by the full set of LAX Northside projects [Q] conditions is maintained.. (Draft EIS/EIR, Chapter V, page 5-2).

Since this traffic reduction is critical to the projected Master Plan trip generation, the detail associated with this property needs to be firmly established. It is unacceptable to assume that certain conditions may be updated, revised or determined infeasible. if they are necessary to bring about the decrease in collateral trips upon which the Master Plan projections are based.

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While there are some discussions of the Northside/Westchester Southside Project in the Draft EIS/EIR.s purpose and need chapter and Master Plan, Appendix Q, these are brief, general presentations lacking in specificity as to the actions needed to commit the City to limit these uses.

The importance of this lack of specificity in the definition of Project actions, as they relate to the Northside/Westchester Southside Project, is that there is no commitment by Los Angeles to insure that the traffic reduction represented by the changes in allowable land use will occur. The surface traffic capacity for the Project claimed through the reduction of traffic generation from the Westchester Southside Project is significant. Without a more adequate demonstration of the Master Plan.s ability to achieve that reduction, and a concrete commitment to meeting those goals, the Draft EIS/EIR will remain inadequate.

E. The Transportation Planning Horizon Used in the Draft EIS/EIR is Improperly Shortened So As To Minimize the Full Build Out Surface Traffic Impacts of the Project.

The Draft EIS/EIR modeled future conditions for the years 2005 and 2015. The current regional transportation plan, however, uses 2025 as the horizon year. The use of a later year between 2015 and 2025 for analysis is proper in light of the fact that the Project is anticipated to take 16 years to complete.¹⁰ If the Project commences as early as 2002, it will not be completed until 2018, three years after the 2015 horizon has expired. With the year 2013 being the second greatest peak construction year (Draft EIS/EIR, page 4-270), the proposed Master Plan improvements will not be complete by the time the present horizon year of 2015 is reached. The import of the choice of 2015 as horizon year, before the Project is completed, is that the full build-out (.worst case.) impacts of the Project will remain unanalyzed.

Further, while the impacts resulting from the adoption of the proposed Master Plan are generally evaluated against the Adjusted Environmental Baseline, much of the Draft EIS/EIR.s discussion of surface traffic is compared to the No-Project/No-Action alternative (i.e., the alternative that assumes growth in operations and passenger demand at the Airport, along with completion of improvements already planned, but no off airport traffic or other development improvements). The comparison of the Project with two separate baselines in the years 2015 presents a misleading picture. While the reconstitution of the Northside Project may provide a reduction in the traffic generated in 2015, the existing airport improvements clearly permit

¹⁰ The Draft EIS/EIR, Purpose and Need Section (Chapter 2, pages 2-12 through 2-13) indicates that the Project will be implemented in two phases. The first phase will last six years and the following phase 10 more years.

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growth beyond that currently possible. Therefore, the further into the future conditions are projected, the greater the effect of the proposed Master Plan improvements on traffic.

F. The Impacts of Construction Traffic Are Largely Ignored.

While the Project's construction will stretch over a period of 14 years, the impacts of the numerous construction vehicles that will be in use during that period remain unexplored. First, the Draft EIS/EIR acknowledges a volume of construction vehicles which includes 2.8 trucks per minute, 10 hours per day, 6 days per week, or 1.2 trips per minute, 20 hours per day in a 7 day work schedule (Draft EIS/EIR, page 4-319). While the Draft EIS/EIR purports to address mitigation by recommending that trucks trips be divided among four locations on the construction site, that purported mitigation does not consider the trucks' impacts on surrounding arteries even a short distance from the construction site.

Moreover, the Project will admittedly coincide with the construction of Playa Vista, located approximately 2 miles north of the airport (Draft EIS/EIR, page 4-320). The Draft EIS/EIR contains little or no analysis of the cumulative impacts of the construction of these two projects on surface traffic on surrounding arteries and the San Diego Freeway. Moreover, the mitigation offered is slight. The Draft EIS/EIR offers to expand the . . . Traffic Coordination Office . . . to minimize the impacts of construction traffic (Draft EIS/EIR, page 4-320). This purported mitigation measure, even when combined with other assurances including that .construction traffic . . . can be managed . . . (Draft EIS/EIR, page 4-320), and .traffic patterns around the airport for the general public would be largely maintained . . . (*Id.*), does little, if anything, to assure that the manifest impacts of construction will be mitigated. The Draft EIS/EIR admits as much where it states .however, even with these commitments in place, the Project would still cause sufficient construction-related traffic to cause notable disruption of normal traffic flows near the airport.. (*Id.*) Since construction is planned to last more than 14 years, the Draft EIS/EIR is basically stating that for that entire period, traffic is expected to be disrupted, and the Project's purported mitigation will be insufficient to restore stability.

Finally, the Draft EIS/EIR pays little or no attention to the traffic impact of vehicles used by construction workers. It states that construction employees will work in three shifts, and that the second shift will arrive before the first shift ends (Draft EIS/EIR, page 4-319). Using simple math, it appears that at some points during the day, parking would have to be provided for more than 8,000 workers when these two shifts overlap. While remote parking areas are suggested for construction employees, they are as far away as Palmdale, Van Nuys and Ontario (*Id.*). The likelihood of construction workers using such remote parking is slim to none. Therefore, the mitigation measure is largely useless. However, even if remote parking were utilized to any extent, the Draft EIS/EIR fails to discuss the traffic impacts of the shuttles which would bring

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the construction workers from these remote locations to the airport. In short, even though construction is expected to last for 14 years, the Draft EIS/EIR contains little, if any, analysis of the impacts of construction worker traffic which will take place on the entire street/freeway system 6 or 7 days a week during that period.

In summary, while the general construction concept is to have many of the transportation improvements completed within the first five years after construction begins . . . (Draft EIS/EIR, page 4-318), the LAX Expressway and northeastern portion of the ring road from the San Diego Freeway to Sepulveda Boulevard would not be available to traffic until well after the first five years (Draft EIS/EIR, Table 4.3.2-18, page 4-318). Therefore, there would be no new routes available for mitigating the above impacts during the heaviest construction period.¹¹ As a consequence of the above omissions, the Draft EIS/EIR's analysis of construction traffic impacts is materially deficient.

G. The Draft EIS/EIR Lacks a Mitigation Monitoring Program.

The Draft EIS/EIR, Chapter V is entitled Environmental Action Plan. It is not specific as to whether this constitutes a Mitigation Monitoring Program required by CEQA (CEQA Guidelines . 15091(d)). If it does represent a Draft Mitigation Monitoring Program, it is inadequate. The Section lacks a clear statement of the party responsible for implementing the mitigation, the mechanism for enforcement of the mitigation and the timing of implementation. Moreover, it lacks detailed explanation of the way in which the diminution of traffic from the Northside Project, as well as other surface traffic mitigation measures will be achieved.

¹¹ The Draft EIS/EIR states that Phase 1 of the Project would be 5-6 years long and end in 2005. As the Draft EIS/EIR cannot be approved before late 2001, at the earliest, and Phase 1 of the construction could not then begin before 2002, Phase 1 could not end until at least 2007 or 2008. Similarly, Phase 2 which is estimated to extend 10 years past the completion of Phase 1, would end in 2017 not 2015, as assumed in the Draft EIS/EIR. This is important because the impacts of construction, and associated traffic, will now be extending well past the period anticipated in the Draft EIS/EIR.

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III. THE DRAFT EIS/EIR NOISE ANALYSIS UNDERSTATES THE PROJECT'S AIRCRAFT NOISE IMPACTS.

The Draft EIS/EIR minimizes the Project's noise impacts by artificially inflating the Environmental Baseline and by failing to disclose the Project's overflight noise impacts.¹²

A. The Draft EIS/EIR Does Not Designate the Proper Baseline for Its Noise Analysis.

As noted earlier, a threshold issue in environmental analysis is the establishment of a baseline. The function of a baseline is to provide a benchmark of existing conditions against which the environmental impacts of a project may be measured. If the baseline is incorrectly designated at too high a level, the impacts of the Project will be improperly minimized. In this case, the Draft EIS/EIR utilizes three separate and distinct baselines for analyzing the impacts of the Project: (1) the Environmental Baseline (1996), i.e., the purported conditions in existence before implementation of the Project; (2) No-Project baseline for 2005 (and 2015) which includes natural growth on the airport resulting from implementation of already approved airport projects continued in the current Master Plan that purportedly would have occurred even if the Project is not implemented; and (3) Adjusted Environmental Baseline predicated on projected conditions in the years 2005 and 2015 with off-airport land use activities completed and regional circulation improvements in place, but without any improvement to airport facilities.

