DRAFT

California Environmental Quality Act Findings
LAX Specific Plan Amendment Study Project

I. Project Description Summary

The proposed project is the LAX Specific Plan Amendment (SPAS) Project. The SPAS process involves the identification and evaluation of potential alternative designs, technologies, and configurations for the LAX Master Plan Program that would provide solutions to the problems that the Yellow Light Projects were designed to address. The SPAS process also includes identification of potential amendments to the LAX Specific Plan that plan for the modernization and improvement of LAX in a manner that is designed for a practical capacity of 78.9 million annual passengers (MAP) while enhancing safety and security, minimizing environmental impacts on the surrounding communities, and creating conditions that encourage airlines to go to other airports in the region, particularly those owned and operated by LAWA.

Nine alternatives offering various options to the Yellow Light Projects, including one alternative that provides for implementation of the Yellow Light Projects (i.e., implement the Yellow Light Projects as generally reflected in the LAX Master Plan instead of options to those improvements), are addressed within the Final EIR for SPAS. The types of improvements used to define the key characteristics of each SPAS alternative can be grouped into the following three categories:

- Airfield Improvements - Airfield improvements include changes to the runways, taxiways, navigational aids, and service and maintenance roads associated with the north airfield. The primary differences in airfield improvements associated with the various SPAS alternatives pertain to:
  - Separation distances between runways and taxiways. Separation distances largely determine the maximum size aircraft that can freely operate on that system under various visibility conditions, and, in certain visibility conditions, would either require Federal Aviation Administration (FAA) approval of special operating procedures (i.e., Modifications of Standards or other forms of operational waivers) or would be prohibited;
  - Whether an increase in the separation distance between Runway 6L/24R and Runway 6R/24L would allow for the construction of a centerfield parallel taxiway between the runways, to enable aircraft arriving on the outboard (6L/24R) runway to exit onto the center taxiway and hold while aircraft are departing on the inboard (6R/24L) runway, thereby allowing the departing aircraft to safely pass before the arriving aircraft proceeds to the terminal gates;
  - The extent to which the Lincoln Boulevard and the Argo Drainage Channel would have to be modified in order to accommodate a northerly shift in the alignment of Runway 6L/24R;
  - Whether Runway 6R/24L would be extended 1,250 feet eastward to provide greater departure length in west flow condition that would better accommodate departures of large aircraft on long-haul flights and improve the balance between the north airfield and the south airfield relative to such departures;
  - Whether Runway 6L/24R would be reconfigured or extended to relocate its associated RPZ with respect to residential uses, and/or to improve the north airfield and the south airfield relative to the operation of aircraft;
  - How RSA requirements would be met, in terms of runway extensions, declared distances, displaced thresholds, or a combination thereof; and

- Separation distances between Runway 6R/24L, Taxiway E, Taxilane D, the adjacent vehicle service road, and the aircraft gates/parking positions at the north end of the CTA, which largely determine the maximum size aircraft that can either freely operate on that system or would be subject to certain limitations, particularly as related to the interface between aircraft going to or from the gates at Terminals 1 through 3 and aircraft taxiing to the east end of Runway 6R/24L for departure.

- Terminal Improvements - Terminal improvements consist primarily of additions/demolitions to existing terminals/concourses, and, for most SPAS alternatives, the construction of a new terminal - Terminal 0 ("zero"). The primary differences in terminal improvements for the various SPAS alternatives are directly related to the movement of runways and taxiways under each alternative. Specifically, the alternatives differ in the location of their building limit lines (i.e., the "object free" safety area along runways and taxiways where no part of a structure can be present) and their aircraft parking limit lines (APLL) (i.e., the safety clearance setback area along runways and taxiways into which no part of an aircraft parked at a gate can extend). The northernmost limit of concourse building area and/or aircraft gate parking positions is defined by the southernmost safety clearance distance for the runways and taxiways in the north airfield. Depending on the location and design of the runways and taxiways associated with each alternative, the locations of the building limit line and APLL may differ between alternatives.

  In general, the building lines and APLLs associated with most of the alternatives extend southward, overlapping, to varying degrees, portions of the concourse areas for Terminals 1 through 3, which would require removal (demolition) of those building areas that encroach past the building limit line and/or the elimination or reduction in aircraft size capability of gate parking positions that encroach past the parking limit line. Conversely, the building and parking limit lines associated with several alternatives do not extend as far south as the limit lines defined in the LAX Master Plan, which assumed the movement of Runway 6R/24L 340 feet south and defined the northerly building limits for the Tom Bradley International Terminal (TBIT) West Gates, currently under construction as part of the Bradley West Project, and the future Midfield Satellite Concourse (MSC). In those cases, establishing building and parking limit lines farther north than the current LAX Master Plan limit lines would allow the opportunity for a future northward extension (i.e., an addition to) the north concourses for Bradley West and the MSC.

  While the amount of concourse area and the layout of aircraft gates vary between alternatives, none of the SPAS alternatives includes more than 153 passenger gates.

  Certain alternatives propose a westerly realignment of the Terminal 3 concourse to provide a wider alleyway between the concourses at Terminals 2 and 3 for aircraft taxiing.

  For those alternatives that include development of the new Terminal 0, the existing alignment of Sky Way (the primary access road connecting CTA to southbound Sepulveda and 96th Street Bridge) would be shifted east, into the area now occupied by the Park One parking lot, providing an improved entrance roadway into the CTA.

- Ground Access Improvements - Ground access improvements consist of changes to on-airport and off-airport roads, addition of specific transportation facilities, development of dedicated access (i.e., busway or APM) into the CTA, and changes in parking locations. While the focus of SPAS is on alternatives to the Yellow Light Projects, such as the GTC and its associated roadways and one of the two APM systems proposed under the LAX Master Plan (APM 2), the ground access improvements proposed under the various SPAS alternatives also take into consideration key non-Yellow Light projects that are integral parts of the overall ground access system. Such projects include the Consolidated Rental Car Facility (CONRAC), the Intermodal Transportation Center (ITC),

the APM connecting the ITC and CONRAC to the CTA, and the West Employee Parking facility. The ground access improvements proposed under the various SPAS alternatives represent different combinations of options to the Yellow Light Projects. Due to integral nature of these key non-Yellow Light projects with the overall ground access system, the SPAS alternatives include proposed modifications to, or proposed deletion of, these non-Yellow Light projects.

Alternatives 1 through 4 in the Draft EIR were presented as "fully-integrated" alternatives that include specific improvements in all three categories: airfield improvements, terminal improvements, and ground access improvements. Alternatives 5 through 7 focus on variations to the airfield improvements, which, in turn, affect the terminal improvements. Alternatives 8 and 9 focus on variations to the ground access improvements. Although the primary focus of Alternatives 5 through 9 is on specific categories of improvements, there is a certain amount of compatibility or "interchangeability" between the SPAS alternatives. Specifically, the airfield and terminal improvements in Alternatives 5 through 7 are equally compatible with the ground access improvements in Alternatives 1, 2, 8, and 9. Likewise, the ground access improvements in Alternatives 8 and 9 are equally compatible with the airfield and terminal improvements in Alternatives 1, 2, 5, 6, and 7. In other words, the proposed ground transportation system incorporated into Alternatives 1 and 2 could function in the same manner with Alternatives 5, 6, or 7. That would also be the case for the ground transportation systems under Alternatives 8 and 9, which could be developed under Alternatives 5, 6, or 7, and could also replace the ground transportation system currently proposed for Alternatives 1 and 2. On the other hand, Alternatives 3 and 4 are unique "fully-integrated" alternatives and are not considered to have elements that are "interchangeable" with the other SPAS alternatives. While Alternatives 5, 6, and 7 focus on options for airfield/terminal improvements and Alternatives 8 and 9 focus on options for ground access improvements, these five alternatives (Alternatives 5 through 9) would only address all of the problems that the Yellow Light Projects were designed to address in conjunction with another alternative (Alternatives 1 through 4), or portion thereof. Detailed descriptions of each of the alternatives are provided in Section 2.3 of the SPAS Draft EIR. The objectives associated with completion of the SPAS process are described in Section 2.2 of the SPAS Draft EIR. Table 1-2 of the SPAS Draft EIR provides an evaluation of how each alternative responds to these objectives.

LAWA Staff-Recommended Alternative

Following completion of the SPAS Draft EIR, and receipt and review of public comments on the LAX SPAS Project Draft EIR, LAWA staff identified a recommended alternative. LAWA staff recommends an alternative that combines the airfield and terminal components associated with Alternative 1 with the ground access components associated with Alternative 9. The key features of the LAWA Staff-Recommended Alternative include:

- Relocation of Runway 6L/24R 260 feet north
- Construction of a centerline taxiway
- Easterly extension of Runway 6R/24L
- Improvements to north airfield taxiways
- Development/redevelopment/extension of Terminal 0, Terminal 3, Tom Bradley International Terminal, and the future Midfield Satellite Concourse
- 153 passenger gates
- Development of an Intermodal Transportation Facility (ITF), Consolidated Rent-A-Car Facility (CONRAC), and parking outside the Central Terminal Area (CTA)
- Construction of an Automated People Mover (APM) to link new facilities to the CTA and provide connectivity with planned Metro facilities

Features of the LAWA Staff-Recommended Alternative

Overview

The LAWA Staff-Recommended Alternative is a fully-integrated alternative, consisting of airfield, terminal, and ground access components. The distinguishing airfield improvement feature of this alternative is the movement of Runway 6L/24R 260 feet north, along with the addition of a centerfield taxiway, the extension of Runway 6R/24L, improvements to Taxilane D and Taxiway E, and relocation of the service road. Terminal improvements include addition of new Terminal 0, loss or modifications to concourse areas and/or gates at Terminals 1, 2, and 3, and the modification and potential northward extension of concourse area and gates at TBIT and the future MSC. Ground access improvements include modification of Sky Way; development of an Intermodal Transportation Facility (ITF) at 98th Street west of Airport Boulevard; development of a CONRAC and parking at Manchester Square; development of an Automated People Mover (APM) along 98th Street; and the relocation of Lincoln Boulevard, a portion of which would be below grade and/or tunneled. The APM would be located within an elevated/dedicated corridor along 98th Street, with a bridge over Sepulveda Boulevard and stops at Manchester Square, the future Metro LAX/Crenshaw Light Rail Transit Station at/near Century and Aviation Boulevards, the ITF, and the CTA. Within the CTA, the APM would be located on a new elevated guideway.

Airfield Facilities

The LAWA Staff-Recommended Alternative meets FAA airport (runway) design standards for ADG V with a Category II/III outboard runway (Runway 6L/24R) and Category I inboard runway (Runway 6R/24L), and provides sufficient space between Runway 6R/24L and the centerfield taxiway for ADG V aircraft to hold prior to crossing the runway with a pilot line-of-sight of the end of Runway 24L. This alternative provides the FAA standard ADG VI runway-to-taxiway separation between Runway 6L/24R and the centerfield taxiway for approach visibility at or above one-half mile (Category I approaches). Taxiway E and Taxilane D dimensions would meet ADG V standards.

Runway Modifications

Runway 6L/24R

- Relocate 260 feet north of current location to accommodate a new centerfield parallel taxiway (see below) and to provide for ADG V separation distances
- Extend 604 feet west so that the RPZ no longer extends over residential areas
- Establish dual displaced thresholds to remove existing residences from the RPZ (east end displaced threshold) and maintain existing westerly aircraft landing heights (west end displaced threshold)
- Widen to 200 feet to meet FAA standards

Runway 6R/24L

- Remains in its current location
- Extend 1,250 feet east to meet RSA requirements and maximize aircraft takeoff length
- Shift 6R landing threshold 104 feet east to meet RSA requirements
- Reconstruct east 2,000 feet for grade compliance

Taxiway Modifications

Centerfield Taxiway

- Construct an 82-foot-wide centerfield taxiway between Runways 6L/24R and 6R/24L, with a centerline separation distance of 500 feet to Runway 6L/24R and 460 feet to Runway 6R/24L, to enhance safety and reduce incursions and other airfield hazards,

while providing for ADG V separation distances; also provide exit taxiways from Runway 6L/24R to the centerfield taxiway, taxiways from the centerfield taxiway to and across Runway 6R/24L, and other related airfield taxiway improvements

Taxiway E

- Rebuild western 2,190 feet to straighten alignment (0 to 64 feet southerly relocation)
- Extend 950 feet east to support easterly extension of Runway 6R/24L and to provide additional hold area for departing aircraft

Taxilane D

- Relocate varying distances (ranging from 15 to 19 feet) north to provide ADG V separation distances between the taxiway and APLL
- Extend 745 feet east to support easterly extension of Runway 6R/24L and 5,145 feet west to provide for dual full-length taxiways in the north airfield

Other Airfield-Related Features

- Cover the entire length of the Argo Drainage Channel (9,857 linear feet) such that the weight of an aircraft could be supported within the RSA by converting the existing open unlined channel to a concrete box culvert
- Relocate Lincoln Boulevard northward between Sepulveda Boulevard and Westchester Parkway, and depress the eastern portion of the road segment to be compatible with the object free area requirements for the east end of Runway 6L/24R, which would require approximately 540 linear feet of the road segment to be tunneled
- Relocate the service road that currently lies between Taxiway E and Taxilane D to a location 142 feet south of Taxilane D centerline to increase the separation between the two taxiways to allow for simultaneous operations with larger aircraft than currently accommodated, improve safety and efficiency, and meet FAA standards
- Taxiway E and Taxilane D dimensions, based on proposed improvements, would meet ADG V standards
- In the eastern portion of the airfield, the APLL would move south to a location 852 feet south of the existing Runway 6R/24L centerline. Beginning just west of Taxiway S, the APLL would move south an additional 50 feet (902 feet south of the Runway 6R/24L centerline).
- Relocate and/or remove existing facilities as specifically described in the section titled "Existing Facilities Affected by SPAS Improvements" and as listed in Table SF-2 later in this section and as shown in Figure 2-10 of the SPAS Draft EIR

Terminal Facilities

Proposed modifications to terminal facilities, including aircraft gates, under the LAWA Staff-Recommended Alternative would include the following:

- Construct a new Terminal 0 with seven gates in the western portion of the area now occupied by Park One to replace gates lost or downsized at Terminals 1 through 3
- Demolish approximately 177 feet of the Terminal 1 concourse to accommodate the southerly movement of the APLL
- Demolish and reconstruct the Terminal 3 concourse and associated gates, with the building centerline shifted 40 feet to the west to increase the width of the alleyway between Terminals 2 and 3 to allow for dual-directional aircraft movement and comply with FAA standards
- Demolish and replace the northerly end of the TBIT concourse and associated gates (with new concourse and gates in line with the new Bradley West concourse) to the LAWA Staff-Recommended Alternative APLL

- Provide the opportunity to extend the northerly end of the future MSC to the LAWA Staff-Recommended Alternative APLL
- As a result of moving the APLL south to meet ADG V standards, several gates would be eliminated or downsized (i.e., would accommodate smaller aircraft types)
- The commuter facility currently in use east of Sepulveda Boulevard would be maintained
- Use of west remote gates would be eliminated upon completion of the airfield and terminals improvements
- The total number of gates used at LAX for scheduled passenger service would be 153

Ground Access Facilities

Ground Access

Under the LAWA Staff-Recommended Alterative, the characteristics of the airport ground access system would be as follows:

- Maintain private vehicle access to the CTA
- Relocate Sky Way (upper and lower level roadways) eastward between the future Terminal 0 and Sepulveda Boulevard to provide additional roadway and curbfront in the CTA, while allowing the development of Terminal 0
- Add new curbside space at Terminal 0
- Relocate the commercial vehicle holding lot south of 96th Street, between Sepulveda Boulevard and the relocated Sky Way to meet RSA and RPZ requirements
- Construct a new ITF on 14 acres between 96th and 98th streets and between Vicksburg Avenue and Airport Boulevard. Key features of the ITF include public parking and remote passenger pick up/drop off. In addition, arriving passengers could travel to the ITF to board door-to-door shuttles or scheduled buses.
- Construct a CONRAC in a portion of Manchester Square, including a customer service area and a structured parking facility to accommodate approximately 1,000 stalls for quick turn-around and 5,800 stalls for ready return. Additional surface parking would be constructed to accommodate a portion of the total demand for staging and storage of rental vehicles by the various operators.
- Construct an elevated APM between Manchester Square and the CTA, primarily using the 98th Street corridor, including a bridge over Sepulveda Boulevard and stops at the future Metro LAX/Crenshaw Light Rail Transit Station at/near Century and Aviation Boulevards and the new ITF. Within the CTA, the APM would be located on an elevated guideway. The number of stations in the CTA has yet to be determined but could range from 3 to 5.
- Provide connectivity to public transit via the APM, with a stop/connection at the new Metro transit station at Aviation/Century. LAX shuttle bus from the Metro Green Line Aviation Station would be discontinued.
- An APM maintenance facility would be constructed, likely in Manchester Square
- Relocate Lincoln Boulevard to the north, outside of the Runway 6L/24R RSA, with a portion below grade and/or tunneled

Parking

Under the LAWA Staff-Recommended Alternative, the characteristics of airport parking within the control of LAWA would be as follows:

- Generally, no changes to existing CTA parking conditions would occur as a result of SPAS, although future pricing structures may change long-term/short-term composition

- Parking Lot E would no longer be used for employee parking, although this property could be used for other airport purposes in the future. Changes to the use of this parking area would occur independently from SPAS.
- No changes are proposed to Public Parking Lot C
- Parking Lot D would provide approximately 1,944 employee parking spaces. The Jenny Lot east of Parking Lot D would provide approximately 2,000 employee parking spaces. These parking areas were not in use in the 2010 baseline year; however, their use for parking is occurring independently from SPAS.
- Development of the ITF would include approximately 4,900 short-term public parking spaces to facilitate passenger drop off and pick up outside of CTA
- Construct approximately 2,750 employee parking spaces in the existing Avis rental car lot
- Construct approximately 4,200 public parking spaces in a portion of Manchester Square
- No public or employee parking is proposed for the area referred to as Continental City
- The existing Park One parking would be eliminated to allow development of Terminal 0 and the relocated entry roadway
- The West Employee Parking facility would not be constructed

Elimination of LAX Master Plan Components

Under the LAWA Staff-Recommended Alternative, the following non-Yellow Light projects approved as part of the LAX Master Plan would be fully or partially eliminated:

- Demolition of all CTA parking structures and replacement with passenger terminals (partially eliminated)
- West Employee Parking facility
- CONRAC in Parking Lot C (would be developed in Manchester Square instead)
- Reconfiguration and expansion of Parking Lot E north of 111th Street
- ITC in the area referred to as Continental City
- APM between ITC, CONRAC, and CTA (APM 1)

A summary of the key characteristics of the LAWA Staff-Recommended Alternative is presented in **Table SF-1**.

Table SF-1

Summary of the LAWA Staff-Recommended Alternative (SRA)

	Baseline Conditions	SRA
Airfield Elements - Key Components		
Runways		
Relocate Runway 6L/24R to north		260'
Extend Runway 6L/24R to west		604'
Extend Runway 6R/24L to east		1,250'
Taxiways		
Centerfield Taxiway	N	Y
Extend Taxiway E to east		950'
Relocate Taxilane D to north		
Between D7 and Q (TBIT and Terminals 1, 2, and 3)		15'
Between Q and E13 (MSC)		19'
Extend Taxilane D to east		745'
Extend Taxilane D to west		5,145'

Table SF-1

Summary of the LAWA Staff-Recommended Alternative (SRA)

	Baseline Conditions	SRA
Service Road		
Construct New Service Road (South of Taxilane D)		Y
Terminal Elements - Key Components		
Central Terminal Area (CTA)		
Terminal 0 Concourse and Passenger Processing		
Proposed New		330,000
Terminal 1 Concourse	138,000	
Demolition		(24,000)
Proposed Remaining		114,000
Terminal 2 Concourse	306,000	
Demolition		(0)
Proposed Remaining		306,000
Terminal 3 Concourse	279,000	
Demolition		(242,000)
Proposed Reconfigured		223,000
Bradley West - North Concourse Extension		
North Extension		113,800
Midfield Satellite Concourse (MSC) - North Concourse Extension		
North Extension		249,400
Ground Access Elements - Key Components		
Transportation Facilities		
Intermodal Transportation Facility (ITF)		X
CONRAC - Manchester Square		X
Circulation System Improvements		
Sky Way Realignment		X
APM - Between Manchester Square and CTA		X
Parking		
CTA[1,2]		
Public	8,577	7,041
Employee	420	420
Subtotal	8,997	7,461
Parking Lot C[3]		
Public	7,300	7,300
Employee	0	0
Subtotal	7,300	7,300
Parking Lot D[4] and Jenny Lot		
Public	0	0
Employee	0	4,344
Subtotal	0	4,344
Park One		
Public	2,728	0
Employee	0	0
Subtotal	2,728	0
Manchester Square		
Public	0	4,200
Employee	0	0
Subtotal	0	4,200
Avis Rental Car Lot		
Public	0	0
Employee	0	2,750
Subtotal	0	2,750
Proposed Parking Structure at ITF		
Public	0	4,900
Employee	0	0

Table SF-1

Summary of the LAWA Staff-Recommended Alternative (SRA)

	Baseline Conditions	SRA
Subtotal	0	4,900
Parking Lot F (Parking Structure at the SE corner of Avion Dr. & Century Blvd.)[5]		
Public	0	0
Employee	1,200	1,200
Subtotal	1,200	1,200
Total	**25,695**	**32,155**

[1] Some of the public parking in the CTA is currently used by government employees.
[2] Assumes that the MSC Passenger Processor building (not a SPAS-related project) would require the removal of parking structures 2B and 5 (1,536 total spaces). Any parking spaces that may be included as a component of the Passenger Processor project is not included in these parking totals.
[3] An area of Parking Lot C comprising approximately 850 spaces is currently being used as a limousine and charter bus holding lot. The 7,300 spaces represents the number of potential spaces if this commercial holding lot were relocated.
[4] Parking Lot D opened to employee parking in November 2011 with 1,944 parking spaces. However, there was no parking in this lot in 2010 (baseline year).
[5] This parking structure is currently used primarily by airport tenants; however, LAWA does sell some monthly parking passes to the public who likely work in nearby offices. For purposes of this summary, this structure is considered as employee parking.

Source: LAWA, CDM Smith, Ricondo & Associates, AECOM, 2011.

Existing Facilities Affected by SPAS Improvements

Implementation of the LAWA Staff-Recommended Alternative would require the relocation and/or removal of several existing facilities both within LAX property, and outside of LAX property. **Table SF-2** below provides an overview of the existing facilities that would be affected by the LAWA Staff-Recommended Alternative, including the name, size, current use, and disposition of each facility. Additional discussion of the facilities is provided in Section 2.3.1.10 of the SPAS Draft EIR. Figure 2-10 of the SPAS Draft EIR delineates the existing and proposed locations of the affected facilities. Because the planning and analysis for the LAWA Staff-Recommended Alternative are at a programmatic level, specific improvements to these facilities have yet to be designed and would not be implemented for several years. The disposition of each facility described below is based on 4th quarter 2011 conditions and currently available information, and is subject to change as local conditions change and more detailed plans are formulated.

Table SF-2

Summary of Existing Facilities Affected by the LAWA Staff-Recommended Alternative

Facility	Approximate Size	Current Use	Disposition of Facility/Use
Navigational Aids		Navigational aids	The navigational aids located at the ends of the north airfield runways would be relocated. FAA's existing Airport Surveillance Radar (ASR) would be relocated north of Westchester Parkway.
North Maintenance Road	Various lengths	Road	The eastern portion of the road would be relocated independent of the LAX Master Plan or SPAS. The LAWA Staff-Recommended

Table SF-2

Summary of Existing Facilities Affected by the LAWA Staff-Recommended Alternative

Facility	Approximate Size	Current Use	Disposition of Facility/Use
			Alternative would require relocation of the entire road to the north with operational restrictions on the eastern end.
Argo Drainage Channel	9,857 feet long	Drainage channel	Independent of SPAS, the easternmost portion of the channel is required to be structurally covered to comply with requirements governing RSAs. Under the LAWA Staff-Recommended Alternative, the entire length of the channel would be structurally covered (i.e., converted to a concrete box culvert).
North Airfield (Abandoned) Tunnel Segment	720 feet long	Unused	The tunnel would be filled.
Airport Operations Area (AOA) Access Guard Post #3	155 square feet	Guard post	Building and appurtenant structures would be demolished. There are no plans to replace the guard post in this area.
Lincoln Boulevard and Adjoining Streets		Road	Lincoln Boulevard and adjoining streets would be realigned. Approximately 540 linear feet of Lincoln Boulevard would require the tunneling.
96th Street Bridge/Sky Way		Bridge	The bridge and roadway would be reconfigured, allowing the eastern extension of Runway 6R/24L and Taxiway E, additional CTA curbside, and the accommodation of Terminal 0.
Taxi Holding Lot	100 vehicles (2.5 acres)	Vehicle parking/staging area	Independent of the LAX Master Plan or SPAS, the taxi holding lot must be relocated. Under the LAWA Staff-Recommended Alternative, the lot would move to the eastern portion of the Park One facility.
Urgent (Medical) Care Facility	Approx. 21,500 square feet	Medical office building	The building would be demolished due to the realignment of 96th Street Bridge/Sky Way. This building could potentially be relocated elsewhere in the vicinity.
LAWA Police Station/Facilities	33,300 square feet	Police station and related facilities	Facilities would be removed and relocated. The facilities could be relocated to the future LAX Public Safety Building and Supporting Facilities currently being planned by LAWA, separate from SPAS.
Park One Parking Facility and Billboards	2,728 spaces and 8 billboards	Privately-operated airport parking lot and outdoor advertising	Parking lot use would be eliminated, along with eight billboards. No relocation of the parking is anticipated.
West Remote Aircraft Gates/Parking Positions	18 gates to facilitate scheduled passenger service	Aircraft gates and parking spaces	With the extension of Taxilane D, various west remote gate structures and parking positions would be removed. These gates and parking positions would be replaced in the buildout gating plan. (It should be noted that all West

Table SF-2

Summary of Existing Facilities Affected by the LAWA Staff-Recommended Alternative

Facility	Approximate Size	Current Use	Disposition of Facility/Use
			Remote gates/parking positions are to be removed under LAX Master Plan buildout.)
LAWA Construction and Maintenance (C&M) Division Facilities	135,000 square feet	C&M facilities	With the extension and/or relocation of Taxilane D, the C&M recycling yard and equipment yard (northern portion of the facility), as well as separately located structures used for storage, would be removed and consolidated/reconfigured at the current site or moved elsewhere on the AOA or to the area referred to as Continental City.
FedEx Aircraft Maintenance Facility	164,000 square feet	Maintenance facilities	The extension and/or relocation of Taxilane D would require the removal of the FedEx Maintenance employee parking area, an apron and run-up area, and miscellaneous storage areas within the northern portion of the facility. The facilities on the leasehold would be reconfigured and consolidated on the existing site or relocated elsewhere on the AOA.
On-Airfield Fuel Truck Filling Station		Fueling facility	With the extension of Taxilane D, the fueling station would need to be reconfigured or relocated within the AOA.
Southwest Airlines Ground Support Equipment(GSE) Facility	7,972 square feet	GSE and vehicle maintenance facility	With the extension and/or relocation of Taxilane D, the Southwest Airlines GSE facility would be removed and relocated elsewhere on, or adjacent to, the AOA.
Airfield Bus Parking Area and Operations Building	44 parking spaces, 3,876-square-foot-building	Bus parking	With the extension of Taxilane D, 44 bus parking spaces and an airfield bus operations building would be removed. These uses would be relocated within the AOA or the area referred to as Continental City.
Avis Rental Car Facility	24 acres	Rental car operation	This facility would be replaced with parking. The primary rental car function would be relocated to the CONRAC in Manchester Square. Heavy maintenance and supporting functions would require relocation elsewhere, but could potentially occur on LAWA property on 111th Street west of La Cienega Boulevard.
Burger King Restaurant	3,551 square feet	Restaurant	An existing Burger King restaurant located on the northwest corner of Airport Boulevard and 96th Place would be eliminated. Relocation would be a business decision. This business could potentially relocate to elsewhere in the vicinity.
Travelodge Hotel and Denny's Restaurant	154 rooms (Travelodge) 7,347 square feet (Denny's)	Hotel and restaurant	An existing Travelodge hotel and Denny's restaurant located in the southwestern portion of Manchester Square would be eliminated. Relocation would be a business decision. These businesses could potentially relocate to elsewhere in the vicinity.

Table SF-2

Summary of Existing Facilities Affected by the LAWA Staff-Recommended Alternative

Facility	Approximate Size	Current Use	Disposition of Facility/Use

Source: LAWA and CDM Smith, 2011.

Acquisition

The LAWA Staff-Recommended Alternative would require the acquisition of properties located east of the airport. Table 2-4 of the SPAS Draft EIR lists the properties that may be affected and provides information pertaining to each parcel. A composite map of all of the acquisition properties is provided in Figure 2-11 of the SPAS Draft EIR. The parcels that would be acquired under the LAWA Staff-Recommended Alternative are identified in Table 2-5 of the SPAS Draft EIR (under the heading "Alts. 1, 2, 8, and 9") and illustrated in Figure 2-12 of the SPAS Draft EIR**.** Following acquisition, the uses would be demolished and replaced with SPAS-related improvements.[1]

Construction Staging Areas

Figure 2-15 of the SPAS Draft EIR depicts the locations of potential construction staging areas that could be utilized in some combination during development of the LAWA Staff-Recommended Alternative. As indicated in Section 2.2.1, the LAWA Staff-Recommended Alternative was formulated at a conceptual level only and there are no specific planning, design, or engineering studies or construction plans for this alternative.

Construction Staging Areas A though D are located within the LAX Northside planning area, which is planned for future development independent from SPAS. Depending on the nature and timing of such future development, use of Construction Staging Areas A through D for SPAS-related construction staging may be limited.

In addition to the potential construction staging areas described above, there are numerous existing surface parking lots in the vicinity of Arbor Vitae Street, and Airport and Aviation Boulevards that could serve as potential short-term and temporary construction staging areas.

II. Project Objectives

The project is to complete a Specific Plan Amendment Study (SPAS) that fulfills Section 7.H of the LAX Specific Plan consistent with the definition of the SPAS set forth in the LAX Master Plan Stipulated Settlement. The objectives associated with completion of the SPAS process, as identified in the Draft EIR, are described below.

1. Provide North Airfield Improvements that Support the Safe and Efficient Movement of Aircraft at LAX

The runways and taxiways within the north airfield at LAX were designed and constructed in the late 1960s. The commercial aircraft fleet in operation at that time, and used as the basis for designing the airfield geometrics (i.e., runway/taxiway widths, lengths, slopes, separation distances, dimensions for safety area setbacks and clearances, etc.), consisted of aircraft types that were substantially smaller and lighter than today's commercial aircraft, and had substantially different performance characteristics (i.e., braking, turn radius, etc.). For example, the

[1] The LAWA Staff-Recommended Alternative would require the same acquisition as Alternatives 1, 2, 8, and 9.

commercial aircraft fleet in operation in the late 1960s and 1970s was dominated by aircraft such as the Boeing 727. The Boeing 747 was introduced into commercial service in the early 1970s and soon became one of the most popular aircraft for international and long-distance flights, particularly at LAX. In October 2008, scheduled flight operations of the Airbus A380 began at LAX. Provided in **Table SF-3** below is comparison of the size and weight of the three subject aircraft.

Table SF-3

Aircraft Size Comparison

	Boeing 727	Boeing 747-400	Airbus A380
Wingspan	108'	195'	261'
Length	153'	231'	239'
Tail Height	34'	64'	79'
Maximum Takeoff Weight	200,000 lbs	833,000 lbs	1,235,000 lbs

Source: Boeing, 2012 and Airbus, 2012. Boeing, Commercial Airplanes 727 Specifications, Available: http://www.boeing.com/commercial/727family/product.html, accessed January 2012; Boeing, Commercial Airplanes 747 Specifications, Available: http://www.boeing.com/commercial/747family/pf/pf_domestic_prod.html, accessed January 2012; Airbus, A380 Dimensions and Key Data, Available: http://www.airbus.com/aircraftfamilies/passengeraircraft/a380family/a380-800/specifications, accessed January 2012.

In addition to the overall growth in the size of airplane types over the past several decades, the wingspans of many current aircraft types, such as the Boeing 737, have increased with the addition of winglets (i.e., wingtip extensions that reduce induced drag, and increase fuel efficiency), which typically add approximately 15+/- feet to the wingspan.

Problems associated with the outdated airfield design include, but are not limited to, the following:

- LAX does not have an airfield, in either the north complex or the south complex, that is fully designed for the largest aircraft types currently in service (i.e., Aircraft Design Group (ADG) V aircraft, such as the Boeing 747-400, and ADG VI aircraft, such as the Airbus A380).
- The north airfield configuration requires non-standard operating procedures, which are not optimal for safety and increase aircraft delay.
- The primary north airfield departure runway (6R/24L) is too short for certain larger aircraft (e.g., fully-loaded Boeing 747-400) on long-haul flights, requiring those aircraft to taxi to the south airfield, resulting in less efficient operations and disproportionate environmental impacts.
- The outdated airfield design creates a situation where aircraft are at increased risk of hazards. Those hazards include potential collisions with other aircraft, such as when a landing aircraft might move in the path of a departing aircraft (incursion). Other potential hazards include, but are not limited to, insufficient side-by-side passing clearances between certain types of aircraft arriving/departing on runways and aircraft on nearby taxiways. Such hazards contribute to the potential for conflicts between taxiing aircraft and ground vehicles on runways, taxiways, and nearby service roads.
- With one exception, the north airfield configuration does not comply with FAA Runway Safety Area (RSA) requirements.

- The north airfield high-speed taxiways are not in compliance with FAA Engineering Brief No. 75.
- The north airfield does not provide sufficient areas at the end of the runways for holding arriving flights and sequencing departing aircraft.
- The existing Runway Protection Zone (RPZ) associated with Runway 6L/24R includes residential uses.

In identifying and evaluating alternatives to the north airfield improvements called for in the LAX Master Plan, LAWA is seeking to provide north airfield improvements that support the safe and efficient movement of aircraft at LAX; specifically, such improvements:

- Are consistent with FAA design standards for the largest aircraft types currently in service and anticipated for the future (ADG V and VI aircraft) for all weather conditions;
- Minimize modifications of standards, waivers, or operational restrictions, all of which reduce airfield efficiency and level of service;
- Reduce the potential for airfield hazards, including incursions, and enhance the overall safety of airfield operations through runway and taxiway design;
- Accommodate a greater percentage of departing aircraft, thereby increasing airfield efficiency;
- Provide sufficient areas at the ends of the runways for holding arriving flights and sequencing departing aircraft; and
- Minimize or eliminate the extent to which Runway Protection Zones overlay residential areas.

2. Improve the Ground Access System at LAX to Better Accommodate Airport-Related Traffic, Especially as Related to the Central Terminal Area

Travelers, visitors, employees, vendors, and others utilizing the commercial passenger terminal at LAX, defined by the Central Terminal Area (CTA), have various ground access options including private vehicles, transportation service providers (i.e., taxis, shuttles, limousines, etc.), and public transit. Ground access within the CTA, where departing and arriving passengers are dropped off and picked up at curbside or can park their vehicles, is provided by an upper-level roadway and a lower-level roadway that loop around the center of the CTA and connect with surface streets on the east side of the CTA. The subject roadway system poses a number of concerns relative to traffic flows including, but not limited to, the following:

- CTA roadway system design currently creates queuing, weaving, and conflict points at various locations that impede traffic flow;
- During peak travel times, inbound airport traffic currently extends out of the CTA roadways onto public streets and may worsen as airport activity returns and grows;
- Curbside demand is unevenly distributed, especially during peak periods, creating concentrations of passengers that are not accommodated by the existing curbside system;
- As cumulative regional traffic increases, there will be less time certainty for airport users without easy access to the airport from the regional transit system; and
- The roadway system is not designed to efficiently accommodate security screening of vehicles entering the CTA.

In identifying and evaluating alternatives to the ground access system delineated in the LAX Master Plan, particularly as related to the related Yellow Light Projects, LAWA is seeking to improve the ground access system at LAX to better accommodate airport-related traffic, especially within the CTA. In particular, LAWA is seeking to:

- Design CTA roadway segments and curbside areas that reduce traffic "bottlenecks" and congestion;
- Reduce the volume of private vehicles accessing the CTA by reconfiguring and developing airport facilities that allow for alternative drop off and pick up of passengers outside the CTA;
- Reduce roadway congestion and improve performance and reliability of the airport ground transportation system by providing a grade-separated/dedicated transportation system that connects airport and transit facilities to the CTA; and
- Integrate LAWA's ground access system improvements with regional transit facilities nearby, including the recently approved Metro Crenshaw/LAX Transit Corridor and Station.

3. Maintain LAX's Position as the Premier International Gateway in Supporting and Advancing the Economic Growth and Vitality of the Los Angeles Region

LAX serves a key role in the region's economy. This is particularly true relative to LAX's position as the international gateway for the western United States. According to a study completed in 2007 by the Los Angeles Economic Development Corporation (LAEDC), over the course of 2006 an average transoceanic flight traveling round-trip from LAX everyday added $623 million in economic output and sustained 3,120 direct and indirect jobs in Southern California with $156 million in wages. Given the continued growth in, and reliance on, new large aircraft such as the Airbus A380 by major airlines operating on those long-distance international routes, it is important that LAX be able to effectively accommodate those aircraft.

LAX is a major employer on both a local level and a regional level. According to the LAX Master Plan Final EIS/EIR, on-airport employment at LAX provided almost 59,000 jobs and, on a larger-scale, LAX-related regional employment provided over 400,000 jobs and $60 billion in economic output.

In addition to being a major provider of permanent positions at the airport, LAX is also a major provider of construction jobs, particularly over the last several years through the economic recession. According to an economic impact analysis completed by the LAEDC in April 2011, construction of the airfield improvements (i.e., Crossfield Taxiway Project), terminal improvements (i.e., Bradley West Project), and other related improvement underway at the time, will create 39,900 jobs over the course of the program, or an average of 5,500 to 6,000 jobs per year. Of these, between 3,500 and 4,000 jobs will be in construction industries.

It is LAWA's desire to provide improvements that further enable LAX to support and advance the economic growth and vitality of the Los Angeles region.

4. Plan Improvements That Do Not Result in More Than 153 Passenger Gates at 78.9 MAP

In identifying and evaluating alternatives to the demolition of Terminals 1, 2, and 3, LAWA is seeking to maintain consistency with the LAX Master Plan design for a total of 153 passenger gates, which was based on a future passenger activity level of 78.9 million annual passengers (MAP) at LAX in 2015. The need to demolish portions of Terminals 1, 2, and 3 is due to the reconfiguration of the north airfield as contemplated in the LAX Master Plan. As described in Section 1.1 of the SPAS Draft EIR, the demolition of those terminals and the reconfiguration of the north airfield are both Yellow Light Projects being addressed in SPAS. The formulation of alternatives for reconfiguration of the north airfield includes various options for moving runways and associated taxiways northward or southward, each of which has implications relative to Terminals 1, 2, and 3. The formulation of potential alternatives to the demolition of Terminals 1, 2, and 3 is substantially influenced by the alternatives for the north airfield reconfiguration. While the extent to which terminals are reconfigured under each terminal alternative will vary depending on which airfield reconfiguration alternative it is linked to, LAWA is seeking to maintain

consistency between all terminal alternatives such that none of them results in more than 153 passenger gates at the projected passenger activity level of 78.9 MAP.

5. Enhance Safety and Security at LAX

During the preparation of the LAX Master Plan, which began in the 1990s, Alternative D was formulated following the events of September 11, 2001 and integrated into the CEQA review process for the LAX Master Plan as the "Enhanced Safety and Security Plan." In now identifying and evaluating alternatives to the Yellow Light Projects, which are key elements of the LAX Master Plan, LAWA is seeking to maintain the ability of the LAX Master Plan, if and as modified by the outcome of the SPAS process, to enhance safety and security at LAX.

6. Minimize Environmental Impacts on Surrounding Communities

LAX is a major international airport located within a very urbanized area, with established communities situated directly to the north, east, and south. These communities are affected to varying degrees by existing operations at the airport. Recognizing that these existing effects to the surrounding communities may change based on the alternatives being considered in SPAS, LAWA seeks to identify and apply ways to avoid, reduce, or minimize environmental impacts on surrounding communities.

7. Produce an Improvement Program that is Efficient, Sustainable, Feasible, and Fiscally Responsible

The nature and scope of improvements associated with the Yellow Light Projects are substantial. Each of those projects represents a major undertaking, requiring substantial funding; considerable planning, engineering, and design; and major construction activities. The costs for each of these major improvement projects would be financed primarily by Airport Improvement Program grants, Passenger Facility Charges (PFCs), and bond sales, all of which are subject to federal requirements regarding expenditure of airport funds, and which will also be utilized to finance other airport improvements outside of the scope of SPAS. The ability to successfully fund such improvements is, to a large extent, dependent on whether certain airport activity levels are reached. Additionally, the types of improvements associated with the Yellow Light Projects and the alternatives thereto represent major long-term investments in the airport's infrastructure that must be efficient and sustainable for many years. The construction of these major improvements poses the potential for major disruptions to existing airport operations. In identifying and evaluating alternatives to those Yellow Light Projects, LAWA is seeking to produce an improvement program that is efficient, sustainable, feasible, and fiscally responsible.

III. Procedural History

In December 2004, the Los Angeles City Council approved the LAX Master Plan[2] and related entitlements for the future development of LAX. The LAX Master Plan provides the first major framework concept for new facilities at, and improvements to, the airport since 1984, and plans to accommodate a specified level of growth in passengers and cargo at LAX through the year 2015. The LAX Master Plan serves as a broad policy statement regarding the conceptual strategic planning framework for future improvements at LAX and working guidelines to be consulted by LAWA as it formulates and processes site-specific projects under the LAX Master Plan program. The LAX Master Plan provides for modernization of the runway and taxiway system, redevelopment of the terminal area, improvement of access to the airport, and enhancement of passenger safety, security, and convenience. Preparation of the LAX Master Plan included a thorough evaluation of the potential environmental effects associated with the four build alternatives, in accordance with federal and State of California environmental review procedures.

[2] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, April 2004.

The environmental review process was conducted as a joint Environmental Impact Statement (EIS), under federal environmental law, and Environmental Impact Report (EIR), under California law. The EIS/EIR provided descriptions of the environmental conditions in and around LAX, analyzed the potential impacts of the improvements associated with each alternative on the physical environment, and recommended mitigation measures to address potential impacts. The LAX Master Plan Final EIR, was certified as complete by the Los Angeles City Council on December 7, 2004.

In January 2005, the City of El Segundo, the City of Inglewood, the City of Culver City, the County of Los Angeles, and the Alliance for a Regional Solution to Airport Congestion (Petitioners) filed petitions challenging the approval of the LAX Master Plan Program. In early 2006, the City of Los Angeles and Petitioners agreed to, and the court approved, a Stipulated Settlement of the subject lawsuits (Stipulated Settlement). Section V of the Stipulated Settlement requires LAWA to undertake a Specific Plan Amendment Study to fulfill the intent of Section 7.H of the LAX Specific Plan,[3] approved in December 2004 as part of the LAX Master Plan Program.[4] The LAX Specific Plan establishes zoning and land use regulations and procedures for the processing of future specific projects and activities anticipated under the LAX Master Plan Program to ensure consistency with the LAX Plan - the City of Los Angeles' general plan component for LAX - and to ensure the adequacy of environmental review and documentation of those individual projects. Section 7.H of the LAX Specific Plan requires completion of a Specific Plan Amendment Study prior to seeking a determination of compliance with the LAX Plan for the following projects:

- Development of the Ground Transportation Center (GTC), including the baggage tunnel, associated structures, and equipment;
- Construction of the Automated People Mover (APM) 2 from the GTC to the Central Terminal Area (CTA), including its stations and related facilities and equipment;
- Demolition of CTA Terminals 1, 2, and 3;
- North Runway re-configuration as contemplated in the LAX Master Plan, including center taxiways; and
- On-site road improvements associated with development of the GTC and construction of APM 2.

These projects are referred to as the "Yellow Light Projects."[5] Pursuant to the Stipulated Settlement, and in accordance with the LAX Specific Plan, LAWA is proceeding with the LAX SPAS process to, consistent with previous local and federal approvals, identify Specific Plan amendments that plan for the modernization and improvement of LAX in a manner that is designed for a practical capacity of 78.9 MAP while enhancing safety and security, minimizing environmental impacts on the surrounding communities, and creating conditions that encourage airlines to go to other airports in the region, particularly those owned and operated by LAWA.

LAWA circulated a Notice of Preparation (NOP) of an EIR for the LAX SPAS Project on March 12, 2008. The comment period concluded on June 18, 2008. Two public scoping meetings were conducted during the comment period. Subsequent to the circulation of the NOP, LAWA

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3 City of Los Angeles, Los Angeles International Airport Specific Plan (Ordinance No. 176,345), September 29, 2004, as amended by Ordinance No. 179,148, August 24, 2007.

4 As defined in the Stipulated Settlement, the "LAX Master Plan Program" means the entire program that comprises the approval by both the Los Angeles City Council and the Federal Aviation Administration (FAA) in its Record of Decision (ROD), and subsequent implementation of Alternative D (i.e., the approved LAX Master Plan), including the initial approval of all entitlements and other actions in conjunction with the Los Angeles City Council's approval of the LAX Master Plan. The LAX Master Plan Program includes subsequent LAWA, BOAC and/or City of Los Angeles approvals of all entitlements and other actions for any of the specific project components and activities that implement Alternative D.

5 The Stipulated Settlement and the Specific Plan Amendment approved by BOAC and the Los Angeles City Council removed the West Satellite Concourse and associated APM segments from the original list of Yellow Light Projects. (Ordinance 179,148, August 24, 2007).

reconsidered and refined various options for the potential alternative designs, technologies and configurations to be evaluated in the SPAS and the SPAS EIR. A Revised NOP was circulated from October 8, 2010 to November 29, 2010 to inform public agencies and members of the public of the changes and describe the potential alternative designs, technologies and configurations being considered. Two additional public scoping meetings were conducted during the Revised NOP comment period. The notice of availability for the Draft EIR for public review was published in the Los Angeles Times and local newspapers, including the Daily Breeze and the Argonaut, and posted at the City and County Clerk's offices prior to release of the Draft EIR. Copies of the Draft EIR were placed in six local libraries and the EIR was available for review on thru the LAWA website. On July 27, 2012, the City of Los Angeles published the Draft EIR for a 75-day review period that ended on October 10, 2012. Three public meetings were held during the comment period, specifically, on August, 25, 28, and 29, 2012. In addition, a "virtual meeting" was available online between September 10 and October 10, 2012. The Final EIR for the LAX SPAS Project was published on January 25, 2013. The Final EIR for the LAX SPAS Project incorporates and responds to comments received on the Draft EIR and includes corrections and additions to the Draft EIR, as well as other Final EIR material. The EIR was prepared in accordance with CEQA, Public Resources Code §21000 et seq. and in compliance with CEQA Guidelines Title 14 California Code of Regulations §15000 et seq., as well as with the City of Los Angeles CEQA Guidelines. LAWA, the Board of Airport Commissioners (BOAC), and other decision-makers will use the Final EIR to inform their decisions on the LAX SPAS Project, as CEQA requires.

IV. Environmental Impacts and Findings

Pursuant to Public Resources Code §21081 and CEQA Guidelines §15091, no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless the public agency makes one or more of the following findings with respect to each significant impact:

1. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.
2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

BOAC has made one or more of these specific written findings regarding each significant impact associated with the Project. Those findings are presented below, along with a presentation of facts in support of the findings. Concurrent with the adoption of these findings, the BOAC adopts the Mitigation Monitoring and Reporting Program (CEQA Guidelines §15097(a)).

A. Findings on Less than Significant Impacts

Based on the issue area assessment in the EIR, the BOAC has determined that the LAWA Staff-Recommended Alternative (as described above and with implementation of applicable LAX Master Plan commitments and mitigation measures identified in the SPAS Final EIR) will have less than significant impacts for several issues as summarized in the **Table SF-4** below. For each of the impacts set forth below, the BOAC adopts and incorporates by reference the discussion of each of the impacts in the detailed issue area analyses in Chapter 4 of the SPAS Draft EIR and Section 2.3 of Part II of the SPAS Final EIR and the cumulative impacts discussed in Chapter 5 of the SPAS Draft EIR and Section 2.4 of Part II of the SPAS Final EIR as the rationale for the conclusion that there would be no impact or less than significant impacts.

