4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.0.1 EIR Type

This Environmental Impact Report (EIR), as defined by Section 15161 of the California Environmental Quality Act (CEQA) Guidelines, is a Project EIR, and as such is site- and Project-specific. Pursuant to CEQA Guidelines Section 15128, potential effects of the proposed Project that were determined to be less than significant or no impact are discussed in the Initial Study (IS), attached as Appendix A and summarized in Chapter 6, Other Environmental Considerations, of this EIR. This chapter of the EIR and the topical sections included herein evaluate the environmental impacts determined by the IS to be potentially significant, consistent with CEQA Guidelines Section 15063(c)(3)(A), and mitigation measures are provided as appropriate to reduce or avoid significant environmental impacts.

Los Angeles World Airports (LAWA), as the Lead Agency is responsible for certifying the EIR and adopting any mitigation measures needed to reduce or avoid the proposed Project’s significant environmental impacts.

4.0.2 Baseline for Determining Significant Environmental Impacts

In accordance with Section 15125 of the CEQA Guidelines, the affected environment (referred to in the CEQA Guidelines as the "environmental setting") is characterized by the physical environmental conditions that existed in the vicinity of the proposed Project when the Notice of Preparation (NOP) is published, and normally constitutes the baseline physical conditions against which project impacts are compared to determine whether an impact is significant. For this EIR, the environmental baseline used for determining significant impacts primarily represents the physical conditions that existed when the NOP for the proposed Project was published in September 2012. However, for certain issue areas where data specific to that timeframe were unavailable or incomplete, more current information was utilized to define the environmental baseline as follows:

- For purposes of evaluating potential construction traffic impacts of the proposed Project, intersection turning movement traffic volume data were collected in April and May 2013. These volumes were used as a basis for preparing the construction traffic analysis and assessing potential Project-related construction traffic impacts.

- For purposes of evaluating potential impacts associated with hazards and hazardous materials, information on surface conditions was based on the Report of Screening-Level Sampling and Analyses of Selected Stockpiles: West Aircraft Maintenance Area prepared by Geosyntec Consultants, completed on June 2013, which supplemented information on subsurface conditions that was based on various technical studies; the most recent study was completed in December 2012.

- The environmental baseline for evaluating potential hydrology and water quality impacts is based on the West Maintenance Area, Los Angeles International Airport, Engineer’s Design Report: Appendix F, Drainage Design Report prepared by Atkins in August 2013.
4.0 Environmental Impact Analysis

- For purposes of evaluating potential impacts associated with noise, information on existing noise conditions is based on a noise technical memorandum Noise Analysis Results for the Proposed WAMA at LAX prepared by Harris Miller Miller & Hanson Inc. in June 2013. Information on Aircraft Taxi Noise was based on a technical memorandum, West Aircraft Maintenance Area-Taxi Noise, prepared by Ricondo and Associates in September 2013.

Based on the nature of updated information listed above and the limited duration between when the NOP was published (September 2012) and when the updated information was compiled, a period during which there were no major changes in the nature and activity levels of uses at and around the airport, the environmental baseline conditions characterized by the updated information are considered to be reasonably representative of the physical conditions that existed when the NOP was published.

4.0.3 Incorporation of Los Angeles International Airport (LAX) Master Plan Commitments and Mitigation Measures into the Environmental Analysis

The proposed Project responds to the development framework set forth in the LAX Master Plan and represents a refinement to the programmed development of hangar/maintenance facilities in the western portion of the airport property. Applicable LAX Master Plan commitments and mitigation measures identified in the LAX Master Plan Mitigation Monitoring and Reporting Program (MMRP) are included as part of the proposed Project in order to reduce or avoid potential impacts. Relevant LAX Master Plan commitments and mitigation measures are cited within individual sections of this chapter where applicable.

The environmental analysis assumes that these measures will be implemented in conjunction with the proposed Project as required in the MMRP. To the extent that these measures would not reduce significant environmental effects to a less than significant level, and Project level information has revealed additional feasible mitigation measures, new mitigation measures are separately identified after the various impact conclusions and proposed for adoption as conditions of approval.

4.0.4 Evaluation of Cumulative Impacts

Section 15130 of the CEQA Guidelines requires that the analysis of potential project impacts include cumulative impacts, which are defined as “two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts.” Under the requirements of the CEQA Guidelines, analysis of cumulative impacts need not be as in-depth as that performed relative to the proposed Project, but instead should “be guided by the standards of practicality and reasonableness.”

As further described in Chapter 2, Project Description, of this EIR, construction of the proposed Project is expected to occur within three construction sequences over a five year period, with the majority of construction activity occurring during an approximate 20-month period, beginning
in 2014 and ending in 2015. The schedule for construction of the first aircraft maintenance hangar is estimated to take 18 to 20 months and would be completed prior to 2016. Construction of the additional aircraft maintenance hangar is estimated to take approximately 16 to 24 months and is anticipated to commence in the last quarter of 2016 and be completed prior to 2019.

Accordingly, the cumulative analysis for each environmental issue analyzed in this EIR, with the exception of the cumulative analysis for greenhouse gas (GHG) emissions, evaluates the effects of other proposed development projects that may be constructed at some point during the same five year time period (i.e., 2014 through 2018). This includes past, present, and reasonably foreseeable future related projects identified for LAX development projects (LAX Master Plan projects and other LAX projects) and non-LAX development projects that could, in conjunction with the proposed Project, result in cumulative impacts to the environment. Related projects within or adjacent to LAX are described in Chapter 3, Overview of Project Setting, of this EIR and are listed in Table 3-1 and identified in Figure 3-1.