The Draft EIS/EIR chooses 1996 (i.e., the Environmental Baseline) as the base year for evaluation of aircraft noise impacts, and states that in 2015, the Project's horizon year, Alternative C would reduce the total number of people exposed to aircraft noise above 65 CNEL compared to current conditions as represented by the Environmental Baseline year. (Draft EIS/EIR, page 4-11) By using 1996 as the benchmark, the Draft EIS/EIR's noise analysis artificially minimizes the apparent growth in noise impacts associated with the Project. This is because, in 1996, many noisy Stage 2 aircraft remained in the fleet (which were then phased out in late 1999). When the Notice of Preparation was published in July 1997, the Project proponents knew with certainty at that time that some of the noisiest aircraft in its fleet would not operate after December 31, 1999, and that the removal of these aircraft from the fleet serving

¹² Project proponents apparently did not use the most recent Integrated Noise Model (INM) Version 6.0 to calculate aircraft noise as the Draft EIS/EIR discusses INM, Version 5.1a. Draft EIS/EIR, Appendix D, page 6.

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the Airport would reduce the size of the airport's noise exposure contours. The Draft EIS/EIR concedes that the reduction in noise exposure is the result of a federally mandated phase out of older, noisier Stage 2 jets, and not the implementation of the Project. Despite that fact, the Draft EIS/EIR consciously skews the analysis by using 1996 as the Base Year for its noise analysis.

The Draft EIS/EIR disregards the fleet mix changes brought about by the Stage 2 phase out. The Draft EIS/EIR's Average Annual Day Operations and Fleet Mix - Environmental Baseline. (Draft EIS/EIR, Appendix D, page 11) includes a total of 139 noisy Stage 2 aircraft in the daily operations mix. In other words, nearly 7% of the aircraft included in the calculation of the baseline noise contour analysis are high noise producing aircraft the inclusion of which will increase the size of the baseline noise contours and, thereby minimize the apparent impacts of the Project.

Courts have displayed flexibility in dealing with cases involving complex long term environmental review. They have agreed that, for lengthy environmental review such as that at issue here, the analysis of such impacts as surface traffic (and aircraft operations) which normally fluctuate over time are properly assessed against a later baseline than the time of the publication of the Notice of Preparation. (Save our Peninsula Committee, *supra*, 87 Cal.App.4th at 125-126) Therefore, Project proponents are not tied to the 1996 baseline, the last full year of data before the year of Notice of Preparation Publication, but should, more properly, have used a year no earlier than 1999, the last full year of data available before publication of the Draft EIS/EIR. Moreover, that data should have been updated with available data from the year 2000. Absent such an update, the Draft EIS/EIR noise analysis is incomplete and, thus, inadequate.

B. The Draft EIS/EIR Fails to Disclose the Project's Overflight Noise Impacts.

Under FAA Rules, changes in operations above an altitude of 3,000 feet Above Ground Level (AGL) are categorically excluded from environmental review under NEPA. FAA Order 1050.1D, Appendix 3, paragraph 3.a.¹³ However, FAA Order 1050.1D, paragraph 32 also mandates that extraordinary circumstances, such as actions which are likely to have a significant impact on noise levels over noise sensitive areas, or a significant impact on coastal zones, shall be the subject of an environmental assessment.. (*Id.*, paragraph 32)

¹³ The Draft EIS/EIR improperly relies on *draft* FAA Order 1050.1E and the City of Los Angeles. Draft L.A. CEQA Thresholds Guide (May 14, 1998) as authority for several of its assertions.

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Here, the noise analysis in the Draft EIS/EIR narrowly focuses on cumulative aircraft noise impacts created by aircraft approaching the Airport from the east, and from start-of-takeoff roll. However, it completely disregards the impact of single event overflight noise on the South Bay communities: (1) by failing to depict and analyze the noise impacts from additional new routes over areas not previously over-flown; (2) by failing to acknowledge a potential increase in lateral separation of aircraft which could lead to an increase in overflight noise; (3) by failing to report or study the noise impacts of increased operations over coastal zones; and (4) by using an outdated modeling system to justify the decision not to study the noise impacts to South Bay communities.

1. The Draft EIS/EIR Depicts Additional New Routes Over Noise-Sensitive Areas Within the South Bay Communities but Fails to Analyze the Noise Effects of These New Routes.

CEQ Guidelines . 1502.15¹⁴ state that [t]he environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. [emphasis added] The Draft EIS/EIR.s failure to comply with this mandate is two-fold. First, the Preferred Alternative includes new routes over areas not previously impacted. Second, the Draft EIS/EIR does not analyze the noise impact created by these new routes over noise sensitive areas, thereby failing to describe the environment of the areas to be affected or created.

Master Plan Maps (pages II-2.36 - II-2.37, Figures II-2.11 and II-2.12) illustrate that when the Airport is operating on a west flow, M-class or turbo-prop aircraft turn at the VOR. This is contrary to stated airport policy and noise abatement procedures which require aircraft to proceed past the shoreline before starting a turn. In fact, twelve of the departure tracks for turbo-props used to establish the baseline integrated noise monitor data are routed over residential areas not previously overflowed. (Draft EIS/EIR, Appendix D, page 7, Exhibit 2). The use of these incorrect flight tracks and early turns potentially affects the noise contour on both sides of the airport.

Moreover, if the turbo-prop aircraft turn early, the designated routes will cause them to fly over noise sensitive areas such as parts of El Segundo, thus requiring further review under the .extraordinary circumstances. exception of FAA Order 10501.1D, paragraph 32. In short, the

¹⁴ The Draft EIS/EIR is also a federal document subject to the requirements of the National Environmental Policy Act, 42 U.S.C. . 4321, et seq., and its implementing regulations, 40 C.F.R. . 1500, et seq. (.CEQ Guidelines.).

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development of these new routes could potentially violate Airport noise abatement policy and could create unacknowledged impacts which must be analyzed.

2. Greater Lateral Dispersion of Aircraft Will Potentially Occur to Accommodate the Increase in Operations at the Airport Which May Lead to Premature Easterly Turns Over the South Bay Communities and Consequent Increases in Overflight Noise.

Even if no new routes were contemplated, the Draft EIS/EIR states that over 90% of the operations at the Airport are in a west flow with climb out over the ocean. The aircraft then turn either south-east or north-east towards their easterly destination. The Draft EIS/EIR anticipates that the Project will lead to an increase in operations. The Draft EIS/EIR does not, however, discuss the way in which these increased operations will be integrated into the existing Airport air traffic flows. If it did, it would also have to reveal the potential for increased overflights of South Bay communities.

To accommodate this increase in air traffic, more airspace will probably be required to maintain adequate separation between aircraft during climb out. Air traffic controllers separate aircraft in two ways, laterally and vertically. Generally speaking, since heavy departing aircraft are resistant to an increase in vertical separations for reasons of both cost and performance, aircraft are dispersed laterally. As lateral separation between departing aircraft must be maintained, a greater number of offshore aircraft may come closer and over the shoreline, which may also lead to premature easterly turns from the initial southerly headings of departing flights. These premature turns will potentially lead to an increase in overflight noise over South Bay Communities, noise sensitive areas not previously included in standard departure tracks. At a minimum, the Draft EIS/EIR should contain a supplementary single-event noise analysis for communities south of the airport.

3. The FAA Fails to Study the Project's Noise Impacts over Coastal Zones.

FAA Order 1050.1D, paragraph 32, Extraordinary Circumstances, mandates that a normally categorically excluded proposed Federal action which is likely to have a significant impact on natural, ecological, cultural, or scenic resources of national, state, or local significance, including... coastal zones, (FAA Order 1050.1D, paragraph 32) shall be the subject of, at a minimum, an environmental assessment. Included in South Bay communities are the coastal zones south of the airport. As California's coastal zones are of national, state, and local significance, they fall within the mandate contained in FAA Order 1050.1D. Nevertheless, the Draft EIS/EIR fails to acknowledge, let alone analyze, impacts on South Bay coastal zones.

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4. The Draft EIS/EIR Ignores FAA Order 1050.1D, Paragraph 32 and Uses a Modeling System Which Lacks Any Legal or Scientific Basis in Order to Justify the Draft EIS/EIR's Failure to Examine the Noise Impacts to Communities in the South Bay.