Table SF-4

Less Than Significant Impacts - LAWA Staff-Recommended Alternative

Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
AESTHETICS			
Cause the direct or indirect introduction of features that would detract from the existing valued aesthetic quality of a neighborhood, community, or localized area by conflicting/contrasting with important aesthetic elements or the quality of the area (such as a theme, style, setbacks, density, massing, etc.) or cause an inconsistency with applicable design guidelines	Less than significant	Implementation of LAX Master Plan Commitments DA-1, DA-2, LU-2, and LU-4, and Master Plan Mitigation Measure MM-DA-1; no new mitigation specific to SPAS is required	Less than significant
Cause the direct or indirect removal of one or more features that contribute to the valued aesthetic character or image of the neighborhood, community, or localized area such as demolition of structures, street trees, a strand of trees, or other landscape features that contribute positively to the valued visual image of a community.	Less than significant	Implementation of LAX Master Plan Commitments DA-1, DA-2, LU-2, and LU-4, and Master Plan Mitigation Measure MM-DA-1; no new mitigation specific to SPAS is required	Less than significant
With respect to light emissions and glare, a significant impact would occur if the direct and indirect changes in the environment that may be caused by the LAWA Staff-Recommended Alternative would result in one of the following future conditions: ♦ A change in lighting or lighting intensity such that light would spill off the project site and affect light-sensitive areas; or ♦ A substantial new source of glare, or a change in the built environment, which would adversely affect day or nighttime views in adjacent areas sensitive to glare.	Less than significant	Implementation of LAX Master Plan Commitments LI-2, LI-3 and DA-1, and LAX Master Plan Mitigation Measure MM-DA-1; no new mitigation specific to SPAS is required	Less than significant
BIOLOGICAL RESOURCES			
Cause the direct or indirect conflict with the provisions of an adopted HCP, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan	Less than significant	No mitigation is required	Less than significant
Cause the direct or indirect substantial adverse effect on the El Segundo Blue butterfly, its habitat, or the substantial loss of individuals or the substantial reduction of existing habitat of a locally-designated species or a substantial reduction in a locally-designated natural habitat or plant community within the study area.	Less than significant	Implementation of LAX Master Plan Mitigation Measures MM-BC-1, MM-ET-3 and MM-ET-4; no new mitigation specific to SPAS is required	Less than significant
Cause the direct or indirect substantial interference with wildlife movement/migration corridors.	Less than significant	No mitigation is required	Less than significant
Cause the direct or indirect conflict with any local policies or ordinances protecting biological resources, such as the City of Los Angeles Protected Tree Ordinance.	Less than significant	Implementation of LAX Master Plan Mitigation Measure MM-BC-3; no new mitigation specific to SPAS is required	Less than significant
HUMAN HEALTH RISK ASSESSMENT			
Cause the direct or indirect increase in incremental cancer risk greater than, or equal to, 10 in one million (10 x 10-6) for potentially exposed off-site workers, residents, or school	Less than significant	Implementation of LAX Master Plan Mitigation Measures and Community Benefits Agreement Measures described in Sections 4.2.5 and	Less than significant and beneficial

Table SF-4

Less Than Significant Impacts - LAWA Staff-Recommended Alternative

Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
children.		4.7.1.5 of the SPAS Draft EIR; no new mitigation specific to SPAS is required	
Cause the direct or indirect total incremental chronic hazard index greater than, or equal to, one for any target organ system at any receptor location.	Less than significant	Implementation of LAX Master Plan Mitigation Measures and Community Benefits Agreement Measures described in Sections 4.2.5 and 4.7.1.5 of the SPAS Draft EIR; no new mitigation specific to SPAS is required	Less than significant
Cause the direct or indirect exceedance of Permissible Exposure Limits - Time Weighted Average or Threshold Limit Values for workers.	Less than significant	Implementation of LAX Master Plan Mitigation Measures and Community Benefits Agreement Measures described in Sections 4.2.5 and 4.7.1.5 of the SPAS Draft EIR; no new mitigation specific to SPAS is required	Less than significant
SAFETY			
Cause the direct or indirect construction of runways within 10,000 feet of a solid waste landfill.	Less than significant	No mitigation is required	Less than significant
Cause the direct or indirect construction of facilities or implementation of operational conditions that would serve as attractants to birds.	Less than significant	No mitigation is required	Less than significant
Cause a direct or indirect compromise in aviation safety or an aviation safety hazard for people in the project area.	Less than significant	No mitigation is required	Less than significant
HAZARDOUS MATERIALS			
Cause a direct or indirect contamination of soil or groundwater or interference with clean up of sites that are currently undergoing soil or groundwater remediation.	Less than significant	Implementation of LAX Master Plan Commitments HM-1 and HM-2; no new mitigation specific to SPAS is required	Less than significant
Cause direct or indirect unsafe exposure of workers to hazardous materials from contaminated soils and/or groundwater encountered during construction.	Less than significant	Implementation of LAX Master Plan Commitments HM-1 and HM-2; no new mitigation specific to SPAS is required	Less than significant
Cause a direct or indirect impairment of the effective implementation of emergency response activities.	Less than significant	Implementation of LAX Master Plan Commitments C-1, ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22; no new mitigation specific to SPAS is required	Less than significant
HYDROLOGY/WATER QUALITY			
Cause a direct or indirect substantial alteration of the existing drainage pattern of the site in a manner which would result in substantial erosion or siltation on- or off-site.	Less than significant	Implementation of existing regulatory requirements; no new mitigation specific to SPAS is required	Less than significant
Cause a direct or indirect increase load of a pollutant of concern delivered to a receiving water body by surfacewater runoff (*Dry Weather Flows*)	Less than significant	No mitigation is required	Less than significant
Cause a direct or indirect increase load of a pollutant of concern delivered to a receiving water body by surfacewater runoff. (*Construction Impacts*)	Less than significant	No mitigation is required	Less than significant
LAND USE AND PLANNING – PLAN CONSISTENCY			

Table SF-4

Less Than Significant Impacts - LAWA Staff-Recommended Alternative

Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Cause a direct or indirect conflict with any applicable land use plan, policy, or regulation (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	Less than significant	Implementation of LAX Master Plan Commitments LU-2 and RBR-1, and Master Plan Mitigation Measures MM-RBR-1 and MM-RBR-2, as well as the necessary plan amendments associated with the project approval; no new mitigation specific to SPAS is required	Less than significant
AIRCRAFT NOISE – NIGHTTIME AWAKENINGS			
Cause a direct or indirect substantial increase in the probability of nighttime awakenings.	Less than significant	No mitigation is required	Less than significant
ROAD TRAFFIC NOISE			
Cause direct or indirect roadway traffic from a SPAS alternative that causes the ambient noise level measured at the property line of affected uses to increase by 3 dBA or more in CNEL.	Less than significant	No mitigation is required	Less than significant
CONSTRUCTION TRAFFIC NOISE			
Cause direct or indirect construction traffic that causes the ambient noise level measured at the property line of affected uses to increase by 3 dBA or more in CNEL.	Less than significant	Implementation of LAX Master Plan Commitments ST-16, ST-18, and ST-22; no new mitigation specific to SPAS is required	Less than significant
TRANSIT NOISE AND VIBRATION			
Cause direct or indirect transit operations, associated with the APM, that causes the ambient noise level measured at the affected noise-sensitive uses to increase by 3 dBA or more in CNEL.	Less than significant	No mitigation is required	Less than significant
Cause direct or indirect vibration or ground-borne noise levels to exceed the FTA recommended maximum acceptable level threshold of 72 VdB for residences and buildings where people normally sleep, including hotels.	Less than significant	No mitigation is required	Less than significant
LAW ENFORCEMENT			
Cause a direct or indirect increase in on-airport population that would require a substantial increase in law enforcement services to maintain adequate services or would require new or expanded facilities without providing adequate mechanisms for addressing these additional needs, related to airfield improvements, terminal improvements, and construction.	Less than significant	Implementation of LAX Master Plan Commitments LE-1 and LE-2; no new mitigation specific to SPAS is required	Less than significant
Cause direct or indirect changes, through increased traffic congestion, changes in circulation, expansion of airport property, or the location of new land uses, and increase in emergency response times beyond the limits required by applicable jurisdictions within the study area related to airfield improvements, terminal modifications, and construction.	Less than significant	Implementation of LAX Master Plan Commitments C-1, ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22; no new mitigation specific to SPAS is required	Less than significant
FIRE PROTECTION			
Cause a direct or indirect change that would result in restricted emergency access, increased response times, or extended station response distances beyond the standards maintained by the agencies serving LAX and the surrounding communities.	Less than significant	Implementation of LAX Master Plan Commitments FP-1, PS-1, PS-2, C-1, ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22; no new mitigation specific to SPAS is required	Less than significant
Cause a direct or indirect need for a new fire station or the expansion, consolidation, or	Less than significant	Implementation of LAX Master Plan Commitments FP-1, PS-1, PS-2, C-1,	Less than significant

Table SF-4

Less Than Significant Impacts - LAWA Staff-Recommended Alternative

Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
relocation of an existing facility to maintain adequate service levels.		ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22; no new mitigation specific to SPAS is required	
ON-AIRPORT TRANSPORTATION: PARKING			
Cause the airport's future (2025) parking supply to not be sufficient to accommodate the airport's estimated future (2025) public parking demand for the alternative.	Less than significant	No mitigation is required	Less than significant
ENERGY			
Cause a direct or indirect exceedance in regional electricity or natural gas supplies due to project-related electricity and natural gas demand.	Less than significant	Implementation of LAX Master Plan Commitment E-1; no new mitigation specific to SPAS is required	Less than significant
Cause a direct or indirect substantial increase in project-related fuel consumption relative to available supply.	Less than significant	Implementation of LAX Master Plan Commitment E-1; no new mitigation specific to SPAS is required	Less than significant
SOLID WASTE			
Cause a direct or indirect net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities.	Less than significant	Implementation of LAX Master Plan Commitment SW-1; no new mitigation specific to SPAS is required	Less than significant
Cause direct or indirect conflicts with solid waste policies and objectives intended to help achieve state or local waste diversion goals.	Less than significant	Implementation of LAX Master Plan Commitment SW-1; no new mitigation specific to SPAS is required	Less than significant
WASTEWATER GENERATION			
Cause a direct or indirect exceedance in the capacities of regional wastewater treatment facilities due to project-related wastewater generation.	Less than significant	Implementation of LAX Master Plan Commitment W-2; new no mitigation specific to SPAS is required	Less than significant
WATER SUPPLY			
Cause a direct or indirect exceedance of regional water supply due to project-related water demand.	Less than significant	Implementation of LAX Master Plan Commitments W-1 and W-2; no new mitigation specific to SPAS is required	Less than significant
CUMULATIVE IMPACTS			
Aesthetics: Light and Glare	Not cumulatively considerable	No mitigation is required	Not cumulatively considerable
Coastal Resources	No impact	No mitigation is required	No impact
Human Health Risk Assessment - Cancer Risk and Chronic Non-Cancer Health Hazard	Not cumulatively considerable	No mitigation is required	Not cumulatively considerable
Land Use and Planning: Plan Consistency	Not cumulatively considerable	No mitigation is required	Not cumulatively considerable
Aircraft Noise – Nighttime Awakenings	Not cumulatively considerable	No mitigation is required	Not cumulatively considerable
Transit Noise and Vibration	Not cumulatively considerable	No mitigation is required	Not cumulatively considerable
Fire Protection	Not cumulatively considerable	No mitigation is required	Not cumulatively considerable
Law Enforcement	Not cumulatively considerable	No mitigation is required	Not cumulatively considerable
Energy	Not cumulatively considerable	No mitigation is required	Not cumulatively considerable
Wastewater Generation	Not cumulatively considerable	No mitigation is required	Not cumulatively considerable
Water Supply	Not cumulatively considerable	No mitigation is required	Not cumulatively considerable

Findings: Based on substantial evidence in the administrative record, including Chapter 4 of the SPAS Draft EIR and Section 2.3 of Part II of the SPAS Final EIR, and the cumulative impacts discussed in Chapter 5 of the SPAS Draft EIR and Section 2.4 of Part II of the SPAS Final EIR, the BOAC hereby finds and determines that the aforementioned impacts associated with Aesthetics, Biological Resources, Human Health Risk Assessment, Safety, Hazardous Materials, Hydrology, Land Use and Planning: Plan Consistency, Aircraft Noise – Nighttime Awakenings, Road Traffic Noise, Construction Traffic Noise, Transit Noise and Vibration, On-Airport Transportation: Parking, Fire Protection, Energy, Solid Waste, Wastewater Generation, and Water Supply are less than significant.

Based on substantial evidence in the administrative record, including Chapter 5 of the SPAS Draft EIR and Section 2.4 of Part II of the SPAS Final EIR, the BOAC hereby finds and determines that there are no cumulative impacts associated with Coastal Resources and that the Project's contribution to cumulative impacts associated with Aesthetics: Light and Glare, Human Health Risk – Cancer Risk and Chronic Non-Cancer Hazard, Land Use and Planning: Plan Consistency, Aircraft Noise – Nighttime Awakenings, Transit Noise and Vibration, Fire Protection, Law Enforcement, Energy, Wastewater Generation, and Water Supply are less than cumulatively considerable.

Because these impacts are less than significant and the Project's contribution to cumulative impacts is less than cumulatively considerable, mitigation beyond that already required and approved as part of the LAX Master Plan, which will be included in the Mitigation Monitoring and Reporting Program for the Project, is not required.

Additionally, the Initial Study included in the October 2010 LAX SPAS EIR Notice of Preparation (NOP), included as Appendix A, *Notice of Preparation/Scoping*, of the SPAS Draft EIR, determined that effects on the following resource areas would result in no impact, or less than significant impacts: agricultural resources, geology and soils, mineral resources, population/housing, and recreation. The BOAC finds that these impacts either would not occur or are less than significant and adopts the analysis contained in the NOP as the rationale for this finding.

B. Findings on Impacts that Will be Reduced to Below the Level of Significance with Project-Specific Mitigation

The BOAC finds that the following environmental impacts can and will be mitigated to below a level of significance based upon the implementation of the SPAS (Project-specific) mitigation measures in the EIR. These findings are based on the discussion of impacts in the detailed issue area analyses in Chapter 4 of the SPAS Draft EIR and Section 2.3 of Part II of the SPAS Final EIR, and the cumulative impacts discussed in Chapter 5 of the SPAS Draft EIR and Section 2.4 of Part II of the SPAS Final EIR. An explanation of the rationale for each finding is presented below.

1) Aesthetic Resource

Impact: Cause a direct or indirect obstruction, interruption, or diminishment of a valued focal or panoramic view or view from any designated scenic highway, corridor, or parkway.

Description of Effects: As discussed in Section 4.1 of the SPAS Draft EIR and Section 2.3.1 of Part II of the SPAS Final EIR, with the exception of the development of the APM within the CTA, which has the potential to result in significant impacts to views of the Theme Building within the CTA, and with implementation of LAX Master Plan Commitments, improvements associated with the LAWA Staff-Recommended Alternative would not occur in areas of high aesthetic quality and would not remove features that would change the aesthetic character of the area. The addition of the APM within the CTA, while it would be visually noticeable, would introduce a new, modern feature within the CTA that would be consistent with the airport's image as a Gateway to the City

of Los Angeles. However, views of the Theme Building are valued focal views within the CTA. The APM within the CTA, although conceptual, may impact valued focal views of the Theme Building from different vantage points within the CTA. Mitigation Measure MM-HA (SPAS)-2, Preservation of Historic Resources: Theme Building and Setting (detailed in Section 2.3.1.2 of Part II of the SPAS Final EIR), requires that, consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the historic character of the Theme Building and Setting be retained and preserved. Therefore, any changes to the Theme Building or to features and spatial relationships of the CTA that could alter the Setting of the Theme Building that contribute to its eligibility will be avoided, protected, and maintained in a manner consistent with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitation. Therefore, with implementation with MM-HA (SPAS)-2, impacts to views associated with the APM within the CTA will be reduced to a level that is less than significant.

Cumulative Aesthetic Impacts

Regarding cumulative impacts as discussed in Section 5.5.1 of the SPAS Draft EIR and Section 2.4.1 of Part II of the SPAS Final EIR, with the exception of the Airport Metro Connector Project, the cumulative projects would not affect views from a designated scenic highway, corridor, or parkway, or obstruct/diminish other valued focal or panoramic views. Elevated elements related to the Airport Metro Connector Project could affect views of the Theme Building within the CTA. Although the Airport Metro Connector Project may contribute to a cumulatively significant impact on views of the Theme Building, in general, improvements within the CTA under the LAWA Staff-Recommended Alternative would take place on the airfield and north of Sky Way, and would not obstruct or degrade views of the Theme Building. In addition, with implementation of Mitigation Measure MM-HA (SPAS)-2, Preservation of Historic Resources: Theme Building and Setting, the contribution of the LAWA Staff-Recommended Alternative to cumulative impacts will not be cumulatively considerable.

Findings: Based on substantial evidence in the administrative record, including Section 4.1 of the SPAS Draft EIR and Sections 2.3.1 and 2.4.1 of Part II of the SPAS Final EIR, the BOAC hereby finds and determines that changes or alterations have been required in, or are incorporated into, the project which avoid or substantially lessen the aforementioned significant environmental effects related to aesthetics, as may occur from implementation of the LAX SPAS Project. Specifically, with implementation of commitments and mitigation already required by the LAX Master Plan, as well as LAX SPAS Project-specific Mitigation Measure MM-HA (SPAS)-2, Preservation of Historic Resources: Theme Building and Setting, the Project will not affect views from a designated scenic highway, corridor, or parkway or obstruct/diminish other valued focal or panoramic views, impacts on views will be less than significant, for the reasons explained above.

With the mitigation described above, the Project's contribution to cumulative impacts to the aforementioned views will be less than cumulatively considerable.

Rationale: Implementation of Project-specific Mitigation Measure MM-HA (SPAS)-2, Preservation of Historic Resources: Theme Building and Setting, includes consultation with a qualified historic preservation consultant to review the compatibility of new design and construction components adjacent to the Theme Building for conformance with Secretary of the Interior's Standards that provide guidelines for sensitively and respectfully managing changes to the defining characteristics of a historic property's site and environment. Therefore, implementation of Project-specific Mitigation Measure MM-HA (SPAS)-2 will reduce impacts to views associated with the APM within the CTA to a level that is less than significant, and will also reduce the Project's contribution to cumulative impacts to less than cumulatively considerable.

2) Biological Resources

Impact: Significant impacts to biological resources, including endangered, rare, or threatened species of flora and fauna, would occur if direct and indirect changes in the environment, which

may be caused by the LAWA Staff-Recommended Alternative, result in one or more of the following future conditions:

- A substantial reduction in federally-designated critical habitat, locally-designated natural communities including state-designated sensitive habitats, Environmentally Sensitive Habitat Areas (ESHAs), and habitat preservation areas designated pursuant to local ordinances, including a substantial reduction in the Los Angeles/El Segundo Dunes, including the Habitat Restoration Area (designated as such by City of Los Angeles Ordinance 167,940 and the Los Angeles Airport/El Segundo Dunes Specific Plan).
- Interference with habitat (e.g., from the introduction of noise, light) such that normal species behaviors are disturbed to a degree that results in substantial adverse impacts to sensitive species.
- A substantial adverse effect, through the loss of individuals or the reduction of existing habitat, on a state- or federally-listed endangered, threatened, rare, protected, or candidate species; sensitive or special status species in local or regional plans, policies or regulations; species that meet the criteria for endangered, rare or threatened under State CEQA Guidelines Section 15380(b); or a SSC.
- Substantial interference with nesting during the breeding season (March 15 to August 15) for any avian species afforded protection under MBTA or Fish and Game Code Sections 3503 or 3503.5.
- Conflict with any local policies or ordinances protecting biological resources, such as the City of Los Angeles Protected Tree Ordinance.

Description of Effects: As discussed in Section 4.3 of the SPAS Draft EIR and Section 2.3.3 of Part II of the SPAS Final EIR, and summarized below, habitat/vegetation associations, sensitive plant species, and wildlife have the potential to exist at the Project site.

Habitat/Vegetation Associations

Construction of the north airfield improvements under the LAWA Staff-Recommended Alternative would result in the permanent loss of 2.69 acres of Disturbed Southern Dune Scrub, which is a state-designated sensitive habitat with a global ranking of G1 and a state ranking of S1.1, indicating that there are less than 2,000 acres throughout both its global and state range, and that it is very threatened. However, the Disturbed Southern Dune Scrub associated with the north airfield occurs in a long, narrow strip covering approximately 2.69 acres along Westchester Parkway, is surrounded by developed and ruderal areas, and is highly disturbed, having been previously developed for residential use. Because this area is highly disturbed, isolated, colonized by invasive, non-native species, and provides greatly diminished habitat value relative to the Disturbed Southern Dune Scrub in the Dunes, it is not consistent with the definition of the state-designated sensitive habitat (i.e., Southern Dune Scrub), despite the presence of indicator species. Nevertheless, this impact is considered significant. To address this impact, Mitigation Measure MM-BIO (SPAS)-14, Replacement of Habitat Units, described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, is proposed. This measure will provide compensatory mitigation for this loss of habitat. With implementation of Mitigation Measure MM-BIO (SPAS)-14, impacts to Disturbed Southern Dune Scrub habitat in this area will be less than significant.

Under the LAWA Staff-Recommended Alternative, relocation of navigational aids and construction of new service roads would result in permanent impacts to 0.89 acre of undeveloped area within the Los Angeles/El Segundo Dunes, including impacts to 0.54 acre of Disturbed Southern Foredune, and 0.35 acre of ruderal. Southern Foredune is a state-designated sensitive habitat with a global ranking of G2 and a state ranking of S2.1, indicating that there are 2,000-10,000 acres throughout both its global and state range, and that it is very threatened. Permanent loss of 0.54 acre of Disturbed Southern Foredune would occur in two locations: within the Habitat Restoration Area (0.19 acre) and north of the Habitat Restoration Area (0.35 acre).

Given the relative rarity of Southern Foredune, and because these areas are contiguous with other habitat, thus providing better habitat quality and connectivity than isolated patches, the permanent loss of 0.54 acre of Disturbed Southern Foredune constitutes a substantial reduction in state-designated sensitive habitat, and would be a significant impact. Moreover, temporary impacts associated with minor grading and construction-related access roads would occur within Disturbed Southern Foredune and would be significant. The permanent loss of 0.35 acre of ruderal vegetation for new navigational aids and associated service roads, as well as additional temporary construction impacts, would not be significant, as ruderal vegetation is not a state- or locally-designated sensitive habitat. To address impacts to state-designated habitats associated with the relocation of navigational aids within the Dunes, Mitigation Measure MM-BIO (SPAS)-1, Replacement of State Designated Habitats, described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, is proposed. This measure will provide for restoration of habitat within the Dunes. With implementation of Mitigation Measure MM-BIO (SPAS)-1, impacts to sensitive habitats will be less than significant.

The LAWA Staff-Recommended Alternative would result in the loss of 21.06 habitat units (refer to Table SRA-2.3.3-3 of Part II of the Final EIR). In accordance with the LAX Master Plan mitigation program for biological resources, specifically, LAX Master Plan Mitigation Measure MM-BC-8, Replacement of Habitat Units, the loss of habitat units will be mitigated through a habitat replacement program. Mitigation Measure MM-BIO (SPAS)-14, Replacement of Habitat Units, described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, outlines the habitat replacement program as it would apply to the LAWA Staff-Recommended Alternative. Pursuant to this program, a habitat value of 0.8 would apply to the replacement acreage. Therefore, 26.33 acres would be required to mitigate the loss of habitat units and will reduce impacts to habitat/vegetation associations to less than significant.

Sensitive Plants

As discussed in Section 4.3 of the Draft EIR and Section 2.3.3 of Part II of the Final EIR, six sensitive plant species are either known to occur or have potential to occur in the biological resources study area, within the navigational aids relocation area and/or construction staging areas under the LAWA Staff-Recommended Alternative. The sensitive plant species assumed to have the potential to occur within the Project site are as follows: Lewis' evening primrose; California spineflower; south coast branching phacelia; a subspecies of mesa horkelia; a variety of Orcutt's pincushion; and, southern tarplant. The relocation of navigational aids under the LAWA Staff-Recommended Alternative, the construction of improvements in the north airfield, and the disturbance associated with the Construction Staging Areas B, C, and D would result in habitat alteration or removal and may result in a significant impact to these species, depending on the total population size present on-site and the percentage of the population that would be affected. As the number and distribution of the species varies from year to year and these fluctuations can be extreme, and the presence or absence of some species was not able to be determined during preparation of the EIR, it is assumed that significant impacts to sensitive plant species would occur as a result of construction of the LAWA Staff-Recommended Alternative. To address impacts to sensitive plant species, a series of mitigation measures that detail requirements specific to each species is proposed, as described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, including MM-BIO (SPAS)-2, Conservation of Floral Resources: South Coast Branching Phacelia, MM-BIO (SPAS)-3, Conservation of Floral Resources: Lewis' Evening Primrose, MM-BIO (SPAS)-4, Conservation of Floral Resources: California Spineflower, MM-BIO (SPAS)-5, Conservation of Floral Resources: Mesa Horkelia, MM-BIO (SPAS)-6, Conservation of Floral Resources: Orcutt's Pincushion, and MM-BIO (SPAS)-7, Conservation of Floral Resources: Southern Tarplant. With implementation of these mitigation measures, impacts to sensitive plants will be less than significant.

Sensitive Wildlife

Six sensitive wildlife species have been detected in and around the biological resources study area during surveys conducted for the LAX Master Plan EIR: Riverside fairy shrimp, El Segundo blue butterfly, western spadefoot toad, loggerhead shrike, western burrowing owl, and San Diego black-tailed jackrabbit. Riverside fairy shrimp and western spadefoot toad are believed extirpated from the biological resources study area, as discussed in Section 4.3.3.2 of the Draft EIR, and are not discussed further in these findings.

Relocation of navigational aids in the Los Angeles/El Segundo Dunes associated with implementation of the LAWA Staff-Recommended Alternative would result in permanent impacts to at least 0.89 acre of undeveloped area in the Los Angeles/El Segundo Dunes, of which approximately 0.54 acre consists of state-designated sensitive habitat (Disturbed Southern Dune Scrub), and additional temporary impacts associated with project construction. The undeveloped areas in the Los Angeles/El Segundo Dunes support several species of sensitive arthropods and gastropods, silvery legless lizard, and coast horned lizard. Construction activities could result in the loss of individuals through direct take of sensitive arthropod and gastropod species, the silvery legless lizard, and the coast horned lizard, which is considered to be a significant impact. Various detection methods are available to locate individuals and would be used to find and relocate them, in order to reduce the level of take. With implementation of Mitigation Measure MM-BIO (SPAS)-8, Conservation of Faunal Resources: Sensitive Reptiles, Arthropods, and Gastropods, as described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, impacts to these sensitive wildlife species will be less than significant.

Loggerhead shrike may occasionally visit or forage in the AOA, but is not expected to nest within the AOA. If loggerhead shrikes were to nest within a construction or staging area, implementation could have a significant impact on this species through interference with nesting activity. With implementation of Mitigation Measure MM-BIO (SPAS)-9, Conservation of Faunal Resources: Loggerhead Shrike, described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, impacts to this sensitive wildlife species associated with use of construction or staging areas will be less than significant.

Burrowing owl may occasionally occur on the edges of the AOA as wintering individuals. If burrowing owls are present in areas associated with construction, including the construction staging areas, Argo Drainage Channel, the AOA east of Pershing Drive, or the navigational aids relocation area in the Los Angeles/El Segundo Dunes, project implementation would have a significant impact on this species. With implementation of Mitigation Measure MM-BIO (SPAS)-10, Conservation of Faunal Resources: Burrowing Owl, described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, impacts to this sensitive wildlife species will be less than significant.

Use of proposed Construction Staging Areas B, C, D, and F under the LAWA Staff-Recommended Alternative would have the potential to result in the removal of mature trees used for nesting by raptors or birds. Such removal would have the potential to result in impacts to nesting birds or raptors protected under the MBTA and/or California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513. The LAX Master Plan Final EIR concluded that removal of any mature ornamental trees would be a significant impact requiring replacement with native trees at a 2:1 ratio because the trees may provide nesting sites for raptors. A majority of the ornamental trees in the study area are not the types typically preferred by common raptor species in Southern California, with the exception of eucalyptus trees, which may be used by red-tailed and red-shouldered hawks, and palm trees, which may be used by American kestrels. If mature trees in the study area are documented to support nesting, removal of mature trees would be a significant impact. Under the LAWA Staff-Recommended Alternative, construction activities may result in substantial interference with nesting during the breeding season (March 15 to August 15) through either close proximity of construction activity or removal of vegetation that supports avian species afforded protection under the MBTA or Fish and Game Code 3503 or 3503.5. Such

impacts would be significant. With implementation of Mitigation Measures MM-BIO (SPAS)-11, Conservation of Faunal Resources: Mature Tree Replacement - Nesting Raptors, and MM-BIO (SPAS)-12, Conservation of Faunal Resources: Nesting Birds/Raptors, described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, impacts to nesting birds and raptors will be less than significant.

The following 13 Project-specific mitigation measures (detailed in Section 2.3.3.2 of Part II of the SPAS Final EIR) will address the potential significant impacts to state-designated sensitive habitats; habitat units; sensitive plants; and sensitive wildlife, including nesting birds/raptors and mature trees utilized by nesting raptors, associated with the LAWA Staff-Recommended Alternative:

- MM-BIO (SPAS)-1. Replacement of State-Designated Sensitive Habitats.
- MM-BIO (SPAS)-2. Conservation of Floral Resources: South Coast Branching Phacelia.
- MM-BIO (SPAS)-3. Conservation of Floral Resources: Lewis' Evening Primrose.[6]
- MM-BIO (SPAS)-4. Conservation of Floral Resources: California Spineflower.
- MM-BIO (SPAS)-5. Conservation of Floral Resources: Mesa Horkelia.
- MM-BIO (SPAS)-6. Conservation of Floral Resources: Orcutt's Pincushion.
- MM-BIO (SPAS)-7. Conservation of Floral Resources: Southern Tarplant.
- MM-BIO (SPAS)-8. Conservation of Faunal Resources: Sensitive Reptiles, Arthropods, and Gastropods.[7]
- MM-BIO (SPAS)-9. Conservation of Faunal Resources: Loggerhead Shrike.[8]
- MM-BIO (SPAS)-10. Conservation of Faunal Resources: Burrowing Owl.[9]
- MM-BIO (SPAS)-11. Conservation of Floral Resources: Mature Tree Replacement - Nesting Raptors.
- MM-BIO (SPAS)-12. Conservation of Faunal Resources: Nesting Birds/Raptors.
- MM-BIO (SPAS)-14. Replacement of Habitat Units.

Operation and maintenance of the facilities associated with the LAWA Staff-Recommended Alternative will not result in significant impacts to biological resources.

Cumulative Biological Resources Impacts

With implementation of mitigation described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, cumulative impacts to sensitive wildlife species, including nesting birds/raptors, and mature trees utilized by nesting raptors, as a result of the LAWA Staff-Recommended Alternative in combination with cumulative projects identified in Chapter 5, *Cumulative Impacts*, of the Draft EIR, will not be cumulatively considerable and therefore less than significant.

Findings: Based on substantial evidence in the administrative record, including Section 4.3 of the SPAS Draft EIR and Section 2.3.3 of Part II of the SPAS Final EIR, the BOAC hereby finds and determines that changes or alterations have been required in, or are incorporated into, the project

6 For purposes of the LAWA Staff-Recommended Alternative, this measure satisfies the intent of LAX Master Plan Mitigation Measure MM-BC-2.

7 For purposes of the LAWA Staff-Recommended Alternative, this measure satisfies the intent of relevant portions of LAX Master Plan Mitigation Measure MM-BC-9.

8 For purposes of the LAWA Staff-Recommended Alternative, this measure satisfies the intent of relevant portions of LAX Master Plan Mitigation Measure MM-BC-9.

9 For purposes of the LAWA Staff-Recommended Alternative, this measure satisfies the intent of relevant portions of LAX Master Plan Mitigation Measure MM-BC-9.

which avoid or substantially lessen the significant environmental effects identified in the SPAS Final EIR. Specifically, with implementation of mitigation already required by the LAX Master Plan as well as LAX SPAS Project-specific Mitigation Measures MM-BIO (SPAS)-1 through MM-BIO (SPAS)-12 and MM-BIO (SPAS)-14, the Project will not have significant impacts to biological resources, for the reasons explained above.

Rationale: Implementation of Project-specific Mitigation Measures MM-BIO (SPAS)-1 through MM-BIO (SPAS)-12 and MM-BIO (SPAS)-14, include habitat and species-specific requirements and consultation with qualified restoration biologists. Implementing these measures will avoid or substantially lessen the significant environmental effects to biological resources to a level that is less than significant.

Impact: With respect to wetlands, a significant impact would occur if direct and indirect changes in the environment, which might be caused by the LAWA Staff-Recommended Alternative, could result in one or more of the following future conditions:

- A substantial alteration of the flow, bed, channel, or bank of rivers, streams, or lakes as defined in Section 1600 of the State Fish and Game Code.
- A substantial adverse effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruptions, or other means.
- A substantial adverse effect on state-protected wetlands and waters as defined by the State Water Resources Control Board pursuant to the Porter-Cologne Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruptions, or other means.
- A substantial adverse effect on an existing wetland habitat as defined by California Public Resources Code Section 30121, or as classified under the Cowardin system by USFWS or CDFG.

Description of Effects: As discussed in Section 4.3 of the SPAS Draft EIR and Section 2.3.3 of Part II of the SPAS Final EIR, and summarized below, the LAWA Staff-Recommended Alternative would have an impact on all USACOE and CDFG jurisdictional areas associated with the Argo Drainage Channel by structurally covering the Channel in order to relocate Runway 6L/24R 260 feet north of its current location. Impacts to USACOE jurisdictional areas would include 3.78 acres, of which 1.33 acres consists of wetlands vegetated with California Bulrush Marsh (1.31 acres) and Sandbar Willow Thicket (0.02 acre), and 2.45 acres consists of non-wetland waters of the U.S. vegetated with the ruderal (Argo Drainage Channel) association. Impacts to CDFG jurisdictional areas would include 3.97 acres, of which 2.45 acres consist of streambed and banks vegetated with the ruderal (Argo Drainage Channel) association, and 1.52 acres consist of vegetated riparian habitat (0.21 acre of Sandbar Willow Thicket and 1.31 acres of California Bulrush Marsh). These impacts would constitute a substantial alteration of the flow, bed, channel, or bank of rivers, streams, or lakes as defined in Section 1600 of the State Fish and Game Code and a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruptions, or other means, and would be significant. With the consultation associated with implementation of Mitigation Measure MM-BIO (SPAS)-13, Replacement of Jurisdictional Aquatic Features, described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, impacts relating to USACOE and CDFG jurisdictional areas will be less than significant.

Cumulative Jurisdictional Aquatic Features

Regarding cumulative impacts, there are no other projects that would result in impacts within the Argo Drainage Channel, nor are there any reasonably foreseeable projects within the geographic scope of analysis that would impact jurisdictional aquatic features. Nevertheless, given the historical loss of jurisdictional aquatic features in the vicinity, including at Playa Vista, cumulative

impacts to jurisdictional aquatic features are considered significant. With implementation of the mitigation measure described in Section 4.3.7 of the Draft EIR and Section 2.3.3.2 of Part II of the Final EIR, the contribution of the LAWA Staff-Recommended Alternative to this significant cumulative impact will not be cumulatively considerable.

Findings: Based on substantial evidence in the administrative record, including Section 4.3 of the SPAS Draft EIR and Section 2.3.3 of Part II of the SPAS Final EIR, the BOAC hereby finds and determines that changes or alterations have been required in, or are incorporated into, the project which avoid or substantially lessen the significant environmental effects identified in the SPAS Final EIR. Specifically, with implementation of mitigation already required by the LAX Master Plan as well as LAX SPAS Project-specific Mitigation Measure MM-BIO (SPAS)-13, the Project will not have significant impacts to wetlands, for the reasons explained above.

Rationale: Implementation of Project-specific Mitigation Measure MM-BIO (SPAS)-13 requires LAWA to consult with USACOE, CDFG and LARWQCB, as applicable, to obtain a determination of the jurisdictional area subject to those agencies' purview and requirements, potential for impacts, and mitigation (if applicable), should additional mitigation for impacts be required beyond those addressed in the Final EIR. In addition, Mitigation Measure MM BIO (SPAS)-13 also requires that, if a mitigation site is required and if a site at LAX is selected, site selection shall be conducted in consultation with LAWA's USDA Wildlife Hazard Biologist and be consistent with FAA Advisory Circular No. 150/5200-33B "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Management Plan" to avoid increasing wildlife hazards to aircraft. Implementation of this mitigation measure will lessen any potential significant environmental effects to jurisdictional aquatic features to a level that is less than significant.

3) Coastal Resources

Impact: A significant impact to coastal resources would occur if the direct and indirect changes in the environment that may be caused by the LAWA Staff-Recommended Alternative would result in one or more of the following future conditions:

- Damage to the overall quality of the coastal zone environment and its natural and artificial resources.
- Inhibition of orderly, balanced utilization and conservation of coastal zone resources.

Description of Effects: As discussed in Section 4.4 of the SPAS Draft EIR and Section 2.3.4 of Part II of the SPAS Final EIR, and summarized below, Project elements that would be located within the Dunes have the potential to impact coastal resources.

The LAWA Staff-Recommended Alternative would require changes to navigational aids currently located within the Dunes, including instrument landing light systems and other navigational aids, which must be in alignment with their respective runways. Existing navigational aids would be replaced with new facilities, which would be installed to align with proposed runway configurations. Specifically, new Runway 6L/24R navigational aids would be located 260 feet north of the existing landing lights. A new localizer antenna, MTI radar reflector, and middle marker would also be located to the north of their current locations. Because the landing threshold for Runway 6L would be in the same longitudinal location, the navigational aids would not move east or west. A new service road would be developed to access the navigational aids associated with Runway 6L/24R. The new service road would be similar to existing service roads (i.e., existing paved roads would be used where feasible and new road surface would be graded and graveled to minimize erosion). New navigational aids associated with Runway 6R/24L would be located 104 feet to the east to accommodate the easterly shift in the Runway 6R landing threshold. The middle marker would also be shifted 104 feet east. The localizer antennae would not need to be replaced. As navigational aids associated with Runway 6R/24L would be situated laterally, new navigational aids could be accessed by the existing service road.

The planned facilities would be similar to existing facilities, which include navigational aids in the Dunes and on the north airfield. The Dunes are considered an ESHA. California Coastal Act (CCA) coastal resource planning and management policies state that ESHAs shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within these areas. Navigational aids are not a use that is dependent on the Dunes resources. In connection with approval of the LAX Master Plan, the FAA previously determined that the installation of new navigational aids and associated service roads at LAX associated with implementation of the LAX Master Plan was consistent, to the maximum extent practicable, with the California Coastal Management Program, pursuant to the requirements of the Coastal Zone Management Act and the CCA. An additional consistency determination or certification from California Coastal Commission may be required to permit implementation of the LAWA Staff-Recommended Alternative. In addition, the new navigational aids would require a Coastal Development Permit.

The placement of navigational aids and an associated service road within the Dunes would not damage the overall quality of the coastal zone environment or its natural or artificial resources. The impacts on biological resources as a result of the installation of navigational aids and an associated service road within the Dunes are addressed above under *Biological Resources,* which concludes that such impacts would be less than significant with implementation of existing LAX Master Plan and proposed SPAS mitigation measures, and that the Dunes would be protected from any significant disruption of habitat values. Implementation of LAX Master Plan Mitigation Measures MM-BC-1, MM-ET-3, and MM-ET-4, and SPAS Project-specific mitigation measures MM-BIO (SPAS)-1, MM-BIO (SPAS)-2, MM-BIO (SPAS)-3, MM-BIO (SPAS)-4, MM-BIO (SPAS)-5, MM-BIO (SPAS)-6, MM-BIO (SPAS)-8, MM-BIO (SPAS)-9, and MM-BIO (SPAS)-10, detailed in Section 2.3.3.2 of Part II of the SPAS Final EIR, will ensure that impacts to sensitive resources within the coastal zone associated with the LAWA Staff-Recommended Alternative will be less than significant.

Findings: Based on substantial evidence in the administrative record, including Section 4.4 of the SPAS Draft EIR and Section 2.3.4 of Part II of the SPAS Final EIR, the BOAC hereby finds and determines that changes or alterations have been required in, or are incorporated into, the project which avoid or substantially lessen the significant environmental effects to coastal resources, as may occur from implementation of the LAX SPAS Project. Specifically, with implementation of mitigation already required by the LAX Master Plan, including Master Plan Mitigation Measures MM-BC-1, MM-ET-3, and MM-ET-4, as well as LAX SPAS Project-specific Mitigation Measures MM-BIO (SPAS)-1, MM-BIO (SPAS)-2, MM-BIO (SPAS)-3, MM-BIO (SPAS)-4, MM-BIO (SPAS)-5, MM-BIO (SPAS)-6, MM-BIO (SPAS)-8, MM-BIO (SPAS)-9, and MM-BIO (SPAS)-10, the Project will not have significant impacts to coastal resources, for the reasons explained above.

Rationale: Implementation of LAX Master Plan Mitigation Measures MM-BC-1, MM-ET-3, and MM-ET-4 and SPAS Project-specific Mitigation Measures MM-BIO (SPAS)-1, MM-BIO (SPAS)-2, MM-BIO (SPAS)-3, MM-BIO (SPAS)-4, MM-BIO (SPAS)-5, MM-BIO (SPAS)-6, MM-BIO (SPAS)-8, MM-BIO (SPAS)-9, and MM-BIO (SPAS)-10, include habitat and species-specific requirements and consultation that will avoid or substantially lessen the significant environmental effects to coastal resources to a level that is less than significant.

4) Cultural Resources

Impact: A significant impact upon historical and archaeological resources would occur if the direct and/or indirect changes in the environment that may be caused by the LAWA Staff-Recommended Alternative would result in one or more of the following conditions:

- Physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource, as defined in State CEQA Guidelines Section 15064.5(a), would be materially impaired. The significance of a historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its

historical significance and that justify its inclusion in, or eligibility for, inclusion in the National Register, California Register, a local register, a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, or as determined by LAWA for purposes of CEQA.

- Any action, such as clearing, scraping, soil removal, mechanical excavation, or digging that would disturb, damage, or degrade a "unique archaeological resource," as defined in Public Resources Code Section 21083.2.

Description of Effects: As discussed in Section 4.5 of the SPAS Draft EIR and Section 2.3.5 of Part II of the SPAS Final EIR, and summarized below, historical and archaeological resources have the potential to exist in the Project site.

Historical Resources

Two eligible historical resources potentially affected by the LAWA Staff-Recommended Alternative were analyzed in the EIR: the Theme Building and Setting, and the Union Savings and Loan Building.

The contributing features of the original Theme Building structure (extant original exterior and interior features) include, but are not necessarily limited to, the base, elevator core, extant original features of the restaurant space (excluding later alterations), public viewing platform, structural arches and footings, surrounding concrete wall/grille around base, pedestrian entrance, associated original hardscape features such as pedestrian patios and planters/planting beds, and surrounding pedestrian and vehicular circulation. Contributing features of the Theme Building Setting generally include: the Central Service Facility Buildings; the Primary Axial View between the Theme Building and the 1961 Airport Traffic Control Tower; the 1961 Airport Traffic Control Tower remains recognizable; the general character of the airport setting from the 1960s and 1970s remains residually recognizable, including the site plan, horizontal forms and rectangular massing of the concourse buildings, their generally consistent scale and height, the centrally located Theme Building which remains predominant within the U-shaped concourse and circulation complex, and the exterior terminals and associated airfields located to the north and south of the concourse area, etc; mid- and long-range outward looking views from the Theme Building's 80-foot level restaurant and 360-degree views from the roof-top viewing platform including mid-range views of the concourses and terminals, long-range views of the airfields, and distant views to the surrounding neighborhoods, mountains, and Pacific Ocean, which can still be experienced as originally conceived; direct views of the Theme Building from the U-shaped vehicular and pedestrian circulation paths within the concourse complex; and, direct views of the Theme Building from the edges of the horizontal concourse levels, including views through the continuous horizontal strip windows directly facing the Theme Building from the south terminals.

The airfield and terminal improvements under the LAWA Staff-Recommended Alternative would have no direct impacts and no adverse indirect impacts on historical resources because of their design, distance, and intervening development. Furthermore, because of the height limitations of the proposed terminal improvements and the incorporation of LAX Master Plan Commitment HR-1, Preservation of Historic Resources, which supports the preservation of significant historic/architectural resources through careful review of design and development adjacent to such resources to ensure modifications are carried out consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the impacts on the Theme Building and Setting from terminal improvements under the LAWA Staff-Recommended Alternative would be less than significant.

The ITF, proposed to be located between 96th Street and 98th Street west of Airport Boulevard, and the future Metro LAX/Crenshaw Light Rail Transit Station at/near Century and Aviation Boulevards, would not have any direct physical impacts or indirect impacts on identified eligible or listed historical resources in the cultural resources study area due to their distance from these resources. Likewise, the relocation of Lincoln Boulevard would have no impact on identified

eligible and listed historical resources and the proposed parking improvements would not be visible from the Theme Building or the Union Savings and Loan Building. Therefore, many of the improvements associates with the LAWA Staff-Recommended Alternative would not result in direct physical impacts to historical resources.

However, the APM system that is included in the ground access improvements under the LAWA Staff-Recommended Alternative would have significant impacts on the National Register-eligible Theme Building and Setting, but no impact on the ineligible 1961 Airport Traffic Control Tower. With incorporation of Mitigation Measure MM-HA (SPAS)-2, Preservation of Historic Resources: Theme Building and Setting, described in Section 4.5.7.1 of the SPAS Draft EIR and Section 2.3.5.2.1 of Part II of the SPAS Final EIR, which requires that the design of the APM ensure that important contributing views of the north and south elevations of the Theme Building are not materially impaired, significant impacts to the Theme Building and Setting will be reduced to a less than significant level. Potential indirect impacts to the Union Savings and Loan Building from the proposed ground access improvements, specifically, an elevated APM structure along 98th Street and extending over Sepulveda Boulevard, would be less than significant due to their proposed location within or north of the 98th Street right-of-way, their distance from the eligible Union Savings and Loan Building, and the incorporation of LAX Master Plan Commitment HR-1, Preservation of Historic Resources.

Archeological Resources

A description of the project site's archaeological setting is provided in section 4.5.3.3 of the SPAS Draft EIR.

The LAWA Staff-Recommended Alternative would not have any impacts on previously recorded archaeological resources. However, this alternative has the potential to disturb or destroy significant, undiscovered archaeological resources during construction excavations. However, with the exception of the north airfield and the navigational aids in the Los Angeles/El Segundo Dunes, the improvements associated with the LAWA Staff-Recommended Alternative are located in disturbed areas. The north airfield improvements and navigational aids would not require deep excavations, and the area subject to excavation for the navigational aids would be small. The lack of deep excavations reduces the potential to encounter undiscovered archaeological resources because deep excavations may encounter previously undisturbed soils conducive to retaining undiscovered archaeological resources. Shallow excavations are likely to be conducted in previously disturbed soils that are likely not conducive to retaining undiscovered archaeological resources because resources in these soils may have been destroyed or displaced from prior disturbances (e.g., rough grading or trenching, road/airstrip construction). Since improvements associated with the north airfield and navigational aids would include shallow excavations in disturbed soils, the likelihood of encountering undiscovered significant archaeological resources during construction is limited. Nevertheless, the potential for construction to affect previously unidentified archaeological resources is a significant impact. Mitigation Measure MM-HA (SPAS)-4, Conformance with LAX Master Plan Archaeological Treatment Plan (ATP) (as described in Section 4.5.7.2 of the SPAS Draft EIR and Section 2.3.5.2.2 of Part II of the SPAS Final EIR), is proposed to address significant impacts to previously unidentified archaeological resources by requiring construction activities to be undertaken in conformance with the ATP. In the event subsurface deposits are encountered, the ATP provides for evaluation and treatment of archaeological resources consistent with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation and other applicable guidance. Requirements outlined in the ATP include specific procedures for archaeological monitoring, identifying and assessing the significance of resources, and for the recovery and curation of resources when warranted. For example, an archaeological excavation program to remove the resources may be implemented, if deemed necessary. In addition, the ATP includes guidance on retaining a Native American monitor if Native American cultural resources are encountered. If human remains are found, LAWA will need to comply with the State Health and Safety Code regarding the appropriate treatment of those remains as outlined in the ATP. Finally, the ATP details the reporting

requirements to document the archaeological monitoring effort and provides guidance as to the proper curation and archiving of artifacts in accordance with industry and federal standards. The procedures outlined in the ATP would reduce potentially significant impacts to previously unidentified archaeological resources associated with this alternative to a less than significant level.

The following two Project-specific mitigation measures (detailed in Section 2.3.5.2 of Part II of the SPAS Final EIR) provide specific methods to ensure that alteration of the surrounding setting of the Theme Building in connection with the LAWA Staff-Recommended Alternative is undertaken in accordance with the Secretary of the Interior's Standards and will ensure compliance with the ATP, which incorporates the requirements of LAX Master Plan Mitigation Measures MM-HA-4 through MM-HA-10:

- MM-HA (SPAS)-2. Preservation of Historic Resources: Theme Building and Setting.
- MM-HA (SPAS)-4. Conformance with LAX Master Plan Archaeological Treatment Plan.

Cumulative Cultural Resources Impacts

Regarding cumulative impacts, as addressed in Section 5.5.5 of the SPAS Draft EIR and Section 2.4.5 of Part II of the SPAS Final EIR, with the exception of the Airport Metro Connector Project, the cumulative projects in the CTA would be compatible with the historic materials, features, size, scale and proportion, and massing of the Theme Building and Setting and would protect the integrity of the historical resource and its environment. Although implementation of the Airport Metro Connector Project may contribute to a cumulatively significant impact on the Theme Building and Setting, with height limitations, design, and distance of the proposed improvements and the incorporation of LAX Master Plan Commitment HR-1, Preservation of Historic Resources, the contribution of the LAWA Staff-Recommended Alternative would not be cumulatively considerable. In light of Mitigation Measure MM-HA (SPAS)-2, Preservation of Historic Resources: Theme Building and Setting, the contribution of the LAWA Staff-Recommended Alternative to cumulative impacts on the Theme Building and Setting would not be cumulatively considerable.

Regarding cumulative impacts, impacts associated with the disturbance or destruction of undiscovered archaeological resources during construction of the LAWA Staff-Recommended Alternative would be less than significant with implementation of Mitigation Measure MM-HA (SPAS)-4, Conformance with LAX Master Plan Archaeological Treatment Plan. However, the potential for cumulative projects to disturb or destroy undiscovered resources would be cumulatively significant when viewed in combination with the progressive cumulative loss of archaeological resources associated with other past, present, and reasonably anticipated future projects. Even though regulatory controls and project-level mitigation measures would reduce these effects, there would be a cumulatively significant impact to undiscovered archaeological resources associated with cumulative projects. With the exception of the navigational aids in the Los Angeles/El Segundo Dunes, the improvements associated with the LAWA Staff-Recommended Alternative are located in disturbed areas. The navigational aids would not require deep excavations. Therefore, the likelihood of encountering undiscovered significant archaeological resources during construction would be limited. Moreover, construction activities would be subject to Mitigation Measure MM-HA (SPAS)-4, Conformance with LAX Master Plan Archaeological Treatment Plan. For these reasons, the contribution of the LAWA Staff-Recommended Alternative to cumulative impacts would not be cumulatively considerable.

Findings: Based on substantial evidence in the administrative record, including Sections 4.5 and 5.5.5 of the SPAS Draft EIR and Sections 2.3.5 and 2.4.5 of Part II of the SPAS Final EIR, the BOAC hereby finds and determines that changes or alterations have been required in, or are incorporated into, the project which avoid or substantially lessen the significant environmental effects related to historical and archaeological resources, as may occur from implementation of the SPAS Project. Specifically, with implementation of mitigation already required by the LAX

Master Plan Commitment HR-1 would ensure that impacts to the Union Savings and Loan Building associated with the LAWA Staff-Recommended Alternative would be less than significant. Therefore, no mitigation specific to SPAS is required for the LAWA Staff-Recommended Alternative relative to the Union Savings and Loan Building. However, even with implementation LAX Master Plan Commitment, HR-1 there would be a significant impact to the Theme Building and Setting as a result of the implementation of the APM under the LAWA Staff-Recommended Alternative. The implementation of LAX SPAS Project-specific Mitigation Measure MM-HA (SPAS)-2, Preservation of Historic Resources: Theme Building and Setting will reduce this impact to a less than significant level.