For the GHG analysis, as further described in Section 4.2, Greenhouse Gas Emissions, of this EIR, climate change impacts are cumulative in nature, and therefore no typical single project would result in emissions of such a magnitude that it would be significant on project basis. Thus, the analysis of significance of potential impacts from GHG emissions related to a single project is already representative of the long-term impacts on a cumulative basis. Therefore, projects that exceed the Project-specific significance thresholds would cause cumulatively considerable impacts with respect to GHG emissions.

As further described in Section 4.7, Construction Surface Transportation, of this EIR, the construction traffic analysis assumed that peak cumulative traffic conditions associated with other LAX development projects listed in Table 3-1 would occur around March 2018. In addition, a two percent annual growth in background traffic that includes additional growth from non-specific projects and LAX background development was assumed during this timeframe to provide a conservative traffic analysis.

### 4.0.5 Organization

Each of the environmental disciplines addressed in this chapter is discussed in a separate section using a common organization. Sections are numbered 4.1 through 4.7. Several sections are divided into subsections to simplify and clarify the discussion. Within each environmental topic section, discussion of the following is provided:

- The Introduction briefly describes the issues addressed in the analysis and identifies related topics. The Introduction also identifies any specific issue area of the topic that is not being addressed as part of this EIR and provides a discussion explaining the reasons why.

In many cases, a number of specific issue areas were evaluated and impacts determined to be less than significant, as documented in the IS that was published with NOP for the proposed Project in September 2012 (included herein as Appendix A). Subsequent to release of the IS/NOP and based on public input and LAWA coordination with the Federal Aviation Administration minor refinements have been made to certain components of the proposed Project, which are detailed in the Introduction. In accordance with Sections 15063(c)(3)(A) and 15128 of the CEQA Guidelines, further analysis of specific issue areas where impacts were determined to be less than significant in the IS is not required and is not
4.0 Environmental Impact Analysis

provided in this EIR. The refinements do not represent a material change to the proposed Project that was described in the IS/NOP and do not result in the identification of new significant impacts or the increase in the severity of previously identified impacts.

• The **Methodology** describes how the issue was approached, including explanations of any assumptions, equations, or calculations; identification of information sources used for the analysis; and delineation of the study area considered for each environmental discipline. This section also identifies the environmental baseline used to determine the significance of potential impacts.

• The **Existing Conditions** discusses the existing conditions for the environmental discipline in the study area, including relevant activities, facilities, and regulations.

• The **Thresholds of Significance** are quantitative or qualitative criteria used to determine whether a significant environmental impact would occur as a result of the project. This section identifies the origins of the thresholds of significance used in the analysis. In general, and unless otherwise noted, the thresholds of significance used in the analysis reflect guidance provided in Appendix G of the **CEQA Guidelines** and/or criteria or guidance included in the **L.A. CEQA Thresholds Guide**.

• The **Applicable LAX Master Plan Commitments and Mitigation Measures** section lists the LAX Master Plan commitments and mitigation measures applicable to the proposed Project. As background, in conjunction with approval of the LAX Master Plan and certification of the Final EIR in December 2004, the Los Angeles City Council adopted an **MMRP** to ensure that mitigation measures and LAX Master Plan commitments identified in the Final EIR are implemented. Mitigation measures are activities, policies, or practices designed to avoid or minimize significant environmental impacts. Besides mitigation measures, the MMRP for the LAX Master Plan includes Master Plan commitments. LAX Master Plan commitments were determined to be more appropriate than mitigation measures where: (1) standards and regulations exist with which compliance is already required by the applicable regulatory agency; (2) impacts would be adverse but not significant; and (3) design refinements could be incorporated into the project to reduce or avoid potential impacts. The timing of implementation of LAX Master Plan commitments and mitigation measures is set forth in the LAX Master Plan MMRP. Unless otherwise noted, the impacts analysis for the proposed Project assumes that the applicable LAX Master Plan commitments and mitigation measures would be implemented concurrently with and as part of the proposed Project. To the extent that the LAX Master Plan commitments and mitigation measures would not reduce significant environmental impacts to a level that is less than significant, Project-specific mitigation measures, if feasible, are separately identified in the Mitigation Measures section.

• The **Impacts Analysis** section presents the analysis of impacts for the construction (the build-out horizon year 2018) and operation of the proposed Project. Impacts were compared to the thresholds of significance to determine whether they would be, under

1  State of California, Guidelines for California Environmental Quality Act (State CEQA Guidelines), California Code of Regulations, Title 14, Chapter 3, Sections 15000-15387.


3  City of Los Angeles, Los Angeles World Airports, Alternative D Mitigation Monitoring and Reporting Program, September 2004.
CEQA, significant or less than significant. For purposes of determining significance, potential impacts were compared to the environmental baseline/existing conditions.

- **Cumulative** impacts are the impacts of the proposed Project in conjunction with past, present, and reasonably foreseeable future projects. The environmental impacts of the proposed Project may be individually minor, but collectively significant when considered in conjunction with other projects.

- **Mitigation Measures** are specified procedures, plans, policies, or activities proposed for adoption by the lead agency to reduce or avoid the significant impacts identified in the analysis of environmental impacts. This section identifies Project-specific mitigation measures proposed to address significant impacts that would occur with implementation of the proposed Project. In accordance with the requirements of CEQA, an MMRP would be adopted as part of the proposed Project approvals to ensure that implementation of mitigation measures are properly monitored and documented.

- **Level of Significance After Mitigation** is a CEQA determination of the significance of a particular impact after implementation of the proposed mitigation measures. This section identifies any significant impacts that cannot be mitigated to a level that is less than significant. These "significant unavoidable impacts" are also listed in Chapter 6, *Other Environmental Considerations*, of this EIR.
This page left intentionally blank.