The Draft EIS/EIR noise analysis assumes that noise in the South Bay communities which lies outside the parameters established for the noise analysis, does not exist. The noise analysis is, therefore, incomplete. First, as discussed above, the turbo-prop routes and the potential for increased lateral separation of aircraft will have a material impact on noise levels of noise sensitive areas including coastal zones. Therefore, FAA Order 1050.1D, paragraph 32 calls for at least an assessment of changes in operations above 3,000 feet AGL. Nevertheless, the Draft EIS/EIR, in two paragraphs, completely dismisses this requirement and categorically states that no further noise review above 3,000 feet is necessary since the noise associated with jet aircraft weighing more than 75,000 pounds will not change more than five decibels CNEL. (Draft EIS/EIR, Appendix D, page 65)

Second, the rationale for this determination is unexplained and unjustified under either legal or scientific standards. The five decibel CNEL standard is not acknowledged in the procedures and policies of NEPA, FAA Order 1050.1D, or FAA Order 5050.4A. The Draft EIS/EIR's methodology is further flawed by the use of a patently erroneous measure. The FAA's benchmark for the measurement of overflight is Above Ground Level. (AGL).¹⁵ The measure employed in the Draft EIS/EIR is Above the Airport. (Draft EIS/EIR, Appendix D, page 65). The potential for mischief with the latter measure is clear. If the Project proponents analyze noise at altitudes greater than 3,000 feet above an airport's elevation, then communities in the South Bay and elsewhere which are located well above the airport's elevation would be at a severe disadvantage. For instance, Palos Verdes is at approximately 1,480 feet elevation,¹⁶ while the Airport is located at 126 feet.¹⁷ Due to the difference in elevation between Palos Verdes and the Airport, an aircraft may be 3,001 feet above the airport., and its noise not subject to environmental review, while it is only 1,521 feet above Palos Verdes. Thus, while the noise impact may not meet the above the airport. criterion, the noise over Palos Verdes would be significantly greater but remain unaccounted for in the model.

¹⁵ See, in general, FAA Order 1050.1D which uses the benchmark ABOVE GROUND LEVEL. as a starting point for altitude measurements.

¹⁶ <http://pointvicenteinterpretivecenter.com/rpv/recreationparks/content/rpvfactsheet2000.htm> (accessed June 22, 2001).

¹⁷ <http://www.airnav.com/airport/LAX> (accessed June 22, 2001).

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Third, the Draft EIS/EIR claims to have relied upon the Air Traffic Noise Screening Model (ATNS), Version 2.0, to:

.assess the effects of noise level changes associated with air traffic procedure changes at altitudes greater than 3,000 feet above an *airport. s elevation*. This methodology requires that changes in aircraft noise be evaluated if the noise associated with jet aircraft weighing more than 75,000 pounds changes by more than five decibels of DNL (CNEL in California) over residential areas and the aircraft is in flight at an altitude between 3,000 and 18,000 feet *above the airport..* (Draft EIS/EIR, Appendix D, page 65)
[Emphasis added.]

It did not. In fact, it appears that the outdated and obsolete checklist from FAA Notice 7210.360 was utilized instead. ATNS is a computerized version of the former FAA Notice 7210.360, and supercedes the checklist method. It requires actual data input, performs the calculations, and prepares written documentation on the findings. The Draft EIS/EIR contains only a checklist. After checking off five boxes from the *departure. N 7210.360 checklist*, (Draft EIS/EIR, Volume D, pages 79-86) the Project proponents determined that:

.since the flight tracks of the new and relocated runways will be located within close proximity to the present flight tracks of the existing runways, and the aircraft activity on these tracks will not result in an increase of 5 decibels of DNL (CNEL) over any residential area when the aircraft are above 3,000 feet, *the checklist* indicates that no further noise review under this requirement is necessary.. Draft EIS/EIR, Volume D, pg. 65. (Italics added for emphasis.)

The checklist itself is proof that the drafters never used the actual ATNS aircraft noise screening modeling system, but, instead, chose to work with its former outdated and obsolete checklist version. The Draft EIS/EIR misleads the public into believing that an actual, scientific analysis was conducted to determine whether noise decibels would increase above 3,000 feet.

In short, the Draft EIS/EIR does a disservice to the South Bay communities by ignoring the potential noise impacts that the new flight tracks and lateral separation of aircraft will cause to the area. Not only should the Project proponents conduct a full environmental review of the noise impacts to the area under FAA 1050.1D, paragraph 32, but a more accurate, and

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scientifically appropriate methodology should be used to make the determination of the significance of noise impacts over South Bay communities.

IV. THE DRAFT EIS/EIR AIR QUALITY ANALYSIS IS INADEQUATE.

The Draft EIS/EIR's air quality analysis exhibits serious deficiencies, not the least of which is the total absence of a formal air quality conformity analysis required under federal law where, as here, the Project's air quality impacts are not claimed to be insignificant (see 42 U.S.C. . 7506¹⁸). The absence of a conformity analysis necessarily renders the following comments preliminary, and SBCCOG reserves the right to comment further upon issuance of the conformity analysis.

A. The Baseline for the Draft EIS/EIR Air Quality Analysis is Not Appropriately Estimated.

The Draft EIS/EIR assumes that annual aircraft operations will be essentially identical regardless of whether the Preferred Alternative is implemented. Under the No-Action/No-Project Alternative, total operations are expected to be 98 percent of operations under the expanded capacity scenario (air passenger operations activity will actually be *higher* under the No-Action/No-Project Alternative). At the same time, the Preferred Alternative moves about 15 percent more passengers through higher aircraft load factors.

Basic economic theory, however, dictates that under free market conditions demand will reach equilibrium for a given level of supply at a certain market cost (including time costs associated with delays, congestion, etc.). If the supply curve (for air transportation) is then shifted, as would occur under an increased capacity situation such as that proposed,¹⁹ the supply/demand equilibrium for the same level of market cost will shift to a point of higher demand. This shift is often referred to as induced demand, and analyses which do not consider this effect (or which assume demand levels counter to market behavior as appears to be the case with the Draft EIS/EIR) are not accurate in general, or specifically with respect to future air

¹⁸ .No department, agency, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license, permit or approve any activity which does not conform to an implementation plan . . . (42 U.S.C. . 7506(c)(1))

¹⁹ The Preferred Alternative lengthens and reconfigures runways, adds a new West Terminal, and improves traffic flow.

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quality conditions under any of the various alternatives. Viewed from a practical rather than theoretical perspective, the Draft EIS/EIR presumes that the Airport will support over 391,000 aircraft landing and takeoff (LTO) cycles in 2015 by doing nothing other than carrying through with those projects already adopted. Although operations without the Project would be constrained by greater delays as well as excessive times to reach the airport, the Draft EIS/EIR does not account for the discouraging effects of these delays, and assumes that under the Preferred Alternative, specifically designed to relieve these problems of congestion and delay, the total number of annual LTOs will increase by less than 2 percent (to 398,000) over the No-Action/No-Project Alternative. There are only two possible explanations for this relationship: (1) either usage under the No-Action/No-Project baseline is overstated; or (2) usage under the Preferred Alternative is understated. Correspondingly, either emissions for the No-Action/No-Project baseline are overstated or emissions for the Preferred Alternative are understated. The result is an artificial (and erroneous) minimization of the difference in emissions between baseline conditions and those of the Project.

This same issue affects stationary source emissions. Increased airport capacity can be expected to attract associated industrial and commercial activity into the area. This attraction would not occur without the increased capacity and, therefore, must be accounted for if a true assessment of airport emission impacts is to be determined. Note that this commercial development is distinct from currently planned commercial development, in that it occurs due to airport capacity expansion, but outside the formal planning process of the airport. One must recognize that the estimates of reduced emissions under the action alternatives (either the preferred or alternative scenarios relative to a No-Action/No-Project scenario) are due almost entirely to flow improvements in the form of reduced taxiway congestion and improved traffic movement both on and offsite. If these congestion reductions are eliminated or reduced through increased air travel or associated demand that is not properly accounted for in the Draft EIS/EIR, the predicted emissions impacts will not be accurate.

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B. Future Background Pollutant Concentrations Are Not Appropriately Estimated.

Background pollutant concentrations are required to accurately estimate the impact of the proposed Airport expansion on National Ambient Air Quality Standards/California Ambient Air Quality Standards (NAAQS/CAAQS) compliance. These concentrations must account for the combined impacts of the universe of emission sources not explicitly accounted for in the airport analysis. In effect, the background concentrations determine the emissions baseline upon which Airport emissions are placed. If this base is underestimated, the overall affect of airport expansion on NAAQS/CAAQS compliance could be similarly understated. Alternatively, if the base is too high, the Draft EIS/EIR analysis could be conservative. While the Draft EIS/EIR implies the latter, it contains no data to support such a conclusion and some reason to believe that the converse may be true.

Current short term (sub-annual) background concentrations for the Draft EIS/EIR are based on measurements taken at an onsite monitoring station located just east of the southern runway configuration. Current annual concentrations are based on data collected at a South Coast Air Quality Management District (SCAQMD) monitoring facility (Hawthorne) located near, but southeast of the Airport. On the premise that measurements from these sites inherently include emissions from the Airport, the Draft EIS/EIR concludes that such emissions represent conservative background concentration baselines for air quality analysis (since Airport emissions will be added on top of a background that already includes Airport emissions).