In addition, LAX SPAS Project-specific Mitigation Measure MM-HA (SPAS)-4, Conformance with LAX Master Plan Archaeological Treatment Plan, will be implemented to ensure compliance with the ATP, which incorporates the requirements of LAX Master Plan Mitigation Measures MM-HA-4 through MM-HA-10, is proposed to mitigate potential impacts to archaeological resources.

With the mitigation described above, the Project's contribution to cumulative impacts to cultural resources will be less than cumulatively considerable.

Rationale: The focus of Mitigation Measure MM-HA (SPAS)-2 is to provide specific guidance to ensure that alteration of the surrounding setting of the Theme Building in connection with the LAWA Staff-Recommended Alternative is undertaken in accordance with the Secretary of the Interior's Standards. Therefore, the Project will not have significant impacts to cultural resources, for the reasons explained above. Compliance with the ATP, as ensured by SPAS Mitigation Measure MM-HA (SPAS)-4 would reduce impacts to previously unidentified archaeological resources that may be discovered during construction of the LAWA Staff-Recommended Alternative. Implementation of these mitigation measures will avoid or substantially lessen the significant environmental effects to cultural resources to a level that is less than significant, and will also reduce the Project's contribution to cumulative impacts to less than cumulatively considerable.

5) Hydrology/Water Quality

Hydrology

Impact: A significant hydrology impact would occur if the direct and indirect changes in the environment that may be caused by the LAWA Staff-Recommended Alternative would result in the following future condition:

- An increase in runoff that would cause or exacerbate flooding with the potential to harm people or damage property.

Description of Effects: As discussed in Section 4.8 of the SPAS Draft EIR and Section 2.3.8 of Part II of the SPAS Final EIR, under the LAWA Staff-Recommended Alternative, the total impervious area within the HWQSA would increase by approximately 92 acres as compared to baseline conditions of 3,082 acres. Since much of the area surrounding the airport in both the Santa Monica Bay and Dominguez Channel watersheds is developed (i.e., impervious) under baseline conditions, this change would represent a marginal increase (3.0 percent) in regional impervious area. The changes in impervious area would not be evenly distributed between the Santa Monica Bay and Dominguez Channel watersheds when compared to baseline conditions. The impervious area within the Santa Monica Bay Watershed would increase 32 acres or 1.6 percent, occurring primarily within the Argo sub-basin due to the runway and taxiway improvements, while the impervious area within the Dominguez Channel Watershed would increase by 61 acres or 5.5 percent. The increase in impervious surface in the portion of the HWQSA tributary to Santa Monica Bay, which includes both the Argo and Imperial sub-basins, is 1.6 percent, which would result in a very small net increase in peak flow rates to be conveyed by the drainage systems serving these areas. It is possible that this increase could cause one or more existing on-site or off-site storm drains to reach or exceed the design capacity, which would be a significant impact. Also the increase in impervious surface in the portion of the HWQSA

tributary to Dominguez Channel is 5.5 percent, which would result in a net increase in peak flow rates to be conveyed by the drainage systems serving these areas. As previously noted, the Dominguez Channel is currently over capacity off-site and downstream from LAX; therefore, a 5.5 percent increase in peak flow rates from LAX, which represents a portion of the total tributary area to the Dominguez Channel, would add to the capacity deficiency, which would be a significant impact.

LAWA would continue to implement applicable recommendations resulting from LAX Master Plan Commitment HWQ-1, Conceptual Drainage Plan, including improvements designed to address deficiencies, if any, in the drainage system that would occur at buildout of the LAX Master Plan. Such improvements would reduce flooding impacts associated with development of the LAWA Staff-Recommended Alternative; however, given that those recommended improvements were designed based on the approved LAX Master Plan development program, flooding impacts of the LAWA Staff-Recommended Alternative would be significant. As described in Section 4.8.7 of the SPAS Draft EIR and Section 2.3.8.2 of Part II of the SPAS Final EIR, Mitigation Measure, MM-HWQ (SPAS)-1, Conceptual Drainage Plan Revision and Update, is proposed to tailor the Conceptual Drainage Plan recommendations to the specific characteristics of the LAWA Staff-Recommended Alternative. With implementation of Mitigation Measure MM-HWQ (SPAS)-1, the hydrology impacts associated with the LAWA Staff-Recommended Alternative would be less than significant.

Cumulative Hydrology Impacts

The cumulative impacts analysis focuses on development projects located in the watersheds within which the SPAS improvements are located (i.e., those projects with the greatest potential to have impacts to hydrology that could combine with impacts of the LAWA Staff-Recommended Alternative). In particular, the two projects at LAX with the potential to contribute to significant cumulative hydrology impacts are LAX Northside and the West Aircraft Maintenance Area, both of which would convert existing largely vacant land to future urban/airport development. LAX Northside is proposed to include a mix of retail uses, hotels, offices, educational and community facilities, and open space. The development of LAX Northside would result in conversion of largely vacant property to other land uses, such as commercial uses and roads. The future development of urban uses on the site would increase the volumes and velocity of surface runoff due to the addition of impervious surfaces due to urban activities (e.g., traffic, parking, landscape maintenance, washing of surfaces) and building surfaces (i.e., roof/siding materials). The hydrology impacts from development of LAX Northside would occur within the Argo sub-basin, which drains to the Santa Monica Bay. The West Aircraft Maintenance Area is proposed to be located on a 60-acre site on the west end of the airport. Development of the site would result in a land use conversion from airport open space to airport operations, which would increase the volumes and velocity of surface runoff due to the addition of impervious surfaces. The hydrology impacts associated with implementation of the West Aircraft Maintenance Area project would occur within the Pershing sub-basin which drains to the Santa Monica Bay. Additionally, construction activities associated with future development would pose the potential for temporary increases in erosion and sedimentation.

As discussed above, the impacts of the LAWA Staff-Recommended Alternative would include both the Argo sub-basin and the Pershing sub-basin. As such, there would be cumulative drainage impacts within the Argo sub-basin area from the combination of LAX Northside development and the LAWA Staff-Recommended Alternative, and cumulative drainage impacts within the Pershing sub-basin area from the combination of the West Aircraft Maintenance Area project and the LAWA Staff-Recommended Alternative (the two sub-basins do not share a common storm drain system, consequently cumulative drainage impacts would only be from the combination of the LAWA Staff-Recommended Alternative and each of the other projects within their respective sub-basins). The combination of these projects would not result in cumulative hydrology impacts related to the Dominguez Channel because neither LAX Northside or the West Aircraft Maintenance Area project drain to the Dominguez Channel sub-basin.

The LAX Master Plan Final EIR includes LAX Master Plan Commitment HWQ-1, which required preparation of the LAX Conceptual Drainage Plan (CDP) to identify the drainage system improvements and Best Management Practices (BMPs) necessary to avoid significant hydrology impacts from LAX Master Plan projects. While implementation of the current CDP would serve to mitigate hydrology impacts from future development within the LAX Master Plan area, within which all three projects - LAX Northside, West Aircraft Maintenance Area, and the LAWA Staff-Recommended Alternative - are located, the overall development characteristics of the combined projects would not be the same as the LAX Master Plan assumed during preparation of the CDP. As such, the cumulative hydrology impacts of the combined projects are considered to only be partially mitigated through implementation of LAX Master Plan Commitment HWQ-1, Conceptual Drainage Plan, and the remaining impact would be significant without additional mitigation. The contribution of the LAWA Staff-Recommended Alternative to this cumulatively significant impact would be cumulatively considerable.

As detailed in Section 2.3.8.2 of Part II of the SPAS Final EIR, Mitigation Measure MM-HWQ (SPAS)-1, Conceptual Drainage Plan Revision and Update, is recommended to revise and update the current CDP to account for changes in the development assumptions of SPAS alternatives, as compared to those of the LAX Master Plan, as well as other existing or proposed improvement projects at LAX. That revision and update of the CDP would serve to achieve the same level of mitigation intended by LAX Master Plan Commitment HWQ-1, that is, to reduce hydrology impacts to a level that is less than significant. Given that LAX Northside, the West Aircraft Maintenance Area project, and the LAWA Staff-Recommended Alternative would be accounted for through implementation of Mitigation Measure MM-HWQ (SPAS)-1, the cumulative hydrology impacts of these projects would be less than significant, and the LAWA Staff-Recommended Alternative would no longer have a cumulatively considerable contribution.

Findings: Based on substantial evidence in the administrative record, including Sections 4.8 and 5.5.8 of the SPAS Draft EIR and Sections 2.3.8 and 2.4.8 of Part II of the SPAS Final EIR, the BOAC hereby finds and determines that changes or alterations have been required in, or are incorporated into, the project which avoid or substantially lessen the significant environmental effects related to hydrology, as may occur from implementation of the LAX SPAS Project. Specifically, with implementation of mitigation already required by the LAX Master Plan as well as LAX SPAS Project-specific Mitigation Measure MM-HWQ (SPAS)-1, Conceptual Drainage Plan Revision and Update, the Project will not have significant impacts to, or a cumulatively considerable contribution to cumulative impacts associated with, hydrology, for the reasons explained above.

Rationale: Implementation of Project-specific Mitigation Measure MM-HWQ (SPAS)-1, Conceptual Drainage Plan Revision and Update, is proposed to tailor the Conceptual Drainage Plan recommendations, including BMPs, to the specific characteristics of the LAWA Staff-Recommended Alternative. As part of the update to the existing Conceptual Drainage Plan for LAX, LAWA would integrate the applicable BMP requirements related to SUSMP and the City's LID Ordinance. Additionally, the existing source control BMPs currently employed by LAWA as identified in the LAX SWPPP would also serve to decrease the potential for additional pollutant loading as a result of intensification of airport activities. Routine maintenance such as sweeping and inspections would be performed more frequently and in direct proportion to the increase in frequency of airport activities. Implementation of this mitigation measure will avoid or substantially lessen any potential significant environmental effects to hydrology to a level that is less than significant and would also reduce the Project's contribution to cumulative impacts to less than cumulatively considerable.

Storm Water Pollutant Loads

Impact: A significant water quality impact would occur if the direct and indirect changes in the environment that may be caused by the LAWA Staff-Recommended Alternative would result in the following future condition:

- An increased load of a pollutant of concern delivered to a receiving water body by surface water runoff.

Description of Effects: As discussed in Section 4.8 of the SPAS Draft EIR and Section 2.3.8 of Part II of the SPAS Final EIR, under the LAWA Staff-Recommended Alternative, the estimated annual total pollutant load generated within the HWQSA would increase for most constituents compared to baseline conditions. Specifically, greater estimated loads are predicted for all constituents except for total suspended solids, 5-day Biochemical Oxygen Demand (BOD_5), and fecal enterococcus bacteria when compared to baseline conditions. The increases in estimated loads would range from 0.3 percent for total Kjeldahl Nitrogen to 4.9 percent for copper and oil and grease.

With respect to debris loads, activities within airfield improvement areas are not a significant generator of debris compared to the potential load generated within ground access improvement areas (e.g., parking lots). Within the airport improvement areas, there is no public access to these areas so sources of debris are minimal compared to public access areas. Additionally, debris sources are minimized as a result of implementation of source control measures conducted by LAWA and its tenants under the SWPPP. The LAWA Staff-Recommended Alternative does include ground access improvements which could potentially increase debris loads. The complete model results are presented in Table 6 in Appendix H, *Hydrology and Water Quality*, of the SPAS Draft EIR. The increases in pollutant loads would be a significant impact.

LAWA would continue to implement applicable recommendations resulting from LAX Master Plan Commitment HWQ-1, Conceptual Drainage Plan, including BMPs to address water quality impacts associated with increased pollutant loads from buildout of the LAX Master Plan. Such BMPs would reduce the water quality impacts associated with development of the LAWA Staff-Recommended Alternative; however, given that those recommended improvements were designed based on the approved LAX Master Plan development program, pollutant load increases associated with the LAWA Staff-Recommended Alternative are assumed to be significant. As detailed in Section 2.3.8.2 of Part II of the SPAS Final EIR, Project-specific Mitigation Measure, MM-HWQ (SPAS)-1, Conceptual Drainage Plan Revision and Update, is proposed to tailor the CDP recommendations to the specific characteristics of the LAWA Staff-Recommended Alternative. With implementation of Mitigation Measure MM-HWQ (SPAS)-1, the water quality impacts associated with the LAWA Staff-Recommended Alternative would be less than significant.

Cumulative Water Quality Impacts

Similar to hydrology, the potential for cumulative impacts focuses on development projects located in the watersheds within which the SPAS improvements are located (i.e., those projects with the greatest potential to have impacts to hydrology and water quality that could combine with impacts of the LAWA Staff-Recommended Alternative). In particular, the two projects at LAX with the potential to contribute to significant cumulative hydrology impacts are LAX Northside and the West Aircraft Maintenance Area, both of which would convert existing largely vacant land to future urban/airport development. The future development of urban uses on the site would change the water quality characteristics within the runoff due to urban activities (e.g., traffic, parking, landscape maintenance, washing of surfaces) and building surfaces (i.e., roof/siding materials). The West Aircraft Maintenance Area development of the site would result in a land use conversion from airport open space to airport operations, which would change the water quality characteristics within runoff. The change in water quality would occur from the replacement of existing vacant/disturbed ground, which generates mostly sediments and

suspended solids within runoff, to aircraft apron/ramp area where aircraft would be parked or taxiing, introducing a source of pollutants such as oils and grease, metals, and particulate matter (e.g., tire particles).

As discussed above, implementation of the LAWA Staff-Recommended Alternative would result in an increase in impervious surface area and an increase in several types of water quality pollutants, although there would be reductions in total suspended solids, 5-day Biochemical Oxygen Demand (BOD_5), and fecal enterococcus bacteria. The impacts of the LAWA Staff-Recommended Alternative would include both the Argo sub-basin and the Pershing sub-basin. As such, cumulative water quality impacts would occur from the combination of all three of the projects given that both affected sub-basins drain to Santa Monica Bay. The combination of these projects would not result in cumulative water quality impacts related to the Dominguez Channel because neither LAX Northside nor the West Aircraft Maintenance Area project drain to the Dominguez Channel sub-basin. The LAX Master Plan Final EIR includes LAX Master Plan Commitment HWQ-1, which required preparation of the LAX Conceptual Drainage Plan (CDP) to identify the drainage system improvements and Best Management Practices (BMPs) necessary to avoid significant hydrology and water quality impacts from LAX Master Plan projects. While implementation of the current CDP would serve to mitigate water quality impacts from future development within the LAX Master Plan area, within which all three projects - LAX Northside, West Aircraft Maintenance Area, and the LAWA Staff-Recommended Alternative - are located, the overall development characteristics of the combined projects would not be the same as the LAX Master Plan assumed during preparation of the CDP. As such, the cumulative water quality impacts of the combined projects are considered to only be partially mitigated through implementation of LAX Master Plan Commitment HWQ-1, Conceptual Drainage Plan, and the remaining impact would be significant without additional mitigation. The contribution of the LAWA Staff-Recommended Alternative to this cumulatively significant impact would be cumulatively considerable. Implementation of Mitigation Measure MM-HWQ (SPAS)-1, Conceptual Drainage Plan Revision and Update, is recommended to revise and update the current CDP to account for changes in the development assumptions of SPAS alternatives, as compared to those of the LAX Master Plan, as well as other existing or proposed improvement projects at LAX. That revision and update of the CDP would serve to achieve the same level of mitigation intended by LAX Master Plan Commitment HWQ-1, that is, to reduce water quality impacts to a level that is less than significant. Given that LAX Northside, the West Aircraft Maintenance Area project, and the LAWA Staff-Recommended Alternative would be accounted for through implementation of Mitigation Measure MM-HWQ (SPAS)-1, the cumulative water quality impacts of these projects would be less than significant, and the LAWA Staff-Recommended Alternative would no longer have a cumulatively considerable contribution.

Findings: Based on substantial evidence in the administrative record, including Section 4.8 of the SPAS Draft EIR and Sections 2.3.8 and 2.4.8 of Part II of the SPAS Final EIR, the BOAC hereby finds and determines that changes or alterations have been required in, or are incorporated into, the project which avoid or substantially lessen the significant environmental effects identified in the SPAS Final EIR. Specifically, with implementation of mitigation already required by the LAX Master Plan as well as LAX SPAS Project-specific Mitigation Measure MM-HWQ (SPAS)-1, Conceptual Drainage Plan Revision and Update, the Project will not have significant impacts to, or a cumulatively considerable contribution to cumulative impacts associated with, water quality, for the reasons explained above.

Rationale: Implementation of Project-specific Mitigation Measure MM-HWQ (SPAS)-1, Conceptual Drainage Plan Revision and Update, is proposed to tailor the Conceptual Drainage Plan recommendations, including BMPs, to the specific characteristics of the LAWA Staff-Recommended Alternative. As part of the update to the existing Conceptual Drainage Plan for LAX, LAWA would integrate the applicable BMP requirements related to SUSMP and the City's LID Ordinance. Additionally, the existing source control BMPs currently employed by LAWA as identified in the LAX SWPPP would also serve to decrease the potential for additional pollutant

loading as a result of intensification of airport activities. Routine maintenance such as sweeping and inspections would be performed more frequently and in direct proportion to the increase in frequency of airport activities. Implementation of this mitigation measure will avoid or substantially lessen any potential significant environmental effects to water quality to a level that is less than significant and will also reduce the Project's contribution to cumulative impacts to less than cumulatively considerable.

6) Law Enforcement

Impact: A significant impact on law enforcement services would occur if the direct and indirect changes in the environment that may be caused by the LAWA Staff-Recommended Alternative would result in one or more of the following conditions:

- An increase in on-airport population that would require a substantial increase in law enforcement services to maintain adequate services or would require new or expanded facilities without providing adequate mechanisms for addressing these additional needs.
- Through increased traffic congestion, changes in circulation, expansion of airport property, or the location of new land uses, an increase in emergency response times beyond the limits required by applicable jurisdictions within the study area.

Description of Effects: As discussed in Section 4.11.2 of the SPAS Draft EIR and Section 2.3.11.2 of Part II of the SPAS Final EIR, the LAWA Staff-Recommended Alternative contains various features that are particularly relevant to the analysis of law enforcement impacts. These features include airfield facility and terminal improvements, ground access improvements and parking, and removal and relocation of a future LAWAPD facility. The impacts to law enforcement services and facilities due to airfield improvements, terminal modifications, and ground access improvements and parking under the LAWA Staff-Recommended Alternative were determined to be less than significant with implementation of LAX Master Plan commitments.

Removal of Existing Facilities

Under the LAWA Staff-Recommended Alternative, the existing LAWAPD station and associated facilities located at West 96th Street would be removed. LAWA is planning a future LAX Public Safety Building and Supporting Facilities independent of SPAS. The site for this planned facility is still under consideration. The future LAX Public Safety Building and Supporting Facilities would consolidate existing facilities and personnel under one roof, creating a larger, more modern and efficient facility that would result in an improvement and expansion of LAWAPD facilities. In addition, the new facility would be sited to ensure that adequate response times are maintained. The LAX Public Safety Building and Supporting Facilities is proposed to occur within approximately the next 5 years and is considered in this EIR as a cumulative project (see Chapter 5, Cumulative Impacts, of the SPAS Draft EIR). Although LAX Master Plan Commitments PS-1, Fire and Police Facility Relocation Plan, and PS-2, Fire and Police Facility Space and Siting Requirements, would reduce impacts associated with removal of the LAWAPD facilities, because the location, timing, and characteristics of the replacement LAX Public Safety Building and Supporting Facilities have yet to be determined, and these factors as well as gaps in service could occur and degrade service and response times, impacts on LAWAPD facilities would be significant. With implementation of Mitigation Measure MM-LE (SPAS)-1, LAWAPD Replacement Facilities (detailed in Section 2.3.11.2.2 of Part II of the SPAS Final EIR), impacts to law enforcement associated with the LAWA Staff-Recommended Alternative would be less than significant.

To the extent that implementation of Mitigation Measure MM-LE (SPAS)-1, LAWAPD Replacement Facilities, requires interim facilities to temporarily accommodate displaced LAWAPD facilities, secondary or indirect environmental impacts may occur under the LAWA Staff-Recommended Alternative. Such facilities would not be required if the LAX Public Safety Building and Supporting Facilities is constructed prior to the need to remove the existing LAWAPD station and facilities. It should also be noted that, if/when such temporary facilities are

required, the discretionary approval(s) associated with such activity would be subject to CEQA compliance, at which time additional CEQA review specific to the proposed activity would be completed. If interim facilities are required, it is expected that such facilities would be housed within existing available building space and/or would consist of temporary structures, such as trailers and modular buildings. Functions such as patrols and emergency response would have to be located in relatively close proximity to the existing LAWAPD facilities in order to provide adequate response times and distances to the uses served by the existing facilities. Administrative functions could be housed in a separate location, which could include the western portion of the airport, LAX Northside, or another location. As potential temporary sites at or near LAX are highly developed and are surrounded by urban uses, impacts associated with the temporary facilities would be limited. Interim facilities would not be expected to change transportation patterns at or around the airport, nor would such facilities be located in an aesthetically sensitive area, as the airport and its environs are highly developed. As the interim facilities would be housed in existing building space and/or trailers and modular buildings, construction activities, if any, would be limited and construction-related impacts, such as noise and air quality, would be less than significant.

Cumulative Law Enforcement Impacts

As described in Section 5.5.11.2 of the SPAS Draft EIR and 2.4.11.2 of Part II of the SPAS Final EIR, the types of development projects at or adjacent to LAX that have the potential to result in cumulative impacts on law enforcement include various airside, terminal, land development, infrastructure, security, and transportation projects. The LAWA Staff-Recommended Alternative would alter demand for law enforcement services. Many of the components of the LAWA Staff-Recommended Alternative, such as airfield and ground access improvements, would enhance safety at the airport and improve response times, thereby reducing demand for law enforcement services. However, development of new terminal areas and new ground access facilities would increase demand for law enforcement services. Implementation of LAX Master Plan commitments LE-1, LE-2, PS-1, PS-2, C-1, ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would ensure that impacts to law enforcement services, facilities, and response times would be less than significant in most instances. The removal of the LAWAPD station and associated facilities on West 96th Street would result in a significant impact to law enforcement if the planned LAX Public Safety Building and Supporting Facilities is not completed prior to removal of these facilities. Project-specific Mitigation Measure MM-LE (SPAS)-1, LAWAPD Replacement Facilities, would ensure that adequate law enforcement facilities are maintained. Therefore, impacts to law enforcement services and facilities would be less than significant. Cumulative on-airport projects that are independent from SPAS include airfield and terminal safety improvements, installation of security fencing and lighting, construction of the Airport Response Coordination Center (ARCC) and the LAX Public Safety Building and Supporting Facilities, LAX Northside, and various other safety, infrastructure, and security upgrades. Many of the cumulative projects, including those related to maintenance, signage, and infrastructure upgrades, would have no impact on law enforcement. Other projects, such as the Airfield Operating Area (AOA) Perimeter Fence Enhancements and the ARCC, would improve overall safety at the airport and reduce the potential demand for law enforcement services and facilities. In particular, the LAX Public Safety Building and Supporting Facilities would consolidate existing facilities and personnel under one roof, creating a larger, more modern and efficient facility that would result in an improvement and expansion of LAWAPD facilities. The new facility would be sited to ensure that adequate response times are maintained. On-airport cumulative projects that would increase passenger-serving areas, provide new maintenance or cargo facilities, or add new development, such as the Bradley West Project, Midfield Satellite Concourse (MSC), North and South Terminals Improvements, West Maintenance Area, and LAX Northside, in combination with the LAWA Staff-Recommended Alternative, have the potential to increase demands for law enforcement services. The majority of projects that would contribute to this cumulative impact are related to the LAX Master Plan, and would be subject to LAX Master Plan commitments and regulatory requirements that would ensure that cumulative impacts from airport-related

development would be less than significant. The LAX Northside project would also add new development that would have the potential to increase demand for law enforcement services. With review of project plans by LAWAPD and LAPD, implementation of the security features referenced in the development requirements for the LAX Northside Sub-Area in the LAX Specific Plan, provision of a police station within the area, and fulfillment of LAX Master Plan commitments, impacts on law enforcement services associated with LAX Northside would be less than significant. With implementation of LAX Master Plan commitments, regulatory requirements, and planned upgrades such as the LAX Public Safety Building and Supporting Facilities, cumulative impacts associated with airport-related development would be less than significant.

Regarding cumulative off-airport projects, the development of the Metro Crenshaw/LAX Transit Corridor Project and Airport Metro Connector Project would introduce new rail systems in the airport vicinity and within the CTA, with a corresponding potential increase in demand for law enforcement services. However, Metro would be responsible for implementing System Safety Program Plans and System Security Plans for Metro projects, which would address the safety and security of transit commuter operations, mitigate accidents, and support compliance with state regulations. These safety measures have been established to provide employee and passenger safety, crime prevention, adequate emergency response, and emergency procedures. In addition, the proposed stations would be designed to avoid obstructions to visibility or observation and would be adequately lit and monitored by security personnel. The Metro Crenshaw/LAX Transit Corridor would have a beneficial effect on the regional transportation network compared to existing conditions and is expected to have a beneficial effect on the regional transportation network. This reduced traffic congestion would reduce the potential for degradation of response times adjacent to LAX. In addition, the removal of remaining residences within the Manchester Square and Belford areas through implementation of LAWA's residential acquisition program would reduce the overall demand for law enforcement services in the LAX area.

In light of planned improvements to law enforcement facilities, LAX Master Plan commitments and Project-specific mitigation measures, design features, and regulatory compliance, improvements under the LAWA Staff-Recommended Alternative in combination with cumulative projects would not require a substantial increase in law enforcement services to maintain adequate services or require new or expanded facilities without providing adequate mechanisms for addressing these additional needs. Moreover, cumulative development would not increase emergency response times beyond the limits required by applicable jurisdictions. Therefore, cumulative impacts on law enforcement services under the LAWA Staff-Recommended Alternative would be less than significant.

Findings: Based on substantial evidence in the administrative record, including Sections 4.11.2 and 5.5.11.2 of the SPAS Draft EIR and Sections 2.3.11.2 and 2.4.11.2 of Part II of the SPAS Final EIR, the BOAC hereby finds and determines that changes or alterations have been required in, or are incorporated into, the project which avoid or substantially lessen the significant environmental effects related to law enforcement, as may occur from implementation of the LAX SPAS Project. Specifically, with implementation of mitigation already required by the LAX Master Plan as well as LAX SPAS Project-specific Mitigation Measure MM-LE (SPAS)-1, the Project will not have significant impacts to law enforcement, for the reasons explained above.

Rationale: To address the potential significant impacts to law enforcement services as a result of the removal and relocation of the LAWAPD station and facilities located at West 96th Street associated with the LAWA Staff-Recommended Alternative, Mitigation Measure MM-LE (SPAS)-1, LAWAPD Replacement Facilities, would require a completed transition plan to the planned LAX Public Safety Building and Supporting Facilities, or interim facilities in the event the LAX Public Safety Building and Supporting Facilities is not yet completed. The existing LAWAPD station and facilities shall not be removed unless and until adequate emergency response times and distances can be achieved without it, as determined in consultation with LAWAPD. Therefore, implementation of Mitigation Measure MM-LE (SPAS)-1, LAWAPD Replacement

Facilities, will avoid or substantially lessen impacts to law enforcement facilities associated with the LAWA Staff-Recommended Alternative to a level that is less than significant.

C. Findings on Significant and Unavoidable Impacts

1) Air Quality

Impact: A significant air quality impact would occur if the estimated incremental increase in construction-related emissions attributable to the LAWA Staff-Recommended Alternative would be greater than the daily construction emission South Coast Air Quality Management District's (SCAQMD's) thresholds, as well if the estimated incremental increase in operational emissions attributable to the LAWA Staff-Recommended Alternative would be greater than the SCAQMD's operational daily emission thresholds.

Description of Effects: As discussed in Sections 4.2 and 5.5.2 of the SPAS Draft EIR and Sections 2.3.2 and 2.4.2 of Part II of the SPAS Final EIR, implementation of the LAWA Staff-Recommended Alternative has the potential to have a significant impact on air quality, as well as a cumulatively considerable contribution to cumulative air quality impacts.

Construction Emissions

The vast majority (80 percent or more) of the construction emissions for the LAWA Staff-Recommended Alternative would be associated with the airfield and terminal improvements. Such improvements include moving Runway 6L/24R 260 feet north and completing related improvements such as covering the Argo Drainage Channel and realigning Lincoln Boulevard, lengthening Runways 6L/24R and 6R/24L, various taxiway and taxilane improvements, and terminal improvements. Under the LAWA Staff-Recommended Alternative, peak daily emissions of SO_2 would not exceed the SCAQMD construction emission thresholds; however, peak daily emissions of CO, VOC, NO_x, PM10, and PM2.5 would exceed the SCAQMD construction emissions thresholds. Therefore, the LAWA Staff-Recommended Alternative construction emissions of CO, VOC, NO_x, PM10, and PM2.5 would be significant.

Construction Concentrations

Construction concentrations for the LAWA Staff-Recommended Alternative would exceed the 1-hour NO_2 CAAQS and NAAQS. In addition, PM10 concentrations would exceed the 24-hour and annual CEQA thresholds set by SCAQMD. Therefore, the LAWA Staff-Recommended Alternative construction concentrations would be significant for NO_2 and PM10. Off-airport peak NO_2 construction-related concentrations are estimated to occur at the western property line of the airport north of the Hyperion Treatment Plant, based on the assumption that much of the construction support equipment/operations would occur in the western portion of the airport south of World Way West, as has been the case for several major construction projects at LAX, such as the South Airfield Improvement Project, the Crossfield Taxiway Project, and the Bradley West Project. Key construction support equipment/operations are assumed to include a concrete/asphalt batch plant(s) and rock crusher, and associated equipment such as loaders and concrete/materials transfer trucks, and construction delivery/haul staging. These facilities and activities would contribute the majority of the NO_2 emissions that drive the peak emissions, while the NO_2 emissions associated with overall construction activities in the north airfield (i.e., runway and taxiway improvements) would be a secondary contributor to the peak NO_2 concentrations. The peak 24-hour and annual PM10 concentrations are estimated to occur just east of the CTA, near the intersection of Century Boulevard and Sepulveda Boulevard. The sources contributing to this peak concentration would include the construction of the proposed APM, north airfield improvements and north concourse improvements along with the bridge and roadway modifications at the entrance to the CTA. The LAWA Staff-Recommended Alternative construction concentrations would be less than significant for CO, SO_2, and PM2.5.

Sections 2.3.2.1.1 and 2.3.2.1.2 of Part II of the SPAS Final EIR detail the construction emissions and concentrations, respectively, anticipated for the LAWA Staff-Recommended Alternative. With

respect to all construction-related impacts from air emissions associated with the SPAS project, including the LAWA Staff-Recommended Alternative, LAWA is committed to mitigating temporary construction-related emissions to the maximum extent feasible and has established some of the most aggressive construction emissions reduction measures in Southern California, particularly with regard to requiring construction equipment to be equipped with emissions control devices. The framework identified in the Mitigation Plan for Air Quality (MPAQ) for reducing air emissions associated with construction of the Master Plan and the specific means for implementing the mitigation measures described in Section 4.2.5 of the SPAS Draft EIR, as well as all of the measures identified in Table 4.2-8 of the SPAS Draft EIR, would be used to reduce air emissions associated with implementation of the SPAS project. Also, the addition of a new Project-specific mitigation measure, MM-AQ (SPAS)-1, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Construction-Related Mitigation Measures, as identified in Section 2.3.2.2 and Chapter 5 of Part II of the SPAS Final EIR, which expands the existing LAX Master Plan Mitigation Plan for Air Quality Construction-Related Mitigation Measures, would further reduce construction-related air quality impacts associated with the LAWA Staff-Recommended Alternative. These mitigation measures establish a commitment and process for incorporating all technically feasible air quality mitigation measures into each component of the SPAS project as each element of that project is constructed. At a programmatic level, this provides the most comprehensive means of ensuring air emissions will be reduced to the maximum extent feasible. In addition, the *LAWA Sustainable Airport Planning, Design and Construction Guidelines* encourages contractors to implement a number of voluntary measures that would reduce criteria pollutant and greenhouse gas emissions. Through the sustainability program, contractors are encouraged to implement such measures as: further reduce vehicle and equipment idling times; comply with Tier 4 emission standards for non-road diesel equipment; retrofit existing diesel equipment with particulate filters and oxidation catalysts; replace aging equipment with new low-emission models; and consider the use of alternative fuels for construction equipment. There are no feasible measures that could be adopted at this time to reduce air emissions further. Therefore, no additional project-specific mitigation measures are recommended in connection with SPAS.

Cumulative Air Quality - Construction

Construction air quality impacts tend to be primarily local in nature (i.e., impacts such as fugitive dust and construction equipment emissions are mostly realized in the immediate area around a construction site), although construction-related air pollutant emissions also contribute incrementally to degradation of regional ambient air quality. Cumulative projects with the most notable potential to contribute to cumulative construction air quality impacts, adding to the construction-related impacts associated with the LAWA Staff-Recommended Alternative, would be those under construction at the same time and in the same general vicinity as the LAWA Staff-Recommended Alternative. As such, the geographic study area for evaluation of cumulative construction air quality impacts is focused primarily on projects at LAX and the immediate surroundings. It should be noted, however, that the basis used in this EIR for determining significant air quality impacts, whether project-specific or cumulative, are the thresholds established by the SCAQMD. The SCAQMD is the regional air pollution control agency for the South Coast Air Basin, which includes all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties, and sets forth regulations, policies, and programs designed to address air quality on a regional (Basin-wide) basis.

As described in Section 5.3 of the SPAS Draft EIR, numerous past, present, and reasonably foreseeable development projects are located at and around LAX. Past and present projects involving substantial construction activities include the South Airfield Improvement Project, Taxiway R, the Bradley West Project including Taxiways S and T, and the Central Utility Plant (CUP) Replacement Project. Construction of these projects has been, or is anticipated to be, completed prior to start of construction of SPAS improvements in 2015. There are also several other smaller projects described in Section 5.3 of the SPAS Draft EIR that have been, or would

be, completed prior to 2015 (see anticipated timeframes within the description of each project). Reasonably foreseeable projects involving substantial construction activities between 2015 and 2025, concurrent with construction of SPAS improvements, include the Midfield Satellite Concourse (MSC) and associated taxiways and passenger processor, LAX Northside, and the Metro Crenshaw/LAX Transit Corridor and Station. Additional smaller development projects anticipated to occur during this time period are described in Section 5.3 of the SPAS Draft EIR, as are several other projects for which construction schedules have not yet been determined but would nevertheless contribute to cumulative construction air quality impacts at some point.

According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

Construction of the past, present, and reasonably foreseeable future projects described above, along with the improvements proposed under the LAWA Staff-Recommended Alternative, would collectively exceed the SCAQMD thresholds of significance; hence, there would be significant cumulative impacts to air quality. As indicated in Sections 2.3.2.1.1 and 2.3.2.1.2 of Part II of the SPAS Final EIR, estimated emissions from construction of the LAWA Staff-Recommended Alternative would exceed the SCAQMD thresholds of significance for CO, VOC, NOx, PM10, and PM2.5, and concentrations of criteria pollutants from construction would exceed the SCAQMD thresholds of significance for NO2 and PM10. The contribution of the LAWA Staff-Recommended Alternative to cumulative emissions and concentrations of these specific pollutants would, therefore, be cumulatively considerable.

Construction emission and concentration impacts of SO_2 and construction concentration impacts of CO and PM2.5 would not exceed the SCAQMD thresholds of significance under the LAWA Staff-Recommended Alternative and, therefore, would not be cumulatively considerable relative to these specific pollutants.

Overall, based on the above, construction of the LAWA Staff-Recommended Alternative would result in a cumulatively considerable impact on air quality.

Operational Emissions

Operational emissions for the LAWA Staff-Recommended Alternatives were determined by calculating total airport emissions in 2025 after implementation of the alternative (using a worst case scenario), then subtracting the baseline (2009) emissions. The incremental project emissions for the LAWA Staff-Recommended Alternative were then compared to the significance thresholds for operations. Section 2.3.2.1.3 of Part II of the SPAS Final EIR details the operational emissions anticipated for the LAWA Staff-Recommended Alternative. Many of the pollutant emissions associated with the LAWA Staff-Recommended Alternative are shown as negative values, indicating that the emissions associated with each alternative in 2025 would be lower than the existing emissions in the baseline (2009) conditions. In most cases, these negative values are due primarily to reductions in emissions from on-road motor vehicles (cars and trucks carrying passengers and cargo to and from the airport). As emission standards for motor vehicles continue to become more stringent over time, and the motor vehicle fleet is replaced with newer, less-polluting cars and trucks, the daily emissions from these sources decrease substantially when compared to baseline (2009) conditions. The reduction in motor vehicle emissions occurs even though the total VMT for airport-related trips increases between the baseline (2009) period and 2025. This emissions reduction more than compensates for the growth in emissions from aircraft and APUs for all gaseous pollutants except SO_2. Fuel sulfur content for motor vehicle fuels, as well as for aircraft fuel, does not change between the baseline (2009) condition and 2025; therefore, SO_2 emissions would increase relative to the baseline (2009) condition as noted above. In addition, fugitive road dust emission factors are assumed to remain constant between 2009 and 2025; thus, PM10 and PM2.5 emissions would increase

relative to the growth in vehicle trips between 2009 and 2025. The incremental aircraft emissions associated with the LAWA Staff-Recommended Alternative in 2025 (i.e., buildout year) are measured against the existing aircraft emissions in the baseline (2009) condition. As such, the incremental aircraft emissions of the LAWA Staff-Recommended Alternative include both the growth in aircraft activity anticipated to occur between 2009 and 2025 and the changes in aircraft operations that are attributable to the proposed airfield configuration specific to the LAWA Staff-Recommended Alternative. The majority of emissions that would increase in the future under the LAWA Staff-Recommended Alternative would be from aircraft. If one were to consider airfield emissions (aircraft, APU, and GSE) alone under the LAWA Staff-Recommended Alternative, the thresholds of significance would be exceeded for all criteria pollutants, except PM10; however, based on total emissions compared to baseline (2009) conditions, only the emissions of SO_2, PM10, and PM2.5 would exceed the daily operational thresholds and cause a significant impact. Therefore, the LAWA Staff-Recommended Alternative operational emissions of SO_2, PM10, and PM2.5 would be significant relative to baseline (2009) conditions.

Daily operational thresholds would not be exceeded for total emissions of CO, VOC, and NO_x. These pollutant emissions would not exceed their respective thresholds mainly because of ongoing implementation of more stringent motor vehicle emissions standards and cleaner future fleet mixes in the future, as described above in the introduction to the operational emissions impacts analysis. These anticipated reductions in future motor vehicle emissions would more than offset the estimated increases in other types of emissions, such as from aircraft, APU, and GSE.

Operational Concentrations

Section 2.3.2.1.4 of Part II of the SPAS Final EIR details the operational concentrations anticipated for the LAWA Staff-Recommended Alternative. Ambient concentrations resulting from operations, including background concentrations, for CO, NO_2, and SO_2 under the LAWA Staff-Recommended Alternative were compared to the appropriate NAAQS and CAAQS. Since the project is located in a nonattainment area for PM10 and PM2.5, the project concentrations are compared against the SCAQMD significance thresholds for short term and annual PM10 and PM2.5, instead of the NAAQS or CAAQS. The estimated operational concentrations indicate that, with the exception of the 1-hour NO_2 CAAQS and NAAQS, all other NAAQS or CAAQS for CO, NO_2, and SO_2 would not be exceeded. The project incremental concentrations of PM10 would exceed the SCAQMD significance thresholds, and incremental concentrations of PM2.5 would not exceed the thresholds. Implementation of the LAWA Staff-Recommended Alternative would exceed the 1-hour NAAQS for NO_2, the 1-hour CAAQS for NO_2, and the SCAQMD significance thresholds for PM10; therefore, the LAWA Staff-Recommended Alternative operational concentrations would be significant for NO_2 and PM10. Aircraft in the takeoff mode would contribute over 95 percent to the peak 1-hour NO_2 concentrations, and the peak 1-hour NO_2 impact locations would be on the LAX property line east of Runway 25R. Emissions from the parking lot and CONRAC located at Manchester Square contribute to the peak daily and annual PM10 concentrations. The peak impact location for PM10 is the northeast corner of Manchester Square.

It is estimated that the LAWA Staff-Recommended Alternative would have significant impacts relative to operational emissions of SO_2, operational concentrations of NO_2, and operational concentrations of SO_2. As indicated in the impacts discussion above, the vast majority (over 95 percent) of the emissions contributing to those significant impacts (i.e., causing exceedances of the applicable 1-hour CAAQS and NAAQS) would occur from aircraft during takeoff. Other than potential future improvements in aircraft engine technology and associated reductions in air pollutant emissions, there are no feasible means to mitigate emissions during aircraft takeoff because the only measures are related to aircraft operational options, such as reduced thrust take-off, which are at the sole discretion of the pilot. However, as noted above, LAWA is committed to mitigating operational air quality impacts to the maximum extent feasible. The LAX Master Plan mitigation measures (i.e., MM-AQ-3, Transportation-Related Mitigation Measures,

and MM-AQ-4, Operations-Related Mitigation Measures) described in Section 4.2.5 of the SPAS Draft EIR, and Section 2.3.2.2 of Part II of the SPAS Final EIR, would also be applied to the SPAS project. Also, the addition of two new Project-specific mitigation measures, MM-AQ (SPAS)-2, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Transportation-Related Mitigation Measures and MM-AQ (SPAS)-3, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Operations-Related Mitigation Measures, as identified in Section 2.3.2.2 and in Chapter 5 of Part II of the SPAS Final EIR, which would expand the LAX Master Plan Mitigation Plan to address transportation-related and operations-related emissions, would further reduce operational air quality impacts associated with the LAWA Staff-Recommended Alternative. Although these measures would not mitigate operational impacts to a level that is less than significant, they would reduce impacts associated with the LAWA Staff-Recommended Alternative to the maximum extent feasible. When the specific elements of the SPAS project are implemented, additional project-specific mitigation measures may be identified to further reduce air quality impacts.

Cumulative Air Quality Impacts - Operation

Operational emissions associated with past, present, and reasonably foreseeable future projects such as those described in Section 5.3 of the SPAS Draft EIR would contribute to cumulative criteria pollutant emissions in excess of SCAQMD thresholds of significance; therefore, significant cumulative impacts would occur. Such operational emissions would be both localized, occurring at each project site, and regional in nature relative to mobile source emissions associated with vehicle travel to and from each site. According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants.

Operational emissions and concentrations associated with past, present, and reasonably foreseeable future projects, along with the LAWA Staff-Recommended Alternative, would contribute to cumulative criteria pollutant emissions in excess of SCAQMD thresholds of significance; therefore, significant cumulative impacts would occur. As discussed in Section 2.3.2.1.3 of Part II of the SPAS Final EIR, operational emissions associated with the LAWA Staff-Recommended Alternative would exceed the SCAQMD's threshold for SO_2, PM10, and PM2.5. The SO_2 exceedance is primarily due to aircraft emissions during takeoff and to auxiliary power units (APUs). Although SO_2 emissions from other cumulative projects would be much more limited, given that the vast majority of non-aviation fuel types are subject to existing regulatory requirements that limit sulfur content to very low levels (i.e., no more than 15 parts per million), the impact of the LAWA Staff-Recommended Alternative relative to SO_2, which exceeds the SCAQMD threshold of significance, would be a cumulatively considerable contribution to a significant impact for that pollutant. Emissions of PM10 and PM2.5 would, under the LAWA Staff-Recommended Alternative, exceed the SCAQMD thresholds of significance due primarily to off-airport vehicle travel, which would also occur with many of the other cumulative projects. The contribution of the LAWA Staff-Recommended Alternative to cumulative impacts for those pollutants would be cumulatively considerable. As discussed in Section 2.3.2.1.4 of Part II of the SPAS Final EIR, concentrations of NO_2 would exceed the SCAQMD's threshold of significance, due primarily to pollutant emissions associated with aircraft takeoffs, and concentrations of PM10 would also exceed the SCAQMD thresholds of significance. The LAWA Staff-Recommended Alternative would, therefore, also have a cumulatively considerable impact relative to those pollutants. As discussed in Section 2.3.2.2 of Part II of the SPAS Final EIR, mitigation measures would be implemented to address operational impacts; however, no feasible mitigation measures are available to reduce those impacts to a level that is less than significant. Operational emission impacts of CO, VOC, and NO_x, and operational concentration impacts of CO, PM2.5, and SO_2 would not be significant under the LAWA Staff-Recommended Alternative and, therefore, would not be cumulatively considerable relative to those pollutants. Overall, based on the above,

operation of the LAWA Staff-Recommended Alternative would result in a cumulatively considerable impact on air quality.

Findings: Based on substantial evidence in the administrative record, including Sections 4.2 and 5.5.2 of the SPAS Draft EIR and Sections 2.3.2 and 2.4.2 of Part II of the SPAS Final EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant construction and operational air quality impact identified in the SPAS Final EIR, including as related to the Project's contribution to cumulative air quality impacts.

LAWA is committed to mitigating temporary construction-related emissions to the maximum extent feasible and has established some of the most aggressive construction emissions reduction measures in Southern California, particularly with regard to requiring construction equipment to be equipped with emissions control devices. Specifically, At least 15 construction-related Master Plan mitigation measures have been identifies and establish a commitment and process for incorporating all technically feasible air quality mitigation measures into each component of the SPAS project as each element of that project is constructed. Also, the addition of a new Project-specific mitigation measure, MM-AQ (SPAS)-1, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Construction-Related Mitigation Measures, as identified in Section 2.3.2.2 and Chapter 5 of Part II of the SPAS Final EIR, will further reduce construction-related air quality and cumulative air quality impacts associated with the LAWA Staff-Recommended Alternative. At a programmatic level, this provides the most comprehensive means of ensuring air emissions will be reduced to the maximum extent feasible. In addition, the *LAWA Sustainable Airport Planning, Design and Construction Guidelines* encourages contractors to implement a number of voluntary measures that will reduce criteria pollutant and greenhouse gas emissions. Through the sustainability program, contractors are encouraged to implement such measures as: further reduce vehicle and equipment idling times; comply with Tier 4 emission standards for non-road diesel equipment; retrofit existing diesel equipment with particulate filters and oxidation catalysts; replace aging equipment with new low-emission models; and consider the use of alternative fuels for construction equipment. There are no feasible measures that could be adopted at this time to reduce air emissions further. Therefore, no additional project-specific mitigation measures are recommended in connection with SPAS.

LAWA is committed to mitigating operational air quality impacts to the maximum extent feasible. The LAX Master Plan mitigation measures (i.e., MM-AQ-3, Transportation-Related Mitigation Measures, and MM-AQ-4, Operations-Related Mitigation Measures) described in Section 4.2.5 of the SPAS Draft EIR would also be applied to the SPAS project. Also, the addition of two new Project-specific mitigation measures, MM-AQ (SPAS)-2, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Transportation-Related Mitigation Measures and MM-AQ (SPAS)-3, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Operations-Related Mitigation Measures, as identified in Section 2.3.2.2. and Chapter 5 of Part II of the SPAS Final EIR, will further reduce operational air quality and cumulative air quality impacts associated with the LAWA Staff-Recommended Alternative. Although these measures would not mitigate operational impacts to a level that is less than significant, they will reduce impacts associated with the LAWA Staff-Recommended Alternative to the maximum extent feasible. When the specific elements of the SPAS project are implemented, additional project-specific mitigation measures may be identified to further reduce air quality impacts.

Despite incorporation of these measures, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: With respect to all construction-related impacts associated with air emissions and concentrations associated with the SPAS project, there are no feasible measures that could be

adopted at this time to reduce air emissions further because the identified mitigation measures already incorporate all technically feasible mitigation. LAWA already has some of the most aggressive construction emissions reduction measures in Southern California, particularly with regard to requiring construction equipment to be equipped with emissions control device (see Section 2.3.2.2 of Chapter 2 of the Final EIR) and will further expand the construction emissions control and reduction requirements through the addition of Mitigation Measure MM-AQ (SPAS)-1. With respect to operational impacts associated with air emissions and concentrations associated with the SPAS project, the vast majority (over 95 percent) of the emissions contributing to those significant impacts would occur from aircraft during takeoff. Other than potential future improvements in aircraft engine technology and associated reductions in air pollutant emissions, there are no feasible means to mitigate emissions during aircraft takeoff because the only measures are related to aircraft operational options, such as reduced thrust take-off, which are at the sole discretion of the pilot and outside of BOAC's control. Nevertheless, as noted above, LAWA is committed to mitigating operational air quality impacts to the maximum extent feasible. Therefore, no additional project-specific mitigation measures are recommended in connection with SPAS.

2) Greenhouse Gases

Impact: A significant impact relative to GHG emissions would occur if the annual GHG emissions per passenger at buildout of the LAWA Staff-Recommended Alternative (i.e., at 78.9 MAP) are not at least 16 percent less than the annual GHG emissions per passenger at baseline conditions (i.e., 56.5 MAP).

Description of Effects: As discussed in Section 4.6 of the SPAS Draft EIR and Section 2.3.6 of Part II of the SPAS Final EIR, implementation of the LAWA Staff-Recommended Alternative would have a significant impact on GHG emissions.

SCAQMD recommends that amortized GHG construction emissions (i.e., total construction emissions divided by the lifetime of the project, assumed to be 30 years) be added to operational emissions to evaluate significance. As a result, construction-related significance is not determined on an individual basis for GHG emissions; rather, the significance of the combined construction-related and operations-related GHG emissions for the LAWA Staff-Recommended Alternative was evaluated.

Operational GHG emissions, plus amortized construction GHG emissions, for the LAWA Staff-Recommended Alternative at buildout of the alternative in 2025, as well as operational GHG emissions for Alternative 4 for comparative purposes (discussed below), compared the per capita (per passenger) emissions for baseline conditions with the LAWA Staff-Recommended Alternative per capita emissions. The determination of per capita emissions is based on 56.5 MAP for baseline (2009) conditions and 78.9 MAP for future (2025) baseline conditions. Where the per capita GHG emissions are not at least 16 percent less than those of baseline conditions, a significant impact is identified. Incremental changes in GHG emissions associated with the LAWA Staff-Recommended Alternative, compared to baseline conditions (detailed in Sections 4.6 and 5.5.6 of the SPAS Draft EIR and Sections 2.3.6 and 2.4.6 of Part II of the SPAS Final EIR), indicated that the majority of increases in GHG emissions compared to baseline conditions would be from aircraft operations, which is entirely attributable to the anticipated growth in airport activity levels that is common to 2025 buildout of any and all of the alternatives, including the LAWA Staff-Recommended Alternative. Although there would be a notable increase in aircraft emissions compared to baseline conditions, the airfield improvements under the LAWA Staff-Recommended Alternative would actually reduce GHG emissions for future conditions if no airfield improvements were implemented. This can be seen in comparing the aircraft emissions between the LAWA Staff-Recommended Alternative and 4, the latter of which includes no airfield improvements other than safety-related improvements. Under the LAWA Staff-Recommended Alternative, aircraft emissions in 2025 would be approximately one percent less than would otherwise occur if no airfield improvements were implemented. Under federal law, LAWA has no

direct control over aircraft operations relative to GHG emissions; however, the airfield improvements proposed by LAWA and the ability of those improvements to enable aircraft to operate more efficiently (i.e., reduce the amount of time that aircraft are operating in the taxi/idle mode) would serve to reduce GHG emissions.

