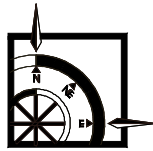


**County of Los Angeles**

**Comments on Draft EIS/EIR for Proposed  
Master Plan Improvements at LAX**

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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 I 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<sub>x</sub>) were determined to have significant impacts before and after mitigation and the Draft EIS/EIR indicates that NO<sub>x</sub> 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.<sup>1</sup> 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:<sup>2</sup>
  - ◆ 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.

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<sup>1</sup> 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.”

<sup>2</sup> 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,<sup>3</sup> 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

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<sup>3</sup> 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”<sup>4</sup> 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”<sup>5</sup> 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 Report<sup>6</sup> 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.

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<sup>4</sup> Pages ES-41 through ES-59.

<sup>5</sup> Pages ES-9 through ES-11.

<sup>6</sup> 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,<sup>7</sup> and the strength of the region as an international gateway.<sup>8</sup> 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.”<sup>9</sup>

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.<sup>10</sup> 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.”<sup>11</sup>

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.”<sup>12</sup> 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

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<sup>7</sup> 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.

<sup>8</sup> 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.

<sup>9</sup> Section 1.1, Page 1-1.

<sup>10</sup> Pages 1-23, 2-8, and elsewhere.

<sup>11</sup> Section 1.4, Page 1-29.

<sup>12</sup> 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/EIR<sup>13</sup> 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

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<sup>13</sup> 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 4<sup>th</sup> quarter 1996 database cited for the noise calibration does not match actual 4<sup>th</sup> quarter data according to published noise contours.

**Table 3.1**  
**Difference Between Draft EIS/EIR Noise Impact and LAWA 1996 Quarterly Report**

	<b>Dwellings Inside 65 CNEL</b>	<b>Population Inside 65 CNEL</b>
LAWA 1996 Fourth Quarter Report	31,968	85,907
EIS/EIR Table 4.1-2 For 1996	16,900	49,000
<b>Difference</b>	<b>15,068</b>	<b>36,907</b>

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,<sup>14</sup> 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 Alternatives<sup>15</sup> 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,

<sup>14</sup> First bar chart on Page ES-22 titled, “Population Exposed to Noise Above 65 CNEL in 2015.”

<sup>15</sup> 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 airports<sup>16</sup> or the estimates of rising aviation demand.<sup>17</sup>

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.”<sup>18</sup> 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,<sup>19</sup> 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.

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<sup>16</sup> Table 1-13.

<sup>17</sup> Depicted in the Exhibit on Page ES-3.

<sup>18</sup> 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.

<sup>19</sup> 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.<sup>20</sup> 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.

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<sup>20</sup> 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:<sup>21</sup>

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.<sup>22</sup> 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

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<sup>21</sup> Section 2.1, Page 2-1.

<sup>22</sup> 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.<sup>23</sup> 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.

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<sup>23</sup> 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.<sup>24</sup> 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.<sup>25</sup>

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.

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<sup>24</sup> NEPA Guidelines, Section 15022.22.

<sup>25</sup> 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.<sup>26</sup>

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.<sup>27</sup>

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.”<sup>28</sup> 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.<sup>29</sup>

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.

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<sup>26</sup> Section 4.4.3, Page 4-426.

<sup>27</sup> Section 4.4.3, Page 4-430.

<sup>28</sup> Section 4.4.3, Page 4-428.

<sup>29</sup> 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.<sup>30</sup>

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

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<sup>30</sup> 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.<sup>31</sup>

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.”<sup>32</sup> 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.<sup>33</sup>

Offer increased opportunities for residents to move out.<sup>34</sup>

Increase annual funding.<sup>35</sup>

Incorporate newly exposed areas into the LAX Aircraft Noise Mitigation Program.<sup>36</sup>

### 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.<sup>37</sup>

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.<sup>38</sup>

### 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.<sup>39</sup>

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<sup>31</sup> Appendix F, Environmental Technical Report, Page 5.

<sup>32</sup> Section 4.4.3, Page 4-432.

<sup>33</sup> Section 4.4.3, Page 4-432.

<sup>34</sup> Section 4.4.3, Page 4-432.

<sup>35</sup> Section 4.4.3, Page 4-432.

<sup>36</sup> Section 4.4.3, Page 4-432.

<sup>37</sup> Section 4.4.3, Page 4-433.

<sup>38</sup> Section 4.4.3, Page 4-426.

<sup>39</sup> 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.<sup>40</sup>

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.

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<sup>40</sup> 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.”<sup>41</sup> 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.

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<sup>41</sup> 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:<sup>42</sup> 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 guideline<sup>43</sup> 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.

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<sup>42</sup> Title 21 of the California Code of Regulations.

<sup>43</sup> 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.<sup>44</sup> 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**

	<b>Dwellings Inside 65 CNEL</b>	<b>Population Inside 65 CNEL</b>
LAWA 1996 Fourth Quarter Report	31,968	85,907
EIS/EIR Table 4.1-2 For 1996	16,900	49,000
<b>Difference</b>	<b>15,068</b>	<b>36,907</b>

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.

<sup>44</sup> 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.”<sup>45</sup> 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,”<sup>46</sup> contains Appendix B, “FAA Profile Review Checklist.” The first paragraph of that appendix contains the following statement,

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<sup>45</sup> Appendix D, Page 17.