However, the prevailing wind direction for the Airport area is southwest to northeast. Therefore, there is probably little influence from the Airport on the offsite concentrations used as background, as well as only moderate influence on the onsite-based background concentrations. The bulk of airport activity, including all terminal and motor vehicle operations occur under the influence of a prevailing wind plume that is further north than the onsite monitoring station. While certain aircraft takeoff and queuing emissions are undoubtedly accounted for in the onsite baseline concentrations, these represent only a small fraction of overall airport emissions. Comparative data for concentrations from both monitoring stations could demonstrate the validity of the claim of conservatism, (i.e., do the observed concentrations for identical monitoring periods show a higher background at the onsite station?), but the Draft EIS/EIR apparently contains no data for the offsite monitoring station (other than the specific background concentrations used in the Draft EIS/EIR and associated documents).

More importantly, the emissions inventory rollback techniques used to forecast future background concentrations are of questionable validity for the Airport area. Background concentrations as well as future emission reduction influences around the Airport are constrained by geography. Since the prevailing wind flows southwest to northeast, the Pacific Ocean

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represents a physical constraint that may significantly influence emission reduction impacts on background concentrations. In effect, the implemented rollback procedure to estimate future background concentrations reduces current background concentrations in proportion to expected *regional* emission inventory reductions over the same time period. Therefore, this procedure inherently assumes that inventory reductions are homogeneous throughout the region in terms of their influence on background concentrations. This is perhaps a viable assumption in instances where one part of a region has similar source characteristics with another, but the Airport region is clearly constrained to those source characteristics along the Pacific coastline to the immediate south of the Airport. It is the expected reductions from these sources in particular that should be used to adjust Airport background concentrations.

Generally background concentrations for 2005 are reduced 30 to 40 percent while concentrations for 2015 are reduced 50 to 60 percent from the current measured data. Clearly this assumes significant emission reductions will affect coastal monitoring sites and provides substantial headroom for emissions increases within the confines of the NAAQS/CAAQS. These reductions probably represent the most significant influence on forecast pollutant concentrations in 2005 and 2015. It is critical that the propriety of the assumed background concentrations at least be supported by comparative analysis of current Airport and offsite monitoring data as well as analysis of emissions source classifications for the area immediately to the south of the Airport with the remainder of the air basin. This comparison will either provide the proper support for the currently implemented approach or suggest a more appropriate alternative.

C. Reverse Thrust Emissions from Aircraft Are Not Included in the Draft EIS/EIR Air Quality Analysis.

The Draft EIS/EIR makes an affirmative determination not to address emissions from aircraft reverse thrust operations, ostensibly on the basis of inadequate emission factors and short usage times. Both of these claims are misleading. First, reverse thrust is essentially a high thrust operating mode and emission factors for such modes (i.e., climbout and takeoff) are readily available. Common practice is to use takeoff emission factors. Second, it is true that the time in mode for reverse thrust operations is short, however high thrust modes produce very high unit time NO_x . For example, at a commonly utilized reverse thrust mode time of 15 seconds, overall effective takeoff time would be increased by 35 percent (0.7 minutes plus 0.25 minutes versus 0.7 minutes), which in turn increases NO_x by 35 percent relative to takeoff alone. Since takeoff accounts for about 35 percent of total aircraft NO_x (according to the Draft EIS/EIR), the overall aircraft NO_x inventory could increase by nearly 13 percent simply due to the inclusion of reverse thrust-related emissions. Without some affirmative determination that such operations will be

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prohibited under the action alternatives, reverse thrust emissions should be included in the Draft EIS/EIR air quality analysis.

D. The Applicability of the Construction Equipment NO_x Standard is Overstated.

The Draft EIS/EIR states that only construction vehicles meeting a 2.5 grams per brake horsepower-hour (g/bhp-hr) NO_x standard will be used for airport construction projects by 2005. Furthermore, this requirement will be phased in between 2001 and 2005, beginning at 20 percent of vehicles and increasing at a rate of 20 percent per year. This requirement raises several concerns as it is applied to the construction equipment emissions analysis in the Draft EIS/EIR.

First, the 3.0 g/bhp-hr NMHC+NO_x standard for construction vehicles does not take effect until 2005 for 300-750 horsepower (hp) engines, 2006 and 2007 for 100-300 hp engines, or not at all for engines of other hp. Mandating this equipment beginning in 2001 may or may not be successful and clearly requires some statement of commitment by the regulated parties. Voluntary, so-called Blue Sky Series, engines can be certified by manufacturers before 2005 but there is no requirement to do so (and little incentive since these engines cannot be used in the emissions averaging programs associated with non-Blue Sky engines). In short, construction firms will only be able to provide equipment that is available on the market and it is dubious that the number of engines meeting the suggested standard in the required years will be significant.

Second, the mandatory clean engine standards that do begin in 2001 require NO_x at levels around 4.0 g/bhp-hr (an exact value is not possible since the standard is again expressed as NMHC+NO_x, in this case 4.8 g/bhp-hr). However, these standards also only apply to 300-750 hp equipment. While a number of construction engines fall into this category, many others range from as low as 25 hp up through 300 hp. For these lower hp categories, standards do not begin until 2003 or 2004 and get progressively less stringent as engine size decreases (to 5.6 g/bhp-hr for engines below 100 hp).

Third, even if this low emissions requirement could be enforced (i.e., use of only new Blue Sky Series engines at the Airport), an assumption of 100 percent in-use compliance is overly optimistic. While it is not possible to say with certainty what fraction of equipment may operate at emissions levels above certification standards, experience has demonstrated that engines employing sophisticated engine management strategies and aftertreatment controls (as is expected for these engines) are subject to both malperformances and maintenance effects. For first generation engines, such problems are usually exacerbated. What can be stated with certainty is that construction emissions impacts will be larger than the level acknowledged in the Draft EIS/EIR.

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E. General Emissions Factors for Offroad Equipment are Understated.

In general, it appears that the emission factors employed for offroad engines, even in the absence of the 2.5 g/bhp-hr issue noted above, are significantly underestimated. This underestimation affects not just construction equipment, but both baseline and ongoing Ground Support Equipment (.GSE.) operations, and results from the fact that outdated emission factor sources were utilized. The net effect is that airport emission and air quality impacts are underestimated.

Offroad engine emissions knowledge is currently in a state of rapid development and estimation techniques need to maintain currency with the latest methods. In California, this would imply use of the California Air Resources Board's (.CARB.) OFFROAD emission factor model, while nationally a similar model termed NONROAD has been developed by the U.S. Environmental Protection Agency (.EPA.). While development continues on both, they clearly represent the most up-to-date compendiums of current offroad engine emissions estimation techniques. For example, these models employ the most recent emission factor test data, emissions deterioration test data, and equipment size and activity factors. References cited in the Draft EIS/EIR, such as the EPA's AP-42 and Procedures for Emissions Inventory Preparation documents as well as the SCAQMD's CEQA Handbook, employ less developed and seriously outdated data.

An example of the magnitude of the emissions underestimation can be derived by comparing emission factors across the alternative methods. The Draft EIS/EIR relies on the use of EDMS to generate GSE emission estimates. However, EDMS includes significantly outdated GSE emissions data.²⁰ A quick comparison indicates that CARB OFFROAD model and EPA NONROAD model GSE (average) emission rates (for the same equipment activity distribution assumed in the EIS/EIR) are, for diesel equipment, from 7 to 13 times greater for VOC, 5 to 10 times greater for PM, 5 to 9 times greater for CO, 4 to 5 times greater for NO_x, and 4 to 5 times greater for SO₂. For gasoline GSE, the models produce average emission rates 10 to 20 times greater for VOC, 1 to 6 times greater for PM, 15 to 16 times greater for CO, 6 to 9 times greater for NO_x, and 2 to 4 times greater for SO₂. The impact of using outdated emission rates is clearly significant and should be reevaluated if realistic air quality impacts are to be derived.

²⁰ This may be improved in the latest version released subsequent to the completion of the Draft EIS/EIR.

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F. Ground Support Equipment Populations Are Not Appropriately Specified.

The Draft EIS/EIR uses the FAA's EDMS model to estimate GSE emissions. An inherent assumption within this approach is that EDMS properly estimates GSE populations. Since the current GSE population at the Airport is known, it would be appropriate to determine whether EDMS assumptions are consistent with the Airport's actual population and use-hour statistics. This would provide support for the validity of EDMS equipment estimation algorithms and allow for a more appropriate assessment of the accuracy of the GSE emissions estimates and air quality impacts of the Draft EIS/EIR.

G. Emissions Benefits of Conversion of GSE to Electric, Hybrid, and Alternative Fuels are Overstated.

The Draft EIS/EIR contemplates a widespread GSE replacement program under all three of the action alternatives, while retaining primarily fossil fuel powered GSE for the No-Action/No-Project Alternative. While this could be construed as a mitigation measure and, in fact, is listed as the single most effective mitigation measure on the list of potential mitigation measures included in the Draft EIS/EIR, it is arbitrary to apply the measure only to the action alternatives, as there are no specific constraints to such substitution today or under the No-Action/No-Project Alternative. Electric GSE is cost effective from a market standpoint today. Therefore, whatever incentive or mandate will be offered under the action alternatives to move toward electrification could just as readily apply today. The infrastructure modifications are relatively modest and implicate no limitation of use to any of the action alternatives. But by far the most troubling issue is that the replacement program already appears to be accounted for in the unmitigated emission estimates for all three action scenarios. If this is the case, no additional emission reductions will be achieved through GSE electrification.