With regards to other increases in GHG emissions under the LAWA Staff-Recommended Alternative compared to baseline conditions, there would be an approximately 30 percent increase in GSE emissions and 36 percent increase in APU emissions, again being attributable to the projected growth in airport activity by 2025 independent of the alternatives. Vehicle-related GHG emissions at buildout of the LAWA Staff-Recommended Alternative would be slightly more than those of baseline conditions. Although the volume of airport-related traffic would increase substantially by 2025, compared to baseline conditions, due the aforementioned projected growth in airport activity, the ongoing implementation of motor vehicle emission control and fuel mileage standards in new vehicles along with the gradual transition to newer, cleaner, and more fuel efficient vehicles over time would result in reduced GHG emissions per vehicle by 2025. The amount of per vehicle GHG emission reductions would largely offset the increase in the volume of vehicles projected to occur between the baseline year and 2025. In comparing the 2025 GHG emissions for the LAWA Staff-Recommended Alternative to those of Alternative 4 (i.e., the alternative with minimal improvements), the vehicle-related emissions of the LAWA Staff-Recommended Alternative would be less. This is primarily due to the improved parking infrastructure that would reduce the number of off-airport roadway trips. Stationary source GHG emissions for the LAWA Staff-Recommended Alternative, as well as all other alternatives, are anticipated to be greater than baseline conditions because of the additional airfield/terminal and ground access components.

On a per capita (per passenger) basis, the GHG emissions associated with implementation of the LAWA Staff-Recommended Alternative would be approximately 14.68 percent less than the per capita (per passenger) GHG emissions for baseline conditions. Notwithstanding that reduction in per capita GHG emissions would be a substantial improvement over baseline conditions, the reduction is less than the 16 percent targeted reduction reflected in the AB 32 Scoping Plan, which is the basis for the threshold of significance in this analysis; hence, the GHG emissions associated with the LAWA Staff-Recommended Alternative would be significant.

The LAWA Staff-Recommended Alternative includes mitigation measures to reduce construction equipment operations/duration, as described in the individual resource sections. Additionally, GHG emissions associated with the LAWA Staff-Recommended Alternative would be reduced directly or indirectly through compliance with LAWA's Sustainable Airport Planning, Design and Construction Guidelines and/or the requirements of the City of Los Angeles Green Building Ordinance. The addition of a new Project-specific mitigation measure, MM-AQ (SPAS)-1, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Construction-Related Mitigation Measures, as identified in Section 2.3.2.2 and Chapter 5 of Part II of the SPAS Final EIR, would also help reduce construction-related GHG emissions associated with the LAWA Staff-Recommended Alternative. There are no other feasible mitigation measures to reduce construction-related GHG emissions other than those already identified above in Section C.1) relative to Air Quality.

For operational impacts, the LAWA Staff-Recommended Alternative would comply with the requirements of the City of Los Angeles Green Building Ordinance and with LAWA policies and programs related to sustainability and reducing GHG emissions that are implemented on project-specific and on an airport-wide basis. As noted in OPR's Technical Advisory on CEQA and Climate Change, LAWA's programmatic efforts to address GHG emissions agency-wide can be a more effective approach than mitigating GHG emissions at a project level. A comprehensive list of suggested mitigation measures for new development projects throughout the state of California prepared by the California Office of the Attorney General relative to addressing GHG emissions and climate change impacts within an EIR is presented in Table SRA-2.3.6-3 in Section 2.3.6 of Part II of the SPAS Final EIR. The list prepared by OPR is presented in Table SRA-2.3.6-4 in

Section 2.3.6 of Part II of the SPAS Final EIR and presents examples of measures that have been used by some public agencies to reduce GHG emissions.

Cumulative GHG Impacts

The analysis of GHG, by its nature, considers cumulative conditions in that it evaluates the contributions of the LAWA Staff-Recommended Alternative in the context of global changes in the concentrations of atmospheric pollutants and their cumulative impact on global climate change. Due to the global nature of GHG emissions and their potential effects, GHG emissions are typically addressed in a cumulative impacts analysis. As indicated in Section 5.5.6 of the SPAS Draft EIR and Section 2.4.6 of Part II of the SPAS Final EIR, construction and operation of the LAWA Staff-Recommended Alternative would result in a significant impact relative to GHG emissions, primarily related to construction activities, aircraft operations, GSE, APU, and motor vehicle operations, when compared to baseline conditions. Cumulative development in the region, and at LAX specifically, would also result in increased GHG emissions as a result of construction and operational activity. As mentioned above, the LAWA Staff-Recommended Alternative would result in lower GHG emissions from aircraft operations, which is the primary source of GHG emission increases compared to baseline conditions, than would otherwise occur in 2025 without the project. The LAWA Staff-Recommended Alternative would comply with requirements of the City of Los Angeles Green Building Code, which includes a number of measures that serve to reduce GHG emissions. On a per capita (per passenger) basis, implementation of the LAWA Staff-Recommended Alternative would result in approximately 14.7 percent less GHG emissions that the per capita GHG emissions associated with baseline conditions. The California Assembly Bill (AB) 32 Scoping Plan indicates that at least a 16 percent reduction in GHG emissions is necessary to achieve the goal of reducing GHG emissions projected to occur in California by 2020 under "business as usual" down to levels that occurred in the state in 1990. Meeting this GHG reduction goal statewide is intended to address cumulative GHG emissions within the state. Given that the LAWA Staff-Recommended Alternative cannot achieve a 16 percent reduction in GHG emissions, on a per capita basis compared to baseline conditions, the resultant significant GHG emissions impact would be cumulatively considerable.

Findings: Based on substantial evidence in the administrative record, including Sections 4.6 and 5.5.6 of the SPAS Draft EIR and Sections 2.3.6 and 2.4.6 of Part II of the SPAS Final EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant GHG impact identified in the SPAS Final EIR. Specifically, the LAWA Staff-Recommended Alternative includes mitigation measures to reduce construction equipment operations/duration (described under each resource). The proposed addition of a new Project-specific mitigation measure, MM-AQ (SPAS)-1, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Construction-Related Mitigation Measures, as identified in Section 2.3.2.2 and Chapter 5 of Part II of the SPAS Final EIR, will also help reduce construction-related GHG emissions associated with the LAWA Staff-Recommended Alternative. Furthermore, GHG emissions associated with the LAWA Staff-Recommended Alternative will be reduced directly or indirectly through compliance with LAWA's Sustainable Airport Planning, Design and Construction Guidelines and/or the requirements of the City of Los Angeles Green Building Ordinance. There are no other feasible mitigation measures to reduce construction-related GHG emissions other than those already identified in Section 4.6.5 and in Section 4.2, Air Quality, of the SPAS Draft EIR and Section 2.3.2 of Part II of the SPAS Final EIR.

For operational impacts, the LAWA Staff-Recommended Alternative will comply with the requirements of the City of Los Angeles Green Building Ordinance and with LAWA policies and programs related to sustainability and reducing GHG emissions that are implemented on project-specific and on an airport-wide basis, as well as suggested mitigation measures for new development projects throughout the state of California as identified by the California Office of the Attorney General and OPR. The proposed addition of two new Project-specific mitigation measures, MM-AQ (SPAS)-2, Additional Measures to Supplement the LAX Master Plan

Mitigation Plan for Air Quality – Transportation-Related Mitigation Measures and MM-AQ (SPAS)-3, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Operations-Related Mitigation Measures, as identified in Section 2.3.2.2 and Chapter 5 of Part II of the SPAS Final EIR, will also help to reduce operational GHG emissions associated with the LAWA Staff-Recommended Alternative.

As discussed above, the LAWA Staff-Recommended Alternative will result in a significant cumulative impact with respect to GHGs. The LAWA Staff-Recommended Alternative will result in lower emissions from aircraft operations and comply with requirements of the City of Los Angeles Green Building Code. However, because the LAWA Staff Recommended Alternative will not achieve a 16 percent reduction in GHG emissions, on a per capita basis compared to baseline conditions, the significant GHG emissions impact would be cumulatively considerable.

Despite incorporation of these measures, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: Continued implementation of LAWA's existing practices and programs that promote sustainability and reduction in GHG emissions, along with compliance with the City of Los Angeles Green Building Ordinance, plus the proposed addition of the three new Project-specific mitigation measures described above, would help reduce GHG emissions associated with the LAWA Staff-Recommended Alternative; however, the GHG emissions associated with the LAWA Staff-Recommended Alternative will remain significant and unavoidable. Although these measures would not mitigate operational impacts to a level that is less than significant, they would reduce impacts associated with the LAWA Staff-Recommended Alternative to the maximum extent feasible, and are responsive to the applicable GHG reduction measures and strategies set forth by the California Office of the Attorney General and the Governor's Office of Planning and Research (see Tables 4.6-7 and 4.6-8 in the SPAS Draft EIR). When the specific elements of the SPAS project are implemented, additional project-specific mitigation measures may be identified to further reduce air quality impacts.

3) Human Health Risk Assessment

Impact: A significant incremental impact to human health would occur if changes in airport operations following implementation of the LAWA Staff-Recommended Alternative would result in the following future condition:

- A total incremental acute hazard index greater than, or equal to, one for any target organ system at any receptor location.

Description of Effects: As discussed in Sections 4.7.1 and 5.5.7.1 of the SPAS Draft EIR and Sections 2.3.7.1 and 2.4.7.1 of Part II of the SPAS Final EIR, incremental health impacts associated with inhalation of TAC released during construction and during airport operations following implementation of the LAWA Staff-Recommended Alternative. As described below, only acute non-cancer health hazards were determined to be significant and unavoidable, and would also likely be cumulatively considerable if other regional projects contribute positively to the total regional acute hazards.

Acute Non-Cancer Health Hazards

Acrolein and formaldehyde are the only TAC of concern in emissions from LAX that might be present at concentrations approaching the threshold for acute effects. Acrolein is responsible for the majority of all predicted acute non-cancer health hazards associated with LAX SPAS operations and is primarily associated with aircraft emissions. (For a detailed discussion of uncertainties regarding the presence of acrolein in aircraft emissions, see Section 7.3 of Technical Report S-9a of the LAX Master Plan Final EIR.) Acute exposures to acrolein may result in mild irritation of eyes and mucous membranes. Primary sources of formaldehyde are emissions from gasoline and diesel powered equipment. Acute effects for exposure to

formaldehyde would typically include irritation to the eye and respiratory system and possibly adverse effects to the immune system. Maximum acute non-cancer health hazards associated with exposure to acrolein and formaldehyde from LAX SPAS operations under the LAWA Staff-Recommended Alternative are summarized in Tables SRA-2.3.7.1-3 and SRA-2.3.7.1-4 of Part II of the SPAS Final EIR. Acute non-cancer health hazards for TAC other than acrolein and formaldehyde are orders of magnitude below 1 and below the acute non-cancer health hazards estimated for short-term exposure to acrolein and formaldehyde.

SPAS-related maximum acute hazard quotients for acrolein after buildout of the LAWA Staff-Recommended Alternative are estimated to be 3.0 for residents living at the peak hazard location, 1.2 for school children, 1.4 for recreational users, and 1.6 for off-site adult workers. 240 of 326 off-site grid nodes have incremental acute hazard quotients for acrolein of less than 1. Of the 86 grid nodes with incremental acute hazard quotients for acrolein greater than 1, only five of the grid nodes are greater than 2. These grid nodes are located north of Runway 6L/24R in the north airfield (grid nodes 66 to 70). The acute REL for acrolein has an uncertainty factor of 60. This factor indicates a moderate uncertainty in the REL based on specific sources of variability not addressed in the toxicological studies, such as individual variation and interspecies differences. Although the maximum acute hazard quotient for acrolein after buildout of the LAWA Staff-Recommended Alternative is greater than 1, it should be noted that the acute REL is set at or below a level at which no adverse health impacts are expected for the majority of the population. Hence, it represents the tail-end of a distribution and not a specific "bright line" beyond which adverse effects are certain; instead any adverse acute non-cancer health effects (mucous membrane irritation) would be part of a complex probabilistic process. Although the maximum acute hazard quotient estimated as 3.0 is above the threshold of significance of 1, the value is still close to the threshold for acute effects, given the uncertainty in the toxicity factor, and may represent minimal actual acute non-cancer health hazards. Thus, an acute hazard quotient of 3.0 does not mean that adverse effects would definitely occur in the receptor population; rather, it indicates that such effects cannot be ruled out on the basis of current knowledge.

SPAS-related maximum acute hazard quotients for formaldehyde under the LAWA Staff-Recommended Alternative are estimated to be 0.6 for residents living at the peak hazard location, 0.2 for school children, 0.3 for recreational users, and 0.4 for off-site adult workers.

Because maximum acute hazard quotients for acrolein for all analyzed receptors (residents, recreational users, school child, and off-site adult workers are slightly above the threshold of significance of 1, acute non-cancer health hazard impacts under the LAWA Staff-Recommended Alternative would be significant.

Cumulative Impacts Related to Acute Non-Cancer Health Hazards

As described above, predicted concentrations of TAC released from operational activities for the LAWA Staff-Recommended Alternative suggest that slight impacts to human health may occur associated with acute non-cancer health hazards. The assessment of cumulative acute non-cancer health hazards follows the methods used to evaluate cumulative acute non-cancer health hazards presented in the LAX Master Plan Final EIR (Section 4.24.1.7 and Technical Report S-9a, Section 6.3), incorporating updated National-Scale Air Toxics Assessment (NATA) tables from 2005. USEPA-modeled emission estimates by census tract were used to estimate annual average ambient air concentrations. These census tract emission estimates are subject to high uncertainty, and USEPA warns against using them to predict local concentrations. Thus, for the analysis of cumulative acute non-cancer health hazards, estimates for each census tract within the HHRA study area were identified, and the range of concentrations was used as an estimate of the possible range of annual average concentrations in the general vicinity of the airport. This range of concentrations was used to estimate a range of acute non-cancer hazard indices using the same methods as described in the LAX Master Plan Final EIR (Section 4.24.1.7 and Technical Report S-9a, Section 6.1). This range of hazard indices was then used as a basis for comparison with estimated maximum acute non-cancer health hazards for the LAWA Staff-

Recommended Alternative. The relative magnitude of acute non-cancer health hazards calculated on the basis of the USEPA estimates and maximum hazards estimated for the LAWA Staff-Recommended Alternative were taken as a general measure of relative cumulative impacts. Emphasis must be placed on the relative nature of these estimates. Uncertainties in the analysis preclude estimation of absolute impacts.

When USEPA annual average estimates are converted to possible 1-hour maximum concentrations, acute hazard indices associated with total acrolein concentrations are estimated to range from 0.03 to 1.5, with an average of 0.4, for locations within the HHRA study area. The predicted overall maximum incremental acute non-cancer health hazard associated with acrolein for the LAWA Staff-Recommended Alternative is 3.0. USEPA modeled acute hazard indices associated with formaldehyde exposure are estimated to range from 0.1 to 2.2, with an average of 1.0, for locations within the HHRA study area. The predicted maximum acute non-cancer health hazard associated with formaldehyde for the operation of the LAWA Staff-Recommended Alternative is 0.64. Results suggest that the LAWA Staff-Recommended Alternative would add to total 1-hour maximum acrolein concentrations at some locations in the HHRA study area and, therefore, to cumulative acute non-cancer health hazards associated with exposure to acrolein.

Although no defined thresholds for cumulative health risk impacts are available, it is the policy of the SCAQMD to use the same significance thresholds for cumulative impacts as for the project-specific impacts analyzed in the EIR. If cumulative health risks are evaluated following this SCAQMD policy, the project's contribution to the cumulative cancer risk would not be cumulatively considerable since the incremental cancer risk impacts of the LAWA Staff-Recommended Alternative are all negative (i.e., beneficial) and thus below the individual cancer risk significance thresholds of 10 in one million. However, the SCAQMD policy does have different significance thresholds for project-specific and cumulative impacts for hazard indices for TAC emissions. A project-specific significance threshold is 1.0 while the cumulative threshold is 3.0. Acute non-cancer hazard indices would be at the cumulative threshold of 3.0 for the LAWA Staff-Recommended Alternative, and, therefore, also would likely be cumulatively considerable if it assumed that other planned regional projects would contribute positively to the total regional acute hazards.

Findings: Based on substantial evidence in the administrative record, including Sections 4.7.1 and 5.5.7.1 of the SPAS Draft EIR and Sections 2.3.7.1 and 2.4.7.1 of Part II of the SPAS Final EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant human health risk impact identified in the SPAS Final EIR.

LAWA is committed to mitigating emissions to the maximum extent feasible from construction activities, temporary changes in operations associated with construction of the LAWA Staff-Recommended Alternative, and long-term operational activities at LAX. A comprehensive mitigation program was developed as part of the LAX Master Plan Final EIR and the specific means for implementing the mitigation measures, described in Section 4.2.5 of the SPAS Draft EIR, will also be applied to the LAWA Staff-Recommended Alternative. Also, the proposed addition of a new Project-specific mitigation measure, MM-AQ (SPAS)-1, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Construction-Related Mitigation Measures, as identified in Section 2.3.2.2 and Chapter 5 of Part II of the SPAS Final EIR, will further reduce construction-related air pollutant emissions associated with the LAWA Staff-Recommended Alternative. Similarly, the proposed addition of two new Project-specific mitigation measures, MM-AQ (SPAS)-2, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Transportation-Related Mitigation Measures and MM-AQ (SPAS)-3, Additional Measures to Supplement the LAX Master Plan Mitigation Plan for Air Quality – Operations-Related Mitigation Measures, as identified in Section 2.3.2.2 and Chapter 5 of Part II of the SPAS Final EIR, will further reduce operations-related air pollutant emissions associated with the LAWA Staff-Recommended Alternative. Although developed to address air quality impacts, this program will also reduce impacts to human health associated with exposure

to TAC, because this mitigation program establishes a commitment and process for incorporating all technically feasible air quality mitigation measures into each component of the LAWA Staff-Recommended Alternative as that element is constructed. At the programmatic level of this EIR, there are no additional feasible measures available to address acute non-cancer health hazard impacts, which would remain significant. In addition, LAWA's construction contract specifications include requirements from the LAX Master Plan Community Benefits Agreement that serve to reduce construction equipment emissions, particularly those related to diesel emissions. Such measures include: reduce vehicle and equipment idling times, comply with Tier 4 emission standards for non-road diesel equipment, retrofit existing diesel equipment with particulate filters and oxidation catalysts, replace aging equipment with new low-emission models, consider the use of alternative fuels for construction equipment. These reductions in emissions will translate into reductions in risks and hazard impacts.

The LAWA Staff-Recommended Alternative would also be at the threshold of significance for acute non-cancer hazard indices and, therefore, would also likely be cumulatively considerable if it is assumed that other planned regional project would contribute positively to the total regional acute hazards.

LAX Master Plan mitigation measures, as well as SPAS-specific mitigation measures, will reduce TAC emissions associated with the LAWA Staff-Recommended Alternative. However, even with implementation of these measures, acute non-cancer health hazards at some fence-line receptors will exceed the threshold of significance under the LAWA Staff-Recommended Alternative, compared to 2009 baseline conditions. As such, acute non-cancer health hazard impacts under the LAWA Staff-Recommended Alternative are considered to be significant and unavoidable. Despite incorporation of these measures, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: LAX Master Plan mitigation measures and SPAS Project-specific mitigation measures would reduce TAC emissions associated with the LAWA Staff-Recommended Alternative. However, even with implementation of these measures, acute non-cancer health hazards due to exposure to acrolein at some fence-line receptors would exceed the threshold of significance under the LAWA Staff-Recommended Alternative, compared to 2009 baseline conditions. The emission of acrolein is from operation of aircraft engines, which cannot be regulated or controlled by LAWA; hence, additional mitigation measures to address this impact are infeasible. As such, acute non-cancer health hazard impacts under the LAWA Staff-Recommended Alternative are considered to be significant and unavoidable, and may also result in a cumulatively considerable contribution to cumulative impacts related to acute non-cancer health hazards.

4) Land Use and Planning: Aircraft Noise Exposure

Impact: A significant land use impact would occur if the direct and indirect changes in the environment caused by the LAWA Staff-Recommended Alternative would result in the following future condition:

- Create physical incompatibility with existing land uses through increased aircraft noise exposure.

Description of Effects: As discussed in Sections 4.9 and 5.5.9 of the SPAS Draft EIR and Sections 2.3.9 and 2.4.9 of Part II of the SPAS Final EIR, the land use incompatibility analysis is focused on incompatibility associated with aircraft noise exposure. The analysis evaluates future (2025) noise levels associated with the LAWA Staff-Recommended Alternative compared to baseline (2009) conditions. However, the vast majority of the change in future conditions compared to baseline conditions is attributable to growth in aviation activity anticipated to occur at LAX by 2025. Aircraft-related noise impacts that are attributable to project-related changes in the airfield configuration are also identified in Sections 4.10.1 and 5.5.10.1 of the SPAS Draft EIR and Sections 2.3.10.1 and 2.4.10.1 of Part II of the SPAS Final EIR.

Changes in Overall Noise Exposure

The environmental impacts of high noise levels on noise-sensitive land uses under the LAWA Staff-Recommended Alternative are described here. This analysis identifies significant impacts on those noise-sensitive uses newly exposed to noise levels 65 CNEL or higher, increases of 1.5 CNEL or higher within the 65 CNEL or higher noise contours, and increases in noise levels below 65 CNEL compared to 2009 baseline conditions. Compared to 2009 baseline conditions, the most notable changes under the LAWA Staff-Recommended Alternative would include an increase in noise exposure within the City of Inglewood and City of Los Angeles. The overall net change in total area (on- and off-airport) exposed to 65 CNEL or higher noise levels in 2025 would increase by 1,450 acres compared to 2009 baseline conditions. Compared to 2009 baseline conditions, the overall number of incompatible land uses would be increased by 4,370 dwelling units, 13,160 residents, and 43 non-residential noise-sensitive facilities by 2025.

Newly Exposed Areas

Under the LAWA Staff-Recommended Alternative, 4,918 dwelling units, 13,445 residents, and 44 non-residential noise-sensitive facilities would be newly exposed in 2025 compared to 2009 baseline conditions (see Table SRA-2.3.9-2 in Part II of the SPAS Final EIR). Impacts on these noise-sensitive uses would be considered incompatible under Title 21. Also considered incompatible under Title 21 are all residential areas having habitable exterior areas including balconies, patios, and yards exposed to noise levels of 75 CNEL or higher (even if interior noise levels are reduced to 45 CNEL). This outdoor noise standard is also referenced in a more limited fashion under the 14 CFR Part 150 Land Use Compatibility Guidelines. As stated in 14 CFR Part 150, certain outdoor land uses, such as parks, that are exposed to noise levels above 75 CNEL may be considered incompatible. These standards recognize that high noise levels have the potential to affect outdoor speech and the quality of outdoor activities. Under this alternative, two parks and 4.07 acres (41 units) of residential uses would be newly exposed to noise levels of 75 CNEL or higher compared to 2009 baseline conditions. No schools would be newly exposed to these noise levels. Although exposure of non-residential noise-sensitive facilities to outdoor noise levels in the 65 to 75 CNEL range is not considered to be a significant impact under CEQA, areas exposed to these noise levels would still have some impact on outdoor speech and the quality of outdoor activities. With implementation of LAX Master Plan Mitigation Measure MM-LU-1, these impacts would be less than significant with the exception of interim impacts prior to completion of noise insulation or land recycling, and impacts on residential uses with outdoor private habitable areas, or parks that would be newly exposed to noise levels of 75 CNEL or higher. These residual impacts would remain significant.

Increases in 1.5 CNEL

Some noise-sensitive uses would experience a noise increase of 1.5 CNEL or higher within the 65 CNEL or higher noise contours in 2025. The number of residential units, population, and non-residential noise-sensitive facilities experiencing this level of noise increase within the 65 CNEL contour in 2025 compared to 2009 baseline conditions includes 5,296 dwelling units, 13,608 residents, and 48 non-residential noise-sensitive facilities would experience substantial noise level increases in 2025. With implementation of LAX Master Plan Mitigation Measure MM-LU-1, these impacts would be less than significant with the exception of interim impacts prior to completion of noise insulation or land recycling, and impacts on residential uses with outdoor private habitable areas, or parks that would be newly exposed to noise levels of 75 CNEL or higher. These residual impacts would remain significant.

Increase In Noise Levels Below 65 CNEL

As presented in Section 2.3.10.1 of Part II of the SPAS Final EIR, under the LAWA Staff-Recommended Alternative, two non-residential noise-sensitive facilities (places of worship) would be exposed to increases of 3 CNEL between 60 and 65 CNEL. Both of these uses are located in the City of Los Angeles in the Westchester community. However, such increases would not rise

to the level of being a significant impact. No noise-sensitive uses would be exposed to increases of 5 CNEL or higher below 60 CNEL.

Cumulative Aircraft Noise Impacts

As indicated above, implementation of the LAWA Staff-Recommended Alternative would result in significant aircraft noise impacts to noise-sensitive uses around the airport. These impacts can be reduced through implementation of LAX Master Plan commitments and mitigation measures, compliance with Title 24 requirements, and review of certain projects located within the airport influence area by the Airport Land Use Commission (ALUC) for compliance with the Los Angeles County Airport Land Use Plan (ALUP), but interim impacts prior to implementation of mitigation measures or certain residential uses with outdoor private habitable areas or parks that are newly exposed to outdoor noise levels of 75 CNEL or higher would be significant and unavoidable. In light of such impacts, implementation of the LAWA Staff-Recommended Alternative would have a cumulatively considerable contribution to significant future aircraft noise impacts on existing and potential future noise-sensitive uses within the 65 CNEL and higher noise contours.

Findings: Based on substantial evidence in the administrative record, including Sections 4.9 and 5.5.9 of the SPAS Draft EIR and Sections 2.3.9 and 2.4.9 of Part II of the SPAS Final EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant land use and planning – aircraft noise exposure impact identified in the SPAS Final EIR. Specifically, Master Plan Mitigation Measure MM-LU-1 and other measures described in SPAS Draft EIR Sections 4.9.3.3 and 4.101.5 will be incorporated into the Project's design.

Despite incorporation of mitigation, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: Implementation of LAX Master Plan Mitigation Measure MM-LU-1, as well as the other measures described in SPAS Draft EIR Sections 4.9.3.3 and 4.10.1.5 would reduce, but not eliminate, aircraft noise impacts on residential uses and non-residential noise-sensitive facilities newly exposed to noise levels of 65 CNEL or higher associated with the LAWA Staff-Recommended Alternative. No additional mitigation measures are available to address aircraft noise.

5) Aircraft Noise

Impact: A significant aircraft noise impact would occur if the direct and indirect changes to aircraft operations patterns in the environment that may be caused by the LAWA Staff-Recommended Alternative would result in the following future condition:

- Noise-sensitive areas are exposed to 65 CNEL or greater with at least a 1.5 CNEL increase.

Description of Effects: As discussed in Sections 4.10.1 and 5.5.10.1 of the SPAS Draft EIR and Sections 2.3.10.1 and 2.4.10.1 of Part II of the SPAS Final EIR, the impacts analysis provides a discussion of operational conditions assumed as part of the LAWA Staff-Recommended Alternative and a comparison of the future (2025) aircraft noise levels of the LAWA Staff-Recommended Alternative to the baseline (2009) noise levels with respect to CNEL noise exposure contours.

The evaluation of aircraft noise impacts includes a comparison of aircraft noise levels associated with completion of the LAWA Staff-Recommended Alternative by 2025 to the aircraft noise levels associated with baseline (2009) conditions. Passenger activity levels at LAX between 2009 and 2025 are forecast to increase from approximately 56.5 MAP to 78.9 MAP for all SPAS alternatives, including the LAWA Staff-Recommended Alternative, which would be accompanied by an increase in the number of daily flights at LAX, as well as an anticipated change in the fleet mix (i.e., size and types of aircraft) during that time. The number of average annual daily aircraft

operations is forecasted to increase from 1,493 in 2009 to 1,937 in 2025. The number of heavy (aircraft weighing over 300,000 pounds, identified as "SWB" (Small Wide-Body Aircraft), "LWB" (Large Wide-Body Aircraft), and "NLA" (New Large Aircraft) jet operations in 2025 is projected to increase to 441 on an average day from 239 in 2009, while the number of non-jet (i.e., propeller) aircraft operations in 2025 is projected to decrease to 148 on an average day from 158 in 2009. The proportion of light jets in the fleet mix would shrink slightly in 2025 as compared to 2009.

The improvements to the north airfield under the LAWA Staff-Recommended Alternative, operating in conjunction with the existing configuration of the south airfield, along with the forecasted growth in activity at LAX by 2025 would change the airport's 2009 noise exposure pattern. A general increase in the overall size of the LAWA Staff-Recommended Alternative noise exposure contour in 2025, as compared to 2009 conditions, would result in more total noise energy being generated within the airport environs on an average day with an increase in aircraft operations, and particularly heavy jet aircraft operations. The 260 feet northward relocation of Runway 6L/24R for landings on Runway 24R is expected to change the arrival and landing noise 260 feet north compared to 2009 conditions. The relocation of the high-speed runway exits for landings on Runway 24R would provide additional exits for heavy aircraft to use when landing on Runway 24R, as the current locations of the exits preclude heavy aircraft from using them. This change is not expected to increase the overall size of the CNEL noise exposure contours, because aircraft would be able to exit with reduced reverse thrust. The Runway 24L extension of 1,250 feet to the east is expected to move start-of-takeoff roll noise levels to the northwest and northeast behind the runway end, and slightly increase due to the additional small wide-body departures from Runway 24L. With the extension, the enhanced balance of small wide-body aircraft departures between the south and north airfields is expected to decrease start-of-takeoff roll noise from Runway 25R to the east.

The most notable change from the baseline (2009) conditions to the LAWA Staff-Recommended Alternative conditions is attributable to the projected growth in aircraft activity from 2009 to 2025. As the number of aircraft operations grows, it is expected that the area exposed to significant levels of aircraft noise will grow as well. While the noise exposure contours for the LAWA Staff-Recommended Alternative are larger in comparison to baseline (2009) conditions, the overall shape of the contours remains similar. With the 260-foot shift of Runway 6L/24R to the north, the 65 CNEL noise exposure contour for the north airfield is expected to expand more to the north than to the south, particularly with respect to the north side along the arrival path to Runway 6L/24R.

Affected Noise-Sensitive Uses

The LAWA Staff-Recommended Alternative scenario would result in a net increase of the land area within the 65 CNEL noise exposure contours, as well as increase in the number of dwellings, population, and non-residential noise-sensitive facilities located within the 65 CNEL (or higher) noise exposure contours. Specifically, an additional 13,160 people, 4,370 additional dwelling units, and 43 additional non-residential noise-sensitive facilities are expected to be exposed to 65 CNEL or higher noise exposure levels, compared to baseline (2009) conditions. These noise-sensitive uses would be exposed to 65 CNEL or greater with at least a 1.5 CNEL increase as compared to baseline (2009) conditions, and therefore impacts would be significant. The significant impacts would be located principally along the approach to the north and south airfield. Within this area are an estimated 5,296 dwellings and 13,608 residents, as well as 48 non-residential noise-sensitive facilities, including 19 schools, 19 places of worship, 9 parks, and 1 convalescent hospital (these values include both noise sensitive receptors that would be newly exposed to 65 CNEL or greater with at least a 1.5 CNEL increase and also include those sensitive receptors that are currently/already exposed to 65 CNEL or greater and would experience at least a 1.5 CNEL increase). While there would also be increases in existing noise levels in areas beyond the 65 CNEL contour (i.e., areas with exterior noise levels less than 65 dBA CNEL), such increases would not rise to the level of being a significant impact.

As discussed in Section 4.10.1.7 of the SPAS Draft EIR, the abatement and mitigation of aircraft noise may be accomplished in two general ways: 1) by reducing the loudness of the noise source or increasing the distance of the noise source from the receptor on the ground or 2) by modifying the receptor to make it less affected by noise. The LAWA Staff-Recommended Alternative would entail a northbound shift of the centerlines of Runways 6L/24R. Relocated Runway 6L/24R is planned 260 feet north of the existing Runway 24R centerline. The noise abatement measures and classroom disruption and children's ability to learn presented in Section 4.10.1.5 of the SPAS Draft EIR would continue to be implemented, as would all other current measures. Land use measures to mitigate noise impacts, that are not related to classroom disruption are identified and discussed in Section 4.9.3.3 of the SPAS Draft EIR, as amended by Chapter 5 of Part II of the SPAS Final EIR (i.e., the addition of LAX Master Plan Mitigation Measures MM-LU-3 and MM-LU-4). To continue noise abatement techniques, new/replacement procedures are assumed for westerly departures from each relocated runway end to ensure that aircraft reach the coastline before making turns. Although LAX Master Plan Commitment N-1 and LAX Master Plan Mitigation Measure MM-N-4 would reduce aircraft noise impacts compared with conditions that would exist without those measures, they cannot fully mitigate the noise impacts associated with implementation of the LAWA Staff-Recommended Alternative. Further, no other operational noise abatement measures are available to fully mitigate the noise impacts of the LAWA Staff-Recommended Alternative. Also, because the land use mitigation measures would take several years to fully implement, it is possible that significant noise impacts would be experienced in the area after implementation of the LAWA Staff-Recommended Alternative but before the mitigation measures are fully implemented.

Cumulative Aircraft Noise Impacts on Sensitive Receptors

For the purpose of calculating the LAWA Staff-Recommended Alternative's contribution to cumulative impacts, a comparison of the future (2025) aircraft noise levels to the future (2025) aircraft noise levels that would otherwise occur without such improvements was performed. The potential for cumulative aircraft noise impacts is defined primarily by past, present, and reasonably foreseeable future operations at LAX. Although there are other airports in the nearby area, such as Hawthorne Municipal Airport approximately five miles southeast of LAX and Compton Airport approximately ten miles southeast of LAX, they are primarily small municipal airports with relatively few daily operations compared to LAX and flight paths separate from the primary arrivals and departure routes for LAX. Commercial airports, such as Bob Hope International Airport approximately 20 miles northeast of LAX and Long Beach International Airport approximately 15 miles southeast of LAX, have higher daily operations than the aforementioned local airports and may share some of the same regulated air space routes as operations at LAX; however, such common use of regulated air space would occur at higher altitudes that would not contribute appreciably to cumulative noise levels on the ground in the vicinity of LAX.

The aircraft noise impacts analysis presented in Section 2.3.10.1 of Part II of the SPAS Final EIR, accounts for present operations at LAX (i.e., baseline [2009] conditions) and reasonably foreseeable future operations at LAX (i.e., future [2025] conditions). In general, aircraft noise conditions have improved over the past two decades at most major airports in the U.S. with the federally-mandated phase-out of older noisier (FAR Part 36 Stage 2) aircraft. This is evidenced by the fact that the 65 CNEL contours for LAX under current and future conditions are generally smaller than the 65 CNEL for LAX from two decades ago.

Implementation of the LAWA Staff-Recommended Alternative would result in significant aircraft noise impacts at buildout in 2025, compared to baseline conditions. Although LAX Master Plan Commitment N-1 and LAX Master Plan Mitigation Measure MM-N-4 would reduce aircraft noise impacts, they cannot fully mitigate the noise impacts associated with implementation of the LAWA Staff-Recommended Alternative. Further, no other operational noise abatement measures are available to fully mitigate the noise impacts of the LAWA Staff-Recommended Alternative. Based

on the above, implementation of the LAWA Staff-Recommended Alternative would have a cumulatively considerable contribution to significant future aircraft noise impacts.

Findings: Based on substantial evidence in the administrative record, including Sections 4.10.1 and 5.5.10.1 of the SPAS Draft EIR and Sections 2.3.10.1 and 2.4.10.1 of Part II of the SPAS Final EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant aircraft noise impact identified in the SPAS Final EIR. Specifically, LAX Master Plan Commitment N-1 and LAX Master Plan Mitigation Measure MM-N-4, as well as the other measures described in SPAS Draft EIR Sections 4.9.3.3 and 4.10.1.5, will be incorporated into the Project's design.

Despite incorporation of these measures, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: In general, aircraft noise conditions have improved over the past two decades at most major airports in the U.S. with the federally-mandated phase-out of older noisier (FAR Part 36 Stage 2) aircraft. Although LAX Master Plan Commitment N-1 and LAX Master Plan Mitigation Measure MM-N-4 would reduce aircraft noise impacts, they cannot fully mitigate the noise impacts associated with implementation of the LAWA Staff-Recommended Alternative. Further, no other operational noise abatement measures are available to fully mitigate the noise impacts of the LAWA Staff-Recommended Alternative. Also, because the land use mitigation measures would take several years to fully implement, it is possible that significant noise impacts would be experienced in the area after implementation of the LAWA Staff-Recommended Alternative but before the mitigation measures are fully implemented. In addition, as further discussed in Section 2.3.9 of Part II of the SPAS Final EIR, certain residential uses with outdoor private habitable areas, or parks would be newly exposed to noise levels of 75 CNEL or higher. These noise impacts would also be significant and unavoidable.

Impact: A significant impact relative to classroom disruption is considered to occur when:

- Schools are newly exposed to exterior noise levels during school hours sufficient to result in interior noise levels of 55 dBA L_{max}, which can cause momentary disruption of speech intelligibility in classroom teaching situations (an assumed distance between the speaker and listener of 20 feet), and an interior noise level of 65 dBA L_{max}, which can momentarily disrupt speech intelligibility in small group and one-on-one teaching situations (assumed to be at 6 feet). In each case, exposure is measured as having a time above the threshold noise level of three seconds or more during the school day. At LAX, the thresholds of significance for speech interference at schools equate to exterior single event maximum noise levels of 84 dBA for general classroom teaching and 94 dBA for small group learning occurring during school hours, defined as between 8:00 a.m. and 4:00 p.m.
- Schools are newly exposed to exterior noise levels during school hours sufficient to result in sustained interruption of classroom teaching through interior noise levels in excess of 35 $L_{eq(h)}$ during an hour. At LAX, the threshold of significance equates to an exterior hourly noise level during school hours of 64 dBA of $L_{eq(h)}$.

Description of Effects: As discussed in Section 4.10 of the SPAS Draft EIR and Section 2.3.10.1.1.2.2 of Part II of the SPAS Final EIR, baseline (2009) conditions related to school facilities and classroom disruption is provided in Tables 4.10.1-4, 4.10.1-5, and 4.10.1-6 of the SPAS Draft EIR and Tables SRA-2.3.10.1-6, SRA-2.3.10.1-7, and SRA-2.3.10.1-8 of Part II of the SPAS Final EIR. The numbers of schools that would exceed the thresholds of significance for classroom disruption under the LAWA Staff-Recommended Alternative as compared to baseline (2009) conditions is one additional school projected to be newly exposed at the 55 interior dBA (L_{max}), which relates to momentary disruption of speech intelligibility, and the overall number of individual noise events at schools would increase. The school, Jefferson Elementary School,

would be newly exposed to average number of daily events and duration above 55 interior dBA, as compared to baseline (2009) conditions, and impacts would therefore be significant.

No schools would be newly exposed above 65 interior dBA (L_{max}) speech interference Levels.

The assessment of the number of schools that would experience interior dBA $L_{eq(h)}$ levels equal to or higher than 35 dBA $L_{eq(h)}$ in the classroom indicates that under the LAWA Staff-Recommended Alternative, seven public schools and one private school would be newly exposed to this level as compared to baseline (2009) conditions, and therefore impacts would be significant.

The LAWA Staff-Recommended Alternative would entail a northbound shift of the centerlines of Runways 6L/24R. Relocated Runway 6L/24R is planned 260 feet north of the existing Runway 24R centerline. The LAX Master Plan mitigation measures related to noise abatement measures and classroom disruption and children's ability to learn, including MM-LU-1, MM-LU-3, and MM-LU-4, presented in Section 4.9.5 of the SPAS Draft EIR, as amended in Chapter 5 of Part II of the SPAS Final EIR, would continue to be implemented, as would all other current measures. Specifically, as described in Section 2.3.9, *Land Use and Planning*, of Part II of the SPAS Final EIR, LAX Master Plan Mitigation Measure MM-LU-1, Implement Revised Aircraft Noise Mitigation Program, would incorporate all eligible dwellings and non-residential noise-sensitive facilities that are newly exposed to noise levels 65 CNEL or higher into the Aircraft Noise Mitigation Program (ANMP) to mitigate the significant noise impacts. Also, LAX Master Plan Mitigation Measures MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn, and MM-LU-4, Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise, would ultimately serve to mitigate adverse noise impacts on schools.

Together, the LAX Master Plan noise and land use mitigation measures are intended to fully mitigate the significant noise impacts that would be caused by the LAWA Staff-Recommended Alternative once implemented. Because the land use mitigation measures would take several years to fully implement, it is possible that significant noise impacts would be experienced in the area after implementation of the LAWA Staff-Recommended Alternative but before the mitigation measures are fully implemented. Thus, significant and unavoidable interim noise impacts would be experienced over an indeterminate period of time.

Findings: Based on substantial evidence in the administrative record, including Section 4.10.1 of the SPAS Draft EIR and Section 2.3.10.1 of Part II of the SPAS Final EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant aircraft noise exposure impact to schools. Specifically, LAX Master Plan Commitment N-1 and LAX Master Plan Mitigation Measures MM-N-4, MM-LU-1 and MM-LU-3 would reduce aircraft noise impacts to less than significant once implemented. However, because the land use mitigation measures would take several years to fully implement, it is possible that significant noise impacts would be experienced in the area after implementation of the selected SPAS alternative but before the mitigation measures are fully implemented. Thus, significant and unavoidable interim noise impacts would be experienced over an indeterminate period of time.

Further, no other operational noise abatement measures are available to fully mitigate the noise impacts of the LAWA Staff-Recommended Alternative.

Despite incorporation of mitigation, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: Implementation of LAX Master Plan Commitment N-1 and LAX Master Plan Mitigation Measures MM-N-4, MM-LU-1 and MM-LU-3 would reduce impacts. However, because they would take several years to fully implement, it is possible that significant noise impacts would be experienced in the area after implementation of the selected SPAS alternative but before the

mitigation measures are fully implemented. No additional mitigation measures are available to address this noise impact.

6) Construction Equipment Noise

Impact: A significant construction equipment noise impact would occur if the direct and indirect changes in the environment that may be caused by the LAWA Staff-Recommended Alternative would result in the following future condition:

- Construction activities lasting more than ten days in a three month period would exceed baseline ambient exterior noise levels by 5 dBA or more at a noise-sensitive use; or
- Construction activities would exceed the ambient exterior noise level by 5 dBA at a noise-sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday.

Description of Effects: As discussed in Sections 4.10.3 and 5.5.10.3 of the SPAS Draft EIR and Sections 2.3.10.3 and 2.4.10.3 of Part II of the SPAS Final EIR, the analysis of construction equipment noise impacts addresses impacts associated with the airfield/terminal improvements and the ground access improvements under the LAWA Staff-Recommended Alternative. The construction equipment noise impacts addressed below discuss various noise-sensitive receptors which are considered representative of other nearby noise-sensitive receptors, described in Section 4.10.3 of the SPAS Draft EIR, and the related LAWA Staff-Recommended Alternative proposed improvements that have a potential to create a significant impact, and to result in a cumulatively considerable contribution to cumulative construction noise impacts.

Airfield Improvements

Due to the distance from the proposed airfield improvements, the following sensitive receptors could experience a significant construction equipment noise impact from the LAWA Staff-Recommended Alternative:

- Saint Bernard High School
- Residential Uses Along Southern Edge of Westchester
- Park West Apartments Northwest on Lincoln Boulevard South of La Tijera Boulevard

Ground Transportation

Due to the distance from the proposed ground transportation system improvements, the following sensitive receptors could experience a significant construction equipment noise impact from the LAWA Staff-Recommended Alternative:

- Remaining Residences Within Belford
- Noise Sensitive Uses Within Manchester Square
- Animo Leadership Charter High School[10]

[10] At the publication time of the Notice of Preparation for the SPAS Draft EIR, October 2010 (i.e., the baseline year for the EIR impacts analysis), the Animo Leadership Charter High School was located at the northeast corner of Aviation Boulevard and Arbor Vitae Street, across from Manchester Square. This school, however, has subsequently moved to a new location in Lennox, approximately 2.5 miles from the current site (see http://www.dailybreeze.com/news/ci_21358340/animo-leadership-has-new-lennox-campus-and-new, accessed on December 10, 2012). In order to provide a consistent basis of comparison, the impacts discussion for the LAWA Staff-Recommended Alternative contained herein assumes the location of the Animo Leadership Charter High School to be at its former location at the northeast corner of Aviation Boulevard and Arbor Vitae Street, across from Manchester Square.

Construction Staging Area A

Due to the distance from Construction Staging Area A, the following sensitive receptors could experience a significant construction equipment noise impact from the LAWA Staff-Recommended Alternative:

- Saint Bernard High School
- Park West Apartments Northwest on Lincoln Boulevard South of La Tijera Boulevard

Construction Staging Area E

- Remaining Residences Within Belford

Construction Staging Area F

- Noise Sensitive Uses Within Manchester Square
- Animo Leadership Charter High School[11]

Cumulative Impacts

The geographic scope of analysis for cumulative construction equipment noise impacts generally encompasses the land uses immediately north, east, and south of the airport; specifically, the southern edges of Playa del Rey and Westchester, the northeastern edges of Inglewood and Lennox, and the northern edges of Del Aire and El Segundo. Such areas contain noise-sensitive uses that could be exposed to combined construction equipment noise from local development projects and from improvements proposed under the LAWA Staff-Recommended Alternative.

Based on the nature and location of local development projects and the improvements proposed under the LAWA Staff-Recommended Alternative, relative to the locations of noise-sensitive receptors nearby, the LAWA Staff-Recommended Alternative would have a cumulatively considerable contribution to significant construction equipment noise impacts at the following noise-sensitive receptors:

- Saint Bernard High School
- Residential uses along the southern edge of Westchester
- Park West Apartments
- Belford and Manchester Square, if residential uses are still present
- Animo Leadership Charter School[12]

LAX Master Plan Commitments ST-16, ST-18, and ST-22 and LAX Master Plan Mitigation Measures MM-N-7 through MM-N-10 would reduce construction equipment noise impacts. However, at this level of planning, it cannot be concluded that the construction equipment noise impacts described above would be fully mitigated; hence, the impacts above for the LAWA Staff-Recommended Alternative are considered at this time to be significant.

Findings: Based on substantial evidence in the administrative record, including Section 4.10.3 and 5.5.10.3 of the SPAS Draft EIR and Section 2.3.10.3 and 2.4.10.3 of Part II of the SPAS Final

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11 Ibid.

12 At the publication time of the Notice of Preparation for the SPAS Draft EIR, October 2010 (i.e., the baseline year for the EIR impacts analysis), the Animo Leadership Charter High School was located at the northeast corner of Aviation Boulevard and Arbor Vitae Street, across from Manchester Square. This school, however, has subsequently moved to a new location in Lennox, approximately 2.5 miles from the current site (see http://www.dailybreeze.com/news/ci_21358340/animo-leadership-has-new-lennox-campus-and-new, accessed on December 10, 2012). In order to provide a consistent basis of comparison, the impacts discussion for the LAWA Staff-Recommended Alternative contained herein assumes the location of the Animo Leadership Charter High School to be at its former location at the northeast corner of Aviation Boulevard and Arbor Vitae Street, across from Manchester Square.

EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant construction equipment noise impacts identified in the SPAS Final EIR. Specifically, LAX Master Plan Commitments ST-16, ST-18, and ST-22 and LAX Master Plan Mitigation Measures MM-N-7 through MM-N-10 would reduce construction equipment noise impacts. However, at this level of planning, it cannot be concluded that the construction equipment noise impacts described above would be fully mitigated; hence, the impacts above for the LAWA Staff-Recommended Alternative are considered at this time to be significant.

Despite incorporation of mitigation, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: Implementation of LAX Master Plan Commitments ST-16, ST-18, and ST-22 and LAX Master Plan Mitigation Measures MM-N-7 through MM-N-10 would reduce, but not eliminate, construction equipment noise impacts on sensitive receptors. No additional mitigation measures are available to address this noise impact.

7) Combined SPAS Aircraft, Road Traffic, Construction Traffic and Equipment, and Transit Noise Impacts

Impact: A cumulatively significant noise impact would occur if the combined SPAS aircraft, road traffic, construction traffic and equipment, and transit noise, in conjunction with noise from other projects nearby, would exceed the significance thresholds described above in the other subsections related to noise.

Description of Effects: As described in Section 5.5.10.5 of the SPAS Draft EIR, implementation of any of the SPAS alternatives would result in significant unavoidable aircraft noise exposure impacts to noise-sensitive uses, even with implementation of LAX Master Plan commitments and mitigation measures that would partially mitigate those impacts. As such, implementation of any of the SPAS alternatives would have a cumulatively considerable impact relative to combined noise levels.

Implementation of any of the SPAS alternatives is anticipated to occur between 2015 and 2025. It is likely that there would be some overlap in noise impacts from operation (including road traffic noise and transit noise) of SPAS improvements completed during that 11-year period and from ongoing construction. It would be speculative at this conceptual level of planning to estimate the timing, location, and combined noise levels of such overlapping activities. In general terms, however, it is likely that any overlap of operational noise and construction noise in Playa del Rey and the southern edge of Westchester west of Lincoln Boulevard would be primarily limited to the combination of aircraft noise and construction noise from north airfield improvements; no notable increases in SPAS-related traffic are expected to occur in that area. For residential areas along the southern edge of Westchester, east of Lincoln Boulevard, construction noise associated with north airfield improvements, including realignment of Lincoln Boulevard under the Staff-Recommended Alternative would potentially combine with increased aircraft noise and road traffic noise along Lincoln Boulevard and Sepulveda Boulevard. Relative to construction of the ground access improvements east of the CTA (i.e., the APM and ITF under the Staff-Recommended Alternative), potential combined construction, aircraft, and road traffic noise impacts to noise-sensitive receptors would generally be limited to residences, if any, remaining in Belford and Manchester Square, Animo Leadership Charter High School, and residential uses in Inglewood (although to a lesser degree than the other areas, based on distance from construction areas and the intervening I-405 Freeway). Such overlaps in operational noise and construction noise would potentially overlap and are therefore considered cumulatively considerable contributions to significant cumulative impacts at nearby noise-sensitive uses.