<sup>46</sup> 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.”<sup>47</sup> 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

<sup>47</sup> 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.<sup>48</sup>
- ◆ 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

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<sup>48</sup> 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 Figure<sup>49</sup> 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.

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<sup>49</sup> Figure 2.3.

### **6.8.6 Operations Data**

In the discussion on noise patterns,<sup>50</sup> 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.

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<sup>50</sup> 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.<sup>51</sup> 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.

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<sup>51</sup> 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 (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>) and particulate matter (PM<sub>10</sub>). 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 (O<sub>3</sub>), lead (Pb), sulfates, CO, NO<sub>2</sub>, SO<sub>2</sub> and PM<sub>10</sub>.

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.<sup>52</sup> 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<sub>x</sub>), SO<sub>2</sub>, and PM<sub>10</sub> 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<sub>x</sub> 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.

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<sup>52</sup> 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.<sup>53</sup> 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.<sup>54</sup> 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.<sup>55</sup> 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

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<sup>53</sup> Appendix G, Section 2.2.5.1.

<sup>54</sup> Appendix G, Section 2.1.3.1.

<sup>55</sup> 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<sub>x</sub> 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 sources<sup>56</sup> 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 NO<sub>2</sub> 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 NO<sub>2</sub> 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 PM<sub>10</sub> emissions; however, it should be recognized that there are even more uncertainties in the predicted PM<sub>10</sub> impacts than there are for

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<sup>56</sup> 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.<sup>57</sup> 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

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<sup>57</sup> 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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> emissions. The mitigated emission estimates for on-airport sources shown in Table 4.6-19 indicate, however, that the reductions in NO<sub>x</sub> 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<sub>x</sub> impacts will still be significant. Thus, the proposed mitigation measures do not seem to effectively address the projected NO<sub>x</sub> 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 O<sub>3</sub>, CO, and PM<sub>10</sub>. Section 4.6.3.2 indicates that Federal statutes require the area comply with the national O<sub>3</sub> standard by November 15, 2010, the national CO standard by December 31, 2000 and the national PM<sub>10</sub> standards by December 31, 2001. The recent monitoring data suggest that all Federal standards

are actually being met except for the O<sub>3</sub> standard and that all State standards are being met except for the O<sub>3</sub> and PM<sub>10</sub> standards.<sup>58</sup>

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 NO<sub>2</sub>, and PM<sub>10</sub> emissions would not conform with the more stringent State ambient air quality standards. Given that the Environmental Baseline NO<sub>2</sub> shown in this table is well within the State standard, that the background NO<sub>2</sub> concentration is projected to decrease with time and comprise only a small portion of the total concentration, and that NO<sub>x</sub> emissions are estimated to increase only marginally by 2015, the predicted five- to eight-fold increase in the NO<sub>2</sub> 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 NO<sub>2</sub> 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 NO<sub>2</sub> concentrations increasing so significantly compared to the Environmental Baseline when the with-project emissions are estimated to increase only modestly.

Given that existing PM<sub>10</sub> 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 PM<sub>10</sub> standards may not be possible. LAWA needs to identify the ramifications of not conforming to the PM<sub>10</sub> 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.

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<sup>58</sup> 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 Program<sup>59</sup> 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,<sup>60</sup> 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 Letter<sup>61</sup> 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.

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<sup>59</sup> Page 4-116.

<sup>60</sup> Page 4-159.

<sup>61</sup> 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.<sup>62</sup> 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.<sup>63</sup> 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.<sup>64</sup> 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).

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<sup>62</sup> 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.

<sup>63</sup> Section 3.2.3.

<sup>64</sup> 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 180,000<sup>65</sup> should also be included in the document.

## 10.5 Distribution of Regional Spending – Resident Expenditures

Section 3.4.3.1 notes,<sup>66</sup>

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.

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<sup>65</sup> Section 2.2.1.

<sup>66</sup> 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.”<sup>67</sup> 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,<sup>68</sup> 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,”<sup>69</sup> 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.

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<sup>67</sup> Section 4.7.6.1.

<sup>68</sup> Section 4.7.5.

<sup>69</sup> 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 4.2.3<sup>70</sup> 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.

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<sup>70</sup> 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,<sup>71</sup> 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.

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<sup>71</sup> 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 floodplains<sup>72</sup> 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.”<sup>73</sup> 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.

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<sup>72</sup> Section 4.13.

<sup>73</sup> 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 1 analyses indicated that aircraft emissions account for about 97% of total emissions and also contribute most to emissions of individual TAPs;<sup>74</sup> (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;<sup>75</sup> 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).<sup>76</sup> This apparent inconsistency requires clarification and the weight given to each of the factors cited should be included in the discussion.

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<sup>74</sup> Technical Report 14a, Section 3.3.

<sup>75</sup> Section 4.24.1, Page 4-1000.

<sup>76</sup> 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.,  $[5-30\% \text{ of demand} \times 50\% \text{ of travel} = 2.5\% \text{ to } 15\%] + [ <5\% \text{ of demand} \times 50\% \text{ of travel} = <2.5\%] = \sim 2.5\% - 17.5\%$ ). 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.”<sup>77</sup> 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

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<sup>77</sup> 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).<sup>78</sup> 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.

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<sup>78</sup> 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.