H. Incorrect Aircraft PM Emission Factors Are Used in the Draft EIS/EIR Air Quality Analysis.

Two issues exist with respect to the PM analysis that result in an underestimation of the Project's potential air quality impacts. First, it appears that the Draft EIS/EIR is based on the incorrect emission factors from the analysis undertaken to develop those factors. Second, it appears that the approach used to develop PM emission factors for aircraft²¹ produces estimates that are not consistent with previous PM emissions testing results.²²

²¹ The International Civil Aviation Organization emissions certification process does not include PM.

²² Adjustments not employed in the Draft EIS/EIR may compensate for most of this

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Analysis of PM emission factor estimation reveals that the basic estimation approach used in the Draft EIS/EIR yields an emission factor that only considers the basic non-volatile portion of particulate. An adjustment factor (that varies with fuel sulfur content) exists and should be used to correct the estimate to total PM. This factor is calculated to be about 2.6 for low sulfur (about 70 ppmW) jet fuel and 14.7 for high sulfur (about 675 ppmW) jet fuel.²³ Since existing EPA data demonstrates that U.S. jet fuel averages about 600 ppmW sulfur, the appropriate adjustment factor for the Draft EIS/EIR would be about 13.2. However, from figures presented in the Draft EIS/EIR, it appears that the unadjusted emission factors were used for all emissions analysis. If so, PM emission impacts are significantly underestimated and should be reassessed after applying an adjustment to increase the PM emission rate by a factor of 13.

In addition there is a potential deficiency in the approach employed to estimate PM emission factor data. The underlying need for a statistical estimation technique such as that employed cannot be disputed as the available PM emissions testing database is both small and dated. However, the Draft EIS/EIR statement that the age of that data renders it valueless are questionable. Engine technology has advanced relative to the engines represented in the test database, but the fundamental combustion characteristics that give rise to PM formation have not. While advances in reducing one (or multiple) pollutant(s) have occurred, those advances do not come without penalties in regard to other pollutants. For example, several low emission combustors are marketed for aircraft and these do result in substantially reduced NO_x production relative to standard combustor engines. However, they also generate significantly increased HC and CO emissions as a tradeoff. The additional claim that the existing aircraft emission factors are not of value since they reflect total PM as opposed to PM-10 is without merit. Virtually 100 percent of combustion-related PM is PM-10, so any error resulting from the substitution of total PM for PM-10 will be insignificant. In fact, the PM emission factor estimation approach employed in the Draft EIS/EIR requires an assumption of equivalency between total PM and PM-10.

If relationships between aircraft PM and another pollutant can be developed in one or more operating modes, then values for the independent pollutant can be used to estimate PM emission rates in that mode or modes. Such a statistical approach can take advantage of the limited existing PM emissions database while at the same time recognizing the substantial progress that has been made in aircraft engine performance. It is, however, critical that such

deficiency.

²³ This calculation is based on data presented in the Draft EIS/EIR.

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relationships consider possible mode-specific differences, as engine and combustion efficiency vary substantially across modes. For example, one would expect PM emission rates to be inherently low in high efficiency (high NO_x) modes of operation since the same high temperature, high pressure conditions that give rise to high NO_x also favor more complete fuel combustion. Conversely, they would be high in low efficiency combustion modes. It is not clear, however, that the significance of the inter-species relationships are invariant across the full range of operating modes.

A very strong statistical relationship between measured PM and the inverse of measured NO_x is observed in three of the four standard operating modes (approach, takeoff, and climbout), with coefficient t statistics all significant at 99-plus percent confidence. A strong coefficient can also be observed for the taxi mode, but it explains virtually none of the observed variation in PM and NO_x (whereas variance explanatory significance exceeds 99 percent confidence for the other three modes). The magnitude of the relationship coefficients varies from 28.4 in takeoff mode to 45.0 in climbout mode and 33.0 in approach mode. While all three modes exhibit significant relationships, takeoff mode serves as a good relationship basis as it statistically produces the smallest root mean square error based on regression data (an error 35 to 40 percent lower than those of climbout and approach modes). With this lynchpin to the ICAO emissions database in place, PM emission rates for the other three modes (climbout, approach, and taxi) can be developed based on observed statistical relationships with takeoff PM (i.e., PM-to-PM regressions across modes). Linear coefficients for all three modes (1.42 for climbout, 1.53 for approach, and 3.10 for taxi, all in pounds per thousand pounds fuel burned space) are significant at 99-plus percent confidence, with adjusted correlation coefficients for climbout and approach at 0.78 and 0.83 respectively. Taxi mode correlation is poor, but the PM-to-PM relation does account for the observed variance at greater than 99 percent confidence.

The net result of this calculation is a determination that this alternative approach produces PM emission rates that are 4 to 37 times higher than those used in the Draft EIS/EIR. The smallest differentials are observed at the highest thrust modes, and differentials potentially grow with reducing thrust because the Draft EIS/EIR approach does not take operating efficiency differentials between modes into consideration. Nevertheless, for a typical LTO cycle (as per Draft EIS/EIR times-in-mode), the aggregate PM emission factor will be underpredicted by a factor of 17 using the Draft EIS/EIR approach. The effect on PM air quality analyses is obvious.²⁴

²⁴ Interestingly, if the appropriate carbon-to-total PM emission factor correction of 13.2 is implemented as suggested in the support material for the Draft EIS/EIR, the bulk of the emission factor differentials between the two estimation approaches virtually disappear (i.e., a correction factor of 13 versus an underestimation factor of 17 for an aggregate LTO). Nevertheless, significant differences would still exist on a mode specific basis.

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I. Aircraft SO₂ Emissions are Underpredicted.

The Draft EIS/EIR relies on version 3.2 of the EDMS model to predict aircraft SO₂ emissions. This model underestimates aircraft SO₂ emissions by a factor of two due to reliance on an incorrect AP-42 emission factor (the factor was developed without accounting for the factor of two ratio between SO₂ mass and fuel sulfur mass). To the extent that the Draft EIS/EIR already demonstrates potential ambient SO₂ concerns, those concerns would be exacerbated by this underprediction.

J. The Assumption of Gate-Based Power and Air for All Aircraft is Questionable.

The Draft EIS/EIR assumes that 100 percent of air carrier gate power and conditioned air needs will be satisfied by gate-based electrically powered systems as opposed to fossil fuel powered auxiliary power units (APU) or GSE. Experience has shown that even under conditions where gate-based equipment is available, not all airlines or aircraft will utilize it consistently. This seems to be especially true for quick-turnaround airlines such as Southwest. Although the assumption of 100 percent availability and usage affects the no action and action scenarios equally, it is important from an ambient air quality perspective to account for the full range of expected emissions. Without some definitive airport policy that gate-based systems (both power and air) be used and that any on-board APU be shut down until needed for main engine startup, the Draft EIS/EIR would present a more realistic assessment of aircraft emissions if it adjusted the percentage of gate-based system usage to match currently observed use rates at the Airport.

K. APU Emission Factors for SO₂ and PM Not Considered.

APU emission factors for both SO₂ and PM are assumed to be zero. This results from deficiencies in the EDMS model and should be corrected to properly estimate aircraft-related air quality impacts. SO₂ emissions are a function of fuel sulfur and emission rates can be readily calculated and applied. APU PM emission rates can be developed using the same methodology applied to main aircraft engines. The potential impacts of this deficiency would be magnified were the Draft EIS/EIR to properly attribute some fraction of gate power and air support to APU.

L. Aircraft Taxi Times are Not Included in the Draft EIS/EIR or Supporting Data.

Aircraft taxi-idle times are not included in the Draft EIS/EIR, its technical appendices or supporting documentation.²⁵ It can be deduced from the included emissions estimates for aircraft

²⁵ The Draft EIS/EIR contains references to the development of the taxi/idle times using SIMMOD, but no actual indications of what those times were.

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taxiing that those emissions decrease substantially under the action scenarios, but the actual times should be included to allow the public an opportunity to better evaluate their propriety. In addition, the ability of SIMMOD to accurately estimate aircraft taxi times must be demonstrated by comparing SIMMOD predictions for current conditions at the Airport to observed taxi times at the Airport. The issue of aircraft taxi times is critical. The bulk of Aircraft VOC and CO emissions are generated during taxiing. In addition, although NO_x emissions rates are low during taxiing, the amount of time spent in taxi mode results in a significant contribution to overall NO_x emissions. Clearly, it is important that taxi times be accurately modeled. However, sufficient information is not included in the Draft EIS/EIR to determine that accurate modeling occurred.