Findings: Based on substantial evidence in the administrative record, including Section 5.5.10.5 of the SPAS Draft EIR, the BOAC hereby finds that changes or alterations have been required in,

or incorporated into, the Project which avoid or substantially lessen the combined APAS aircraft, road traffic, construction traffic and equipment, and transit noise impacts associated with the proposed project. Specifically, LAX Master Plan Commitment N-1 and LAX Master Plan Mitigation Measures MM-LU-1, MM-LU-3, MM-LU-4, and MM-N-4 will reduce aircraft noise impacts, and LAX Master Plan Commitments ST-16, ST-18, and ST-22 and LAX Master Plan Mitigation Measures MM-N-7 through MM-N-10 will reduce construction equipment noise impacts.

Despite incorporation of mitigation, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: Implementation of the LAX Master Plan commitments and mitigation measures identified immediately above would reduce, but not eliminate, aircraft and construction noise impacts, which alone or in combination other SPAS-related noise impacts, such as roadway traffic noise and transit noise, would result in cumulatively considerable combined noise impacts on sensitive receptors. No additional mitigation measures are available to address this noise impact.

8) On-Airport Transportation: Curbsides, Intersections, and Roadways

Impact: An impact to signalized intersections and roadway links is considered to be significant if one of the following thresholds is met or exceeded:

- The LOS is C, its final V/C ratio is 0.701 to 0.800, and the project-related increase in V/C is 0.040 or greater, or
- The LOS is D, its final V/C ratio is 0.801 to 0.900, and the project-related increase in V/C is 0.020 or greater, or
- The LOS is E or F, its final V/C ratio is 0.901 or greater, and the project-related increase in V/C is 0.010 or greater.

Description of Effects: As discussed in Section 4.12.1.2 of the SPAS Draft EIR and Section 2.3.12.1 of Part II of the SPAS Final EIR, traffic-related impacts pertaining to SPAS alternatives, including the LAWA Staff-Recommended Alternative, were assessed by conducting the following comparisons: (1) the baseline (2009) conditions with addition of the SPAS alternative measured against baseline (2009) conditions without the alternative; and (2) future (2025) conditions with addition of the SPAS alternative measured against the future (2025) conditions without the alternative to calculate the SPAS alternatives' contribution to cumulative impacts. The thresholds described in Section 4.12.1.4 of the SPAS Draft EIR and reiterated above were used to determine the significance of impacts. The following presents the results of those comparisons for the LAWA Staff-Recommended Alternative.

Project Impacts

Curbside Impacts

As indicated in Table SRA-2.3.12.1-1 of Part II of the SPAS Final EIR, implementation of the LAWA Staff-Recommended Alternative would not result in significant impacts to the airport's arrivals or departures level curbsides.

CTA Intersection Impacts

As shown in Table SRA-2.3.12.1-2 of Part II of the SPAS Final EIR, implementation of the LAWA Staff-Recommended Alternative would not result in significant impacts to on-airport intersections.

CTA Roadway Link Impacts

As shown in Table SRA-2.3.12.1-3 of Part II of the SPAS Final EIR, implementation of the LAWA Staff-Recommended Alternative would not result in significant impacts to on-airport roadway links.

Cumulative Impacts

This comparison focuses upon the project's contribution to cumulative impacts by calculating the change in traffic for the Future (2025) With Alternative traffic conditions compared to the Future (2025) Without Alternative traffic conditions. This analysis addresses whether the change in future (2025) conditions with implementation of the LAWA Staff-Recommended Alternative would exceed the thresholds defined in Section 4.12.1.4 of the SPAS Draft EIR (i.e., whether the alternative's contributions would be cumulatively considerable). These cumulative scenarios were also compared against baseline conditions.

Curbside Impacts

As shown in Table SRA-2.3.12.1-4 of Part II of the SPAS Final EIR, implementation of the LAWA Staff-Recommended Alternative, in conjunction with other cumulative projects, would not result in a change to the volume to capacity levels at the airport's departures or arrivals level curbsides that exceeds the aforementioned thresholds, with the exception of the TBIT arrivals level inner curbsides. The cumulative impact at the TBIT inner curbside is considered to be significant, and the contribution of the LAWA Staff-Recommended Alternative would be cumulatively considerable. Mitigation Measure MM-ST (OA) (SPAS)-1, defined in Section 4.12.1.10.2 of the SPAS Draft EIR and Section 2.3.12.1.2 of Part II of the SPAS Final EIR is proposed to mitigate this impact to less than significant.

CTA Intersection Impacts

As shown in Table SRA-2.3.12.1-5 of Part II of the SPAS Final EIR, implementation of the LAWA Staff-Recommended Alternative, in conjunction with other cumulative projects, would not result in a change to the volume to capacity levels of on-airport intersections that exceeds the aforementioned thresholds, with the exception of the World Way South and Center Way intersection (Intersection #9) during the arrivals level peak hour. The cumulative impact to this intersection is considered to be significant, and the contribution of the LAWA Staff-Recommended Alternative to this cumulative impact would be cumulatively considerable. This impact is unavoidable as potential measures to mitigate this impact are infeasible, as described in detail within Section 4.12.1.10.2 of the SPAS Draft EIR. As explained therein, in order to mitigate the anticipated impacts, one additional through lane would be required on the eastbound approach to the intersection. In addition, the east leg of the intersection would need to be widened to allow for the additional eastbound through lane. The separation distance between the existing support columns for the departures level recirculation roadway is insufficient to allow for an additional eastbound through lane without demolishing and reconstructing the departures level recirculation roadway. If an additional lane were to be added to the airport's exit roadway, the bridge spanning Sepulveda Boulevard would also require widening to accommodate an additional lane so that an exclusive acceleration/deceleration lane for the ramps connecting to Sepulveda Boulevard can be maintained. Further, the addition of a fifth eastbound lane on the bridge spanning Sepulveda Boulevard would require, at a minimum, a partial reconstruction of the ramps to and from Sepulveda Boulevard to accommodate a reduced turning radius for each ramp. To implement this proposed mitigation measure, at least one of the two existing support columns for the departures level recirculation roadway would need to be relocated. This would require an extended closure of the departures level recirculation roadway for the demolition and reconstruction of the affected upper level span. This extended closure would impact upper level vehicles recirculating to either the departures level or vehicles such as commercial vehicles traveling to the arrivals level curbsides or exiting the CTA northbound on Sky Way. Based on existing physical constraints, the additional environmental impacts associated with demolition and reconstruction, implementation of improvements necessary to mitigate the impact at this intersection is not feasible.

CTA Roadway Link Impacts

As shown in Table SRA-2.3.12.1-6 of Part II of the SPAS Final EIR, implementation of the LAWA Staff-Recommended Alternative, in conjunction with other cumulative projects, would not result in a change to the volume to capacity levels of on-airport roadway links that exceeds the aforementioned thresholds, with the exception of Link "LF" on the arrivals level outer curbside adjacent to Terminal 1. The cumulative impact to this roadway link is considered to be significant and the contribution of the LAWA Staff-Recommended Alternative to this cumulative impact would be cumulatively considerable. Mitigation Measure MM-ST (OA) (SPAS)-2, defined in Section 4.12.1.10.2 of the SPAS Draft EIR and Section 2.3.12.1.2 of Part II of the SPAS Final EIR, is proposed to mitigate this impact to less than significant.

Findings: Based on substantial evidence in the administrative record, including Section 4.12.1 of the SPAS Draft EIR and Section 2.3.12.1 of Part II of the SPAS Final EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant on-airport transportation impacts to curbsides and roadway links resulting from implementation of LAWA Staff-Recommended Alternative. Specifically, SPAS Mitigation Measures MM-ST (OA) (SPAS)-1 and MM-ST (OA) (SPAS)-2 will be incorporated into the Project's design.

Despite incorporation of these measures, the BOAC hereby finds the impact to Intersection #9 will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: Potentially significant impacts to the inner curbside at the TBIT arrivals will be reduced to a level that is less than significant through implementation of MM-ST(OA)(SPAS)-1 by moving the taxi staging zone further downstream to the vacant area between TBIT and Terminal 4, thereby freeing-up more public curbside area on the inner curbside at the TBIT arrivals. Potentially significant impacts to Roadway Link "LF" will be reduced to a level that is less than significant through implementation of MM-ST(OA)(SPAS)-2, which will provide operational changes to commercial modes based on options such as changing hotel and rental car shuttle operations from their current dual loop operation to a single loop operation on the departures and arrivals level curbsides respectively, while the employee shuttle operation could be changed from its existing single level operation on the departures level to a dual loop operation. Such operational changes will reduce traffic volumes at, and impacts to, Roadway Link "LF." There are not, however, any feasible mitigation measures to further reduce the cumulative traffic impacts at the intersection of World Way South and Center Way (Intersection #9), based on the physical constraints around that intersection as described above.

9) On-Airport Transportation: Construction Traffic

Impact: A significant on-airport surface transportation impact would occur during construction if the direct and indirect changes in the environment by the LAWA Staff-Recommended Alternative would cause substantial congestion or substantial inconvenience to motorists on a regular or frequent basis.

Description of Effects: As discussed in Section 4.12.1 of the SPAS Draft EIR and Section 2.3.12.1 of the SPAS Final EIR, construction activities and related construction vehicle trips associated with the LAWA Staff-Recommended Alternative would impact on-airport traffic conditions including those related to existing curbside, intersection, and roadway link operations. At this programmatic level of planning and analysis, there are not yet any particular construction plans or construction schedules for the LAWA Staff-Recommended Alternative. It would be speculative at this time to estimate the numbers, locations, and timing of construction-related trips for the LAWA Staff-Recommended Alternative and quantify the on-airport transportation system impacts. In general terms, it is anticipated that construction-related traffic generated within the CTA, such as that associated with terminal modifications, realignment of Sky Way, construction of the west end of the APM segment within the CTA, would add to existing traffic volumes within the

CTA, which, in turn, could adversely affect curbside operations, intersection movements, and roadway link flows. To the extent that LAWA Staff-Recommended Alternative-related construction within the CTA requires temporary lane closures and detours, on-airport traffic conditions could be impacted. The above types of construction-related impacts to the on-airport surface transportation system could result in substantial congestion and substantial inconvenience to motorists on a regular or frequent basis.

Similar to projects currently under construction within the CTA, such as the replacement of the CUP, any LAWA Staff-Recommended Alternative-related project that affects the normal operation of ground transportation in the CTA would be required, pursuant to LAX Master Plan Commitment ST-18, to submit a Construction Traffic Management Plan (CTMP) for review and approval by LAWA staff prior to starting work. Depending on the extent and duration of construction, the CTMP may be in multiple phases. To maintain appropriate traffic flow at all times within the CTA, project construction may be limited by LAWA to certain hours of the day, days of the week, and/or times of year. CTMPs may include but not be limited to changeable message signs, arrow boards, temporary striping, detours, signal timing and phasing changes, pedestrian re-routing, temporary relocation of commercial curb zones and construction, and regulatory and wayfinding signs. In addition, LAWA would alert passengers of more extensive construction activity on its website and through other social media. Other LAX Master Plan commitments and mitigation measures described in Section 4.12.1.5 of the SPAS Draft EIR would also serve to avoid or reduce construction-related impacts to the on-airport transportation system. In the current absence of specific construction plans, schedules, and approaches for the LAWA Staff-Recommended Alternative, which would be determined during more detailed planning and design stages in the future, it is not possible to conclude whether the on-airport transportation system construction impacts would be fully mitigated by the aforementioned measures. As such, construction impacts to the on-airport transportation system are considered at this time to be significant.

Cumulative Impacts

Construction activities associated with past, present, and reasonably foreseeable future projects within the CTA, along with the improvements proposed under the LAWA Staff-Recommended Alternative, pose the potential for cumulative impacts to the on-airport transportation system.

Projects, in conjunction with the improvements associated with the LAWA Staff-Recommended Alternative, that pose the potential for cumulative on-airport transportation system impacts include the Bradley West Project, the Midfield Satellite Concourse new passenger processor, the North Terminals Improvements, the South Terminals Improvements, Miscellaneous Terminal Improvements, the Central Utility Plant Replacement Project, the "New Face" of the Central Terminal Area Improvements/Enhancements, Replacement of Elevators and Escalators, the CTA Second Level Roadway Expansion Joint and Deck Repairs, the LAX Sign District, and, depending upon the alternative selected, the Airport Metro Connector Project. To the extent that construction activities within the CTA overlap between these projects, both in terms of timing and location, significant impacts related to traffic congestion and delays within the CTA roadway system could occur. All of these projects would require the preparation of traffic control plans and implementation of other measures to reduce construction traffic impacts, as described in Section 4.12.1.5 of the SPAS Draft EIR. In the current absence of detailed construction plans for most of these projects, many of which are still in the conceptual stages of planning such as the LAWA Staff-Recommended Alternative, it is not possible to conclude that cumulative construction-related impacts to the on-airport surface transportation system would be reduced to a level that is less than significant with implementation of such measures. Therefore, cumulative impacts to the on-airport transportation system associated with construction would be significant. Based on the anticipated schedules for the above projects, implementation of the improvements associated with the LAWA Staff-Recommended Alternative would result in a cumulatively considerable contribution to those impacts.

Findings: Based on substantial evidence in the administrative record, including Section 4.12.1 of the SPAS Draft EIR and Section 2.3.12.1 of the SPAS Final EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant construction-related on-airport transportation impacts associated with the LAWA Staff-Recommended Alternative. Specifically, LAX Master Plan commitments and mitigation measures ST-2, ST-9, ST-18, ST-19, MM-ST-1, MM-ST-2, and MM-ST-3 will be incorporated into the Project's construction requirements.

Despite incorporation of these measures, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: Potential construction traffic impacts will be reduced through implementation of existing Master Plan commitments and mitigation measures ST-2, ST-9, ST-18, ST-19, MM-ST-1, MM-ST-2, and MM-ST-3, which include provisions to limit construction deliveries to non-peak hours and regulate lane closures, require construction management plans, restricts closures of existing roadways, require construction vehicles to use designated lanes, require additional signage when appropriate, and develop designated stops for labor buses. In the current absence of specific construction plans, schedules, and approaches for the LAWA Staff-Recommended Alternative, which would be determined during more detailed planning and design stages in the future, it is not possible to conclude whether the on-airport transportation system construction impacts would be fully mitigated by the aforementioned measures. The same is true relative to many of the other projects proposed in or near the CTA that, in conjunction with the LAWA Staff-Recommended Alternative, would contribute to cumulative construction traffic impacts.

10) Off-Airport Transportation: Intersections and CMP Facilities

Impact: Each study intersection was evaluated for potential significant traffic impacts using the significant traffic impact criteria utilized in the jurisdiction of the intersection. Intersections lying on the boundary of multiple jurisdictions were evaluated using the more conservative criteria. For CMP facilities, the guidelines set forth in the 2010 Congestion Management Program for Los Angeles provided the basis for determining significant impacts. A description of the significant impact criteria for each jurisdiction and for CMP facilities is presented in Section 4.12.2.4 of the Draft EIR.

Description of Effects: As discussed in Section 4.12.2 of the SPAS Draft EIR and Section 2.3.12.2 of Part II of the SPAS Final EIR, off-airport traffic-related impacts pertaining to operation of the LAWA Staff-Recommended Alternative were assessed in two ways; one by comparing Baseline (2010) With Alternative scenarios against Baseline (2010) Without Alternative scenarios, and the other by comparing the Future (2025) With Alternative scenarios against the Future (2025) Without Alternative scenarios which provides the cumulative analysis. The comparison of Future (2025) scenarios involves holding the airport-related trip generation at current levels and evaluates it against the LAWA Staff-Recommended Alternative with the airport at 2025 trip generation levels. This growth in trip generation is expected to occur with or without the SPAS and therefore yields a conservative analysis. The following summarizes the results of the analyses.

Baseline (2010) Impacts

Intersections

Table SRA-2.3.12.2-2 in Part II of the SPAS Final EIR delineates the intersection impacts of the LAWA Staff-Recommended Alternative by comparing the Baseline (2010) With Alternative scenario and the Baseline (2010) Without Alternative scenario. As indicated in Table SRA-2.3.12.2-2, five of the 200 intersections would be significantly impacted in one or more peak hours. This includes Intersections 9, 36, 71, 85, and 96.

CMP Facilities

Section 4.12 and Table 5 in Appendix K2-7 of the SPAS Draft EIR, and Section 2.3.12.2.1.1 in Part II of the SPAS Final EIR delineate the impacts of the LAWA Staff-Recommended Alternative to the 15 arterial monitoring stations by comparing the Baseline (2010) With Alternative scenario and the Baseline (2010) Without Alternative scenario. For this alternative, no CMP arterial monitoring stations would be significantly impacted.

Table 14 in Appendix K2-7 of the SPAS Draft EIR delineates the impacts of the LAWA Staff-Recommended Alternative to the 30 CMP freeway monitoring stations by comparing the Baseline (2010) With Alternative scenario and the Baseline (2010) Without Alternative scenario. As indicated in Table 14, no CMP freeway monitoring stations would be significantly impacted.

With regard to CMP transit analysis, transit demand is not expected to increase when comparing the Baseline (2010) With Alternative scenario and the Baseline (2010) Without Alternative scenario; therefore, no impact is identified.

Future (2025) Impacts

Intersections

Table SRA-2.3.12.2-4 in Part II of the SPAS Final EIR delineates the intersection impacts of the LAWA Staff-Recommended Alternative by comparing the Future (2025) With Alternative scenario and the Future (2025) Without Alternative scenario. As indicated in Table SRA-2.3.12.2-4, 58 of the 200 intersections would be significantly impacted in one or more peak hours. This includes Intersections 6, 7, 9, 10, 11, 12, 14, 17, 25, 26, 27, 34, 35, 36, 37, 38, 46, 51, 57, 58, 60, 62, 63, 64, 66, 71, 76, 77, 85, 86, 87, 88, 90, 93, 95, 96, 102, 109, 110, 115, 119, 125, 139, 143, 147, 149, 154, 156, 159, 162, 164, 165, 169, 172, 173, 188, 197.

CMP Facilities

Section 4.12 and Table 10 in Appendix K2-7 of the SPAS Draft EIR and Section 2.3.12.2.1.1 in Part II of the SPAS Final EIR delineate the impacts of the LAWA Staff-Recommended Alternative to the 14 arterial monitoring stations by comparing the Future (2025) With Alternative scenario and the Future (2025) Without Alternative scenario. For this alternative, the following CMP arterial monitoring station would be significantly impacted:

- 164. Manchester Avenue and Crenshaw Boulevard (CMP ID #24)

Section 4.12 and Table 18 in Appendix K2-7 of the SPAS Draft EIR and Section 2.3.12.2.1.1 in Part II of the SPAS Final EIR delineate the impacts of the LAWA Staff-Recommended Alternative to the 30 CMP freeway monitoring stations by comparing the Future (2025) With Alternative scenario and the Future (2025) Without Alternative scenario. As indicated in Table 18, the following three CMP freeway monitoring stations would be significantly impacted (without LAX Master Plan Commitment ST-24, Fair Share Contribution to CMP Improvements):

- Route 405, at postmile 0.40, north of Route 22
- Route 405, at postmile 8.02, Santa Fe Avenue
- Route 405, at postmile 11.90, south of Route 110

Table 4.12.2-6 of the SPAS Draft EIR shows the total incremental estimated transit demand due to airport-related growth under each alternative, including the LAWA Staff-Recommended Alternative,[13] and Table SRA-2.3.12.2-5 in Part II of the SPAS Final EIR indicates the resulting impact on the utilization of the major north/south and east/west CMP transit corridors in the LAX vicinity. As indicated in Table SRA-2.3.12.2-5, implementation of the LAWA Staff-Recommended

[13] The LAWA Staff-Recommended Alternative in Table 4.12.2-6 of the SPAS Draft EIR is designated as "Alternative 9."

Alternative would increase transit system utilization by approximately 1.23 percent in the a.m. peak hour and 1.32 percent in the p.m. peak hour, which would not represent a substantial increase in transit demand. At this level of increase, impacts to the regional transit system would be considered less than significant.

Mitigation Measures

Potential intersection improvements were identified and evaluated for all intersections identified in Table SRA-2.3.12.2-1 and Table SRA-2.3.12.2-3 as being significantly impacted. Such improvements include the addition of, or improvements to, travel lanes and turn lanes, traffic signal enhancements, and intersection restriping. Locations where additional right-of-way may be required are noted. The proposed and/or adopted pedestrian and bike plans[14] from the local jurisdictions in the SPAS off-airport transportation study area were evaluated to ensure the feasibility of the proposed mitigation measures such that these mitigation measures would not affect nor conflict with the proposed pedestrian or bike facilities as shown in the adopted plans. In some cases, it was determined that the improvements would not be feasible and that the impact would be significant and unavoidable. In other cases, it would be feasible to implement the mitigation under consideration. For all locations where jurisdiction is shared with agencies other than the City of Los Angeles, or which lie wholly outside of the City of Los Angeles, review and approval by the responsible agencies would be required. The discussion below presents both those improvements that were considered but determined to be infeasible, as well as those improvements that would be feasible and are thereby included in the recommended mitigation program for the LAWA Staff-Recommended Alternative, which is also presented below.

1. Identification and Evaluation of Mitigation Measures

The following discussion evaluates the feasibility of mitigation measures, for significant impacts identified above.

Baseline (2010) with Alternatives

Intersection Improvements

- **9. Airport Boulevard and Manchester Avenue.**

  The potential improvement that would fully mitigate the project impact at this location would be to restripe the eastbound approach to provide one left-turn lane, two through lanes, and a shared through/right-turn lane. Implementation of this improvement would entail removal of three parking spaces on the south side of Manchester Avenue west of Belford Avenue, and two parking spaces on the south side of Manchester Avenue east of Belford Avenue would need to be restricted during the p.m. peak period. However, the proposed restriping of the eastbound approach would conflict with the City of Los Angeles's vision for future bicycle lanes on this segment of Manchester Avenue, and therefore is considered infeasible. No other feasible improvements were identified. This impact would be significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **36. La Cienega Boulevard and Century Boulevard.**

  The potential improvements evaluated at this location for the LAWA Staff-Recommended Alternative involves modifying each of the alternatives' assumptions for lane configuration to the following: the northbound and southbound lane configurations from one left-turn lane, two

[14] The adopted and proposed bike plans in the SPAS off-airport transportation study area include the following documents: Draft Culver City Bicycle & Pedestrian Master Plan, October 2010, Available: http://ccwalkbike.org/documents/; City of Los Angeles, Department of City Planning, 2010 Bicycle Plan, adopted March 1, 2011, Available: http://cityplanning.lacity.org/cwd/gnlpln/transelt/NewBikePlan/Txt/LA%20CITY%20BICYCLE%20PLAN.pdf; County of Los Angeles Bicycle Master Plan, Final Plan, March 2012, Available: http://dpw.lacounty.gov/pdd/bikepath/bikeplan/; and South Bay Bicycle Coalition, South Bay Bicycle Master Plan, August 2011, Available: http://www.southbaybicyclecoalition.org/pass-the-plan-action-plan/south-bay-bicycle-master-plan-review-copy/.

through lanes, and two right-turn lanes to two left-turn lanes, two through lanes, one shared through/right-turn lane, and one right-turn lane; the eastbound lane configuration from one left-turn lane, three through lanes, and one right-turn lane to two left-turn lanes, three through lanes, and two right-turn lanes; and the westbound lane configuration from one left-turn lane, three through lanes, and one shared through/right-turn lane to two left-turn lanes, four through lanes, and two right-turn lanes with a westbound right-turn overlap phase.

The proposed physical improvements for the LAWA Staff-Recommended Alternative cannot be accommodated within the existing right-of-way. They would require removal of existing business (economic and policy infeasibility) and create additional environmental impacts associated with demolition and construction, such as noise, air quality, etc., and therefore are considered infeasible.

The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00008-35.

- **71. Sepulveda Boulevard and Imperial Highway.**

  Potential improvements evaluated at this location are to modify the traffic signal to include a northbound right-turn overlap phase and to restripe the northbound approach on Sepulveda Boulevard to provide one left-turn lane, three through lanes, and two right-turn lanes. Implementation of these improvements would fully mitigate the impact at this location under the LAWA Staff-Recommended Alternative.

- **85. La Brea Avenue and Manchester Boulevard.**

  The potential improvement evaluated at this location is to restripe the northbound approach to provide a separate right-turn lane, resulting in one left-turn lane, two through lanes, and one right-turn lane. This improvement would require removal of up to approximately six metered parking spaces. This improvement would fully mitigate the impact under the LAWA Staff-Recommended Alternative.

- **96. La Cienega Boulevard and Southbound I-405 Ramps (North of Century Boulevard).**

  The potential mitigation evaluated at this location under the LAWA Staff-Recommended Alternative involves widening the I-405 Freeway southbound off-ramp (the westbound approach) to provide one left-turn lane, one shared left-turn/through lane, one shared through/right-turn lane and widening the northbound approach to provide two left-turn lanes, one through lane, one shared through/right-turn lane, and one right-turn lane. The proposed physical improvements would not be sufficient to mitigate the identified impact under the LAWA Staff-Recommended Alternative. No other feasible improvement is available to fully mitigate the project impact under Baseline (2010) with the LAWA Staff-Recommended Alternative scenario.

Future (2025) with Alternatives

Intersection Improvements

- **6. Airport Boulevard and Arbor Vitae Street/Westchester Parkway.**

  The potential improvement for this location is to restripe the northbound approach and departure to provide a third through lane so that the resulting northbound lane configuration would be one left-turn lane, two through lanes, and one shared through/right-turn lane. Implementation of this improvement alone would partially mitigate the significant impact identified at this location under the LAWA Staff-Recommended Alternative.

To provide full mitigation for the LAWA Staff-Recommended Alternative impacts, the improvement evaluated is to reconfigure the northbound approach and departure to provide a third through lane, and widen the eastbound and westbound approaches to add a third through lane in each direction. The proposed improvements for the north approach could be accommodated within the existing right-of-way; however, widening of the east and west legs could not be accommodated within the existing right-of-way and would require removal of existing business (economic and policy infeasibility) and create additional environmental impacts associated with demolition and construction, such as noise, air quality, etc. The Westchester Community Plan, an element of the City's General Plan, includes policies to improve Airport Boulevard between La Tijera Boulevard and Century Boulevard to six through lanes and to improve Arbor Vitae Street between Airport Boulevard and Aviation Boulevard to six through lanes. Given the uncertainty of the implementation plan for the Westchester Community Plan, the widening of the eastbound and westbound approaches may not be feasible.

Therefore, the LAWA Staff-Recommended Alternative can only be partially mitigated with the proposed improvements for the northbound approach and departure (which is to provide a third through lane so that the resulting northbound lane configuration would be one left-turn lane, two through lanes, and one shared through/right-turn lane). No other feasible improvements are available to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **7. Airport Boulevard and Century Boulevard.**

  Potential improvements evaluated at this location are to reconfigure the traffic signal to add a southbound right-turn overlapping phase, and reconfigure the northbound approach to provide additional left-turn capacity. The resulting northbound approach would provide one left-turn lane, one shared through/left-turn lane, one through lane, and one right-turn lane. The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. The combined effect of the physical improvement and the employee vanpool program would only partially mitigate the identified impact. No other feasible improvements have been identified to fully mitigate the project impact at this location. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **9. Airport Boulevard and Manchester Avenue.**

  The potential improvements evaluated at this location are to restripe the eastbound and westbound approach to provide one left-turn lane, two through lanes, and a shared through/right-turn lane. These improvements would partially mitigate the identified impact under the LAWA Staff-Recommended Alternative.

  Implementation of this improvement would entail removal of three parking spaces on the south side of Manchester Avenue west of Belford Avenue, and two parking spaces on the south side of Manchester Avenue east of Belford Avenue would need to be restricted during the p.m. peak period. However, the proposed restriping of the eastbound approach would conflict with the City of Los Angeles's vision for future bicycle lanes on this segment of Manchester Avenue; therefore, this improvement is considered infeasible. No other feasible improvements were identified. This impact would be significant and unavoidable.

- **10. Arbor Vitae Street and Aviation Boulevard.**

  The mitigation measure at this location is to widen the eastbound approach to the intersection of Arbor Vitae Street and Aviation Boulevard to provide a separate right-turn lane, resulting in one left-turn lane, two through lanes and one right-turn lane. Implementation of this

improvement can be accomplished within the existing right of way and would fully mitigate the significant impacts under the LAWA Staff-Recommended Alternative.

- **11. Arbor Vitae Street and Inglewood Avenue.**

  The mitigation measure for this location under the LAX Master Plan is to restripe the southbound approach to provide a separate right-turn lane, which would require removal of two parking stalls on the west side of Inglewood Avenue north of Arbor Vitae Street. Implementation of this improvement would fully mitigate the significant impact identified at this location under the LAWA Staff-Recommended Alternative.

- **12. La Brea Avenue and Arbor Vitae Street.**

  The impact at this location could be mitigated through fair share contribution to the City of Inglewood's ITS improvement program. The contribution to the system would be equivalent to a 0.10 reduction in volume/capacity. This would fully mitigate the impacts under the LAWA Staff-Recommended Alternative.

- **14. Aviation Boulevard and Century Boulevard.**

  The potential improvement evaluated at this location is to widen the northbound, southbound, and westbound approaches, resulting in northbound two left-turn lanes, three through lanes, and one right-turn lane; southbound two left-turn lanes, two through lanes, and one shared through/right-turn lane; and westbound two left-turn lanes, four through lanes, and one right-turn lane. Implementation of these improvements would improve the intersection operations; however, they would only partially mitigate the significant impact at this location and the proposed physical improvement conflicts with the City of Los Angeles' vision for a planned bike lanes on Aviation Boulevard, which may result in policy infeasibility and impacts to alternative modes of transportation. Therefore, the proposed improvements are considered infeasible. The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. No other feasible improvements have been identified to fully mitigate the project impact. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **17. Aviation Boulevard/Florence Avenue and Manchester Avenue.**

  The potential improvement evaluated at this location involves restriping both the eastbound and westbound lane configurations from one left-turn lane, two through lanes, and one right-turn lane to one left-turn lane, two through lanes, and one shared through/right-turn lane. This improvement would require the elimination of parking on the south side of Manchester Boulevard east of Aviation Boulevard and on the north side of Manchester Boulevard west of Aviation Boulevard in order to provide appropriate merging distances. This improvement would fully mitigate the identified project impact under the LAWA Staff-Recommended Alternative.

- **25. La Brea Avenue and Centinela Avenue.**

  The potential improvement evaluated at this location is to restripe the northbound and southbound approaches to provide separate right-turn lanes. The resulting lane configuration would be northbound one left-turn lane, two through lanes, and one right-turn lane; and southbound one left-turn lane, two through lanes, and one right-turn lane. Implementation of this improvement would fully mitigate the identified project impact at this location.

- **26. La Cienega Boulevard and Centinela Avenue.**

  The potential improvement evaluated at this location is to modify the southbound approach to provide dual left-turn lanes. This improvement would require modification of the raised median on La Cienega Boulevard north of Centinela Avenue. The resulting configuration would be two left-turn lanes, two through lanes, and one shared through/right-turn lane.

Implementation of this improvement would fully mitigate the significant impact at this location under the LAWA Staff-Recommended Alternative.

- **27. La Tijera Boulevard and Centinela Avenue.**

  The addition of a second southbound left-turn lane would fully mitigate the project impact at this location. However, this improvement could not be accommodated within the existing right-of-way and would require narrowing of existing sidewalks on La Tijera Boulevard, which would result in policy infeasibility and impacts to alternative modes of transportation. No other feasible improvements have been identified to fully mitigate the project impact. Therefore, this impact would remain significant and unavoidable.

  It is noted that a recent study conducted for SCAG developed grade separation concept designs for the adjacent intersection of La Cienega Boulevard at Centinela Avenue, La Tijera Boulevard, and Fairview Boulevard. If this grade separation concept becomes feasible, LAWA can provide fair share contribution, subject to FAA approval, to this improvement to fully mitigate the project impact at the adjacent intersection of La Cienega Boulevard at Centinela Avenue. This would then reduce the project traffic passing through the intersection of La Tijera Boulevard and Centinela Avenue and reduce the project impact at this location. In addition, if permitted by the FAA, LAWA will also make a monetary contribution to upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction has been taken for this location.

- **34. La Brea Avenue/Hawthorne Boulevard and Century Boulevard.**

  To fully mitigate the project impact at this location under the LAWA Staff-Recommended Alternative would require the fair share contribution to Inglewood's ITS improvement program (the contribution to the system would be equivalent to a 0.10 reduction in volume/capacity), increased service levels of the airport employee TDM/Vanpool program, and physical roadway improvements such as additional through lanes on the northbound, southbound, eastbound, and westbound approaches. However, these physical improvements could not be accommodated within the existing right-of-way and would require removal of existing business on Hawthorne Boulevard and narrowing of existing sidewalks on Century Boulevard, which may result in impacts to alternative modes of transportation. Therefore, the physical improvements are considered infeasible. No feasible improvements have been identified to fully mitigate the project impact at this location under the LAWA Staff-Recommended Alternative. This impact could be partially mitigated through contribution to the ITS program and the TDM/Vanpool program at the airport. Therefore, the impact at this location would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **35. Inglewood Avenue and Century Boulevard.**

  The impact at this location could be mitigated through fair share contribution to the City of Inglewood's ITS improvement program. The contribution to the system would be equivalent to a 0.10 reduction in volume/capacity. This would fully mitigate the impacts under the LAWA Staff-Recommended Alternative.

- **36. La Cienega Boulevard and Century Boulevard.**

  The potential improvements evaluated at this location for the LAWA Staff-Recommended Alternative involves modifying the LAWA Staff-Recommended Alternative assumptions for lane configuration to the following: the northbound and southbound lane configurations from one left-turn lane, two through lanes, and two right-turn lanes to two left-turn lanes, two through lanes, one shared through/right-turn lane, and one right-turn lane; the eastbound lane configuration from one left-turn lane, three through lanes, and one right-turn lane to two left-turn lanes, three through lanes, and two right-turn lanes; and the westbound lane

configuration from one left-turn lane, three through lanes, and one shared through/right-turn lane to two left-turn lanes, four through lanes, and two right-turn lanes with a westbound right-turn overlap phase.

The physical improvements proposed above for the LAWA Staff-Recommended Alternative could not be accommodated within the existing right-of-way. They would require removal of existing business and therefore are considered infeasible.

The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. In addition, if permitted by the FAA, LAWA will also make a monetary contribution to upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction has been taken for this location. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, the impact at this location would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00008-35.

- **37. Prairie Avenue and Century Boulevard.**

  The impact at this location could be mitigated through fair share contribution to the City of Inglewood's ITS improvement program. The contribution to the system would be equivalent to a 0.10 reduction in volume/capacity. This would fully mitigate the impacts under the LAWA Staff-Recommended Alternative.

- **38. Sepulveda Boulevard and Century Boulevard.**

  The potential improvement evaluated at this location is to restripe the westbound approach to allow triple left turns from Century Boulevard westbound to southbound Sepulveda Boulevard. The westbound configuration would be two left turns, one shared left-turn/through/right-turn lane, and one right-turn lane. This would require removal of the raised median island on the westbound departure, which is considered physically feasible. Implementation of this physical improvement would fully mitigate the impacts for the LAWA Staff-Recommended Alternative.

- **46. Douglas Street and El Segundo Boulevard.**

  The potential improvements that would fully mitigate the project impact at this location would involve widening of the northbound approach to provide two left-turn lanes, two through lanes, and one shared through/right-turn lane; and widening of the eastbound approach to provide an additional eastbound through lane. Both improvements could not be accommodated within the existing right-of-way and would require removal of off-street surface parking spaces of existing businesses, and are therefore considered infeasible. Therefore, this impact would be significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **51. Hawthorne Boulevard and El Segundo Boulevard.**

  To fully mitigate the project impact at this location, the southbound configuration would need to provide one right-turn lane, four through lanes, and two left-turn lanes. However, this improvement is not feasible due to physical constraints such as removal of recently constructed streetscape improvements and on-street parking on the southbound departure. No feasible improvements have been identified. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **57. La Brea Avenue and Florence Avenue.**

  The potential improvement evaluated at this location is to restripe the northbound approach to provide a separate right-turn lane, resulting in one left-turn lane, two through lanes, and one right-turn lane. This improvement would fully mitigate the identified impact under the LAWA Staff-Recommended Alternative.

- **58. La Cienega Boulevard and Florence Avenue.**

  Potential improvements evaluated at this location are to modify the north/south split phasing to Protected-Variable and to restripe the southbound approach to provide two left-turn lanes, one through lane, and one shared through/right-turn lane. Implementation of these improvements would partially mitigate the identified project impact under the LAWA Staff-Recommended Alternative. To fully mitigate the intersection would require the following configuration: northbound one left-turn lane, three through lanes, and one right-turn lane; southbound two left-turn lanes, three through lanes, and two right-turn lanes; eastbound two left-turn lanes, one through lane, and one shared through/right-turn lane; and westbound two left-turn lanes, one through lane, and one shared through/right-turn lane. These improvements would require obtaining right-of-way from the adjoining freeway and would conflict with the planned Metro LAX/Crenshaw light rail line, resulting in policy infeasibility and impacts to alternative modes of transportation. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **60. Sepulveda Boulevard and Grand Avenue.**

  The mitigation measure for this location is to restripe the westbound approach to provide additional left-turn capacity by restriping a through lane to a shared through/left-turn lane. Minor changes to the lane assignment signage would also be necessary. The resulting westbound lane configuration would be two left-turn lanes, one shared through/left-turn lane, one through lane and one right-turn lane. This improvement would be a full mitigation for project impacts.

- **62. Hawthorne Boulevard and Imperial Avenue.**

  The potential improvement evaluated at this location is to restripe the southbound approach to provide a separate right-turn lane, resulting in one left-turn lane, three through lanes, and one right-turn lane. Implementation of this improvement would only partially mitigate the identified impact under the LAWA Staff-Recommended Alternative. To fully mitigate the impact at this location under the LAWA Staff-Recommended Alternative would require the provision of additional eastbound and westbound through lanes. This physical improvement could not be accommodated within the existing right-of-way and would require removal of existing businesses (economic and policy infeasibility) and create additional environmental impacts associated with demolition and construction, such as noise, air quality, etc., and therefore is considered infeasible. No other feasible improvements are available to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **63. Hawthorne Boulevard and Lennox Boulevard.**

  The potential improvement evaluated at this location is to restripe the southbound approach to provide an additional left-turn lane and one additional through lane, which would require removal of the raised center median on Hawthorne Boulevard. The resulting southbound configuration would be two left-turn lanes, three through lanes, and one shared through/right-turn lane. This improvement would fully mitigate the identified impact; however, it could not be accommodated within the existing right-of-way and would require removal of existing business on Hawthorne Boulevard (economic and policy infeasibility) and create additional environmental impacts associated with demolition and construction, such as noise, air quality, etc. Therefore, this improvement is considered infeasible. If permitted by the FAA, LAWA

will make a monetary contribution to upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction has been taken for this location. No other feasible improvements have been identified to fully mitigate the project impact. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00008-36.

- **64. Highland Avenue/Vista del Mar and Rosecrans Avenue.**

  The addition of a second westbound right-turn lane or a free westbound right-turn lane would fully mitigate the project impact at this location; however, it would require removal of off-street parking space and disrupt the existing business at the northeast corner of the intersection. Therefore, due to the existing right-of-way constraints on Highland Avenue, the proposed mitigation is infeasible. No other feasible improvements have been identified to fully mitigate the project impact. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **66. Inglewood Avenue and Imperial Highway.**

  The potential improvement evaluated at this location is to restripe the southbound approach to provide additional through capacity, resulting in one left-turn lane, one through lane, and one shared through/right-turn lane. This improvement would partially mitigate the identified impact under the LAWA Staff-Recommended Alternative. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **71. Sepulveda Boulevard and Imperial Highway.**

  Potential improvements evaluated at this location are to modify the traffic signal to include a northbound right-turn overlap phase, restripe the westbound approach to provide a second right-turn lane, and restripe the northbound approach on Sepulveda Boulevard to provide one left-turn lane, three through lanes, and two right-turn lanes. The improvement to the westbound approach can be accommodated within the existing right-of-way, but would require relocation of the existing bike lane to south of the dual right-turn lanes. Implementation of these improvements would fully mitigate the impact at this location under the LAWA Staff-Recommended Alternative.

- **76. Inglewood Avenue and Lennox Boulevard.**

  The addition of a second through lane on both the northbound and southbound approaches would fully mitigate the project impact at this location, however this widening of the northbound and southbound approaches would require narrowing of existing sidewalk on Inglewood Avenue, resulting in policy infeasibility and impacts to alternative modes of transportation. If permitted by the FAA, LAWA will make a monetary contribution to upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction can be taken for this location. No other feasible improvements have been identified. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00008-37.

- **77. Inglewood Avenue and Manchester Boulevard.**

  The addition of a third eastbound through lane would fully mitigate the project impact at this location; however, it would require removing of existing mature landscaped raised median and removal of off-street surface parking spaces on existing business properties, and

therefore is considered infeasible. No other feasible improvements have been identified to fully mitigate the project impact. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **85. La Brea Avenue and Manchester Boulevard.**

  The impact at this location could be mitigated through fair share contribution to the City of Inglewood's ITS improvement program. The contribution to the system would be equivalent to a 0.10 reduction in volume/capacity. This would fully mitigate the impacts under the LAWA Staff-Recommended Alternative.

- **86. La Brea Avenue/Overhill Avenue and Stocker Street.**

  The potential improvement evaluated at this location would modify the southbound approach to provide additional through capacity by converting the southbound free right-turn lane to a shared through/right-turn lane, resulting in two left-turn lanes, two through lanes, and one shared through/right-turn lane. Implementation of this improvement could be accomplished within the existing right-of-way, but would remove the raised island on the northwest corner of the intersection. Because this improvement would only partially mitigate the project impact in certain peak hours but would worsen conditions in others, it is not recommended. To fully mitigate the impact at this location would require the provision of a southbound through lane, which is not feasible within the existing right-of-way and would require narrowing sidewalks on La Brea Avenue, which would result in policy infeasibility and impacts to alternative modes of transportation. If permitted by the FAA, LAWA will make a monetary contribution to upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction has been taken for this location. No other feasible improvements have been identified to fully mitigate the project impact. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00008-38.

- **87. La Brea Avenue and Slauson Avenue.**

  The potential improvement evaluated at this location is to restripe the southbound approach to provide one left-turn lane, two through lanes, and one shared through/right-turn lane and to eliminate the existing southbound right-turn overlap phase. Implementation of this improvement would partially mitigate the project impact at this location. If permitted by the FAA, LAWA will also make a monetary contribution to upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction has been taken for this location. No other feasible improvements have been identified to fully mitigate the project impact. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **88. La Cienega Boulevard and La Tijera Boulevard.**

  Due to right-of-way and physical constraints at this intersection, no feasible improvements have been identified. It is noted that a recent study conducted for SCAG developed grade separation concept designs for La Cienega Boulevard at Centinela Avenue, La Tijera Boulevard, and Fairview Boulevard. Pending further study of these concepts to determine their feasibility, however, this impact would remain significant and unavoidable. If this grade separation concept becomes feasible, LAWA can provide fair share contribution, subject to FAA approval, to this improvement to fully mitigate the project impact at this location.

- **90. La Cienega Boulevard and Manchester Boulevard.**

  The improvement for this location included in the LAX Master Plan involves changing the north/south split phasing from split to protected and restriping La Cienega Boulevard from north of Florence Avenue to south of Olive Street in order to reconfigure the southbound

approach to provide two left-turn lanes, one through lane, and one shared through/right-turn lane. Implementation of this improvement would only partially mitigate the identified project impact under the LAWA Staff-Recommended Alternative. To fully mitigate the impact at this location for the LAWA Staff-Recommended Alternative would require the provision of a second eastbound left-turn lane, a second westbound left-turn lane, and an additional northbound through lane. These additional improvements would require removal of an existing retaining wall on the eastside of La Cienega Boulevard and would require widening of the Manchester Boulevard Bridge over the I-405 Freeway. These additional improvements would require further engineering study and Caltrans review and approval, and therefore may not be feasible. No feasible improvements have been identified to fully mitigate the project impact at the LAWA Staff-Recommended Alternative.

Although the partial mitigation of changing the north/south split phasing from split to protected and restriping the southbound approach to provide two left-turn lanes, one through lane, and one shared through/right-turn lane is physically feasible; therefore, the project impact at this location would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **93. La Cienega Boulevard and Stocker Street.**

  Due to right-of-way and physical constraints at this intersection, no feasible improvements have been identified. It is noted that a recent study conducted for SCAG developed a grade separation concept design for La Cienega Boulevard at Stocker Street. Pending further study of these concepts to determine their feasibility, however, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. If this grade separation concept becomes feasible, LAWA can provide fair share contribution to this improvement, subject to FAA approval, to fully mitigate the project impact at this location. If permitted by the FAA, LAWA will also make a monetary contribution to upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction can be taken for this location and the impact is considered to be significant and unavoidable. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00008-39.

- **95. La Cienega Boulevard and 120th Street.**

  The addition of a second southbound left-turn lane would fully mitigate the project impact at this location. However, this improvement could not be accommodated within the existing right-of-way, but would require removal of existing business on the east side La Cienega Boulevard (economic and policy infeasibility) and create additional environmental impacts associated with demolition and construction, such as noise, air quality, etc. Therefore, this improvement is considered infeasible. If permitted by the FAA, LAWA will make a monetary contribution to upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction can be taken for this location. No feasible improvements have been identified that would fully mitigate the identified impact. Therefore, this impact would remain significant and unavoidable. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00008-40.

- **96. La Cienega Boulevard and Southbound I-405 Ramps (north of Century Boulevard).**

  The potential improvement evaluated at this location involves widening of the I-405 Freeway southbound off-ramp (the westbound approach) to provide one left-turn lane, one shared left-turn/through lane, and one shared through/right-turn lane. This proposed improvement would only partially mitigate the impact under the LAWA Staff-Recommended Alternative. Full mitigation of the impacts under the LAWA Staff-Recommended Alternative would also require widening the northbound approach to provide two left-turn lanes, one through lane, one

shared through/right-turn lane, and one right-turn lane. The proposed physical improvements are considered feasible and would fully mitigate the project impacts at this location under Future (2025) with the LAWA Staff-Recommended Alternative scenario.

- **102. Northbound I-405 Ramps and La Tijera Boulevard.**

  A potential improvement that would fully mitigate the project impact at this location is the addition of a second eastbound left-turn lane from La Tijera Boulevard onto the I-405 northbound on-ramp and the widening of the westbound approach of La Tijera Boulevard from four to five through lanes plus a westbound right-turn lane. This improvement is identified as a potential improvement in the Coastal Corridor Specific Plan, but is subject to additional feasibility analysis and is not considered feasible at this time.

  The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-Recommended Alternative.

  If the widening of the La Tijera Boulevard Bridge becomes feasible, LAWA can provide fair share contribution to this improvement, subject to FAA approval, to fully mitigate the project impact at this location.

- **109. Lincoln Boulevard and Venice Boulevard.**

  The addition of one northbound through lane would fully mitigate the project impact at this location. However, this improvement could not be accommodated within the existing right-of-way and would require narrowing sidewalks on Lincoln Boulevard, which would result in policy infeasibility and impacts to alternative modes of transportation.

  The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **110. Lincoln Boulevard and Washington Boulevard.**

  The addition of a southbound through lane would fully mitigate the project impact at this location. However, adding a southbound through lane would require widening of the southbound approach and departure, which would require removal of existing business on the west side of Lincoln Boulevard (economic and policy infeasibility) and create additional environmental impacts associated with demolition and construction, such as noise, air quality, etc., and therefore is considered infeasible. The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00001-1.

- **115. Ash Avenue and Manchester Avenue.**

  The potential improvement evaluated at this location is to restripe the northbound approach to provide additional left-turn capacity, resulting in two left-turn lanes and one shared through/right-turn lane. Implementation of this improvement would partially mitigate the impact at this location under the LAWA Staff-Recommended Alternative. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-

Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **119. Ocean Avenue/Via Marina and Washington Boulevard.**

  The potential improvement for this location would be restriping the westbound approach to provide a separate right-turn lane. Because it would not fully mitigate the project impact and because it would entail removal of approximately six on-street parking spaces, this improvement is not considered feasible. To fully mitigate the project impact at this location would require the provision of additional eastbound and westbound through lanes.

  However, these improvements would require widening of the eastbound and westbound approaches and departures, which would require removal of existing business on Washington Boulevard (economic and policy infeasibility) and create additional environmental impacts associated with demolition and construction, such as noise, air quality, etc., and therefore are considered infeasible. If permitted by the FAA, LAWA will make a monetary contribution to upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction can be taken for this location. No feasible improvements have been identified to fully mitigate the project impact. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00008-41.

- **125. Sepulveda Boulevard and Rosecrans Avenue.**

  Addressing the significant impact at this location would require widening of the northbound approach to provide two left-turn lanes, five through lanes, and one right-turn lane. This physical improvement could not be accommodated within the existing right-of-way and would require removal of existing business (economic and policy infeasibility) on Sepulveda Boulevard and create additional environmental impacts associated with demolition and construction, such as noise, air quality, etc., and therefore is considered infeasible.

  The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00004-20.

- **139. Sepulveda Boulevard and I-105 Westbound Ramps (North of Imperial Avenue).**

  The addition of a fourth northbound through lane would fully mitigate the project impact at this location. However, the proposed improvement could not be accommodated within the existing right-of-way and would require relocation of existing supporting structures of the I-105 Freeway and modification to the I-105 westbound off-ramp at Sepulveda Boulevard, which would require further engineering study and may not be acceptable to Caltrans. In addition, the merge from four lanes to the existing three lanes in the Sepulveda Tunnel north of this intersection could not be achieved using Caltrans standards.

  The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **143. Vicksburg Avenue and 96th Street.**

  The potential improvement evaluated at this location is to widen the westbound approach to provide dual right-turn movements from Vicksburg Avenue to 96th Street Bridge, resulting in the following westbound configuration: one left-turn lane, one through lane, and two right-turn lanes. Implementation of this improvement would fully mitigate the project impact under the LAWA Staff-Recommended Alternative.