M. The Project's Conformity Cannot Be Determined from Data and Analysis Contained in the Draft EIS/EIR.

Even without consideration of the various issues noted above, the Draft EIS/EIR presents several air quality concerns relative to the NAAQS/CAAQS under the Preferred Alternative. Although a series of mitigation measures are discussed and preliminary emission reduction estimates presented, these estimates are not documented and methodologies cannot be evaluated. The Draft EIS/EIR defers formal review of potential mitigation measures until a Final EIS/EIR is developed. Similarly, the Draft EIS/EIR acknowledges the applicability of federal conformity requirements, but defers both the conformity analysis and a proposed conformity determination to the Final EIS/EIR. Unfortunately, such an approach makes it impossible to comment constructively on either potential emission mitigation measures or the conformity process, since these processes will be released for comment only after the underlying decision-making has been finalized.

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V. THE DRAFT EIS/EIR'S ALTERNATIVES FAIL TO SATISFY THE PURPOSE AND NEED FOR THE PROJECT.

The mandate to evaluate and compare alternatives is the heart of an EIS (CEQ Guidelines, . 1502.14). FAA Order 1050.1D, paragraph 63, implementing NEPA, mandates that an EIS shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action. The FAA Order further requires that the EIS Alternatives analysis include a rigorous exploration and objective evaluation of all reasonable alternatives. Courts have concluded that to be reasonable, the suggested alternatives must meet the goals of the proposed action.²⁶

The Draft EIS/EIR.s alternatives analysis fails to meet the stated goals of the Project. The Draft EIS/EIR states that the general [p]urpose and objectives of the Master Plan are to provide... sufficient airport capacity for passengers and freight in the Los Angeles region to sustain and advance the economic growth and vitality of the Los Angeles region. (Draft EIS/EIR, volume 1, pg. 2-1) More specifically, the Draft EIS/EIR outlines three objectives which the Project needs to satisfy: (1) .to respond to the local and regional demand for air transportation during the period 2000 to 2015, taking into consideration the amount, type, location, and timing of such demand.; (2) .to ensure that new investments in airport capacity are efficient and cost-effective, maximizing the return on existing infrastructure capital.; and (3) .to sustain and advance the international trade component of the regional economy and the international commercial gateway role of Los Angeles..²⁷

It is not clear, however, that the proposed runway improvements that form an integral part of Alternative C, the Preferred Alternative, constitute a superior, or even an efficient way to accomplish the Project.s stated purposes. For example, all three of the Project.s objectives could potentially be, at least partially, achieved through airspace/air traffic modifications, both within the terminal airspace and in the en route system. This alternative is neither acknowledged nor explored in the Draft EIS/EIR. Nevertheless, this conclusion is supported by the fact that the Dual Civet arrival configuration has reduced arrival delay for operations from the east significantly since 1998 and has resulted in an average time-savings of 4.4 minutes per Civet

²⁶ See, generally, City of Carmel-By-The-Sea v. United States DOT, 123 F.32 1142 (1997); National Wildlife Federation v. Federal Energy Regulatory Commission, 912 F.2d 1471 (1990).

²⁷ Id.

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turbojet arrival aircraft. In fact, since the Dual Civet arrival procedures were implemented, there have been no national delay programs set up for the Airport, since delay has not been an issue. However, the Draft EIS/EIR does neither address nor incorporate the capacity or delay reduction efficiencies gained through this procedure in any of its modeling.²⁸

Moreover, a closer examination of the Master Plan and the Draft EIS/EIR reveals that the Draft EIS/EIR may have ignored relatively inexpensive improvements in air traffic procedures in favor of very expensive, physical changes to the airfield. This is apparently because the Project's true purpose does not include the first two claimed in the Draft EIS/EIR, i.e., the broad ones of providing sufficient airport capacity for passengers and freight in the Los Angeles region. (Draft EIS/EIR, Volume 1, page 2-1), in an efficient and cost effective way (Draft EIS/EIR, page 2-1). Instead, the Project's principal purpose is the narrow and singular one of accommodating New Large Aircraft (NLA) that, with their long haul capabilities, would potentially serve the Airport in order to sustain and advance the international trade component of the regional economy. (Draft EIS/EIR, page 2-1)²⁹

This conclusion is substantiated by the fact that the current aircraft fleet does not require 12,000 feet of runway to take off. Even today's heavy aircraft such as the B-747-400 and the B-777-400 only need 8,000 - 10,000 feet of runway for take-off and landing (under the weather

²⁸ Where the Master Plan does address air traffic procedures, it is in error. The Master Plan states that the Departure Sequencing Program (DSP), a program that provides the capability to sequence departures from Los Angeles basin airports, would enhance capacity at the Airport. (Master Plan, 2.6.1.3, page II-2.137) However, the DSP program has been cancelled by the FAA due to a lack of benefit. Essentially, the Southern California TRACON consolidation effort occurred many years ago and the references to it in the Master Plan and the Draft EIS/EIR are outdated. Many innovations and changes in airspace and procedures at the TRACON over the past few years have occurred, and none are referenced or adequately considered in the Draft EIS/EIR. Basically, the Draft EIS/EIR does not address the changes in airspace design or the new routes that have been developed as a result of airspace enhancements in Southern California.

²⁹ The Draft EIS/EIR comes close to admitting as much: Development of NLA aircraft is driven by increasing demand and constrained international gateway airports around the world, including LAX ... Development of the NLA will allow these airports to continue to meet the growing demand for travel between primary trading partners. As one of the three major (and busiest) gateway airports in the nation, LAX would be one of the first airports to be served by NLA. (Draft EIS/EIR, page 2-11)

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conditions prevailing at the Airport). The Airport's existing runways are 8,295-feet, 10,285-feet, 12,091-feet, and 11,096-feet in length. Thus, even the shortest runway at the Airport can accommodate the heaviest and largest aircraft in the fleet under prevailing circumstances today.

The result of the Draft EIS/EIR's failure to acknowledge the Project's primary purpose, i.e., to increase the proportion of super long-haul aircraft in the fleet, is a concomitant failure to analyze the full range and magnitude of environmental impacts that may arise from the desired change in fleet mix. While it is, as yet, early in the NLA development process, some technical facts about the aircraft are already known, sufficient to make at least some educated projections concerning its impact. For instance, ascertaining the projected climb rate will enable an estimate of whether the NLA can meet current airport noise abatement operational requirements; or whether those will have to be altered; or whether the NLA will, ultimately, overfly noise sensitive communities at lower (or higher) altitudes, resulting in higher (or lower) noise levels over those communities. Similarly, preliminary data concerning engine type and emissions characteristics would enable at least a preliminary analysis of the air quality impact of the NLA, as well as the GSE needed to support it, if different from those categories already in use. Finally, the Draft EIS/EIR should have included the capacity/delay impacts from the increased use of NLA. As the Draft EIS/EIR fails to model ground operations in detail, the delay impacts that may result are not considered in developing an accurate analysis of arrival and departure flows and the congestion which may ensue even after Project implementation.

In summary, because the alternatives analysis is the heart of the NEPA process; because the Draft EIS/EIR fails to consider, or analyze, the impacts of eminently reasonable alternatives such as airspace changes to meet the Project's stated purposes; because Alternative C does not alone meet the Project's stated purposes; and because the most significant result of implementing Alternative C, the increased capacity to accommodate NLAs, remains unanalyzed from an environmental perspective, the Draft EIS/EIR's alternatives analysis is seriously flawed.

VI. THE DRAFT EIS/EIR DOES NOT ADEQUATELY SPECIFY MITIGATION MEASURES OR METHODS TO ENFORCE THEM.

CEQA requires that agencies identify the environmental impacts of a project, and implement mitigation measures to lessen the adverse environmental impacts. (CEQA Guidelines 15002 (a)(3)). However, the Draft EIS/EIR fails to comply with CEQA by (1) failing to provide a complete list of mitigation measures, and (2) failing to specify, at a minimum, a Draft Mitigation Monitoring Program to inform the public of how the project proponents intend to ensure the implementation of mitigation measures.

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A. The Draft EIS/EIR Delays Disclosure of the Full List of Mitigation Measures Until the Final EIS/EIR.

CEQA Guidelines .15126.4(a)(1)(B) mandates that the [f]ormulation of mitigation measures should not be deferred until some further time.. While the Draft EIS/EIR acknowledges the existence of significant unmitigable impacts, it also states that, .A final package of design features, Master Plan Commitments, and Mitigation Measures will be developed ... The resulting Environmental Action Plan will be published in the Final EIS/EIR.. (Draft EIS/EIR, Executive Summary, pg. ES-30) By deferring to the Final EIS/EIR to reveal the mitigation measures, the public's opportunity comment will have been attenuated. The SBCCOG, therefore, reserves the right to comment on items, including the Draft Conformity and Mitigation Monitoring Program that should have been included, but were omitted from the Draft EIS/EIR.

B. The Draft EIS/EIR Fails to Provide a Draft Mitigation Monitoring Program.

California Public Resources Code .21081.6 requires that a public agency .adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.. (Cal. Pub. Resources Code .21081.6 (a)(1)). If an EIR .identifies one or more significant environmental effects of the project, . CEQA Guidelines .15091(a) requires an agency to .make one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding.. With these findings, the CEQA Guidelines mandate that .the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.. (CEQA .15091(d))

The Draft EIS/EIR violates CEQA Guidelines .1509(d) and California Public Resources Code . 21081.6 in that it fails to set forth a program that monitors or reports on each mitigation measure. Although the Draft EIS/EIR cites some mitigation measures to combat the environmental impacts of the Project, it makes no mention of the .permit conditions, agreements, or other measures. (CEQA Guidelines . 15091(d)) which would ensure compliance with mitigation measures. In other words, it does not specify the steps necessary to ensure compliance, the responsible party to ensure compliance, or the resulting consequences should compliance not occur.

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VII. THE UNRELATED ISSUE OF SAFETY SHOULD NOT BE USED AS A SMOKE SCREEN TO PUSH THE CAPACITY-DRIVEN DRAFT EIS/EIR FORWARD.

In recent public statements, the FAA and LAWA have introduced the notion that because of its high number of runway incursions, the Airport is unsafe, and that the Project's improvements are critical to remedying the adverse safety conditions.

Contrary to the FAA's contention, however, runway incursions are largely a function of pilot or air traffic controller error, not airport layout and design.³⁰

In fact, the Airport can eliminate runway incursions only if it builds runways with no entrances and no exits. However, simple solutions such as enhanced marking and lighting for runways, increased awareness and training for pilots and controllers, improvements in communications and procedures, and resolving management issues at the FAA³¹ are all basic and available measures that should be implemented at the Airport. In addition, affordable incursion-reducing technologies currently available to the Airport such as the Airport Movement Area Safety System (presently in use at the San Francisco International Airport), which uses radar to alert controllers to potential collisions, would minimize the problem as well.³² In fact, even the

³⁰ A pilot might enter a runway without proper authorization or clearance; a pilot is unfamiliar with an airport, does not hear an instruction, or fails to acknowledge an instruction to hold short of an active runway; a pilot, when approaching an active runway, crosses the hold line for that runway; a controller may clear an aircraft onto an active runway without ensuring that there are no other aircraft operating on that runway; the controller may fail to coordinate an aircraft crossing a runway with the controller who has the responsibility for approving all operations on that runway; a controller may clear an aircraft to cross a runway and the pilot may take an excessive amount of time crossing and may interfere with another aircraft; and the controller may fail to exercise the proper oversight of the operation and allow two aircraft to occupy an active runway resulting in a runway incursion.

³¹ Transportation Department Inspector General Kenneth M. Mead recently told a House subcommittee that the FAA's director of runway safety has little authority over FAA employees who work on runway safety projects. Result: Almost every FAA runway safety project runs years late at more than double the anticipated cost, often failing to meet original expectations. The Washington Post Company, Runway Alert., page A22, July 7, 2001.

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FAA has even pressed the need for instituting technological improvements at airports to combat the runway incursion issue.³³

While recent incidents have made runway incursions a hot button in the eyes of the public, Congress, and aviation organizations, this recently surfaced safety issue cannot serve as justification for a project which otherwise fails to meet environmental standards.

VII. CONCLUSIONS.

Based on the above analyses, the SBCCOG concludes that the Draft EIS/EIR does not serve its most fundamental purpose as an environmental alarm bell to alert the public and responsible officials to environmental changes before they have reached ecological points of no return. (See, e.g., County of Inyo v. Yorty, 32 Cal.App.3d 795, 810 (1993).) Among other things, the varying baselines, selectively applied to areas of potential impact so as to artificially diminish the apparent impacts of the Project; the virtual absence of any analysis of impacts south of the Airport; and the lack of consideration of imminently reasonable alternatives, including air traffic alternatives, to the expenditure of billions of dollars in what are ultimately only marginally effective airfield improvements, require substantial analytic revisions to the Draft EIS/EIR. The SBCCOG further concludes that, after those revisions are made, significant new information will emerge which will require that the Draft EIS/EIR be recirculated (Center Sensible Planning, Inc. v. Board of Supervisors, 122 Cal.App.3d 813, 822 (1981), so that the public, in general, and the SBCCOG and its members in particular, are not denied their statutorily mandated opportunity to test, assess and evaluate the new data and conclusions contained in the revised Draft EIS/EIR, and to make informed judgments as to their validity.

The SBCCOG thanks LAWA for this opportunity to comment.

Sincerely,

³² It is the first surface detection equipment that really gives an alert to the controller and allows the controller to prevent a collision. CNN, Close Calls on Runways Alarm Aviation Experts, June 27, 2001.

³³ The Director of the FAA's Runway Safety Office, Mr. Bill Davis, expressed that he needs additional authority to coordinate and speed up technological improvements. The Washington Post Company, Runway Alert, page A22, July 7, 2001.

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City of Los Angeles
Los Angeles World Airports
July 18, 2001
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CHEVALIER, ALLEN & LICHMAN, LLP

By:

Consultant
South Bay Cities Council of Governments

AL00029

City of Alhambra

Daniel R. Arguello

Mayor

September 20, 2001



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Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports-Master Plan Office
P.O. Box 92216
Los Angeles, CA 90009-2216

RE: LAX Master Plan

Dear Mr. Ritchie:

The City of Alhambra strongly supports regional airport development and urges the City of Los Angeles to explore this alternative approach.

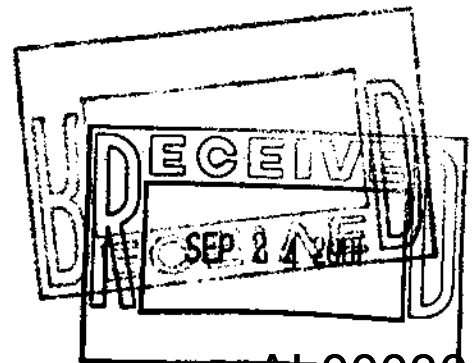
Current expansion scenarios under consideration in the LAX Master Plan would lead to greater strain on LAX's already overburdened airport infrastructure. This facility produces more noise and NOX emissions than any other in Southern California. It is plagued by severe operational inefficiencies and contributes to the severe traffic congestion problems of local communities. The City of Alhambra, which is located near the 10 and 605/710 freeways, is especially concerned about increased air and vehicular traffic, modifications to current flight patterns and the effects of additional air and noise pollutants if this plan is put into effect.

There is no doubt that action must be taken to accommodate increased demand for air travel. Over the next two decades, it is projected that Southern California's population will grow by 40%—with even greater increases in employment. But, in evaluating patterns of projected growth, research indicates that the highest concentration of change will occur in the outlying regions of Southern California—not even close to LAX. These projections justify the need for regional airport expansion where each county is delegated the responsibility to provide for the air travel needs of its own residents—which is currently estimated at a fraction of the cost of expanding infrastructure at LAX.

The City of Alhambra hopes you will look further into this alternative before committing to one of the approaches noted in the LAX Master Plan.

Respectfully Yours,

Daniel R. Arguello
Mayor
City of Alhambra



AL00030





City of Hermosa Beach

Civic Center, 1315 Valley Drive, Hermosa Beach, California 90254-3885

September 20, 2001

Mr. Jim Ritchie
City of Los Angeles
Los Angeles World Airports
LAX Master Plan/Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216

Mr. David B. Kessler, AICP
Federal Aviation Administration
P.O. Box 92007
Worldway Postal Center
Los Angeles, CA 90009-2007

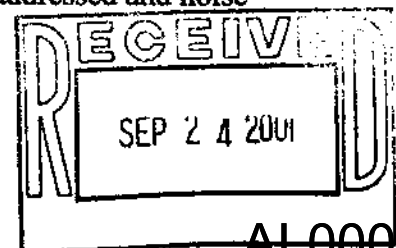
Subject: Draft Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements – Comments from the City of Hermosa Beach

Dear Mr. Ritchie and Mr. Kessler:

The following constitutes the comments of the City of Hermosa Beach pursuant to the requirements of the California Environmental Quality Act, Public Resources Code 21000, et seq., and the National Environmental Policy Act, 42 U.S.C. 4321, et seq., concerning the Draft Environmental Impact Report for the Los Angeles International Airport Proposed Master Plan Improvements (the Project).

The City of Hermosa Beach, by unanimous consent of the City Council of Hermosa Beach, concurs with the comments of the South Bay Cities Council of Governments as set forth in the attached letter from Barbara Lichman, Consultant. The City of Hermosa Beach concurs with the entirety of the comments and with all the issues raised, which fall into the following general categories:

- The baseline data used in the Draft EIS/EIR, against which the various environmental impacts of the proposed Master Plan Improvements are compared, is not properly designated.
- The noise impacts of the Project are inadequately and incompletely addressed and noise impacts are not fully disclosed.