- **147. Crenshaw Boulevard and Century Boulevard.**

  The addition of a fourth southbound through lane would fully mitigate the project impact at this location. However, the proposed improvements could not be accommodated within the existing right-of-way and would require removal of existing business on the west side of Crenshaw Boulevard, which would result in economic and policy infeasibility, and therefore is considered infeasible. The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **149. Crenshaw Boulevard and Imperial Highway.**

  The addition of one through lane in both the eastbound and westbound directions would fully mitigate the project impact at this location. However, the proposed improvement could not be accommodated within existing right-of-way and would require removal of existing business on Imperial Highway, which would result in economic and policy infeasibility, and therefore is considered infeasible. No feasible improvements have been identified to fully mitigate the project impact. This impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **154. Overland Avenue and Sawtelle Boulevard.**

  This stop-controlled intersection meets the standard traffic signal warrants[15] recommended in the Federal Highway Administration Manual on Uniform Traffic Control Devices and associated State guidelines and the criteria for installation of a traffic signal under existing conditions. Installation of a signal would improve the traffic operations at this location and could fully mitigate the project impact. However, installation of a traffic signal at this location would be the responsibility of Culver City. No other feasible improvements have been identified to fully mitigate the project impact. Therefore, the impact at this location would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. If installation of the signal becomes feasible, LAWA would provide a fair share contribution, subject to FAA approval, to this improvement, which would fully mitigate the project impact at this location.

[15] This analysis is intended to examine the general correlation between the planned level of future development and the need to install new traffic signals. It estimates future development-generated traffic compared against a sub-set of the standard traffic signal warrants recommended in the Federal Highway Administration Manual on Uniform Traffic Control Devices and associated State guidelines. This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than forecast, traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The responsible local agency should undertake regular monitoring of actual traffic conditions and accident data, and timely re-evaluation of the full set of warrants in order to prioritize and program intersections for signalization.

- **156. Walgrove Avenue and Washington Boulevard.**

  This stop-controlled intersection meets the standard traffic signal warrants[16] recommended in the Federal Highway Administration Manual on Uniform Traffic Control Devices and associated State guidelines and the criteria for installation of a traffic signal under existing conditions. Installation of a signal would improve the traffic operations at this location and could fully mitigate the project impact. However, installation of a traffic signal at this location would be the responsibility of Culver City and, given the close proximity to upstream/downstream signals, may not be acceptable to Culver City. No other feasible improvements have been identified to fully mitigate the project impact. Therefore, the impact at this location would be significant and unavoidable under the LAWA Staff-Recommended Alternative. If installation of a signal becomes feasible at this location, LAWA would provide a fair share contribution, subject to FAA approval, to this improvement, which would fully mitigate the project impact at this location.

- **159. Hindry Avenue and Manchester Boulevard.**

  The potential improvement evaluated at this location is to reconfigure the eastbound approach to provide a separate right-turn lane, resulting in one left-turn lane, two through lanes, and one right-turn lane. Implementation of this improvement would require removal of approximately seven metered parking spaces. This improvement would fully mitigate the project impact under Alternative 4 and partially mitigate the project impact under the LAWA Staff-Recommended Alternative. No feasible improvements have been identified to fully mitigate the project impact for the LAWA Staff-Recommended Alternative. Therefore, the impact at this location would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **162. Sepulveda Boulevard and Manhattan Beach Boulevard.**

  The addition of a second northbound left-turn lane would fully mitigate the project impact at this location. Implementation of this improvement would require removal of the raised median on Sepulveda Boulevard and would require narrowing of existing sidewalk on the east side of Sepulveda Boulevard, which would result in policy infeasibility and impacts to alternative modes of transportation. Therefore, this improvement is considered infeasible due to right-of-way and physical constraints. The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, it would only partially mitigate the significant impact at this location. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **164. Manchester Avenue and Crenshaw Boulevard.**

  The addition of one through lane in the eastbound and westbound directions would fully mitigate the project impact at this location. Implementation of this improvement would require additional right-of-way and would require removal of the raised median and on-street parking on Manchester Boulevard, and therefore is considered infeasible. No other feasible improvements have been identified to fully mitigate the impact at this location. Therefore, this

[16] This analysis is intended to examine the general correlation between the planned level of future development and the need to install new traffic signals. It estimates future development-generated traffic compared against a sub-set of the standard traffic signal warrants recommended in the Federal Highway Administration Manual on Uniform Traffic Control Devices and associated State guidelines. This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than forecast, traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The responsible local agency should undertake regular monitoring of actual traffic conditions and accident data, and timely re-evaluation of the full set of warrants in order to prioritize and program intersections for signalization.

impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **165. La Cienega Boulevard and Rodeo Road.**

  The project impact at this location would be fully mitigated with the addition of a separate southbound right-turn lane to serve the channelized free right-turn lane that exists at the intersection. Extending the southbound right-turn lane would require additional right-of-way and would significantly disrupt the existing business on the northwest corner of the intersection, which would result in economic and policy infeasibility; and is therefore determined to be infeasible. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

  In addition, it is noted that a recent study conducted for SCAG developed a grade separation concept designs for La Cienega Boulevard at Rodeo Road. Pending further study of this concept to determine its feasibility, this impact, however, would remain significant and unavoidable. If this grade separation concept becomes feasible, LAWA can provide fair share contribution, subject to FAA approval, to this improvement to fully mitigate the project impact at this location.

- **169. Prairie Avenue and Manchester Boulevard.**

  The potential improvement evaluated at this location is to reconfigure the eastbound approach to provide dual left-turn lanes. This improvement would require removing the raised center median and restriping the westbound departure lanes northward in the existing right-of-way. The resulting eastbound approach would provide two left-turn lanes, two through lanes, and one shared through/right-turn lane. This improvement would only partially mitigate the project impact under the LAWA Staff-Recommended Alternative. No other feasible improvements have been identified to fully mitigate the project impacts under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **172. Western Avenue and Manchester Avenue.**

  The project impact at this location would be fully mitigated with the addition of westbound dual left-turn lanes. However, this improvement would require additional right-of-way acquisition from private properties on the west side of Western Avenue and would significantly disrupt those existing business due to loss of off-street parking spaces, which would result in economic and policy infeasibility; and is therefore determined to be infeasible. No feasible improvements are available to fully mitigate the project impact. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **173. Western Avenue and Imperial Highway.**

  The addition of a separate eastbound right-turn lane would fully mitigate the project impact at this location. However, this improvement would require additional right-of-way acquisition from private property on the southwest corner of this intersection, and would significantly disrupt that existing business due to loss of off-street parking spaces, which would result in economic and policy infeasibility. Therefore, this improvement is determined to be infeasible. If permitted by the FAA, LAWA will make a monetary contribution to upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction can be taken for this location. No feasible improvements are available to fully mitigate the project impact. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative. Additional details regarding infeasibility are provided in Part II of the SPAS Final EIR, Response to Comment SPAS-AL00008-42.

- **188. Prairie Avenue and El Segundo Boulevard.**

  The project impact at this location would be fully mitigated with the addition of separate eastbound and westbound right-turn lanes. However, these improvements would require additional right-of-way acquisition from the private property on the southwest corner of this intersection and public space from Hawthorne Memorial Park, which would result in economic and policy infeasibility. No other feasible improvements have been identified to fully mitigate the project impact at this location. Therefore, this impact would remain significant and unavoidable under the LAWA Staff-Recommended Alternative.

- **197. Prairie Avenue and Lennox Boulevard.**

  The potential improvement evaluated at this location is to restripe the eastbound approach to provide one left-turn lane, one shared through/left-turn lane, and one right-turn lane. This improvement would only partially mitigate the project impact under the LAWA Staff-Recommended Alternative. No other feasible improvements have been identified to fully mitigate the project impact under the LAWA Staff-Recommended Alternative. Therefore, this impact would remain significant and unavoidable for the LAWA Staff-Recommended Alternative.

Freeway Segment Improvements

No feasible improvements have been identified for the three freeway segments that could be significantly impacted under the LAWA Staff-Recommended Alternative:

- Route 405, at postmile 0.40, north of Route 22
- Route 405, at postmile 8.02, Santa Fe Avenue
- Route 405, at postmile 11.90, south of Route 110

To fully mitigate the project impact at these locations would require the construction of an additional northbound travel lane at each location and an additional southbound travel lane on I-405 south of Route 110. Due to right-of-way and physical constraints, such as existing bridge structures and auxiliary lane and ramp configurations, the addition of travel lanes at these locations is not feasible. Therefore, impacts would remain significant and unavoidable.

Recommended Mitigation Program

Based on the information provided above, the following mitigation measures are proposed to address off-airport transportation impacts to intersections and CMP facilities that may result from the LAWA Staff-Recommended Alternative:

Intersection Mitigation Measures

- **MM-ST (SPAS)-1. Transportation Demand Management Program.**

  To reduce the impacts associated with the LAWA Staff-Recommended Alternative, LAWA will provide additional vanpool services to airport employees. This would reduce vehicular trips on the major roadways that provide direct access to and from the airport facilities (e.g., Sepulveda Boulevard, Lincoln Boulevard, Century Boulevard, La Tijera Boulevard, Aviation Boulevard, and La Cienega Boulevard). The upgrades to the existing vanpool program would entail providing sufficient vehicles to accommodate up to 500 employees that would shift from driving to the airport to the program.

  The increased vanpool service will result in removal of approximately 740 daily vehicular trips to and from the airport parking facilities on a typical weekday. The net effect of this program would result in partial mitigation of project impacts at multiple locations associated with the LAWA Staff-Recommended Alternative.

- **MM-ST (SPAS)-2. Modify the Intersection of Airport Boulevard and Arbor Vitae Street/ Westchester Parkway (Intersection 6).**

  The mitigation measure for this location is to restripe the northbound approach and departure to provide a third through lane so that the resulting northbound lane configuration would be one left-turn lane, two through lanes, and one shared through/right-turn lane. This would be a partial mitigation for the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-3. Modify the Intersection of Airport Boulevard and Century Boulevard (Intersection 7).**

  The mitigation measure for this location is to reconfigure the traffic signal to add a southbound right-turn overlapping phase, and reconfigure the northbound approach to provide additional left-turn capacity. The resulting northbound approach would provide one left-turn lane, one shared through/left-turn lane, one through lane, and one right-turn lane. The impact at this location could be reduced through increased service levels of the airport employee TDM/Vanpool program. This program would improve intersection operations; however, the combined effect of the physical improvement and the employee vanpool program would partially mitigate the identified impact under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-4. Modify the Intersection of Arbor Vitae Street and Inglewood Avenue (Intersection 11).**

  The mitigation measure for this location is to restripe the southbound approach to provide a separate right-turn lane. This improvement would be a full mitigation for the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-5. La Brea Avenue and Arbor Vitae Street (Intersection 12).**

  The mitigation involves Fair share contribution to the City of Inglewood's ITS improvement program for this intersection. Implementation of the ITS improvement would be full mitigation for the project impact under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-8. Modify the Intersection of Aviation Boulevard/Florence Avenue and Manchester Avenue (Intersection 17).**

  The mitigation measure for this location is to restripe both the eastbound and westbound lane configurations from one left-turn lane, two through lanes, and one right-turn lane to one left-turn lane, two through lanes, and one shared through/right-turn lane. This would be a full mitigation for the project impacts under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-9. Modify the Intersection of La Brea Avenue and Centinela Avenue (Intersection 25).**

  The mitigation measure for this location is to restripe the northbound and southbound approaches to provide separate right-turn lanes. The resulting lane configuration would be northbound one left-turn lane, two through lanes, and one right-turn lane; and southbound one left-turn lane, two through lanes, and one right-turn lane. This would be a full mitigation for the project impacts under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-10. Modify the Intersection of La Cienega Boulevard and Centinela Avenue (Intersection 26).**

  The mitigation measure for this location is to modify the southbound approach to provide dual left-turn lanes. This improvement would require modification to the raised median on La Cienega Boulevard north of Centinela Avenue. The resulting configuration would be two left-turn lanes, two through lanes, and one shared through/right-turn lane. This improvement

would be a full mitigation for project impacts identified at this location under the Future (2025) With the LAWA Staff-Recommended Alternative scenario. This would also be the mitigation for this impacted CMP arterial intersection.

- **MM-ST (SPAS)-12. La Brea Avenue/Hawthorne Boulevard and Century Boulevard (Intersection 34).**

  The mitigation involves fair share contribution to the City of Inglewood's ITS improvement program for this intersection. Implementation of the ITS improvement would be partial mitigation for the project impact under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-13. Inglewood Avenue and Century Boulevard (Intersection 35).**

  The mitigation involves fair share contribution to the City of Inglewood's ITS improvement program for this intersection. Implementation of the ITS improvement would be provide full mitigation for the project impact under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-14. Prairie Avenue and Century Boulevard (Intersection 37).**

  The mitigation involves fair share contribution to the City of Inglewood's ITS improvement program for this intersection. Implementation of the ITS improvement would provide full mitigation for the project impact under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-15. Modify the Intersection of Sepulveda Boulevard and Century Boulevard (Intersection 38).**

  The mitigation measure for this location is to restripe the westbound approach to provide two left-turn lanes, one shared left-turn/through/right-turn lane, and one right-turn lane. This improvement would be a full mitigation for the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-17. Modify the Intersection of La Brea Avenue and Florence Avenue (Intersection 57).**

  The mitigation measure for this location is to restripe the northbound approach to provide a separate right-turn lane, resulting in one left-turn lane, two through lanes, and one right-turn lane. This improvement would be a full mitigation for project impacts identified at this location under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-18. Modify the Intersection of La Cienega Boulevard and Florence Avenue (Intersection 58).**

  The mitigation measure for this location is to modify the north/south split phasing to Protected-Variable and restripe the southbound approach to provide two left-turn lanes, one through lane, and one shared through/right-turn lane. This improvement would be a partial mitigation for the project impacts under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-19. Modify the Intersection of Sepulveda Boulevard and Grand Avenue (Intersection 60).**

  The mitigation measure for this location is to restripe the westbound approach to provide additional left-turn capacity by restriping a through lane to a shared through/left-turn lane. Minor changes to the lane assignment signage would also be necessary. The resulting westbound lane configuration would be two left-turn lanes, one shared through/left-turn lane, one through lane and one right-turn lane. This improvement would be a full mitigation for project impacts under the Future (2025) With Alternatives 1-2, 8, and 9 scenarios.

- **MM-ST (SPAS)-20. Modify the Intersection of Hawthorne Boulevard and Imperial Avenue (Intersection 62).**

  The mitigation measure for this location is to restripe the southbound approach to provide a separate right-turn lane, resulting in one left-turn lane, three through lanes, and one right-turn lane. This improvement would be a partial mitigation for project impacts under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-21. Modify the Intersection of Inglewood Avenue and Imperial Highway (Intersection 66).**

  The mitigation measure for this location is to restripe the southbound approach to provide additional through capacity, resulting in one left-turn lane, one through lane, and one shared through/right-turn lane. This improvement would be a partial mitigation for impacts under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-23. Modify the Intersection of Sepulveda Boulevard and Imperial Highway (Intersection 71).**

  The mitigation measure for this location is to modify the traffic signal to include a northbound right-turn overlap phase, restripe the westbound approach to provide a second right-turn lane, and restripe the northbound approach on Sepulveda Boulevard to provide one left-turn lane, three through lanes, and two right-turn lanes. These would be a full mitigation for the project impacts under the Baseline (2010) with the LAWA Staff-Recommended Alternative scenario and also those impacts under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-25. Modify the Intersection of La Brea Avenue and Manchester Boulevard (Intersection 85).**

  The mitigation involves fair share contribution to the City of Inglewood's ITS improvement program for this intersection. Implementation of the ITS improvement would provide full mitigation for the project impact found Baseline (2010) With the LAWA Staff-Recommended Alternative and under the Future (2025) With the LAWA Staff-Recommended Alternative.

- **MM-ST (SPAS)-26. Modify the Intersection of La Brea Avenue and Slauson Avenue (Intersection 87).**

  The mitigation measure for this location is to restripe the southbound approach to provide one left-turn lane, two through lanes, and one shared through/right-turn lane and to eliminate the existing southbound right-turn overlap phase. This would be a partial mitigation for the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-27. Modify the Intersection of La Cienega Boulevard and Manchester Boulevard (Intersection 90).**

  The mitigation measure for this location is to change the north/south split phasing from split to protected and restripe La Cienega Boulevard from north of Florence Avenue to south of Olive Street in order to reconfigure the southbound approach to provide two left-turn lanes, one through lane, and one shared through/right-turn lane. This would be a partial mitigation for project impacts under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-28. Modify the intersection of La Cienega Boulevard and Southbound I-405 Ramps (north of Century Boulevard) (Intersection 96).**

  The mitigation measure for this location is to widen the I-405 Freeway southbound off-ramp (the westbound approach) to provide one left-turn lane, one shared left-turn/through lane, and one shared through/right-turn lane.

Full mitigation of the impacts under Future (2025) with the LAWA Staff-Recommended Alternative would also require widening the northbound approach to provide two left-turn lanes, one through lane, one shared through/right-turn lane, and one right-turn lane.

- **MM-ST (SPAS)-31. Modify the Intersection of Ash Avenue and Manchester Avenue (Intersection 115).**

  The mitigation measure for this location is to restripe the northbound approach to provide additional left-turn capacity, resulting in two left-turn lanes and one shared through/right-turn lane. This would be a partial mitigation for the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-32. Vicksburg Avenue and 96th Street (Intersection 143).**

  The mitigation measure for this location is to widen the westbound approach to provide dual right-turn movements from Vicksburg Avenue to 96th Street Bridge, resulting in the following westbound configuration: one left-turn lane, one through lane, and two right-turn lanes. This would be a full mitigation for the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-34. Modify the Intersection of Hindry Avenue and Manchester Boulevard (Intersection 159).**

  The mitigation measure for this location is to reconfigure the eastbound approach to provide a separate right-turn lane, resulting in one left-turn lane, two through lanes, and one right-turn lane. This would partially mitigate the impacts under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-35. Modify the Intersection of Prairie Avenue and Manchester Boulevard (Intersection 169).**

  The mitigation measure for this location is to reconfigure the eastbound approach to provide dual left-turn lanes. This improvement would require removing the raised center median and restriping the westbound departure lanes northward in the existing right-of-way. The resulting eastbound approach would provide two left-turn lanes, two through lanes, and one shared through/right-turn lane. This would partially mitigate the impacts under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-36. Modify the Intersection of Prairie Avenue and Lennox Boulevard (Intersection 197).**

  The mitigation measure for this location is to restripe the eastbound approach to provide one left-turn lane, one shared through/left-turn lane, and one right-turn lane. This improvement would partially mitigate the project impact under the Future (2025) With the LAWA Staff-Recommended Alternative scenario.

- **MM-ST (SPAS)-37. Modify the Intersection of Arbor Vitae Street and Aviation Boulevard (Intersection 10).**

  The mitigation measure for this location is to widen the eastbound approach to provide a separate right-turn lane, resulting in one left-turn lane, two through lanes, and one right-turn lane. This improvement would fully mitigate the project impact under the Future (2025) With the LAWA Staff-Recommended Alternative.

- **MM-ST (SPAS)-38. Modify the Intersection of La Tijera Boulevard and Centinela Avenue (Intersection 27).**

  The mitigation measure for this location is to provide a fair share contribution to the improvement of this intersection as part of a grade separation project that would also affect the adjacent section of La Cienega Boulevard, subject to FAA approval and should the grade separation project be found to be feasible and implementation pursued by the affected local agencies. In addition, if permitted by the FAA, LAWA will make a monetary contribution to

upgrading the County's ITS system at this intersection to partially mitigate the alternative's contribution to the cumulative impacts. Because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction has been taken for this location. Because the grade separation project is in the early design and conceptual planning stages, however, it is not fully defined nor adopted at this time and the impact at this location would remain significant and unavoidable.

- **MM-ST (SPAS)-40. Fair Share Contribution to a Traffic Signal at the Intersection of Overland Avenue and Sawtelle Boulevard (Intersection 154).**

  The mitigation measure for this location is to provide a fair share contribution to the installation of a traffic signal, subject to FAA approval and should it be implemented by the City of Culver City. Because it is uncertain that it will be implemented, however, the impact at this location would remain significant and unavoidable.

- **MM-ST (SPAS)-41. Fair Share Contribution to a Traffic Signal at the Intersection of Walgrove Avenue and Washington Boulevard (Intersection 156).**

  The mitigation measure for this location is to provide a fair share contribution to the installation of a traffic signal, subject to FAA approval and should it be implemented by the City of Culver City. Because it is uncertain that it will be implemented, however, the impact at this location would remain significant and unavoidable.

- **MM-ST (SPAS)-42. Contribute to ITS (Intelligent Transportation Systems) Improvements at 11 Study Intersections within the Jurisdiction of Los Angeles County (Intersections 27, 36, 52, 63, 76, 86, 87, 93, 95, 119, and 173.**

  Los Angeles County Department of Public Works staff determined that improvements to the County's intelligent transportation systems (ITS) equipment would improve traffic operations where no feasible physical mitigation measures have been identified. As partial mitigation for the identified cumulative impacts, LAWA will make a monetary contribution to upgrading the County's ITS system at these intersections, if permitted by the FAA. Because the contribution to Los Angeles County is conditional pending approval by FAA and because the County does not have a method to quantify the benefits of this improvement, no quantitative V/C reduction has been taken for this location and these impacts would remain significant and unavoidable.

As described, several types of improvements to the off-airport transportation system are recommended to mitigate the impacts associated with the LAWA Staff-Recommended Alternative. Such improvements include the addition of, or improvements to, travel and turn lanes, and traffic signal phasing modifications, fair share contribution to improve the computer-controlled traffic signal control systems in the City of Inglewood, and provision of additional vanpool services to LAWA, airport and cargo employees to and from the airport.

The potential environmental impacts associated with the proposed improvements to the off-airport transportation system would depend on the specific nature, location, and extent of such improvements. For example, the addition or improvement of travel and/or turn lanes that is accomplished by restriping of lanes within existing roadway segments would, in general, have a low potential for significant environmental effects other than improvement in traffic flows. The addition of lanes accomplished by the removal or modification of existing raised medians would have some level of environmental impacts such as construction-related noise, air quality impacts, temporary lane closures, and visual impacts if the removed median is currently landscaped. The addition of lanes accomplished with elimination of on-street parking could impact nearby off-street parking areas and/or remaining on-street parking areas to the extent that the affected parking redistributes to such areas. The addition of lanes accomplished by the physical widening of roadway segments could result in the types of potential environmental impacts described above relative to the removal or modification of raised medians, and could also result in the reduction of

the widths of sidewalks or parkways, possibly impacting trees, utilities, or other existing improvements, if any, located within the needed rights-of-way.

Findings: Based on substantial evidence in the administrative record, including Section 2.3.12.2 of Part II of the SPAS Final EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant off-airport traffic impacts related to intersections and CMP facilities that may result from the proposed project. Specifically, LAX SPAS Project-specific Mitigation Measures MM-ST (SPAS)-1 through MM-ST (SPAS)-5, MM-ST (SPAS)-8 through MM-ST (SPAS)-10, MM-ST (SPAS)-12 through MM-ST (SPAS)-15, MM-ST (SPAS)-17 through MM-ST (SPAS)-21, MM-ST (SPAS)-23, MM-ST (SPAS)-25 through MM-ST (SPAS)-28, MM-ST (SPAS)-31 through MM-ST (SPAS)-32, MM-ST (SPAS)-34 through MM-ST (SPAS)-38, and MM-ST (SPAS)-40 through MM-ST (SPAS)-42 will be incorporated into the Project's design.

There would be significant impacts to some CMP arterial monitoring intersections and freeway monitoring stations under the LAWA Staff-Recommended Alternative. Physical mitigation is available for Intersection 26 (La Cienega Boulevard and Centinela Avenue) as described above in MM-ST (SPAS)-10. No additional measures are feasible and available to address the impacts to other impacted arterial and freeway facilities.

Despite incorporation of these measures, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible. Specifically, the intersections with significant and unavoidable impacts include Intersections 6, 7, 9, 14, 27, 34, 36, 46, 51, 58, 62, 63, 64, 66, 76, 77, 86, 87, 88, 90, 93, 95, 102, 109, 110, 115, 119, 125, 139, 147, 149, 154, 156, 159, 162, 164, 165, 169, 172, 173, 188, and 197.

Additionally, BOAC hereby finds that several of the intersections identified above where feasible mitigation measures are recommended are located outside the jurisdiction of the City of Los Angeles, and such improvements are within the responsibility and jurisdiction of another public agency other than the City of Los Angeles. Section 15091(a)(2) of the State CEQA Guidelines indicates that where this condition occurs relative to recommended mitigation measures:

"Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency."

Relative to the recommended mitigation program presented above, the following list delineates those intersections, and corresponding SPAS Mitigation Measure numbers, that are wholly or partially outside the jurisdiction of the City of Los Angeles and within the responsibility and jurisdiction of another public agency:

Int #	Intersection	Jurisdiction	Mit. Meas. #
11	Inglewood Avenue & Arbor Vitae Street	Inglewood	MM-ST (SPAS)-4
12	La Brea Avenue & Arbor Vitae Street	Inglewood	MM-ST (SPAS)-5
17	Aviation Boulevard/Florence Avenue & Manchester Avenue	Caltrans/Inglewood	MM-ST (SPAS)-8
25	La Brea Avenue & Centinela Avenue	Inglewood	MM-ST (SPAS)-9
26	La Cienega Boulevard & Centinela Avenue	Inglewood/City of LA	MM-ST (SPAS)-10
34	La Brea Avenue/Hawthorne Boulevard & Century Boulevard	Inglewood	MM-ST (SPAS)-12
35	Inglewood Avenue & Century Boulevard	Inglewood	MM-ST (SPAS)-13
37	Prairie Avenue & Century Boulevard	Inglewood	MM-ST (SPAS)-14

Int #	Intersection	Jurisdiction	Mit. Meas. #
38	Sepulveda Boulevard & Century Boulevard	Caltrans/City of LA	MM-ST (SPAS)-15
57	La Brea Avenue & Florence Avenue	Inglewood	MM-ST (SPAS)-17
58	La Cienega Boulevard & Florence Avenue	Inglewood	MM-ST (SPAS)-18
60	Sepulveda Boulevard & Grand Avenue	Caltrans/El Segundo	MM-ST (SPAS)-19
62	Hawthorne Boulevard & Imperial Avenue	Hawthorne	MM-ST (SPAS)-20
66	Inglewood Avenue & Imperial Highway	Hawthorne	MM-ST (SPAS)-21
71	Sepulveda Boulevard & Imperial Highway	Caltrans/El Segundo/City of LA	MM-ST (SPAS)-23
85	La Brea Avenue & Manchester Boulevard	Caltrans/Inglewood	MM-ST (SPAS)-25
87	La Brea Avenue & Slauson Avenue	La Brea Avenue & Slauson Avenue	MM-ST (SPAS)-26
90	La Cienega Boulevard & Manchester Boulevard	Caltrans/Inglewood	MM-ST (SPAS)-27
96	La Cienega Boulevard & I-405 Southbound Ramps (n/o Century Boulevard)	Caltrans/Inglewood/City of LA	MM-ST (SPAS)-28
115	Ash Avenue & Manchester Avenue	Caltrans/Inglewood	MM-ST (SPAS)-31
159	Hindry Avenue & Manchester Boulevard	Caltrans/Inglewood	MM-ST (SPAS)-34
169	Prairie Avenue & Manchester Boulevard	Inglewood	MM-ST (SPAS)-35
197	Prairie Avenue & Lennox Boulevard	Inglewood	MM-ST (SPAS)-36
10	Aviation Boulevard & Arbor Vitae Street	Inglewood/City of LA	MM-ST (SPAS)-37
27	La Tijera Boulevard & Centinela Avenue	City of LA/LA County	MM-ST (SPAS)-38
154	Overland Avenue & Sawtelle Boulevard	Culver City	MM-ST (SPAS)-40
156	Walgrove Avenue & Washington Boulevard	Culver City	MM-ST (SPAS)-41
36	La Cienega Boulevard & Century Boulevard	Inglewood/City of LA/LA County	MM-ST (SPAS)-42
52	Inglewood Avenue & El Segundo Boulevard	Hawthorne/LA County	MM-ST (SPAS)-42
63	Hawthorne Boulevard & Lennox Boulevard	LA County	MM-ST (SPAS)-42
76	Inglewood Avenue & Lennox Boulevard	LA County	MM-ST (SPAS)-42
86	La Brea Avenue/Overhill Drive & Stocker Street	LA County	MM-ST (SPAS)-42
93	La Cienega Boulevard & Stocker Street	LA County	MM-ST (SPAS)-42
95	La Cienega Boulevard & West 120th Street	LA County	MM-ST (SPAS)-42
119	Ocean Avenue/Via Marina & Washington Boulevard	LA County	MM-ST (SPAS)-42
173	Western Avenue & Imperial Highway	LA County	MM-ST (SPAS)-42

If the intersection improvements and related mitigation measures described above are implemented as recommended, the impacts would be mitigated as described above. Should the improvements that occur outside the City of Los Angeles are not implemented by the other agencies having responsibility and jurisdiction for those intersections, the residual impact will remain significant and unavoidable.

Rationale: The feasibility and effectiveness of the measures proposed to address significant impacts and the residual impacts are described in the findings above.

11) Off-Airport Transportation: Construction

Impact: With regard to construction-related traffic impacts, a significant off-airport transportation impact would occur during construction if the direct and indirect changes in the environment by an alternative would potentially cause sufficient construction-related traffic to result in disruption to normal traffic flows, including substantial addition of project-generated traffic, long-term lane closures, loss of vehicular or pedestrian access to adjacent land uses, or long-term loss of bus stops or re-routing of bus lines.

Description of Effects: As discussed in Section 4.12.2.6.3 of the SPAS Draft EIR and Section 2.3.12.2.1.3 of Part II of the SPAS Final EIR, no construction plans, programs, or schedules have been formulated for any of the SPAS alternatives, including the LAWA Staff-Recommended Alternative. As such, it would be speculative to estimate construction-related vehicle trip generation and distribution onto the local roadway network in order to evaluate traffic impacts on specific streets and intersections during peak and non-peak traffic periods. The following provides a qualitative summary of the key factors that would influence construction traffic generation under the LAWA Staff-Recommended Alternative, how such traffic generation would relate, in general, to the roadway system around LAX, and which existing provisions of the LAX Master Plan would serve to reduce or avoid construction traffic impacts. Applicable LAX Master Plan commitments and mitigation measures cited below are discussed fully in Section 4.12.2.5 of the SPAS Draft EIR.

For the LAWA Staff-Recommended Alternative, construction activities at LAX would extend over the course of several years. As individual projects are underway, traffic impacts would likely be experienced in the immediate area around the active development site(s). Three key considerations that would influence potential traffic impacts of these construction activities are:

- Deliveries of various construction materials
- Provision of labor to the construction sites
- Maintenance of traffic in the immediate construction zones

Section 2.3.1.12 of the SPAS Draft EIR identifies seven potential construction staging areas that could be utilized in some combination during development of the LAWA Staff-Recommended Alternative. Four of the potential construction staging areas are located within the LAX Northside planning area, which is planned for future development independent from SPAS. Depending on the nature and timing of such future development, use of those construction staging areas for SPAS-related construction staging may be limited.

Regional access for construction-related vehicles would occur via the I-405 and I-105 freeways. Pursuant to LAX Master Plan Commitment ST-22, Designated Truck Routes, designated truck routes for construction would include Pershing Drive (Westchester Parkway to Imperial Highway); Florence Avenue (Aviation Boulevard to I-405); Manchester Boulevard (Aviation Boulevard to I-405); Aviation Boulevard (Manchester Avenue to Imperial Highway); Westchester Parkway/Arbor Vitae Street (Pershing Drive to I-405); Century Boulevard (Sepulveda Boulevard to I-405); Imperial Highway (Pershing Drive to I-405); La Cienega Boulevard (north of Imperial Highway); Airport Boulevard (Arbor Vitae Street to Century Boulevard); Sepulveda Boulevard (Westchester Parkway to Imperial Highway); I-405; and I-105. LAX Master Plan Commitment ST-17, Maintenance of Haul Routes, provides for the maintenance of haul routes.

It is anticipated that implementation of the LAWA Staff-Recommended Alternative would, from time to time, require substantial deliveries of equipment, materials, and personnel to the construction site and the hauling and return of equipment, materials (i.e., excavated soils), and personnel from the site. Potential traffic impacts associated with such deliveries, haul trips, and construction worker trips would be reduced through the use of designated truck/haul routes, as described above, and by LAX Master Plan Commitment ST-12, Designated Truck Delivery Hours, which requires such activities be scheduled to avoid peak traffic hours (i.e., avoid 7:00 a.m. to 9:00 a.m. and 4:30 p.m. to 6:30 p.m.). Additionally, LAX Master Plan Commitment ST-18, Construction Traffic Management Plan, and LAX Master Plan Mitigation Measure MM-ST-14, Ground Transportation/Construction Coordination Office Outreach Program, require each construction project to have a construction traffic management plan and coordinate with the LAX Ground Transportation/Construction Coordination Office for specific means to manage and reduce both worker-related traffic impacts and delivery/haul-related traffic impacts.

The LAWA Staff-Recommended Alternative includes major construction projects that would be substantial generators of construction traffic, including substantial numbers of truck trips for materials delivery, removal of spoil materials, and other construction functions, as well as employee trips. A large construction work force would be required, which would also generate traffic. Potential traffic impacts associated with worker trips would be reduced through several LAX Master Plan commitments and an LAX Master Plan mitigation measure. LAX Master Plan Commitment ST-14, Construction Employee Shift Hours, requires that construction worker shift hours do not coincide with the heaviest commuter traffic periods (7:00 a.m. to 9:00 a.m., 4:30 p.m. to 6:30 p.m.). LAX Master Plan Commitment ST-21, Construction Employee Parking Locations, provides that during construction of improvements at or near the eastern portion of the airport, employee parking locations be selected as close to I-405 and I-105 as possible and be accessible by employee vehicles with minimal disruption to adjacent streets. Similarly, LAX Master Plan Commitment ST-20, Stockpile Locations, provides for situating stockpile locations as close to the I-405 and I-105 as possible.[17] LAX Master Plan Commitment ST-18, Construction Traffic Management Plan, and LAX Master Plan Mitigation Measure MM-ST-14, Ground Transportation/Construction Coordination Office Outreach Program, described in Section 4.12.2.5 of the SPAS Draft EIR, provide additional mechanisms to manage and reduce worker-related traffic impacts.

In addition to potential disruption of local traffic conditions due to the addition of construction-related vehicle trips, there is the potential for additional disruption in the event a project-related improvement requires temporary closure of at least one lane adjacent to its site. Closures of key roadways and intersections could cause delays, except if done for short durations during periods of very low vehicular volumes. In addition to potential traffic disruption impacts, such closures could affect pedestrian access and/or bicycle lanes due to the need to temporarily close sidewalks, and transit service may be affected due to the need to temporarily relocate bus stops. The potential for, and impacts associated with, such lane closures are addressed by LAX Master Plan Commitment ST-9, Construction Deliveries, requiring that construction deliveries involving lane closures must receive prior approval from the LAX Ground Transportation/Construction Coordination Office and notification of deliveries shall be made with sufficient time to allow for any modifications to approved traffic detour plans. Additionally, LAX Master Plan Commitment ST-19, Closure Restrictions of Existing Roadways, requires that, other than short time periods during

[17] The intended construction traffic mitigation benefits of LAX Master Plan Commitments ST-20 and ST-21 would be best achieved relative to Alternative 3 based on the size, nature, and location of improvements proposed at the east end of the airport under that alternative; however, those benefits would not be realized relative to the other alternatives given the comparatively smaller and fewer improvements at the east end of the airport under those alternatives. The need for, and potential traffic implications of, placing construction employee parking and construction stockpile areas at the east end of the airport would be further assessed in conjunction with the preparation of the construction traffic management plan required under LAX Master Plan Commitment ST-18 as required for all alternatives, including the LAWA Staff-Recommended Alternative.

nighttime construction, existing roadways remain open until they are no longer needed for regular traffic or construction traffic, unless a temporary detour route is available to serve the same function. The related requirements associated with LAX Master Plan Commitment ST-18, Construction Traffic Management Plan, and LAX Master Plan Mitigation Measure MM-ST-14, Ground Transportation/Construction Coordination Office Outreach Program, described above, would also help reduce potential impacts associated with construction-related lane closures.

In summary, implementation of the LAWA Staff-Recommended Alternative would result in temporary construction-related traffic impacts. Although there are a number of Master Plan commitments and a mitigation measure specifically designed to reduce such impacts, it cannot be concluded at this time that all construction-related traffic impacts would be reduced to a level that is less than significant. As such, in addition to the intersection impacts described above, construction-related traffic could, at times, result in temporary significant and unavoidable impacts on the streets surrounding LAX.

Findings: Based on substantial evidence in the administrative record, including Section 4.12.2.6.3 of the SPAS Draft EIR and Section 2.3.12.2.1.3 of Part II of the SPAS Final EIR, the BOAC hereby finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant off-airport construction traffic impact associated with the Project. Specifically, implementation of LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-20, ST-21,[18] and ST-22 and LAX Master Plan Mitigation Measure MM-ST-14 would reduce construction-related off-airport transportation impacts associated with the LAWA Staff-Recommended Alternative. No additional measures are available to address construction-related off-airport transportation impacts at this stage of planning.

Despite incorporation of these measures, the BOAC hereby finds this impact will remain significant and unavoidable and that specific economic, legal, social, technological, or other considerations make additional mitigation measures or project alternatives infeasible.

Rationale: The feasibility and effectiveness of the measures proposed to address significant impacts and the residual impacts are described in the findings above.

D. Findings on Impacts Related to Plan Amendments

Chapter 6, Evaluation of Amendments to the LAX Specific Plan, of the SPAS Draft EIR describes the LAX Specific Plan amendments proposed in conjunction with completion of the SPAS process, and provides an evaluation of potential environmental impacts associated with those amendments. The analysis found that, with the exception of the proposed revision of Section 7.H of the LAX Specific Plan, the proposed LAX Specific Plan Amendments would not result in environmental impacts materially different from those addressed in detail in Chapters 4 and 5 of the SPAS Draft EIR. The proposed amendments to Section 7.H of the LAX Specific Plan include measures that could cause a shift in aircraft and passenger activity from LAX to other airports in the region. The results of the analysis found that to the extent that there is a shift in activity from LAX to other airports, there would be a potential decrease in environmental impacts at LAX and an accompanying increase in environmental impacts at the other airport(s) that receives the activity. The nature and extent of such decreases and increases in impacts would depend on the type and amount of activity that is shifted from LAX and which airport(s) exactly would receive the

[18] As discussed in Section 4.12.2.6.3, the construction traffic mitigation benefits of LAX Master Plan Commitments ST-20 and ST-21, which involve locating construction worker parking and construction stockpiles at the east end of the airport, would best be realized under Alternative 3, given the size, location, and nature of improvements proposed in that area; however, the mitigation benefits and traffic implications of those measures relative to other alternatives, including the LAWA Staff-Recommended Alternative, would need to be further assessed in conjunction with development of construction traffic control plans required under ST-18.

activity. Since none of that information is currently known, it would be speculative to quantify or specifically delineate the environmental impacts associated with that shift in activity.

In conjunction with the analysis of LAX Specific Plan Amendments described above, Section 3.2 of Part II of the SPAS Final EIR addresses the potential for environmental impacts to occur from potential amendments of the LAX Plan. Should the potential LAX Specific Plan amendments associated with the LAWA Staff-Recommended Alternative be adopted by the City of Los Angeles, various administrative amendments would also be required to the LAX Plan, the City's General Plan element for LAX. The analysis of potential LAX Plan amendments found that such amendments were either administrative in nature and would not result in environmental impacts, or represent changes in the LAX Plan that would conform the LAX Plan to the specific characteristics of the selected SPAS alternative (i.e., the LAWA Staff-Recommended Alternative), with those specific characteristics being reflected in the project description of the SPAS Draft EIR, from which potential environmental impacts were addressed in the SPAS Draft and Final EIRs. As such, the specific findings for potential environmental impacts directly or indirectly associated with amendments to the LAX Specific Plan and LAX Plan are already accounted for elsewhere in this CEQA Findings document.

E. Findings on Other CEQA Considerations

1) Significant Irreversible Environmental Changes

Section 7.2 of the SPAS Draft EIR identifies the significant irreversible environmental changes associated with the SPAS alternatives. With regard to the LAWA Staff-Recommended Alternative, which is a combination of Alternatives 1 and 9, such impacts will include commitment of various natural, physical, human, and fiscal resources. Most of the land proposed to be used for the SPAS improvements is already dedicated to airport uses. For the LAWA Staff-Recommended Alternative, land outside the existing airport boundaries would be acquired, specifically for proposed ground transportation system improvements such as the ITF and the APM system. These acquisition areas are currently in other urban areas with developed uses, such as commercial and industrial uses, and would be converted to primarily airport-related (transportation) use.

Implementation of the LAWA Staff-Recommended Alternative would involve the consumption of building materials during construction, such as aggregate (sand and gravel), metals (e.g., steel, copper, lead) and petrochemical construction materials (e.g., plastics). This would represent the loss of non-renewable resources, which are generally not retrievable. Aggregate resources are locally constrained, but regionally available. Their use would not have a project specific adverse effect upon the availability of these resources.

Construction and operation of the LAWA Staff-Recommended Alternative would require energy resources such as electricity, natural gas, and various transportation-related fuels. This would represent the loss of non-renewable resources, which are generally not retrievable. As discussed in Section 4.13.1, Energy, these energy resources are not in short supply and their use would not have a project-specific adverse effect upon the availability of these resources. To reduce energy consumption, implementation of the LAWA Staff-Recommended Alternative would comply with the City of Los Angeles Green Building Ordinance, which includes various requirements pertaining to energy conservation. In addition, the LAWA Staff-Recommended Alternative would result in irreversible impacts to air quality from emissions of criteria pollutants, toxic air contaminants, and greenhouse gases (GHG). However, project design features and mitigation measures would be incorporated to reduce air quality and GHG impacts.

Project consumption of water during construction and operation of the LAWA Staff-Recommended Alternative is addressed in Section 2.3.13.4 of Part II of the SPAS Final EIR. LAWA would continue to implement and enhance water conservation measures at LAX in fulfillment of LAX Master Plan Commitments W-1, Maximize Use of Reclaimed Water, and W-2, Enhance Existing Water Conservation Program, which would serve to reduce water use under

the LAWA Staff-Recommended Alternative. Although the LAWA Staff-Recommended Alternative would not result in significant impacts related to water consumption, it would result in an irretrievable consumption of water, which is a limited resource.

Implementation of the LAWA Staff-Recommended Alternative would result in the conversion of open areas to developed uses. Under the LAWA Staff-Recommended Alternative, much of this open area is on the airfield and is ruderal or disturbed and, therefore, has few flora and fauna species. In addition, impacts due to the loss of small amounts of habitat in the Los Angeles/El Segundo Dunes for the installation of new navigational aids under the LAWA Staff-Recommended Alternative would be less than significant after implementation of proposed mitigation. However, impacts from the loss of open areas would be irreversible.

2) Growth Inducing Impacts

Section 7.3 of the SPAS Draft EIR addresses the potential growth inducing impacts of the project. As indicated therein, none of the SPAS alternatives, which would include the LAWA Staff-Recommended Alternative as a combination of Alternatives 1 and 9, include residential or business development or would directly induce population growth. Additionally, the projected future increase in passenger activity levels at LAX in 2025, the planning horizon year for the SPAS analysis, is the same for all alternatives, including the LAWA Staff-Recommended Alternative - 78.9 million annual passengers (MAP), which would occur at that same level even if none of the SPAS alternatives were to be implemented. This projected increase in future passenger activity levels at LAX is consistent with regional growth forecasts, including the adopted 2012 Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP).

Implementation of the LAWA Staff-Recommended Alternative may directly or indirectly foster economic growth. As the international gateway to the western United States, LAX has long been a major supporter of the Southern California economy through employment and generation of taxes and other revenue, and by facilitating the efficient movement of people, goods, and services. This is particularly true relative to the role that international travel, as facilitated through LAX, plays in the regional economy. To the extent that the airfield improvements, as well as terminal and ground access improvements, proposed in the LAWA Staff-Recommended Alternative enable LAX to better accommodate and encourage increased international travel through the airport, implementation of this alternative would indirectly foster economic growth in the region.

Construction activity associated with development of improvements proposed under the LAWA Staff-Recommended Alternative would directly and indirectly foster economic growth over the multi-year construction period in terms of spending by workers and the provision of goods and services in support of construction.

Economic growth resulting from the project would result in environmental impacts related to increased vehicle travel, increased demands for public services and utilities, and impacts associated with the manufacturing/production of materials. Given the highly urbanized setting of the area around LAX, as well as throughout much of Southern California, and the diverse nature of the improvements to be constructed under the various alternatives, it is not expected that the environmental impacts associated with such economic growth would occur in any one area or be of a specific nature that could be meaningfully addressed within this document, and any further analysis would be speculative.

F. Findings on Project Alternatives

1) Alternatives Considered but Rejected From Further Consideration

In addition to the nine alternative that were evaluated in the SPAS Draft EIR, LAWA considered six additional alternatives, all of which were eliminated from detailed analysis in the Draft EIR either because they did not meet the basic project objectives, would fail to reduce or avoid the

significant impacts, and/or were determined at the outset to be infeasible. These alternatives are discussed below.

Description: *Alternative Location*

Findings: The BOAC hereby finds that specific economic, legal, social, technological, or other considerations make the adoption of this alternative infeasible and rejects this alternative because it would not meet the objectives of the project and would not respond to the basic purpose of the LAX Specific Plan Amendment Study.

Rationale: Implementation of any of the SPAS alternatives would not be feasible at any location other than LAX. Pursuant to the Stipulated Settlement, the SPAS will plan for the modernization and improvement of LAX. Implementing the SPAS alternatives at any other location would not accomplish this fundamental goal. The existing facilities at LAX cannot accommodate the existing demand and forecasted increase in the numbers of aircraft, cargo, and passengers without significant delays and a very poor level of service. As the existing facilities are used beyond their design capacity, the level of service provided to the user degrades. This lowering of the level of service may be demonstrated by increased congestion within the passenger terminals, the various surface roads on and around the airport, and on the airfield itself. The consequences of taking no action to solve this problem will result in a loss of air service and declining economic benefits (jobs) for the Los Angeles region. Air service and economic benefits would likely relocate to other regions both within the state of California and to other states. Therefore, any comprehensive solution to meeting the regional demand for transportation must include improvements at LAX. Under the Alternative Location scenario, the failure to address existing and anticipated problems at LAX, as summarized above, would be contrary to meeting most of the project objectives described in Section 2.2 of the SPAS Draft EIR, as reiterated above in Section II of these CEQA Findings. In particular, the Alternative Location scenario: would not provide north airfield improvements that support the safe and efficient movement of aircraft at LAX; would not improvement the ground access system at LAX to better accommodate airport-related traffic, especially as related to the Central Terminal Area; would not maintain LAX's position as the premier international gateway in supporting and advancing the economic growth and vitality of the Los Angeles region; would not provide plan improvements at LAX that do not result in more than 153 passenger gates at 78.9 MAP; would not enhance safety and security at LAX; would not necessarily minimize environmental impacts on surrounding communities (i.e., as discussed in Chapter 4 of Part II of the SPAS Final EIR, the failure to make improvements to the north airfield, as in the case of Alternative 4, would result in a greater total number of homes and people being newly exposed to 65 CNEL aircraft noise levels than would otherwise occur with improvements to the north airfield); and would not produce an improvement program at LAX that is efficient, sustainable, feasible, and fiscally responsible.

Description: *Alternative Designs*

Findings: The BOAC hereby finds that specific economic, legal, social, technological, or other considerations make the adoption of this alternative infeasible and rejects the design options under this alternative because their basic design characteristics are similar to, and/or fall within the range of, the alternatives carried forth for detailed analysis in the SPAS Draft EIR. Additionally, this alternative would not avoid or substantially reduce any of the significant effects of the project.

Rationale: Several alternative concepts were formulated and considered during development of the nine SPAS alternatives addressed in the EIR. Chapter 5 of the SPAS Report describes the basis, nature, and characteristics of those early concepts. The SPAS Report is available for review at LAWA's Capital Programming and Planning Division, One World Way (LAX), Los Angeles or online at www.laxspas.org. Three of the airfield improvement concepts initially considered for inclusion in the Draft EIR were subsequently refined or consolidated. Specifically, an airfield improvement concept proposing to relocate Runway 6L/24R 400 feet north, which would meet all FAA standards for ADG VI aircraft, was subsequently refined to meet the basic

requirements with only a 350-foot northward move. That refined alternative is Alternative 5 in the SPAS Draft EIR, which would not avoid or substantially reduce any of the significant impacts associated with the proposed project (i.e., the LAWA Staff-Recommended Alternative). Two other airfield improvement concepts, one proposing to move Runway 6L/24R 200 feet north and the other to move the subject runway 300 feet to the north were consolidated into the 260-foot north move that is reflected in Alternative 1 in the SPAS Draft EIR, which represents the airfield and terminal improvement elements of the LAWA Staff-Recommended Alternative.

Description: *Three-Runway Airfield*

Findings: The BOAC hereby finds that specific economic, legal, social, technological, or other considerations make the adoption of this alternative infeasible and rejects this alternative from further consideration because it would not avoid or substantially reduce the significant effects of the project and would likely result in comparatively greater adverse impacts related to airfield operations and associated air quality impacts and a shift in, not avoidance/reduction of, aircraft noise impacts.

Rationale: This concept involves removing one of the two runways within the north airfield and operating LAX with a three-runway system (i.e., one runway in the north airfield along with the two existing runways in the south airfield). This concept would provide sufficient runway and/or taxiway/taxilane separation distances for ADG V and VI aircraft on the north airfield and would eliminate the existing safety hazards associated with crossing an active runway within that airfield. However, the removal of a runway in the north airfield would have adverse impacts on and around the south airfield because of the associated shift in daily aircraft activity from the north airfield to the south airfield. This shift in activity would create unbalanced and inefficient operations for arriving and departing aircraft both in the air and on the ground. Under a three-runway system, a number of aircraft gated on the north side of the CTA, that would otherwise taxi to and from the north airfield, would instead have to taxi to and from the south airfield. While this type of three-runway configuration could reduce aircraft noise exposure levels in developed areas north of the airport, it would essentially just shift aircraft noise exposure impacts to the highly populated areas south and southeast of the airport. Similarly, this geographic shift in aircraft activity would be accompanied by a southward shift in emissions of airfield-related air pollutants; moreover, there would be a net increase in overall airfield emissions because of the increased taxiing times, distances, and congestion associated with more aircraft operations being concentrated in the south airfield. To the extent that such congestion and delays associated with aircraft movements on the ground hamper the ability of air traffic control to clear runways for arriving flights, any resultant need to have inbound aircraft divert from the approach path and go into a hold pattern would increase regional air pollutant emissions, including emissions of greenhouse gases. The imbalance in aircraft operations between the north airfield and the south airfield would adversely affect the overall operational performance of the entire LAX airfield system. In light of the above, a three-runway airfield is not considered a viable concept (i.e., a SPAS alternative) and was therefore eliminated from further evaluation.