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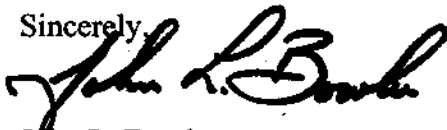
Mr. Jim Ritchie
Mr. David B. Kessler, AICP
Page 2

- The potential air quality impacts of the Project are inadequately and incompletely addressed and not fully disclosed.
- The Project surface traffic impacts are not fully analyzed, and lack adequate consideration of the impacts on South Bay communities.
- The Draft EIS/EIR does not explore all reasonable alternatives, and thus paves the way for its ultimate conclusion that the expansion of the airport is the sole way to meet future demand.
- The Draft EIS/EIR fails to adequately specify mitigation measures or methods to enforce them.

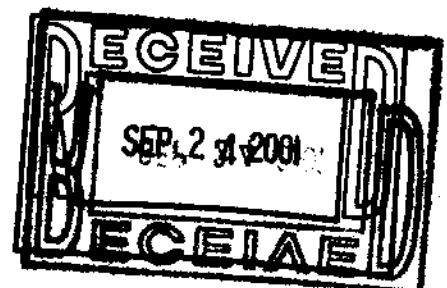
The City of Hermosa Beach concurs with the entirety of the comments of South Bay Council of Government, which are by no means limited to these general categories.

The City of Hermosa Beach thanks the Los Angeles World Airports for this opportunity to comment.

Sincerely,



John L. Bowler,
Mayor



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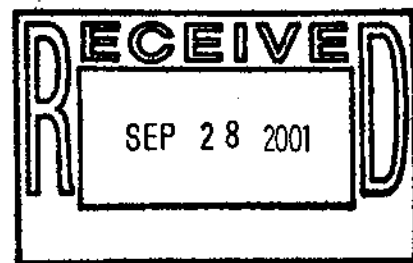


Metropolitan
Transportation
Authority

One Gateway Plaza
Los Angeles, CA
90012-2952

September 24, 2001

Mr. James Ritchie
Los Angeles World Airports
City of Los Angeles
LAX Master Plan / Room 218
P.O. Box 92216
Los Angeles, CA 90009-2216



RE: LAX Master Plan Draft EIS/EIR

Dear Mr. Ritchie:

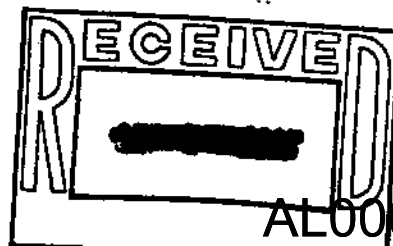
Thank you for providing the Los Angeles County Metropolitan Transportation Authority (MTA) the opportunity to review and comment on the Draft Environmental Impact Statement / Environmental Impact Report (DEIS / DEIR) of the LAX Master Plan. This letter conveys observations and comments concerning issues that are germane to our agency's statutory responsibilities in relation to the proposed project. These issues include: 1) Metro Rail Green Line extension, 2) LAX City Bus Center, 3) Intermodal Transportation Center, 4) Roadway Construction Impacts and Mitigation, and 5) Transportation Mitigation Strategies.

1. Metro Rail Green Line Extension

The adopted MTA "Long Range Transportation Plan" (LRTP) does not include any funding for the proposed extension of the Metro Rail Green Line into LAX. In fact, the LRTP assumes that the Metro Rail Green Line extension would be built with non-MTA funding. Therefore, it will be important that the Metro Rail Green Line extension programming, budgeting and implementation phasing be addressed as part of the LAX Master Plan expansion alternatives.

Sections 4.3.1 and 4.3.2 (*On-Airport Surface Transportation and Off-Airport Surface Transportation, respectively*) should contain detailed descriptions of the Green Line extension route alignment and how it interfaces with other current and planned transportation modes; and should contain detailed data on the project programming and budgeting scenarios including a construction implementation schedule in the alternatives analysis. MTA would like to see a discussion on the role of the Passenger Facility Charge (PFC) for possible funding of the Green Line.

Employees of LAX, LAX-related companies, and adjacent commercial establishments may continue to constitute a majority of passengers on the Green Line extension either with or without the LAX expansion. (This is currently the case and is supported by the current passenger profile of passengers who embark and disembark at the Aviation station).



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The destinations of these employees are currently located or are proposed to be relocated to the north and east of LAX property. While we agree with the DEIS / DEIR the extension of the Green Line to the new west terminal will likely increase Green Line patronage and result in an increased share of airport passengers, we still believe that the majority of users will be oriented to the east. Therefore the DEIS / DEIR needs to consider alignments towards and along the airport's eastern end for both future patronage and cost-effectiveness.

2. LAX City Bus Center

A relocation site for the LAX City Bus Center is not identified in the Draft EIS / EIR. An exact relocation site needs to be identified as part of the Final EIS / EIR so that bus circulation, passenger ingress/egress issues, and intermodal issues can be addressed. All transit operators would experience at least some change in operating cost no matter what alternative is selected.

3. Intermodal Transportation Center

An Intermodal Transportation Center (incorporating the relocation of the LAX City Bus Center) where all transit modes could seamlessly interface in one convenient location (bus, light rail, and Automated People Mover) has not been identified in the DEIS / DEIR and should be an integral part of the Master Plan. The Intermodal Transportation Center provides the critical interface between local transit operators with regional and international connections via LAX. This would serve to increase the percentage of airport passengers arriving at LAX via public transportation (thereby mitigating congestion on the area roadway system). The new center could be located close to the vicinity of the current Parking Lot B or C. A multi-modal location study completed in 1993 by the MTA, supported by an interagency task force including the City of Los Angeles departments of Airports and Transportation, indicated feasible sites existed within parking lots B and C. The DEIS/DEIR should evaluate alternative sites where the various transit modes including the Metro Rail Green Line, Bus and APM can interface.

An alignment for the Automated People Mover (APM) should be considered that would provide a circulator loop from an Intermodal Transportation Center oriented to the eastern side of LAX connecting the Airport Hotels along Century Blvd and the Car Parking and Central Terminal Areas. The Metro Rail Green Line could then be extended north from Metro Rail Aviation Station to the new Intermodal Center. The extension of Metro Rail Green Line could consider utilizing the MTA- owned Harbor Subdivision right-of- way (ROW) which runs along the west side of Aviation Boulevard.

4. Roadway Construction Impacts and Mitigation

The scope of construction associated with the extension of the Century Fwy. (I-105), the LAX ring roadway, and other related projects will result in a very significant increase in traffic and Vehicle Miles Traveled (VMT) in the LAX area.

Transit services may need to be detoured around construction areas, creating an adverse impact on vehicular traffic, transit passengers and transit operating costs. A construction committee similar to that used by the Alameda Corridor project, consisting of representatives from the MTA, other municipal transit operators, City of Los Angeles DOT and Caltrans for example, is essential so that adverse effects due to construction of the mitigation measures may be minimized.

5. Transportation Mitigation Strategies

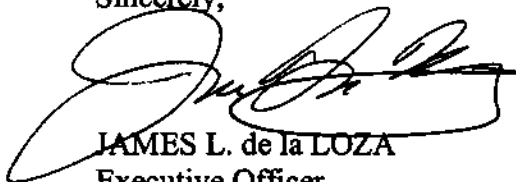
The DEIS / DEIR identifies significant road improvements necessary as for traffic mitigation in the adjacent communities (i.e. the Airport Ring Road and Expressway). The DEIS / DEIR should further clarify the anticipated cost of these projects as well as anticipated revenues to fund these projects. It is not clear whether LAWA anticipates MTA funding for these projects. This should be clarified as these projects are not included in the constrained plan assumptions of MTA's adopted Long Range Transportation Plan.

In addition, the DEIS / DEIR should provide more quantifiable performance indicators for each alternative, including effects on Level of Service (LOS) standards; a cost-benefit analysis of capital, operating and maintenance costs; and analysis of air quality benefits. Furthermore, in addition to capital-intensive roadway improvements, the DEIS / DEIR should also include low-cost Transportation Demand Management (TDM) and Transportation Systems Management (TSM) improvements to relieve traffic congestion, including signal synchronization and application of Intelligent Transportation Systems (ITS) technologies.

The MTA looks forward to reviewing the Final EIS / EIR and working closer with the Los Angeles World Airports in identifying a multi-modal transportation solution that allows both local residents and visitors to access their destinations in Los Angeles as directly, conveniently and safely as possible.

Should you have any questions regarding this response, please call me at 213-922-3071.

Sincerely,



JAMES L. de la LOZA
Executive Officer
Countywide Planning & Development

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