Description: *Next Generation Technology*

Findings: The BOAC hereby finds that specific economic, legal, social, technological, or other considerations make the adoption of this alternative infeasible and rejects this alternative because it is still in the development stage and, once fully developed and implemented on a large scale, would only pertain to limited aspects of LAX airfield operations.

Rationale: The Next Generation Air Transportation System, or NextGen, is currently being developed to provide a transformative change in the management and operation of how aircraft operate. The primary components of NextGen are related to technologically-advanced electronic navigational and communication systems associated with air traffic control, on-board aircraft systems, and airline operations. NextGen is designed to integrate all modes of aircraft operations including gate push-back, taxi operations, takeoffs, enroute flight, landings, and gate arrival. Once fully developed and implemented on a large scale, airports and aircraft in the National

Airspace System (NAS) will be connected to NextGen's advanced infrastructure and will continually share real-time information to provide a better travel experience.

The application of NextGen to the SPAS effort was considered by LAWA to determine if any component of NextGen could provide for a viable concept. Although NextGen systems could provide for better ground situational awareness for air traffic controllers and pilots, and it could make airfield operations more efficient, it would not increase safety-related physical separation distances on the ground to meet ADG V and VI runway and/or taxiway/taxilane separation standards and obstacle free zone requirements. Based on this evaluation, LAWA determined that no component of NextGen technology can provide a viable concept (i.e., a SPAS alternative) and, therefore, NextGen was eliminated from further consideration.

Description: *Offset Runways and Simultaneous Offset Instrument Approaches*

Findings: The BOAC hereby finds that specific economic, legal, social, technological, or other considerations make the adoption of this alternative infeasible and rejects this alternative because it would not avoid or substantially reduce any of the significant effects of the project.

Rationale: A Simultaneous Offset Instrument Approach (SOIA) is a procedure typically used to enhance airfield operational capacity by allowing simultaneous instrument approaches to closely-spaced parallel runways or to closely-spaced runways that are not parallel. This concept was considered by LAWA during the formulation of SPAS airfield improvement options for increasing the separation between the runways in the north airfield in order to meet FAA separation standards for runway and/or taxiway operations, specifically as related to ADG V and VI aircraft. Offsetting one of the runways in the north airfield could provide the required separation distance between the runways that would allow construction of a centerfield taxiway; however, any new approach to the offset runway would have adverse impacts to off-airport areas, by shifting aircraft noise impacts to newly exposed areas. Also, the use of SOIA operations inherently reduces overall airfield operational performance. Based on the above, LAWA determined that offset runways and associated SOIAs do not provide a viable concept (i.e., a SPAS alternative) and, therefore, they were eliminated from further consideration.

Description: *Dual Runway Relocations*

Findings: The BOAC hereby finds that specific economic, legal, social, technological, or other considerations make the adoption of this alternative infeasible and rejects this alternative because it would not avoid or substantially reduce any of the significant effects of the project and would likely increase impacts, particularly as related to air quality.

Rationale: Under this concept, increased separation between runways, as necessary to allow the development of a center parallel taxiway and achieve FAA runway and taxiway separation design standards for ADG V and VI aircraft, would be accomplished by moving both runways. Specifically, Runway 6L/24R would be relocated northward from its current location by, for example, 175 feet and Runway 6R/24L would be relocated southward from its current location by 175 feet, and a center taxiway would be included, to achieve a total of 350 feet of increased separation within the intervening area. There could be any number of variations to this, such as moving Runway 6L/24R northward by a lesser amount (e.g., 100 feet), and Runway 6R/24L a greater amount (e.g., 250 feet), or vice versa, in order to achieve a total of 350 feet of increased separation, but the basic idea of this concept is to split the difference in achieving an increased runway separation distance by moving both runways. Under this concept, any southward relocation of Runway 6R/24L would necessitate a corresponding southward relocation of existing Taxiway E and existing Taxilane D in order to meet the required runway and taxiway/taxilane separation distance requirements. This concept would provide a means of achieving the same design standards as other alternatives, but in a different manner. For example, Alternative 5 would provide a runway configuration that meets ADG VI design standards under both good and poor weather conditions by moving Runway 6L/24R northward by 350 feet and adding a center parallel taxiway.

Development of this alternative is considered infeasible and impractical and likely to result in environmental impacts comparable to or greater than those of the other alternatives addressed in detail within this Draft EIR. Under this concept, the southward relocations of the runway and associated taxiway and taxilane would result in the loss of aircraft gates on the ends of concourses for Terminals 1, 2, and 3, the extent of which would depend on the distance of the southward relocations. To the extent that there is a substantial loss of gates on the north side of the CTA and more gate usage would have to occur on the south side of the CTA, there would be an imbalance in aircraft taxiing and operations between the north and south airfields. Given the extent of airfield construction activities required to relocate both runways, add a center parallel taxiway, relocate Taxiway E and Taxilane D, and modify the north ends of the concourse for Terminals 1, 2, and 3, the construction duration, costs, and construction-related impacts associated with this concept, particularly as related to air quality, would be substantial, and would be comparatively greater than the other alternatives addressed in detail within this Draft EIR that yield the same airfield safety and operational benefits. In other words, the alternatives analyzed in this Draft EIR that move just one runway, instead of both, would achieve the same safety and operational benefits as the dual runway relocation concept but would be less costly, could be completed in a shorter amount of time, and would require less construction equipment activity.

Similarly, completion of dual runway and taxiway improvements would necessitate either more incremental phasing of airfield construction activities (to keep at least one of the north airfield runways operational at all time), more nighttime construction activities (to take advantage of low airfield activity levels), or complete closure of one or both runways in the north airfield for an extended period (to expedite the overall airfield improvement program).

Further, runway construction activities required for dual runway relocations are more likely to be constrained by the FAA airfield construction safety requirement that construction activities be at least 250 feet away from an active runway. For example, FAA is more likely to allow one runway to remain operational during construction while the other runway is relocated 250 feet or more than it is if the runway were moved half that distance - 125 feet. To the extent that runway closures in the north airfield are required during construction of the airfield improvements associated with this dual runway relocation concept, the demands on the other remaining runways at LAX would increase, resulting in an imbalance in operations between the north and south airfields and/or increased potential for airfield congestion and delays that would have impacts both locally and at other airports within the national airspace system.

Additionally, this alternative is within the range of alternatives already analyzed in the EIR as it would provide a means of achieving the same design standards as other alternatives, but in a different manner.

Based on the above, LAWA determined that the dual runway relocations concept was not feasible as a SPAS alternative and, therefore, it was eliminated from further consideration.

2) Alternatives Carried Forward for Full Evaluation in the Draft EIR

The SPAS Draft EIR analyzed nine alternatives offering various options to the Yellow Light Projects, including one alternative that provides for implementation of the Yellow Light Projects. As indicated above, the types of improvements proposed under each alternative can be grouped into airfield improvements, terminal improvements, and ground access improvements. Alternatives 1 through 4 are "fully-integrated" alternatives and Alternatives 5 through 9 focus on variations to the certain types of improvements. As also noted above, there is some amount of interchangeability between elements of the alternatives.

The discussion and findings below summarize and reference analysis in the EIR. The BOAC adopts and incorporates by reference the relevant discussion of each of the impacts discussed below in the detailed issue area analyses in Chapter 4 of the SPAS Draft EIR and Section 2.3 of Part II of the SPAS Final EIR and the cumulative impacts discussed in Chapter 5 of the SPAS Draft EIR and Section 2.4 of Part II of the SPAS Final EIR.

Alternative 1:

Alternative 1, described in detail in Section 2.3.1.1 of the SPAS Draft EIR, is a fully-integrated alternative, consisting of airfield, terminal, and ground access components. The distinguishing airfield improvement feature of this alternative is the movement of Runway 6L/24R 260 feet north, along with the addition of a centerfield taxiway, the extension of Runway 6R/24L, improvements to Taxilane D and Taxiway E, and relocation of the service road. Terminal Improvements include addition of new Terminal 0, loss or modifications to concourse areas and/or gates at Terminals 1, 2, and 3, and the modification and potential northward extension of concourse area and gates at TBIT and the future MSC. Ground access improvements include modification of Sky Way; development of an Intermodal Transportation Facility (ITF) at 98th Street west of Airport Boulevard; development of an elevated/dedicated busway along 98th Street, with a bridge over Sepulveda Boulevard and stops at Manchester Square (future surface parking), the future Metro LAX/Crenshaw Light Rail Transit Station at/near Century and Aviation Boulevards, the ITF, and the CTA; and the relocation of Lincoln Boulevard, a portion of which would be below grade and/or tunneled.

Findings: In light of the analysis in the SPAS Final EIR and substantial evidence in the administrative record, the BOAC hereby accepts the airfield and terminal improvements included under Alternative 1 as elements of the LAWA Staff-Recommended Alternative, but selects the ground transportation system improvements included under Alternative 9 (i.e., the LAWA Staff-Recommended Alternative) over the ground transportation system improvements included under Alternative 1 because the ground transportation system improvements included under Alternative 1 will not substantially reduce or avoid the significant effects of the project and do not provide the operational traffic benefits within the Central Terminal Area that would occur with the LAWA Staff-Recommended Alternative.

Rationale: The airfield improvements proposed under Alternative 1 address key planning objectives related to airfield safety and efficiency. Specifically, as related to safety, the combination of improvements provided would result in an airfield configuration that would permit 99.87 percent of all aircraft operations forecasted to serve LAX in 2025 to be conducted in standardized fashion, free of restrictions and workarounds that complicate efforts to provide a safe airfield and reduce operational efficiency. In most respects, these improvements can be associated with a reduction in aircraft-related operational emissions and noise when compared to scenarios in the future that do not include improvements to the north airfield (i.e., Alternative 4). As stated in Section 1.4 of the SPAS Draft EIR, all alternatives result in significant and unavoidable operational-related SO_x, PM10, and PM2.5 emissions; however, implementation of the airfield improvements proposed under Alternative 1 would result in a 1.1 percent decrease in SO_x when compared to the scenarios without airfield reconfiguration, and even greater reductions when compared to the implementation of configuration included in the LAX Master Plan (i.e., SPAS Alternative 3). Similar to air quality emissions, the SPAS Draft EIR identified significant and unavoidable impacts related to aviation noise (prior to the implementation of noise soundproofing) primarily related to the expected increase in the number of aircraft operations regardless of whether any airfield reconfiguration takes place. In accordance with federal regulation and state law, these impacts are quantified by projecting 65 CNEL noise contours on existing surrounding land uses and populations. These projected contours reflect a reduction of 233 in the number of newly impacted dwellings, and a reduction of 1,244 in the number of newly impacted people in comparison to a scenario in 2025 that does not include a reconfigured airfield.

Under the LAWA Staff-Recommended Alternative, the ground transportation system improvements of Alternative 1 would be replaced by those identified under Alternative 9. The main differences between the ground transportation systems identified under these alternatives are that Alternative 9 includes a consolidated rental car (CONRAC) facility and parking at Manchester Square, whereas Alternative 1 only includes parking, and Alternative 9 includes an automated people mover (APM) system instead of the elevated/dedicated busway system included under Alternative 1.

The nature and extent of environmental impacts associated with the two ground transportation systems are generally comparable, although there is a tradeoff or balancing of traffic impacts between on-airport and off-airport impacts. On-airport traffic impacts related to curbsides, intersections, and roadway links would greater/worse under Alternative 1 than under Alternative 9, as can be seen throughout the tables in Section 4.12.1 of the SPAS Draft EIR, which summarize the impact analysis included in that Section. These include Tables 4.12.1-16 and 4.12.1-17 for curbside impacts, Tables 4.12.1-18 and 4.12.1-19 for roadway links, and Tables 4.12.1-20 and 4.12.1-21 for intersections. As shown in those tables, the vast majority of the almost 200 on-airport facilities (i.e., curbside segments, roadway links, and intersections) analyzed for each alternative would operate better, as defined by lower volume to capacity [v/c] ratios and higher level of service [LOS] values), under Alternative 9 than under Alternative 1. This is reiterated in the impact tables presented as Tables 4.12.1-28 through 4.12.1-30 and Tables 4.12.1-37 through 4.12.1-39. In terms of significant impacts to on-airport traffic conditions, Alternative 1 would have three (3) roadway links with significant, but mitigable, roadway link impacts while Alternative 9 would have only one such impact. Both alternatives would have a significant, but mitigable, impact at the same curbside area (TBIT inner curb). Both alternatives would have a significant unavoidable (unmitigable) impact at the intersection of World Way South and Center Way, which is the main exit for the airport; however, the increase (i.e., worsening) of the v/c ratio at this intersection would be less under Alternative 9 than under Alternative 1 (i.e., 0.13 versus 0.15 – see Tables 4.12.1-38 and 4.12.1-29, respectively). While the on-airport traffic impacts of Alternative 9 would be slightly less than those of Alternative 1, the off-airport traffic impacts of Alternative 1 would be slightly less than those of Alternative 9. Specifically, Alternative 1 would have significant impacts at 55 off-airport intersections while Alternative 9 would have significant impacts at 57 off-airport intersections, a difference of one percent of the 200 intersections evaluated for each alternative (see Table 4.12.2-19, as corrected in Chapter 5 of Part II of the SPAS Final EIR). With implementation of feasible mitigation measures, the number of significantly impacted off-airport intersections would be reduced to 38 for Alternative 1 and 42 for Alternative 9. Based on the above, it is concluded that implementation of the ground transportation system improvements under Alternative 1 would not avoid or substantially reduce the significant traffic impacts associated with the LAWA Staff-Recommended Alternative.

There is also a tradeoff or balancing of impacts in air quality impacts associated with the differences in the ground transportation system improvements between Alternative 1 and Alternative 9. As can be seen in in Table 4.2-10 of the SPAS Draft EIR, which compares the peak daily construction emissions for ground access construction under Alternatives 1 and 9, Alternative 9 would result in greater amounts of emissions due to the fact that comparatively more ground transportation system improvements constructed would be constructed under that alternative. However, the long-term air quality benefits associated with constructing those ground access improvements under Alternative 9, compared to not constructing them under Alternative 1, are evident in Table 4.2-13 of the SPAS Draft EIR, which presents the operational emissions associated with each alternative. As evidenced in that table, the long-term operational emissions associated with on-airport parking, on-airport roadways, and off-airport roadways would be comparatively better for all pollutant categories under Alternative 9 than under Alternative 1 and Alternative 1 would not avoid or substantially reduce the air quality impacts associated with the LAWA Staff-Recommended Alternative.

The ground transportation system improvements of Alternative 9, particularly as related to the CONRAC facility and the APM system, provide certain benefits and advantages not otherwise available under Alternative 1. Specifically, the eventual use of the APM system by rental car users will allow LAWA to reassign over 1,000 feet of dedicated curb in the CTA to other uses, thereby diffusing some of the curbside demand that can reduce the level of service on the roadway and curb systems. Additionally, the ground transportation system improvements of Alternative 9 will provide an improved connection for Metro riders seeking to access the airport through either the Metrobus or Metrorail systems. That grade-separated circulator system will provide a reliable and effective service between airport and Metro facilities, removing perceived

barriers to the airport for potential transit riders. Development of the ground transportation system improvements proposed under Alternative 9 instead of those proposed under Alternative 1 is also responsive to the numerous public and agency comments received during the public review period for the SPAS Draft EIR requesting that the alternative selected for approval by LAWA include the ground transportation system improvements proposed under Alternative 9 – see comments and responses in Chapter 4 of Part II of the SPAS Final EIR.

Alternative 2:

Alternative 2, described in detail in Section 2.3.1.2 of the SPAS Draft EIR, is a fully-integrated alternative, consisting of airfield, terminal, and ground access components. This alternative is distinguished by the fact that it does not propose a northerly relocation of Runway 6L/24R or a southerly relocation of Runway 6R/24L. This alternative does not include a centerfield taxiway, but does include the modification and addition of high-speed runway exits (taxiways) to enhance the safe and efficient movement of arriving aircraft. Many of the improvements associated with Alternative 2 are the same as those associated with Alternative 1, including Runway 6R/24L, Taxiway E and Taxilane D, service road relocation, terminal and gate modifications, and ground access components. Improvements associated with Runway 6L/24R under this alternative, including connecting taxiways, are different than Alternative 1. Because there would be no northerly relocation of Runway 6L/24R under Alternative 2, it does not require the modifications to the Argo Drainage Channel (other than those required under existing conditions to meet federal RSA requirements) and Lincoln Boulevard described above for Alternative 1.

Findings: In light of the analysis in the SPAS Final EIR and substantial evidence in the administrative record, the BOAC hereby rejects Alternative 2 as infeasible for the specific economic, legal, social, technological, or other considerations discussed below, and because, as compared to the LAWA Staff-Recommended Alternative, it is not as responsive to meeting the project objectives and will not effectively reduce or avoid the significant effects of the project.

Rationale: As indicated in Table 1-2 of the SPAS Draft EIR, which provides an evaluation of the relationship between the project objectives and each of the SPAS alternatives, implementation of Alternative 2 would minimally respond to the project objective of providing north airfield improvements that support safe and efficient movement of aircraft at LAX, as compared to the airfield improvements proposed under the LAWA Staff-Recommended Alternative, which include the Alternative 1 airfield improvements that largely respond to that objective. The analysis supporting those conclusions is provided in Section 4.7.2 of the SPAS Draft EIR. As further described in that section, and summarized in Table 4.7.2-16 of the SPAS Draft EIR, there are several aspects of Alternative 2 related to airfield safety and efficiency enhancements that fall far short of those included in Alternative 1 including: the ability to shift the runway protection zone (RPZ) for Runway 24R westward whereby residences and the vehicle staging area west of Sepulveda Boulevard would no longer be located within the RPZ; providing increased separation between runways and between runways and taxiways, which better enables taxiing and holding aircraft to stay clear of runway object free zone (OFZ) and runway safety area (RSA) surfaces; allowing the addition of a centerfield parallel taxiway that includes high-speed exits from Runway 6L/24R, which provides more time and options for FAA air traffic controllers to handle aircraft exiting the runway; more time and distance for the pilot of an arriving aircraft to exit the runway, slow down and hold before crossing Runway 6R/24L, and reduced potential for safety hazards/incursions; and, improving the locations and design of crossing points (i.e., 90-degree crossing angle) at Runway 6R/24L, which provides better pilot visibility down Runway 6R/24L before crossing. Additionally, as also discussed in Section 4.7.2 of the SPAS Draft EIR, several independent assessments of north airfield safety at LAX have been completed and there is consensus among the studies, including the North Airfield Safety Study (NASS) of 2012, that there are airfield safety improvements associated with increasing the separation between the existing runways and adding a centerfield parallel taxiway. Implementation of the airfield component of Alternative 1, which includes increased runway separation and the addition of a centerfield taxiway, can achieve such safety benefits, whereas Alternative 2 will not.

Additionally, because Alternative 2 would not provide north airfield improvements that support safe and efficient movement of aircraft at LAX to the same extent as Alternative 1, Alternative 2 is also less able to respond to the project objective to maintain LAX's position as the premier international gateway in supporting and advancing the economic growth and vitality of the Los Angeles region. As described in Table 1-2 of the SPAS Draft EIR and supported by the analysis in Section 4.7.2 of the SPAS Draft EIR, the limited airfield improvements proposed under Alternative 2 do not increase standardization of aircraft operations and address only some airfield hazards, whereas the airfield improvements under Alternative 1, as included in the LAWA Staff-Recommended Alternative, provide standardization of nearly all airfield operations and address all airfield hazards. As shown in Table 1-2 of the SPAS Draft EIR, the ability of each SPAS alternative to maintain LAX's position as the premier international gateway is influenced by the combination of airfield, terminal, and ground transportation system improvements. The LAWA Staff-Recommended Alternative (i.e., the combination of Alternatives 1 and 9, as described above in Section I) is fully responsive to the terminal and ground transportation aspects of that objective. Alternative 2's airfield component is much less responsive to that objective.

The airfield component of Alternative 2 is also much less responsive to the project objective of enhancing safety and security at LAX. While both Alternatives 1 and 2 respond comparably to the security aspect of that project objective, Alternative 2 responds only minimally to the safety aspect of the objective as compared to Alternative 1 (i.e., the LAWA Staff-Recommended Alternative). As indicated in Table 1-2 of the SPAS Draft EIR, the limited airfield improvements proposed under Alternative 2 do not increase standardization of aircraft operations and address only some airfield hazards. By contrast, the airfield improvements under Alternative 1, as included in the LAWA Staff-Recommended Alternative, provide standardization of nearly all airfield operations and address all airfield hazards. A more detailed summary breakdown of the deficiencies of Alternative 2 in enhancing airfield safety at LAX, as compared to Alternative 1, is presented in Table 4.7.2-16, which is described above.

Section 1.5 of the SPAS Draft EIR identified Alternative 2 as the environmentally superior alternative, in part due to the fact that it would include very limited airfield improvements which would require less construction than all of the other alternatives, except Alternative 4, and therefore would result in reduced/fewer significant construction-related impacts. However, there are no major environmental topical areas where Alternative 2 would avoid or substantially reduce significant unavoidable impacts associated with the LAWA Staff-Recommended Alternative. As evidenced in comparing the summaries of impacts by topics for Alternative 2 and for the LAWA Staff-Recommended Alternative presented in Table 1-4 of the SPAS Draft EIR and Table SRA-2.5-1 of Part II of the SPAS Final EIR, respectively, both alternatives would result in unavoidable significant impacts related to Air Quality, Greenhouse Gases, Human Health Risk Assessment, Land Use and Planning - Aircraft Noise Exposure, Aircraft Noise, Construction Traffic and Equipment Noise, On-Airport Transportation, and Off-Airport Transportation, as further discussed below.

Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR highlights the tradeoff or "balancing" in the various aspects of significant air quality impacts between Alternative 2 and the LAWA Staff-Recommended Alternative. For example, Alternative 2 has lower construction-related air pollutant emissions and concentrations than those of the LAWA Staff-Recommended Alternative due to the fact that less construction would be required under this Alternative, but nevertheless exceeds the threshold of significance for all the pollutants analyzed. Relative to long-term operations-related air quality impacts, the analysis demonstrates that the LAWA Staff-Recommended Alternative would, for the most part, result in significant unavoidable air pollutant emissions and concentrations comparable to, or in some instances lower than, those associated with Alternative 2. As indicated in comparing the significant operational emissions in Tables SRA-2.3.2-4 and SRA-2.3.2-5 of Part II of the SPAS Final EIR and Table 1-5, as corrected in Chapter 5 of Part II of the SPAS Final EIR, the differences between the LAWA Staff-

Recommended Alternative and Alternative 2 would be approximately 3.8 percent for the grand total of sulfur dioxide (SO_2), and, for particulate emissions (PM), the grand total PM10 emissions for the LAWA Staff-Recommended Alternative would be approximately nine percent less than those of Alternative 2, and the grand total PM2.5 emissions for the LAWA Staff-Recommended Alternative would be more than 25 percent less than those of Alternative 2. Relative to significant operations-related concentrations for the two alternatives, as can be seen in comparing the significant operational emissions in Tables SRA-2.3.2-6 and SRA-2.3.2-7 of Part II of the SPAS Final EIR and Table 1-5, as corrected in Chapter 5 of Part II of the SPAS Final EIR, nitrogen dioxide (NO_2) concentration for Alternative 2 would be less than those of the LAWA Staff-Recommended Alternative by between approximately two percent and 26 percent, however, PM10 and PM2.5 concentrations for the LAWA Staff-Recommended Alternative would be less than those of Alternative 2 by approximately 15 percent and 38 percent, respectively. Thus, implementation of Alternative 2 would not avoid or substantially reduce the significant unavoidable air quality impacts of the LAWA Staff-Recommended Alternative.

Relative to significant unavoidable impacts associated with greenhouse gas (GHG) emission, a comparison of Table 4.6-6, as corrected in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.3.6-2 in Part II of the SPAS Final EIR indicates that implementation of Alternative 2 would not achieve the same amount of GHG reduction as that of the LAWA Staff-Recommended Alternative (i.e., 13.47 percent reduction in GHG emissions for Alternative 2 compared to a 14.73 percent reduction for the LAWA Staff-Recommended Alternative; hence, the significant unavoidable GHG impact associated with Alternative 2 would be comparatively worse). With regard to impacts associated with the human health risk assessment, implementation of Alternative 2 would result in a slightly lower hazard value for acute non-cancer health hazard (2.2 Hazard Index versus 3.0 Hazard Index), but would still exceed the threshold of significance (1.0 Hazard Index) by 120 percent.

Similar to air quality above, a comparison of the two alternatives relative to significant unavoidable noise impacts indicates a tradeoff or "balance" between specific aspects of the noise impacts. Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR, highlight the fact that implementation of the LAWA Staff-Recommended Alternative would result in significant unavoidable temporary construction noise impacts associated with airfield improvements, ground access (transportation system) improvements, and construction staging areas, while implementation of Alternative 2 would result in significant unavoidable temporary construction noise impacts associated with ground access (transportation system) improvements, and construction staging areas. As such, the extent of significant unavoidable temporary construction noise impacts under Alternative 2 would be somewhat less than those of the LAWA Staff-Recommended Alternative. However, when comparing the long-term, significant and unavoidable, operations-related aircraft noise impacts of the two alternatives, the extent of impacts under Alternative 2 would be greater than those of the LAWA Staff-Recommended Alternative. As indicated in the tables referenced above and the analysis in the EIR, the numbers of people and homes newly exposed to 65$\underline{>}$ CNEL under Alternative 2 are 14,039 and 4,531, respectively, as compared to 13,160 and 4,370, respectively, under the LAWA Staff-Recommended Alternative. Therefore, implementation of Alternative 2 would not avoid or substantially reduce the significant unavoidable noise impacts of the LAWA Staff-Recommended Alternative.

Relative to significant unavoidable traffic impacts, both Alternative 2 and the LAWA Staff-Recommended Alternative would have the same number of such impacts on-airport (i.e., the one same intersection within the CTA that would be significantly impacted under future cumulative conditions). Significant unavoidable traffic impacts off-airport would not be appreciably different between the two alternatives, with Alternative 2 having significant unavoidable impacts at 42 of the 245 off-airport facilities evaluated in the SPAS traffic analysis (i.e., 38 of the 200 intersection evaluated would have significant unavoidable impacts and 4 of the 45 CMP facilities would have

significant unavoidable impacts), compared to 48 off-airport facilities having significant unavoidable impacts under the LAWA Staff-Recommended Alternative (i.e., 44 intersections and 4 CMP facilities). Thus, implementation of Alternative 2 would not avoid or substantially reduce the significant traffic impacts of the LAWA Staff-Recommended Alternative.

In light of the relatively moderate environmental advantages of Alternative 2 over the LAWA Staff-Recommended Alternative, coupled with the inability of Alternative 2 to meet project objectives to the same extent as the LAWA Staff-Recommended Alternatives, particularly those objectives related to airfield safety, Alternative 2 is found to be infeasible and is rejected in favor of the Staff-Recommended Alternative.

Alternative 3:

Alternative 3, described in detail in Section 2.3.1.3 of the SPAS Draft EIR, is the CEQA "No Project" Alternative and represents what would reasonably be expected to occur in the foreseeable future if the LAX Master Plan (i.e., "Alternative D") and all of the LAX Master Plan improvements, including the Yellow Light Projects, were implemented as originally envisioned. Analysis of Alternative 3 was provided in the EIR to allow decision-makers and the public to compare the impacts of implementing alternatives to the LAX Master Plan with the impacts that would occur under the LAX Master Plan. Alternative 3 is a fully-integrated alternative, consisting of airfield, terminal, and ground access components. The distinguishing airfield improvement related to this alternative is the movement of Runway 6R/24L 340 feet south, along with the addition of a new centerfield taxiway, extension of Runway 6L/24R, and relocation and improvements to Taxiway E, Taxilane D, and service roads. Related terminal improvements include demolition of the concourses/gates at Terminals 1, 2, and 3 and replacement with a new linear concourse, elimination of the northernmost gates at TBIT, and replacement of the existing CTA parking structures with new passenger processing terminals. Key ground access improvements include closure of the CTA to private vehicles; development of a GTC at Manchester Square, an ITC at the area referred to as Continental City with a pedestrian bridge to the existing Metro Green Line Station, and a CONRAC at Parking Lot C; development of two APM systems to link the ITC, CONRAC, and CTA and link the GTC and CTA; construction of new on-airport roads east of and parallel to Aviation Boulevard; reconfiguration and expansion of Parking Lot E located west of La Cienega Boulevard; and construction of a West Employee Parking facility. There would be no modifications to the Argo Drainage Channel (other than those required under existing conditions to meet federal RSA requirements) or Lincoln Boulevard under this alternative.

Findings: In light of the analysis in the SPAS Final EIR and substantial evidence in the administrative record, the BOAC hereby rejects Alternative 3 as infeasible for the specific economic, legal, social, technological, or other considerations discussed below, including the fact that it will not effectively reduce or avoid the significant effects of the project, and, due to its extremely high cost, it would not respond to the project objective to produce an improvement program that is efficient, sustainable, feasible, and fiscally responsible.

Rationale: As can be seen in comparing the summaries of impacts by topics for Alternative 3 and for the LAWA Staff-Recommended Alternative presented in Table 1-4 of the SPAS Draft EIR and Table SRA-2.5-1 of Part II of the SPAS Final EIR, respectively, implementation of Alternative 3 would result in significant unavoidable impacts in all of the same environmental topic categories as those of the LAWA Staff-Recommended Alternative, with the exception of On-Airport Transportation. The reason for that difference is that, under Alternative 3, the CTA would be closed to private vehicles. Consequently, there would be minimal traffic within the CTA (i.e., only FlyAway buses, LAWA service vehicles, and police/security vehicles) and essentially no impacts to on-airport intersections. The significant impacts of the Staff-Recommended Alternative that would be avoided under Alternative 3 would be limited to intersections within the CTA.

For most other environmental topics, the magnitude and severity of significant unavoidable impacts associated with Alternative 3 would be greater than those of the LAWA Staff

Recommended Alternative, as seen by comparing the nature and extent of significant unavoidable impacts associated with Alternative 3 and the LAWA Staff-Recommended Alternative, which can be seen in Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR. This is true relative to all construction-related air pollutant emissions and concentrations, all operations-related air pollutant emissions and concentrations, with the exception of NO_2 1-hour concentrations related to California Ambient Air Quality Standards, greenhouse gas emissions, and human health risk impacts related to acute non-cancer hazards.

As shown in the two tables referenced immediately above, implementation of the LAWA Staff-Recommended Alternative would result in significant unavoidable temporary construction noise impacts associated with airfield improvements, ground access (transportation system) improvements, and construction staging areas, while implementation of Alternative 3 would result in significant unavoidable temporary construction noise impacts associated with only ground access (transportation system) improvements and construction staging areas. However, when comparing the long-term, significant and unavoidable, operations-related aircraft noise impacts of the two alternatives, the extent of impacts under Alternative 3 would be greater than those of the LAWA Staff-Recommended Alternative. The aircraft noise exposure impacts of Alternative 3 would be approximately the same as the LAWA Staff Recommended Alternative relative to population newly exposed to 65$\underline{>}$ CNEL (13,156 people for Alternative 3 compared to 13,160 people for the LAWA Staff Recommended Alternative), but the impact of Alternative 3 relative to the number of homes newly exposed to 65$\underline{>}$ CNEL would be greater than that of the LAWA Staff-Recommended Alternative (i.e., 4,508 versus 4,370). Therefore, implementation of Alternative 3 would not avoid or substantially reduce the significant unavoidable noise impacts of the LAWA Staff-Recommended Alternative.

Significant unavoidable traffic impacts off-airport would not be appreciably different between the two alternatives. Alternative 3 would have significant unavoidable impacts at 42 of the 245 off-airport facilities evaluated in the SPAS traffic analysis (i.e., 37 of the 200 intersection evaluated would have significant unavoidable impacts and 5 of the 45 CMP facilities would have significant unavoidable impacts), compared to 48 off-airport facilities having significant unavoidable impacts under the LAWA Staff-Recommended Alternative (i.e., 44 intersections and 4 CMP facilities). Thus, implementation of Alternative 3 would not avoid or substantially reduce the significant unavoidable off-airport traffic impacts of the LAWA Staff-Recommended Alternative.

Implementation of Alternative 3 would be substantially more expensive than the LAWA Staff-Recommended Alternative, with the construction cost of Alternative 3 being over 3.5 times greater than that of the LAWA Staff-Recommended Alternative (see Table 8-2 in the LAX SPAS Report). A detailed discussion of the financial considerations of SPAS, which was conducted with a series of Rough Order of Magnitude (ROM) cost estimates of capital costs, is contained in Chapter 8 of the LAX Preliminary SPAS Report. The Chapter evaluates, in light of airport expected capital costs and revenues, the financial sustainability of each of the Alternatives relative to one another. That analysis indicates that the Yellow Light Projects are relatively unsustainable compared to other SPAS alternatives, including the LAWA Staff-Recommended Alternative. In particular, the implementation of the Yellow Light Project elements of the LAX Master Plan required more than $16 billion in escalated capital costs, making them, by a large margin, the most capital intensive solutions to the problems that those projects were designed to address. (See LAX Preliminary SPAS Report, Table 8-2.) In addition, the implementation of the Yellow Light Projects was found to incur a high risk of a bond rating downgrade for the airport. (See LAX Preliminary SPAS Report, Table 8-2.) Bond rating downgrades not only call into question the ability of the airport to finance the Yellow Light Projects, but also could reduce the airport's capability to finance other capital projects that the airport may seek unrelated to SPAS, including other projects described in the cumulative impact analysis set forth in Chapter 5 of the SPAS Draft EIR, such as the Midfield Satellite Concourse.

By comparison, and as detailed in Chapter 1 of the SPAS Draft EIR (Tables 1-2 and 1-3), the Staff-Recommended Alternative provides near equivalent solutions for the same problems that the Yellow Light Projects were designed to address with nearly $9 billion less in investment. (See LAX Preliminary SPAS Report, Table 8-1, which reports the escalated costs of the Staff-Recommended Alternative [identified as Alt. 1 with Alt. 9 ground access] at $4,762,650 and the costs of the LAX Master Plan Yellow Light Projects [identified as Alt. 3] at $16,791,356.) As indicated in Table 1-2 of the SPAS Draft EIR, Alternative 3, with its high cost, is the only one of the nine alternatives that would result in a high impact to LAWA finances and therefore does not respond to the project objective to produce an improvement program that is efficient, sustainable, feasible, and fiscally responsible.

In light of the fact that the magnitude and severity of significant unavoidable impacts associated with Alternative 3 would be greater than those of the LAWA Staff Recommended Alternative in most instances, the unsustainable nature of Alternative 3 from a financial perspective, and the inability of Alternative 3 to meet the project objective of producing an improvement program that is efficient, sustainable, feasible, and fiscally responsible, Alternative 3 is found to be infeasible and is rejected in favor of the Staff-Recommended Alternative.

Alternative 4:

Alternative 4, described in detail in Section 2.3.1.4 of the SPAS Draft EIR, represents what would reasonably be expected to occur if all ongoing and reasonably foreseeable non-Yellow Light improvements identified in the LAX Master Plan (i.e., "Alternative D") were implemented, and none of the Yellow Light Projects or any of the identified alternatives to the LAX Master Plan Program were constructed or implemented. Analysis of Alternative 4 was provided in the EIR to allow decision-makers and the public to evaluate the impacts of simply eliminating the Yellow Light Projects from the LAX Master Plan Program. Alternative 4 is a fully-integrated alternative, consisting of airfield, terminal, and ground access components. Ongoing and reasonably-foreseeable non-Yellow Light projects that would be developed include the Bradley West Project, an extension to Runway 6R/24L for RSA improvements, the MSC and related new passenger processor and connector within the CTA, and various terminal improvements. In addition, a CONRAC at Parking Lot C would be constructed and a new parking structure would be developed at the ITC site to accommodate the public parking displaced by the CONRAC. A portion of the Argo Drainage Channel would be covered to comply with existing RSA requirements by converting a portion of the existing open unlined channel to an enclosed concrete box culvert. There would be no modifications to Lincoln Boulevard under this alternative.

Findings: In light of the analysis in the SPAS Final EIR and substantial evidence in the administrative record, the BOAC hereby rejects Alternative 4 as infeasible for the specific economic, legal, social, technological, or other considerations discussed below, including the fact that it will not fully meet most project objectives and will not effectively reduce or avoid the significant effects of the project.

Rationale: As indicated in Table 1-2 of the SPAS Draft EIR, which provides an evaluation of the relationship between the project objectives and each of the SPAS alternatives, implementation of Alternative 4 would not respond to the project objective of providing north airfield improvements that support safe and efficient movement of aircraft at LAX, as compared to the airfield improvements proposed under the LAWA Staff-Recommended Alternative, which includes the Alternative 1 airfield improvements that largely respond to that objective. The analysis supporting those conclusions is provided in Section 4.7.2 of the SPAS Draft EIR. As further described in that section, and summarized in Table 4.7.2-16 of the SPAS Draft EIR, there are several aspects of Alternative 4 related to airfield safety and efficiency enhancements that fall far short of those measures included in Alternative 1 including: the ability to shift the runway protection zone (RPZ) for Runway 24R westward whereby residences and the vehicle staging area west of Sepulveda Boulevard would no longer be located within the RPZ; providing a greater amount of runway and

taxiway facilities that meet FAA Airport Design Standards for ADG V and VI aircraft, particularly as it relates to separation requirements; reducing the need for special operations restrictions, modifications of standards, and waivers from FAA; providing increased separation between runways and between runways and taxiways, which better enables taxiing and holding aircraft to stay clear of runway object free zone (OFZ) and runway safety area (RSA) surfaces; allowing the addition of a centerfield parallel taxiway that includes high-speed exits from Runway 6L/24R, which provides more time and options for FAA air traffic controllers to handle aircraft exiting the runway; more time and distance for the pilot of an arriving aircraft to exit the runway, slow down and hold before crossing Runway 6R/24L, and reduced potential for safety hazards/incursions; improving the locations and design of crossing points (i.e., 90-degree crossing angle) at Runway 6R/24L, which provides better pilot visibility down Runway 6R/24L before crossing; realigning/straightening Taxilane D to provide a full-length parallel taxiway designed for ADG V aircraft; relocating vehicle service road adjacent to Taxiway E and Taxilane D out from between two active surfaces; providing more aircraft holding areas near the end of runways, thereby improving the ability for sequencing departures; and improving the locations for high-speed exits from Runway 6L/24R and improves crossing angles at Runway 6R/24L with better pilot visibility down Runway 6R/24L before crossing. Additionally, as also discussed in Section 4.7.2 of the SPAS Draft EIR, several independent assessments of north airfield safety at LAX have been completed and there is consensus among the studies, including the North Airfield Safety Study (NASS) of 2012, that there are airfield safety improvements associated within increasing the separation between the existing runways and adding a centerfield parallel taxiway. Implementation of Alternative 1, which includes increased runway separation and the addition of a centerfield taxiway, can achieve such safety benefits, whereas Alternative 4 will not.

Additionally, because Alternative 4 would not provide north airfield improvements that support safe and efficient movement of aircraft at LAX to the same extent as Alternative 1, Alternative 4 is also less able to respond to the project objective to maintain LAX's position as the premier international gateway in supporting and advancing the economic growth and vitality of the Los Angeles region. As described in Table 1-2 of the SPAS Draft EIR and supported by the analysis in Section 4.7.2 of the SPAS Draft EIR, the limited airfield improvements proposed under Alternative 4 do not increase standardization of aircraft operations and address very few airfield hazards, whereas the airfield improvements under Alternative 1, as included in the LAWA Staff-Recommended Alternative, provide standardization of nearly all airfield operations and address all airfield hazards. As also shown in Table 1-2 of the SPAS Draft EIR, the ability of each SPAS alternative to maintain LAX's position as the premier international gateway is influenced by the combination of airfield, terminal, and ground transportation system improvements. The LAWA Staff-Recommended Alternative (i.e., the combination of Alternatives 1 and 9, as described above in Section I) is largely responsive to the airfield aspect of that objective and is fully responsive to the terminal and ground transportation aspects, whereas Alternative 4 is completely non-responsive to the airfield and terminal aspects of that objective and only minimally responsive to the ground access aspect.

Relative to meeting the objective of improving the ground access system to better accommodate airport-related traffic, especially as related to the CTA, Alternative 4 is only minimally responsive because the only ground transportation improvement it provides is a CONRAC, whereas the LAWA Staff-Recommended Alternative, with the Alternative 9 ground transportation system improvements, is fully responsive to that objective. Relative to meeting the project objective of enhancing safety and security at LAX, evaluation of the safety aspect of that objective takes into consideration the same airfield performance characteristics described above. Given that Alternative 4 proposes no airfield improvements other than the federally-mandated runway safety improvements that would be required irrespective of SPAS, Alternative 4 does not meet the safety aspect of that objective.

As can be seen in comparing the summaries of impacts by topics for Alternative 4 and for the LAWA Staff-Recommended Alternative presented in Table 1-4 of the SPAS Draft EIR and Table

SRA-2.5-1 of Part II of the SPAS Final EIR, respectively, implementation of Alternative 4 would result in significant unavoidable impacts in all of the same environmental topic categories as those of the LAWA Staff-Recommended Alternative. Specifically, both alternatives would result in unavoidable significant impacts related to Air Quality, Greenhouse Gases, Human Health Risk Assessment, Land Use and Planning - Aircraft Noise Exposure, Aircraft Noise, Construction Traffic and Equipment Noise, On-Airport Transportation, and Off-Airport Transportation. Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR highlight the tradeoff or "balancing" in the various aspects of significant air quality impacts between Alternative 4 and the LAWA-Staff-Recommended Alternative. For example, Alternative 4 has lower construction-related air pollutant emissions and concentrations than those of the LAWA Staff-Recommended Alternative, but nevertheless exceeds the threshold of significance for emissions of NO_x and PM10 and concentrations of NO_2, PM10, and PM2.5. Relative to long-term operations-related air quality impacts, the analysis demonstrates that the LAWA Staff-Recommended Alternative would result in air pollutant emissions and concentrations that are lower than those associated with Alternative 4, with the exception of NO_2 1-hour concentrations related to California Ambient Air Quality Standards. Thus, implementation of Alternative 4 would not avoid or substantially reduce the significant unavoidable air quality impacts of the LAWA Staff-Recommended Alternative.

Relative to significant unavoidable impacts associated with greenhouse gas (GHG) emission, a comparison of the two tables referenced above indicates that implementation of Alternative 4 would not achieve the same amount of GHG reduction as that of the LAWA Staff-Recommended Alternative (i.e., 14.06 percent reduction in GHG emissions for Alternative 4 compared to a 14.73 percent reduction for the LAWA Staff-Recommended Alternative; hence, the significant unavoidable GHG impact associated with Alternative 4 would be comparatively worse).

With regard to impacts associated with the human health risk assessment, implementation of Alternative 4 would result in a higher hazard value (i.e., worse impact) for acute non-cancer health hazard than that of the LAWA Staff-Recommended Alternative (3.1 Hazard Index versus 3.0 Hazard Index).

A comparison of the two alternatives relative to significant unavoidable noise impacts indicates a tradeoff or "balance" between specific aspects of the noise impacts. Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR highlight the fact that implementation of the LAWA Staff-Recommended Alternative would result in significant unavoidable temporary construction noise impacts associated with airfield improvements, ground access (transportation system) improvements, and construction staging areas, while implementation of Alternative 4 would result in significant unavoidable temporary construction noise impacts associated with only ground access (transportation system) improvements and construction staging areas. However, when comparing the long-term, significant and unavoidable, operations-related aircraft noise impacts of the two alternatives, the extent of impacts under Alternative 4 would be greater than those of the LAWA Staff-Recommended Alternative. As indicated in the tables referenced above and the analysis in the EIR, the numbers of people and homes new exposed to 65$\underline{>}$ CNEL are 14,404 and 4,603, respectively, under Alternative 4, but only 13,160 and 4,370, respectively, under the LAWA Staff-Recommended Alternative. Therefore, implementation of Alternative 4 would not avoid or substantially reduce the significant unavoidable noise impacts of the LAWA Staff-Recommended Alternative.

Relative to significant unavoidable traffic impacts, both Alternative 4 and the LAWA Staff-Recommended Alternative would have the same number of such impacts on-airport (i.e., the one same intersection within the CTA that would be significantly impacted under future cumulative conditions). Significant unavoidable traffic impacts off-airport would not be appreciably different between the two alternatives, with Alternative 4 having significant unavoidable impacts at 43 of the 245 off-airport facilities evaluated in the SPAS traffic analysis (i.e., 38 of the 200 intersection evaluated would have significant unavoidable impacts and 5 of the 45 CMP facilities would have

significant unavoidable impacts), compared to 48 off-airport facilities having significant unavoidable impacts under the LAWA Staff-Recommended Alternative (i.e., 44 intersections and 4 CMP facilities). Thus, implementation of Alternative 4 would not avoid or substantially reduce the significant unavoidable traffic impacts of the LAWA Staff-Recommended Alternative.

In light of the fact that Alternative 4 does not have significant environmental advantages over the LAWA Staff-Recommended Alternative, coupled with the inability of Alternative 4 to meet project objectives to the same extent as the LAWA Staff-Recommended Alternatives, Alternative 4 is found to be infeasible and is rejected in favor of the Staff-Recommended Alternative.

Alternative 5:

Alternative 5, described in detail in Section 2.3.1.5 of the SPAS Draft EIR, provides, as noted above, a focus on airfield improvements and associated terminal improvements, as may be compared to such improvements proposed under Alternatives 1 through 4. This alternative is compatible with the ground access improvements associated with Alternatives 1 and 2, as well as the ground access improvements associated with Alternatives 8 and 9, described below. The distinguishing feature of this alternative is the movement of Runway 6L/24R 350 feet north. Similar to Alternative 1, a new centerfield taxiway would be constructed, Runway 6R/24L would be extended, Taxilane D and Taxiway E would be modified/improved, and the service road would be relocated. Under this alternative, the taxilane/taxiway improvements would meet FAA design requirements to fully accommodate ADG VI aircraft. (Under Alternatives 1, 2, and 6, the taxiway configuration would either not meet or only partially meet ADG VI design standards, which would impose certain limitations and special requirements during the operation of those aircraft.) The increased runway-taxiway separation requirements under this alternative would cause the aircraft taxiway operations area to extend farther south than under Alternatives 1, 2, and 6, which, in turn, would result in comparatively less concourse and/or gate area for the potential TBIT extension and MSC extension. Under this alternative, a greater portion of Lincoln Boulevard would be below grade and/or tunneled than under Alternative 1.

Findings: In light of the analysis in the SPAS Final EIR and substantial evidence in the administrative record, the BOAC hereby rejects the airfield and terminal improvements proposed under Alternative 5 in favor of the airfield and terminal improvements proposed under Alternative 1 (i.e., the LAWA Staff-Recommended Alternative) because the improvements proposed under Alternative 5 will not substantially reduce or avoid the significant effects related to the airfield and terminal improvements of the project. Additionally, Alternative 5 is limited in its ability to respond to the project objective of maintaining LAX's position as the premier international gateway in supporting and advancing the economic growth and vitality of the Los Angeles region.

Rationale: As can be seen in comparing the summaries of impacts by topics for Alternative 5 and for the LAWA Staff-Recommended Alternative presented in Table 1-4 of the SPAS Draft EIR and Table SRA-2.5-1 of Part II of the SPAS Final EIR, respectively, implementation of Alternative 5 would result in significant unavoidable impacts in all of the applicable environmental topic categories as those of the LAWA Staff-Recommended Alternative. Specifically, both alternatives would result in unavoidable significant impacts related to Air Quality, Greenhouse Gases, Human Health Risk Assessment, Land Use and Planning - Aircraft Noise Exposure, Aircraft Noise, and Construction Traffic and Equipment Noise. Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR highlight the fact that the range of construction-related air pollutant emissions and concentrations associated with Alternative 5 is comparable to that of the LAWA Staff-Recommended Alternative. The range of long-term operations-related air quality impacts of Alternative 5 is also comparable to that of the LAWA Staff-Recommended Alternative. Thus, implementation of Alternative 5 would not avoid or substantially reduce the significant unavoidable air quality impacts of the LAWA Staff-Recommended Alternative.

Relative to significant unavoidable impacts associated with greenhouse gas (GHG) emission, a comparison of the two tables referenced immediately above indicates that implementation of

Alternative 5 achieve a generally similar amount of GHG reduction as that of the LAWA Staff-Recommended Alternative (i.e., 12.84-14.76 percent reduction in GHG emissions for Alternative 5 compared to a 14.73 percent reduction for the LAWA Staff-Recommended Alternative).

With regard to impacts associated with the human health risk assessment, implementation of Alternative 5 would result in a hazard value for acute non-cancer health hazard that is slightly less than that of the LAWA Staff-Recommended Alternative (2.9 Hazard Index versus 3.0 Hazard Index), but would still exceed the threshold of significance (1.0) by 190 percent.

A comparison of the two alternatives relative to significant unavoidable noise impacts indicates no appreciable difference between Alternative 5 and the LAWA Staff-Recommended Alternative. Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR highlight the fact that both alternatives would result in significant unavoidable temporary construction noise impacts associated with airfield improvements and construction staging areas.

In comparing the long-term operations-related aircraft noise significant unavoidable impacts of the two alternatives, the extent of impacts under Alternative 5 would be generally comparable to, or slightly less than, those of the LAWA Staff-Recommended Alternative. As indicated in the tables referenced above and the analysis in the EIR, the numbers of people and homes new exposed to 65> CNEL are 12,861 and 4,315, respectively, under Alternative 5, and 13,160 and 4,370, respectively, under the LAWA Staff-Recommended Alternative, a difference of approximately 1-3 percent. Thus, implementation of Alternative 5 would not avoid or substantially reduce the significant unavoidable noise impacts of the LAWA Staff-Recommended Alternative.

Alternative 5 is limited in its ability to respond to the project objective of maintaining LAX's position as the premier international gateway in supporting and advancing the economic growth and vitality of the Los Angeles region. Based on the taxiway to runway separation requirements associated with this alternative, the building limit line and aircraft parking limit line for this alternative would be much farther south than would otherwise occur under the LAWA Staff-Recommended Alternative. This, in turn, limits the ability to extend northward the concourse at TBIT and the future Midfield Satellite Concourse, and therefore stifles the opportunity for additional terminal improvements to serve passengers, particularly relative to international travel.

In light of the fact that Alternative 5 does not avoid or substantially reduce the significant environmental impacts of the LAWA Staff-Recommended Alternative and is limited in its responsiveness to one of the key project objectives, Alternative 5 is rejected in favor of the Staff-Recommended Alternative.

Alternative 6:

Alternative 6, similar to Alternative 5 and as described in detail in Section 2.3.1.6 of the SPAS Draft EIR, also focuses on airfield improvements and associated terminal improvements, as may be compared to such improvements proposed under Alternatives 1 through 4. This alternative is compatible with the ground access improvements associated with Alternatives 1 and 2, as well as the improvements associated with Alternatives 8 and 9. The distinguishing feature of this alternative is the movement of Runway 6L/24R 100 feet north. Similar to Alternative 1, a new centerfield taxiway would be constructed. All other physical aspects of the airfield and terminal improvements associated with this alternative would be essentially the same as those of Alternative 1, described above, with a lesser portion of the Argo Drainage Channel requiring covering (i.e., conversion to a concrete box culvert) and a lesser portion of Lincoln Boulevard requiring tunneling.

Findings: In light of the analysis in the SPAS Final EIR and substantial evidence in the administrative record, the BOAC hereby rejects the airfield and terminal improvements proposed under Alternative 6 as infeasible for the specific economic, legal, social, technological, or other considerations discussed below, including the fact that, as compared to the LAWA Staff-

Recommended Alternative, they are not as responsive to meeting the relevant project objectives and will not effectively reduce or avoid the significant effects of the project.

Rationale: As indicated in Table 1-2 of the SPAS Draft EIR, which provides an evaluation of the relationship between the project objectives and each of the SPAS alternatives, implementation of Alternative 6 would partially respond to the project objective of providing north airfield improvements that support safe and efficient movement of aircraft at LAX, as compared to the airfield improvements proposed under the LAWA Staff-Recommended Alternative, which includes the Alternative 1 airfield improvements that largely respond to that objective. The analysis supporting those conclusions is provided in Section 4.7.2 of the SPAS Draft EIR.

Additionally, because Alternative 6 would not provide north airfield improvements that support safe and efficient movement of aircraft at LAX to the same extent as Alternative 1, Alternative 6 is less able to respond to the project objective to maintain LAX's position as the premier international gateway in supporting and advancing the economic growth and vitality of the Los Angeles region. As shown in Table 1-2 of the SPAS Draft EIR, the ability of each SPAS alternative to maintain LAX's position as the premier international gateway is influenced by the combination of airfield, terminal, and ground transportation system improvements. Both Alternative 6 and the Staff-Recommended Alternative address all airfield hazards. However, as described in Section 4.7.2 of the SPAS Draft EIR, the limited airfield improvements proposed under Alternative 6 provide improvement in standardization of airfield operations, whereas, the airfield improvements proposed under the LAWA Staff-Recommended Alternative, which are the same as those proposed under Alternative 1, provide standardization of nearly all airfield operations. A key difference between the two Alternatives is that Alternative 6 fails to standardize operations for all ADG V aircraft during bad weather conditions, and for ADG VI operations during all weather conditions. In addition, Alternative 6 fails to provide significant improvements to arriving pilots' situational awareness, a key feature included in the Staff Recommended Alternative.

Relative to airfield and terminal improvements, the LAWA Staff-Recommended Alternative is largely responsive to the airfield aspect and fully responsive to the terminal aspect, but Alternative 6 is only partially responsive to the airfield aspect although fully responsive to the terminal aspect (i.e., the extent and benefits of airfield improvements under Alternative 6 are not as great as those under the LAWA Staff-Recommended Alternative, although Alternative 6 still allows for the northward extension of the TBIT concourse and future Midfield Satellite Concourse). Because Alternative 6 focuses on only airfield and terminal improvements, which could be coupled with the ground access improvements of certain other alternatives, its relationship to the ground access aspect of the Staff-Recommended Alternative is not evaluated.

A similar relationship between Alternative 6 and the Staff-Recommended Alternative exists relative to each alternative's responsiveness to the project objective to enhance safety and security at LAX. As indicated in Table 1-2 of the SPAS Draft EIR, evaluation of the safety aspect of that objective takes into consideration the same airfield performance characteristics described above. As described above, the airfield improvements proposed under Alternative 6 do provide some improvement in standardization of aircraft operations and address all airfield hazards; however, the airfield improvements under the LAWA Staff-Recommended Alternative provide standardization of nearly all airfield operations and address all airfield hazards, which is more supportive of the safety aspect of this objective.

As can be seen in comparing the summaries of impacts by topics for Alternative 6 and for the LAWA Staff-Recommended Alternative presented in Table 1-4 of the SPAS Draft EIR and Table SRA-2.5-1 of Part II of the SPAS Final EIR, respectively, implementation of Alternative 6 would result in significant unavoidable impacts in all of the same environmental topic categories as those of the LAWA Staff-Recommended Alternative. Specifically, both alternatives would result in unavoidable significant impacts related to Air Quality, Greenhouse Gases, Human Health Risk Assessment, Land Use and Planning - Aircraft Noise Exposure, Aircraft Noise, and Construction

Traffic and Equipment Noise. Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR highlight the fact that the range of construction-related air pollutant emissions and concentrations associated with Alternative 6 would include a level of impact comparable to that of the LAWA Staff-Recommended Alternative. The range of long-term operations-related air quality impacts of Alternative 6 would also be comparable to the level of impact of the LAWA Staff-Recommended Alternative. Thus, implementation of Alternative 6 would not avoid or substantially reduce the significant unavoidable air quality impacts of the LAWA Staff-Recommended Alternative.

Relative to significant unavoidable impacts associated with greenhouse gas (GHG) emission, a comparison of the two tables referenced immediately above indicates that implementation of Alternative 6 achieve a generally similar amount of GHG reduction as that of the LAWA Staff-Recommended Alternative (i.e., 13.23-15.15 percent reduction in GHG emissions for Alternative 6 compared to a 14.73 percent reduction for the LAWA Staff-Recommended Alternative).

With regard to impacts associated with the human health risk assessment, implementation of Alternative 6 would result in a hazard value for acute non-cancer health hazard that is slightly less than that of the LAWA Staff-Recommended Alternative (2.8 Hazard Index versus 3.0 Hazard Index), but would still exceed the threshold of significance (1.0) by 180 percent.

A comparison of the two alternatives relative to significant unavoidable noise impacts indicates no appreciable difference between Alternative 6 and the LAWA Staff-Recommended Alternative. Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR highlight the fact that both alternatives would result in significant unavoidable temporary construction noise impacts associated with airfield improvements and construction staging areas.

In comparing the long-term operations-related aircraft noise significant unavoidable impacts of the two alternatives, the extent of impacts under Alternative 6 would be generally comparable to, or slightly more than those of the LAWA Staff-Recommended Alternative. As indicated in the subject tables, the numbers of people and homes new exposed to 65$\geq$ CNEL are 13,607 and 4,462, respectively, under Alternative 6, and 13,160 and 4,370, respectively, under the LAWA Staff-Recommended Alternative. Thus, implementation of Alternative 6 would not avoid or substantially reduce the significant unavoidable noise impacts of the LAWA Staff-Recommended Alternative.

In light of the fact that Alternative 6 does not have significant environmental advantages over the LAWA Staff-Recommended Alternative and does not meet project objectives to the same extent as the Staff-Recommended Alternative, Alternative 6 is found to be infeasible and is rejected in favor of the Staff-Recommended Alternative.

Alternative 7:

Alternative 7, similar to Alternatives 5 and 6 and described in detail in Section 2.3.1.7 of the SPAS Draft EIR, also focuses on airfield improvements and associated terminal improvements, as may be compared to such improvements proposed under Alternatives 1 through 4. This alternative is compatible with the ground access improvements associated with Alternatives 1 and 2, as well as the improvements associated with Alternatives 8 and 9. The distinguishing feature of this alternative is the movement of Runway 6R/24L 100 feet south. Similar to Alternative 1, a new centerfield taxiway would be constructed, Runway 6R/24L would be extended, Taxiway E and Taxilane D would be modified/improved, and the service road would be relocated. The southward movement of the runway and associated southerly relocation of Taxiway E and Taxilane D would cause the aircraft taxiway operations area to extend farther south than under Alternatives 1, 2, 5, and 6, which, in turn, would result in comparatively less concourse and/or gate area for Terminal 3, potential TBIT extension, and potential MSC extension. There would be no modifications to the Argo Drainage Channel (other than those required under existing

conditions to meet federal RSA requirements) or Lincoln Boulevard under this alternative. The RPZ currently associated with Runway 6L/24R would continue to overlay existing residential uses.

Findings: In light of the analysis in the SPAS Final EIR and substantial evidence in the administrative record, the BOAC hereby rejects the airfield and terminal improvements proposed under Alternative 7 as infeasible for the specific economic, legal, social, technological, or other considerations discussed below, including the fact that, as compared to the LAWA Staff-Recommended Alternative, they are not as responsive to meeting the relevant project objectives and will not effectively reduce or avoid the significant effects of the project.

Rationale: As indicated in Table 1-2 of the SPAS Draft EIR, which provides an evaluation of the relationship between the project objectives and each of the SPAS alternatives, implementation of Alternative 7 would partially respond to the project objective of providing north airfield improvements that support safe and efficient movement of aircraft at LAX, as compared to the airfield improvements proposed under the LAWA Staff-Recommended Alternative, which includes the Alternative 1 airfield improvements that largely respond to that objective. The analysis supporting those conclusions is provided in Section 4.7.2 of the SPAS Draft EIR.

Additionally, because Alternative 7 would not provide north airfield improvements that support safe and efficient movement of aircraft at LAX to the same extent as Alternative 1, Alternative 7 is less able to respond to the project objective to maintain LAX's position as the premier international gateway in supporting and advancing the economic growth and vitality of the Los Angeles region. As shown in Table 1-2, the ability of each SPAS alternative to maintain LAX's position as the premier international gateway is influenced by the combination of airfield, terminal, and ground transportation system improvements. Both Alternative 7 and the Staff-Recommended Alternative address all airfield hazards. However, as described in Section 4.7.2 of the SPAS Draft EIR, the limited airfield improvements proposed under Alternative 7 provide improvement in standardization of airfield operations, whereas the airfield improvements proposed under the LAWA Staff-Recommended Alternative, which are the same as those proposed under Alternative 1, provide standardization of nearly all airfield operations. A key difference between the two Alternatives is that Alternative 7 fails to standardize operations for all ADG V aircraft during bad weather conditions, and for ADG VI operations during all weather conditions. In addition, Alternative 7 fails to provide significant improvements to arriving pilots' situational awareness, a key feature included in the Staff Recommended Alternative.

Relative to airfield and terminal improvements, the LAWA Staff-Recommended Alternative is largely responsive to the airfield aspect and fully responsive to the terminal aspect, but Alternative 7 is only partially responsive to the airfield aspect although fully responsive to the terminal aspect (i.e., the extent and benefits of airfield improvements under Alternative 7 are not as great as those under the LAWA Staff-Recommended Alternative, and Alternative 7 allows more limited northward extensions of the TBIT concourse and future Midfield Satellite Concourse than the LAWA Staff-Recommended Alternative). Because Alternative 7 focuses on only airfield and terminal improvements, which could be coupled with the ground access improvements of certain other alternatives, its relationship to the ground access aspect of the Staff-Recommended Alternative is not evaluated.

A similar relationship between the Alternative 7 and the Staff-Recommended Alternative exists relative to each alternative's responsiveness to the project objective to enhance safety and security at LAX. As indicated in Table 1-2 of the SPAS Draft EIR, evaluation of the safety aspect of that objective takes into consideration the same airfield performance characteristics described above. As described above, the airfield improvements proposed under Alternative 7 do provide some improvement in standardization of aircraft operations and address all airfield hazards; however, the airfield improvements under the LAWA Staff-Recommended Alternative provide standardization of nearly all airfield operations and address all airfield hazards, which is more supportive of the safety aspect of this objective.

As can be seen in comparing the summaries of impacts by topics for Alternative 7 and for the LAWA Staff-Recommended Alternative presented in Table 1-4 of the SPAS Draft EIR and Table SRA-2.5-1 of Part II of the SPAS Final EIR, respectively, implementation of Alternative 7 would result in significant unavoidable impacts in all of the same environmental topic categories as those of the LAWA Staff-Recommended Alternative. Specifically, both alternatives would result in unavoidable significant impacts related to Air Quality, Greenhouse Gases, Human Health Risk Assessment, Land Use and Planning - Aircraft Noise Exposure, Aircraft Noise, and Construction Traffic and Equipment Noise. Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR highlight the fact that the range of construction-related air pollutant emissions and concentrations associated with Alternative 7 would include a level of impact comparable to that of the LAWA Staff-Recommended Alternative. The range of long-term operations-related air quality impacts of Alternative 7 would also be comparable to the level of impact of the LAWA Staff-Recommended Alternative. Thus, implementation of Alternative 7 would not avoid or substantially reduce the significant unavoidable air quality impacts of the LAWA Staff-Recommended Alternative.

Relative to significant unavoidable impacts associated with greenhouse gas (GHG) emission, a comparison of the two tables referenced immediately above indicates that implementation of Alternative 7 achieve a generally similar amount of GHG reduction as that of the LAWA Staff-Recommended Alternative (i.e., 12.99-14.91 percent reduction in GHG emissions for Alternative 7 compared to a 14.73 percent reduction for the LAWA Staff-Recommended Alternative).

With regard to impacts associated with the human health risk assessment, implementation of Alternative 7 would result in a hazard value for acute non-cancer health hazard that is slightly less than that of the LAWA Staff-Recommended Alternative (2.4 Hazard Index versus 3.0 Hazard Index), but would still exceed the threshold of significance (1.0) by 140 percent.

A comparison of the two alternatives relative to significant unavoidable noise impacts indicates no appreciable difference between Alternative 7 and the LAWA Staff-Recommended Alternative. Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR highlight the fact that both alternatives would result in significant unavoidable temporary construction noise impacts associated with airfield improvements and construction staging areas.

In comparing the long-term operations-related aircraft noise significant unavoidable impacts of the two alternatives, the extent of impacts under Alternative 7 would be generally comparable to, or slightly more than those of the LAWA Staff-Recommended Alternative. As indicated in the subject tables, the numbers of people and homes new exposed to 65$\geq$ CNEL are 13,891 and 4,485, respectively, under Alternative 6, and 13,160 and 4,370, respectively, under the LAWA Staff-Recommended Alternative. Thus, implementation of Alternative 7 would not avoid or substantially reduce the significant unavoidable noise impacts of the LAWA Staff-Recommended Alternative.

In light of the fact that Alternative 7 does not have significant environmental advantages over the LAWA Staff-Recommended Alternative and does not meet project objectives to the same extent as the Staff-Recommended Alternative, Alternative 7 is found to be infeasible and is rejected in favor of the Staff-Recommended Alternative.

Alternative 8:

Alternative 8, described in detail in Section 2.3.1.8 of the SPAS Draft EIR, focuses on ground access improvements that could be integrated in place of the improvements proposed under Alternatives 1 through 4. This alternative is compatible with the airfield and terminal improvements associated with Alternatives 1, 2, 5, 6, and 7. The distinguishing feature of this alternative is the development of a CONRAC in addition to parking at Manchester Square, and the development of parking at the Avis facility (east of Parking Lot C). All other ground access

aspects of this alternative are comparable to those of Alternatives 1 and 2, with the exception of the realignment of Lincoln Boulevard, which is only associated with the airfield improvement alternatives.

Findings: In light of the analysis in the SPAS Final EIR and substantial evidence in the administrative record, the BOAC selects the ground transportation system improvements proposed under the LAWA Staff-Recommended Alternative over the ground transportation system improvements included under Alternative 8 because the ground transportation system improvements included under Alternative 8 will not substantially reduce or avoid the significant effects of the project and do not provide the operational traffic benefits within the Central Terminal Area that would occur with the LAWA Staff-Recommended Alternative.

Rationale: As can be seen in comparing the summaries of impacts by topics for Alternative 8 and for the LAWA Staff-Recommended Alternative presented in Table 1-4 of the SPAS Draft EIR and Table SRA-2.5-1 of Part II of the SPAS Final EIR, respectively, implementation of Alternative 8 would result in significant unavoidable impacts in all of the same environmental topic categories as those of the LAWA Staff-Recommended Alternative. Specifically, both alternatives would result in unavoidable significant impacts related to Air Quality, Greenhouse Gases, Human Health Risk Assessment, Construction Traffic and Equipment Noise, On-Airport Transportation, and Off-Airport Transportation. Table 1-5 in the SPAS Draft EIR, as amended by the corrections and additions in Chapter 5 of Part II of the SPAS Final EIR, and Table SRA-2.5.2 in Part II of the SPAS Final EIR highlight the fact that the range of construction-related air pollutant emissions and concentrations associated with Alternative 8 is comparable to that of the LAWA Staff-Recommended Alternative. The range of long-term operations-related air quality impacts of Alternative 8 is also comparable to the level of impact of the LAWA Staff-Recommended Alternative. Thus, implementation of Alternative 8 would not avoid or substantially reduce the significant unavoidable air quality impacts of the LAWA Staff-Recommended Alternative.

Relative to significant unavoidable impacts associated with greenhouse gas (GHG) emission, a comparison of the two tables referenced immediately above indicates that implementation of Alternative 8 achieve a generally similar amount of GHG reduction as that of the LAWA Staff-Recommended Alternative (i.e., 14.56-15.36 percent reduction in GHG emissions for Alternative 8 compared to a 14.73 percent reduction for the LAWA Staff-Recommended Alternative).

With regard to impacts associated with the human health risk assessment, implementation of Alternative 8 would result in a hazard value for acute non-cancer health hazard of 3.0, as indicated in Table 4.7.1-7 of the SPAS Draft EIR, which is the same as that of the LAWA Staff-Recommended Alternative (3.0 Hazard Index).

A comparison of the two alternatives relative to significant unavoidable construction-related noise impacts indicates no appreciable difference between Alternative 8 and the LAWA Staff-Recommended Alternative. As evidenced by a review of the two tables referenced immediately above, both alternatives would result in significant unavoidable temporary construction noise impacts associated with ground access improvements and construction staging areas. Thus, implementation of Alternative 8 would not avoid or substantially reduce the significant unavoidable noise impacts of the LAWA Staff-Recommended Alternative.

On-airport traffic impacts related to curbsides, intersections, and roadway links would be slightly greater/worse under Alternative 8 than under Alternative 9 due to the fact that the APM system would reduce the number of vehicle trips occurring within and around the CTA as compared to what would otherwise occur under Alternative 8. The comparative differences in on-airport performance between Alternatives 8 and 9 seen in the tables in Section 4.12.1 of the SPAS Draft EIR, including Tables 4.12.1-16 and 4.12.1-17 for curbside impacts, Tables 4.12.1-18 and 4.12.1-19 for roadway links, and Tables 4.12.1-20 and 4.12.1-21 for intersections, which summarize the impact analysis included in that Section. In light of the fact that Alternative 8 does not avoid or substantially reduce the significant environmental impacts of the LAWA Staff-Recommended Alternative, Alternative 8 is rejected in favor of the Staff-Recommended Alternative.

Alternative 9:

Alternative 9, similar to Alternative 8 and described in detail in Section 2.3.1.9 of the SPAS Draft EIR, focuses on ground access improvements that could be integrated in place of the improvements proposed under Alternatives 1 through 4. This alternative is compatible with the airfield and terminal improvements associated with Alternatives 1, 2, 5, 6, and 7. The distinguishing features of this alternative are the development of an APM system, instead of a busway, along 98th Street, and development of a CONRAC in addition to parking at Manchester Square. The APM would be located within an elevated/dedicated corridor on the same alignment as the busway under the other alternatives. Within the CTA, the APM would be located on a new elevated guideway. All other ground access aspects of this alternative are comparable to those of Alternatives 1 and 2, with the exception of the realignment of Lincoln Boulevard, which is only associated with the airfield improvement alternatives.

Findings: In light of the analysis in the SPAS Final EIR and substantial evidence in the administrative record, the BOAC hereby accepts the ground transportation system improvements proposed under Alternative 9 as part of the LAWA Staff-Recommended Alternative.

Rationale: As indicated above in Section I, above, the LAWA Staff-Recommended Alternative includes the ground transportation system improvements proposed under Alternative 9. The ground transportation system improvements of Alternative 9, particularly as related to the CONRAC facility and the APM system, provide numerous benefits. Specifically, the eventual use of the APM system by rental car users will allow LAWA to reassign over 1,000 feet of dedicated curb in the CTA to other uses, thereby diffusing some of the curbside demand that can reduce the level of service on the roadway and curb systems. Development of the ground transportation system improvements proposed under Alternative 9 is also responsive to the numerous public and agency comments received during the public review period for the SPAS Draft EIR requesting that the alternative selected for approval by LAWA include the ground transportation system improvements proposed under Alternative 9 – see comments and responses in Chapter 4 of Part II of the SPAS Final EIR.

G. Findings on Suggestions Included in Comments on the LAX SPAS Project Draft EIR

Several comments on the SPAS Draft EIR suggested additional mitigation measures and/or project alternatives, or changes to the mitigation measures and alternatives identified in the Draft EIR. The SPAS Final EIR incorporates some of these mitigation measures, as explained in the responses to comments included in Chapter 4 of Part II of the SPAS Final EIR and included in Chapter 5, Corrections and Additions Related to the SPAS Draft EIR, of Part II of the Final EIR. However, where the suggestions requested minor modifications to already adequate mitigation measures, requested mitigation for impacts that the SPAS Draft EIR determined were less than significant, or requested mitigation for impacts for which the SPAS Draft EIR already identified measures that would reduce the impact to less than significant, these requests were declined for the reasons explained in the responses to comments included in Chapter 4 of Part II of the SPAS Final EIR. The BOAC adopts and incorporates by reference the specific reasons for declining such measures contained in the responses to comments in the SPAS Final EIR as its grounds for rejecting these measures.

Additionally, certain mitigation measures and/or alternatives suggested in comments would be infeasible. The BOAC finds that specific economic, legal, social, technological, or other considerations make infeasible the following mitigation measures or project alternatives identified in the Final EIR, for the reasons explained below and in response to comments in the SPAS Final EIR.

- Several comments on the SPAS Draft EIR suggested that regionalization of air travel demand in Southern California should have been included, and addressed, as a SPAS alternative in the Draft EIR. For the reasons discussed in Topical Response TR-SPAS-REG-1 (Section 4.3 of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and

specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, under the Airport Noise and Capacity Act of 1990 (commonly called "ANCA"), and its implementing regulations (14 C.F.R. Part 161), LAWA cannot force passengers or airlines to utilize one airport over the other. More specifically, federal law prohibits an airport proprietor from unilaterally imposing any restrictions on "access" to an airport by Stage 3 aircraft. Following the phase-out of most noisy Stage 2 aircraft during the 1990s, Stage 3 aircraft comprise essentially all commercial aircraft landing at any U.S. airport. Any Stage 3 restriction is subject to review and approval by the FAA based on strict regulatory criteria that limit the ability to implement any such measures. The FAA strongly discourages any operational limits imposed under Part 161 and prefers and promotes permanent solutions to operational concerns and inefficiencies through capacity improvements. Further, the federal Airline Deregulation Act of 1978 expressly preempted the ability of airport proprietors to control the "price, route or service of an air carrier." (49 USC Section 41713(b)(1).) The United States Supreme Court has interpreted this prohibition broadly to mean that airports "may not seek to impose their own public policies or theories of . . . regulation on the operations of an air carrier." (*Morales v. Trans World Airlines, Inc.* (1992) 504 US 374, 384.) For this reason, an alternative that would have required passengers or airlines to utilize another airport, even one managed by LAWA, is legally infeasible.

- Comment SPAS-AR00002-7 on the SPAS Draft EIR suggested that LAWA "Encourage or incentivize airlines to route the cleanest aircraft engines to serve the South Coast Air Basin." For the reasons discussed in Response to Comment SPAS-AR00002-7 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, as noted in Appendix IV-B of the Revised Draft 2012 Air Quality Management Plan developed by the South Coast Air Quality Management District,[1] state and local aircraft emission regulation is preempted by the Clean Air Act which gives that authority to the U.S. Environmental Protection Agency (USEPA) in consultation with the Federal Aviation Administration (FAA). New engine emission standards for nitrogen oxides (NOx) were recently adopted by the USEPA,[2] making the federal standards consistent with international aircraft engine emission standards. The new, Tier 6 NOx standard applies to newly certified engines after July 18, 2012, and represents a 12 percent reduction compared to the current, Tier 4 NOx standard. In addition, the future Tier 8 NOx standard will apply to newly certified engines in 2014. The Tier 8 standard is approximately 15 percent lower (more stringent) than the Tier 6 standard. The airline industry balances a number of constraints when routing aircraft to various cities across the country. The industry's biggest cost today is that of fuel. Because fuel cost is such a major factor in the decision-making made by airlines when making routing decisions, LAWA cannot develop an incentive policy that would effectively change those decisions to bring cleaner aircraft to LAX. However, LAWA will continue to encourage the routing of newer aircraft to LAX and other Southern California airports through its ongoing coordination with its tenants.

  [1] South Coast Air Quality Management District. 2012. Revised Draft 2012 Air Quality Management Plan, Appendix IV-B, Control Measure No. ADV-07 (September).
  [2] U.S. Environmental Protection Agency. 2012. Control of Air Pollution form Aircraft and Aircraft Engines; Emission Standards and Test Procedures. Final Rule. 77 FR 36341 (June 18).

- Comment SPAS-AR00002-8 on the SPAS Draft EIR suggested the installation and use of solar panels for energy. For the reasons discussed in Response to Comment SPAS-AR00002-8 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, LAWA will consider solar energy options in the project planning and design phases of any approved SPAS alternative. However, space at LAX is limited for construction of solar energy systems in a manner that does not conflict with airport operations. The general design of any solar energy systems would be addressed

in the project-level CEQA documents that will be developed to implement the programmatic SPAS alternatives.

Solar energy includes both passive (solar lighting) and active (solar panels) systems and designs. Typically, large areas are needed to install solar panels in sufficient quantity to offset the cost of installation in a reasonable time. One of the largest airports in the U.S. that operates a solar system is Denver International, which has large areas within its property line that can accommodate large solar panel arrays. Space for a solar energy system at LAX, which is in the middle of urban Los Angeles, is substantially more limited than at Denver International Airport and the effectiveness of a such system on a smaller scale is uncertain. Approximately 30 acres of space is required for solar photovoltaic panels to generate 9 MW of power. Additionally, solar energy systems at airports have been known to result in operational issues. For example, a recent solar panel installation at the Manchester-Boston Regional Airport in New Hampshire had approximately 25 percent of its panels covered with tarps to eliminate the glare in the air traffic control tower.[1]

LAWA will also consider passive solar design, the use of sunlight to light rooms in the daytime, in the project planning and design phases of any approved SPAS alternative. As noted above, LAWA must now comply with the Los Angeles Green Building Code,[2] approved in 2010. As part of LAWA's new Sustainability Guidelines, a Standard of Tier 1 has been set for all on-airport building projects with a Los Angeles Department of Building and Safety permit-valuation over $200,000. The design criteria for passive solar lighting is located in Section A5.507.2. In summary, building designs should incorporate daylit spaces for toplighting and sidelighting indicated in the California Energy Code.

[1] Hayward, M., Airport controllers complain of solar panels' glare, New Hampshire Union Leader, 2012.
[2] City of Los Angeles, Ordinance No. 181480 An ordinance amending Chapter IX of the Los Angeles Municipal Code by adding a new Article 9 to incorporate various provisions of the 2010 California Green Building Standards Code (CALGreen Code), approved December 15, 2010.

- Comment SPAS-AR00002-30 on the SPAS Draft EIR suggested that LAWA "Require diesel particulate filters on all diesel-fueled emergency generators." For the reasons discussed in Response to Comment SPAS-AR00002-30 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the installation of diesel particulate filters on emergency power generators is not feasible. The cost effectiveness of such a measure is likely to be high given the minimal amount of emissions associated with emergency generators. However, because these generators are stationary sources, subject to SCAQMD rules and regulations, any regulations requiring the installation of filters on emergency power generators will be complied with by LAWA.

- Comments SPAS-AL00001-1 and SPAS-AL00007-34 on the SPAS Draft EIR suggested that LAWA contribute towards the SR90 Connector Road to Admiralty Way project to mitigate the significant impact of Alternatives 1-2, 4, 8, and 9 to the intersection of Lincoln Boulevard and Washington Boulevard since "Admiralty Way serves as a "relief valve" to Lincoln Boulevard when it reaches capacity." For the reasons discussed in Response to Comment SPAS-AL00001-1 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, while the traffic impact analysis was being prepared for the SPAS Draft EIR, Los Angeles County Department of Beaches and Harbors was contacted to determine the status of the extension of SR-90 and whether it was a reasonably foreseeable project that should be included in the cumulative 2025 without alternative scenario (page 4-1208 of the SPAS Draft EIR). The extension of SR-90 has been discussed for many years but has been controversial due to the need for property acquisition and other issues. The necessary approvals from Caltrans and the City of Los Angeles have not been obtained, and it is not included in the RTP, STIP or Metro's LRDP. Thus, after

consultation with Los Angeles County, the project was determined not to be reasonably foreseeable within the 2025 timeframe of the SPAS project and was not included in the cumulative scenario or as a feasible mitigation measure. It would therefore be inappropriate to offer a contribution toward its implementation, particularly in light of the additional complications and restrictions that LAWA is subject to under federal law regarding the use of airport funds. Simply contributing funds toward an unspecified future improvement would not constitute mitigation under CEQA, since there is currently no mechanism to ensure that any specific improvements addressing the specific impacts are made. As discussed in Anderson First Coalition v. City of Anderson (2005) 130 Cal.App. 4th 1173and Carson Coalition for Healthy Families v. City of Carson (2007) 2007 WL 3408624 at page 18 [unpublished], without an actual plan and a commitment, a fair-share fee is not an adequate mitigation measure. The statement that the Costco project paid Culver City for this improvement to mitigate its traffic impact, and the fact that the Costco store has been in operation for well over a decade, suggests that its traffic impacts remain unmitigated.

- Comment SPAS-AL00004-5 on the SPAS Draft EIR suggested that LAWA commit, as either a mitigation measure or an extension of the Stipulated Settlement, to allowing designated representatives of the City of El Segundo the right to conduct, no more than four times per year, physical inspections at LAX to confirm the number of passenger gates in use beyond the year 2020, which is the current date for expiration of the gate count provisions set forth in Section IV.F of the Stipulated Settlement. The comment also requests that LAWA produce a gate position report for the public at least annually, as well as reports tied to approval/implementation of those Master Plan elements that include/impact passenger gates through 2020 and beyond. For the reasons discussed in Response to Comment SPAS-AL00004-5 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and therefore, LAWA is not required to consider it in connection with the SPAS CEQA process. As LAWA proceeds to implement any approved SPAS alternative, it would do so in compliance with all approvals issued, which limit the number of gates at LAX to 153. Note that in addition to limiting the gate count to 153, the SPAS project includes an amendment to Section 7.H of the Specific Plan (applicable to all alternatives, including the existing LAX Master Plan) that would provide opportunities for adjustments if LAX reaches 75 or 78.9 MAP earlier than expected. This amendment, set forth in detail in Chapter 7 of the Preliminary LAX SPAS Report, would address potential variations in passenger projections over time, first by requiring action to encourage further shifts in passenger and airline activity to other regional airports if the annual aviation activity analysis forecasts that the annual passengers for that year at LAX are anticipated to exceed 75 MAP, and, second, by requiring a Specific Plan Amendment Study if the annual aviation activity analysis forecasts that LAX annual passengers for that year are anticipated to exceed 79.9 MAP. Therefore, it is not necessary under CEQA to implement the measures suggested in the comment.

- Comment SPAS-AL00004-6 on the SPAS Draft EIR suggested that LAWA commit, as a mitigation measure, to produce a gate position report for the public at least annually, as well as reports tied to approval/implementation of those Master Plan elements that include/impact passenger gates. For the reasons discussed in Response to Comment SPAS-AL00004-6 (Section 4.3 of Part II of the SPAS Final EIR), the measure would not reduce or avoid impacts of the project, and therefore, LAWA is not required to consider it in connection with the SPAS CEQA process. As LAWA proceeds to implement the LAX Master Plan, it would do so in compliance with all approvals issued, including FAA approvals, all of which would limit the number of gates at LAX to 153. The gate configurations would be consistent with those depicted in Figures A through D in Attachment A to Appendix F-1 of the Preliminary LAX SPAS Report. It is not necessary to take additional steps to verify consistency with the 153 gate count on an annual basis.

- Comment SPAS-AL00004-8 on the SPAS Draft EIR suggested that LAWA include the language proposed by the commentor to require a Specific Plan Amendment Study if annual passengers are anticipated to exceed 75 million and to require that LAWA complete such study "prior to commencing construction of any Master Plan Project that is not already under construction when this obligation to commence a SPAS is triggered". For the reasons discussed in Response to Comment SPAS-AL00004-8 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, LAWA cannot be prohibited from implementing LAX Master Plan projects simply because traffic generation, aviation activity, or passenger activity levels increase to certain levels. LAWA's control over these activities is extremely limited. Under FAA rules, LAWA may not restrict access to the airport and may not impose any "cap" on aircraft operations, nor regulate or legally control in any way what operations the airlines might wish to undertake at any particular airport.[1] Prohibiting implementation of LAX Master Plan projects if traffic generation, aviation activity, or passenger activity levels increase to certain levels until another Specific Plan Amendment Study is complete would unnecessarily limit improvement and modernization of LAX without guaranteeing identification of any factor over which LAWA has control beyond the gate provisions (i.e., no more than 153 gates) already included in all of the SPAS alternatives. By designing all of the SPAS alternatives with no more than 153 gates, in combination with the amendment proposed in the Preliminary LAX SPAS Report to Section 7.H of the LAX Specific Plan, LAWA has identified Specific Plan amendments that plan for modernization and improvement of LAX in a manner that is designed for a practical capacity of 78.9 MAP, as required by the Stipulated Settlement. Amending the Specific Plan as recommended by the commentor is not feasible and would not reduce any significant impacts of the SPAS alternatives.

  [1] Under the Airport Noise and Capacity Act of 1990 (commonly called "ANCA") (49 USC Sections 47521-33), and its implementing regulations (14 C.F.R. Part 161), federal law prohibits an airport proprietor from unilaterally imposing any restrictions on "access" to the airport by Stage 3 aircraft. Following the phase-out of most noisy Stage 2 aircraft during the 1990s, Stage 3 aircraft comprise essentially all commercial aircraft landing at any U.S. airport. Any Stage 3 restriction is subject to review and approval by the FAA. The FAA strongly discourages any operational limits imposed under Part 161 and prefers and promotes permanent solutions to operational concerns and inefficiencies through capacity improvements. Further, the federal Airline Deregulation Act of 1978 expressly preempted the ability of airport proprietors to control the "price, route or service of an air carrier." (49 USC Section 41713(b)(1)). The United States Supreme Court has interpreted this prohibition broadly to mean that airports "may not seek to impose their own public policies or theories of . . . regulation on the operations of an air carrier." (Morales v. Trans World Airlines, Inc. (1992) 504 US 374, 384.)

- Comment SPAS-AL00004-26 on the SPAS Draft EIR suggested that "Extending the [Stipulated] Settlement is thus a feasible mitigation measure (or, rather, a feasible improvement to an existing measure) that will help reduce the Project's [aircraft noise] impacts." For the reasons discussed in Response to Comment SPAS-AL00004-26 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, LAWA will continue to implement its Aircraft Noise Mitigation Program (ANMP), with the assistance of the affected jurisdictions, and shall update the entire ANMP from time to time to ensure it reasonably represents the mitigation and funding programs that are in place, being implemented, or proposed for future implementation. In addition, LAWA is committed to implementing the mitigation measures described in the SPAS Draft EIR, including the ANMP, and the LAX Master Plan Commitments and Mitigation Measures described in SPAS Draft EIR Sections 4.9.3.3 and 4.10.1.5. The ANMP described in SPAS Draft EIR Section 4.9.3.3 is being implemented pursuant to California Code of Regulations, Title 21, Subchapter 6, Section 5000 et seq. Other programs such as the LAX Master Plan Commitments and Mitigation Measures are being implemented consistent with the mitigation monitoring and reporting program (MMRP)

adopted for the LAX Master Plan (see CEQA Guidelines Section 15097; see also Board Resolution No. 21481.) The Stipulated Settlement further notes that "This funding cap under this Settlement will not affect the ability of each jurisdiction to demonstrate its ability to effectively use additional ANMP funding. LAWA will consider each of these requests on a case-by-case basis through the existing ANMP process." (Stipulated Settlement, Section VI and Exhibit A.) The suggestion in the comment would therefore be repetitive of existing requirements and would not reduce or avoid a significant impact.

- Comment SPAS-AL00007-33 on the SPAS Draft EIR suggested that the City of Los Angeles should be responsible for the installation of traffic signals at the intersections of Overland Avenue and Sawtelle Boulevard (study intersection 154) and Washington Boulevard and Walgrove Avenue (study intersection 156). As discussed in this comment, Culver City has complete jurisdiction over these intersections (i.e., there is no shared jurisdiction with the City of Los Angeles, as shown in Table 4.12.2-11), and implementation of any improvements at these locations can only be implemented by Culver City. Culver City Municipal Code ("CCMC") § 7.02.010 provides "the City Engineer is authorized to regulate the timing of traffic signals so as to permit the movement of traffic in an orderly and safe manner…and shall erect appropriate signs giving notice thereof." Similarly, CCMC § 7.02.015 provides "[u]pon the request of the City Engineer, the Public Works Director is authorized to place official traffic control devices within or adjacent to intersections…" Similar restrictions are provided for the marking of crosswalks (CCMC § 7.02.055), and pavement (CCMC § 7.02.040). All of which would be required for the signalization of these intersections. Violations of these provisions can result in an infraction (CCMC § 7.02.220) or even a misdemeanor (CCMC § 7.02.040). Furthermore, LAWA is not a property owner at these intersections and cannot apply for permits associated with such signalization. (See CCMC § 17.500.015.) For all of the reasons described in this paragraph, LAWA cannot legally be "responsible for the installation of traffic signals" at these intersections.

  The comment also suggests that the City of Los Angeles should be responsible for the installation of traffic signals at the intersections of Overland Avenue and Sawtelle Boulevard (study intersection 154) and Washington Boulevard and Walgrove Avenue (study intersection 156). Based on application of the thresholds of significance and the analytical techniques described above, the SPAS off-airport transportation impacts analysis in Section 4.12.2 of the SPAS Draft EIR found that both of these unsignalized intersections would be significantly and unavoidably impacted under all SPAS alternatives. The City of Culver City has ownership of these intersections and implementation of any improvements at these locations would be implemented by Culver City. As stated on pages 4-1304 through 4-1305 of the SPAS Draft EIR, relative to the installation of a traffic signal at Washington Boulevard and Walgrove Avenue, "given the close proximity to upstream/downstream signals, may not be acceptable to Culver City." As stated on page 4-1304 of the SPAS Draft EIR, relative to Overland Avenue and Sawtelle Boulevard, "If installation of the signal becomes feasible, LAWA would provide a fair share contribution, subject to FAA approval, to this improvement, which would fully mitigate the project impact at this location."

- Comment SPAS-AL00007-46 on the SPAS Draft EIR suggested that development of traffic mitigation measures should take into consideration the "actual" traffic patterns in the surrounding communities. The comment also urged LAWA to consider additional freeway off-ramps as potential mitigation measures. For the reasons discussed in Response to Comment SPAS-AL00007-46 (Section 4.3 of Part II of the SPAS Final EIR), the suggestions would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the Los Angeles' travel demand forecasting model, described in Response to Comment SPAS-AL00007-45, was calibrated and validated for use in the SPAS Draft EIR analysis, and included both static and dynamic validation procedures to ensure that it is appropriate for SPAS. The LAX Master Plan proposed to develop a new freeway interchange on I-405 at Lennox Avenue. A new interchange on I-405 at Lennox Avenue would have the effect of redistributing traffic locally

but was not considered to be an effective mitigation measure for SPAS because it wood not directly serve the most substantial traffic generating elements of the SPAS alternatives. In order for vehicles to effectively access the airport area though a new interchange (at Lennox Avenue), additional I-405 mainline improvements would be necessary. Given the congestion levels forecast in 2025, drivers are expected to look for alternate freeway and highway routes to minimize travel times. Therefore, the airport traffic-related impacts on major roadway facilities approaching the airport area with the addition of a new interchange on I-405 at Lennox Avenue are not expected to be less than those projected in the SPAS Draft EIR. Based on the above, without major additional mainline improvements, the Lennox Interchange is not considered under CEQA to be an effective mitigation measure in Section 4.12.2 of the SPAS Draft EIR. Regarding the comment on the freeway access to Manchester Square, the SPAS Alternatives 1, 2, 8, and 9 provide direct access from the I-405 Freeway southbound off-ramp to Manchester Square and take traffic off the I-405 Freeway.

- Comment SPAS-AL00008-34 on the SPAS Draft EIR suggested that the addition of a second southbound left-turn lane (which would mitigate the project impact at the intersection of La Tijera Boulevard & Centinela Avenue [Intersection 27]) is physically feasible. For the reasons discussed in Response to Comment SPAS-AL00008-34 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, this potential mitigation measure at this intersection was evaluated but was determined to be infeasible. (See SPAS Draft EIR, Section 4.12.2.7.1 ["Identification and Evaluation of Mitigation Measures."], page 4-1293.) The mitigation measure considered at this location was the addition of a second southbound left-turn lane, which would align with the dual northbound left-turn lanes. Implementation of this measure would require narrowing the sidewalk on the northbound departure of the intersection, where a bus stop and shelter are located. Because the sidewalk there is only approximately ten feet wide and includes existing transit infrastructure, it was determined that the sidewalk there could not feasibly be narrowed while maintaining the current level of pedestrian safety and if implemented would result in secondary impacts to alternative modes of transportation (pedestrian access and transit stop access).
- Comment SPAS-AL00008-35 on the SPAS Draft EIR suggested that the intersection of La Cienega Boulevard and Century Boulevard (Intersection 36) "is a critical location as far as airport accessibility is concerned. Right-of-way is constrained by large office buildings on the northeast and southwest corners, which are not constrained by buildings and where consideration should be given to opportunities presented by right-of-way acquisition from these parts of the intersection. The Cities of Inglewood and Los Angeles share this intersection." For the reasons discussed in Response to Comment SPAS-AL00008-35 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the commentor correctly notes that large office buildings constrain the ability to widen the eastbound and westbound approaches on Century Boulevard. The wording in the remainder of the comment is unclear. To the extent the commentor is suggesting right-of-way acquisition, the commentor's suggestion is considered infeasible for the reasons discussed on page 4-1294 of the SPAS Draft EIR. As discussed therein, removal of existing businesses, including two high-rise commercial buildings with multiple tenants and two gas stations, is considered economically infeasible, socially infeasible, infeasible based upon policy considerations, and infeasible due to inconsistency with the project objectives (i.e., inconsistent with the objective of advancing "economic growth and vitality of the Los Angeles region.") The physical improvement would also create secondary environmental impacts associated with demolition and construction, such as noise and air quality, and therefore is considered infeasible.
- Comment SPAS-AL00008-36 on the SPAS Draft EIR suggested that the intersection of Hawthorn Boulevard and Lennox Boulevard (Intersection 63) "has some physical constraints,

but could potentially be improved with the removal of the north-south median, restriping with minor sidewalk adjustments, and lane width reductions. The potential for such improvements should be the subject of a more detailed evaluation, recognizing that the projected LOS D could be considered acceptable by the City." For the reasons discussed in Response to Comment SPAS-AL00008-36 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, potential mitigation was evaluated at Intersection 63 but was determined to be infeasible. (See SPAS Draft EIR, Section 4.12.2.7.1 ["Identification and Evaluation of Mitigation Measures."]) As noted therein, there are existing right-of-way constraints, and the mitigation measure would require the removal of existing one-story commercial businesses on Hawthorne Boulevard, including a car wash, a restaurant and a retail store. The intersection modifications cited in the comment were considered when mitigation options at this location were being evaluated. The existing curb lanes are currently just wide enough to allow drivers in the northbound and southbound curb lanes to pass buses at the far-side bus stops that are present in both directions. If the curb lanes were narrowed, the resulting lane widths would no longer allow drivers to readily pass by stopped buses and result in operational problems thereby increasing traffic impacts and creating safety problems, making the suggestion infeasible. Also, based on consultation between LAWA and Los Angeles County staff during the meetings that took place on December 10, 2012 and on December 18, 2012 the addition of a southbound travel lane would require the prohibition of on-street parking, which is considered by the County to be infeasible at this location due to the partial reliance of businesses in this commercial district upon street parking. Removal of the median would also create secondary environmental impacted associated with demolition and construction, such as noise, air quality, etc., and is therefore considered infeasible. Further, median landscaping and beautification improvements were made in 2012 on the segment of Hawthorne Boulevard from 104th Street to 111th Street, which includes the intersection with Lennox Avenue, and removal of the median would reduce the value of the recent investment in that corridor.

- Comment SPAS-AL00008-37 on the SPAS Draft EIR suggested that at the intersection of Inglewood Avenue and Lennox Boulevard (Intersection 76) "[i]mprovements as noted in the SPAS are physically feasible at this location, but would result in the loss of on-street parking. Since the projected performance is LOS D, these improvements are recommended if the high project contribution to this location is of concern (as determined through communications between the City and the County)." For the reasons discussed in Response to Comment SPAS-AL00008-37 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the loss of parking and potential narrowing of sidewalks on Inglewood Avenue at this location were considered when mitigation options were developed for this location but were rejected as infeasible because the sidewalk there could not feasibly be narrowed while maintaining the current level of pedestrian safety and convenience and this location is densely developed with residential and commercial uses that rely, in part, on on-street parking, thereby resulting in economic infeasibility, social infeasibility, policy infeasibility, and infeasibility based upon inconsistency with the project objectives (i.e., such a suggestion would not "Advance[ing] the Economic Growth and Vitality of the Los Angeles Region"; Section 1.2.1 of the SPAS Draft EIR). This finding was discussed further with Los Angeles County staff during meetings that took place on December 10, 2012 and on December 18, 2012, prior to the completion of the SPAS Final EIR and concurrence was reached that a lack of right-of-way and the presence of on-street parking preclude the ability to physically mitigate the significant impact at this intersection. As discussed on page 4-1288 of the SPAS Draft EIR, the physical improvements suggested by the commentor are considered infeasible because they would result in impacts to alternative modes of transportation (narrowing of existing sidewalk on Inglewood Avenue).

- Comment SPAS-AL00008-38 on the SPAS Draft EIR suggested that the five-legged intersection of La Brea Avenue/Overhill Drive and Stocker Street (Intersection 86) "is projected to operate at LOS F. An identified mitigation measure is to add a southbound through lane, which would require sidewalk modifications and potentially some right-of-way. Since this intersection is adjacent to open space, the feasibility of such an improvement should be evaluated to determine the extent of constraints to obtaining additional right-of-way." For the reasons discussed in Response to Comment SPAS-AL00008-38 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the comment references a potential mitigation for intersection 86 which was determined to be infeasible on page 4-1298 of the SPAS Draft EIR. The comment appears to be referring to the second infeasible mitigation measure discussed in the fourth sentence of page 4-1298 under Intersection 86. (See Section 4.12.2.7.1, Identification and Evaluation of Mitigation Measures, of the SPAS Draft EIR.) As discussed on page 4-1298 of the SPAS Draft EIR, to fully mitigate the impact at this location would require the provision of a southbound through lane, which is not feasible within the existing right-of-way and would require narrowing sidewalks on La Brea Avenue south of Stocker Street. Because the sidewalk there is only approximately seven feet wide, it was determined that the sidewalk there could not feasibly be narrowed while maintaining the current level of pedestrian safety and if implemented would result in secondary impacts to alternative modes of transportation (pedestrian access). Acquisition of additional right-of-way would require removal of existing one-story commercial and motel businesses on the west side of La Brea Avenue, which is considered economically infeasible, socially infeasible, infeasible based upon policy considerations, and infeasible due to inconsistency with the project objectives (i.e., inconsistent with the objective of advancing "economic growth and vitality of the Los Angeles region.") The physical improvement would also create secondary environmental impacted associated with demolition and construction, such as noise, air quality, etc., and therefore is considered infeasible.
- Comment SPAS-AL00008-39 on the SPAS Draft EIR suggested that at the intersection of La Cienega Boulevard and Stocker Street (Intersection 93) "[t]he DEIR declared improvements at this location as infeasible due to right-of-way constraints, even though there are no buildings in the vicinity. A recent SCAG study is referenced, indicating potential project participation in future improvements if and when something is identified; this should be pursued with a projected LOS F, with possibly some initial improvements identified." For the reasons discussed in Response to Comment SPAS-AL00008-39 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the comment restates the discussion of a potential mitigation measure at La Cienega Boulevard and Stocker Street (study intersection 93) on page 4-1299 of the SPAS Draft EIR, a fair-share contribution to a grade separation should it be found feasible and should the FAA approve of a contribution by LAWA, and suggests that unspecified lesser improvements in the near term may be possible. This finding was discussed further with Los Angeles County staff during meetings that took place on December 10, 2012 and on December 18, 2012, prior to the completion of the SPAS Final EIR and concurrence was reached that no short-term physical mitigation measures are feasible at this location and the proposed fair-share contribution to the grade-separation, subject to FAA approval, as stated on page 4-1299 of the SPAS Draft EIR, remains feasible to fully mitigate the project impact at this location.
- Comment SPAS-AL00008-40 on the SPAS Draft EIR suggested that at the intersection of La Cienega Boulevard and W. 120th Street (Intersection 95) "[w]hile a potentially feasible mitigation measure is identified for this location (may require some right-of-way or sidewalk adjustment), the LOS D that is forecast may be considered acceptable." For the reasons discussed in Response to Comment SPAS-AL00008-40 (Section 4.3 of Part II of the SPAS

Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the comment states that the County considers the mitigation measure discussed for the impact at the intersection of La Cienega Boulevard and 120th Street (study intersection 95), the addition of a second southbound left-turn lane, to be potentially feasible. The comment notes, however, that the projected future operation LOS D may be considered acceptable. This intersection is within the jurisdiction of the County of Los Angeles, in the community of Del Aire. The SPAS Draft EIR concluded that the right-of-way acquisition that would be required rendered it infeasible due to economic and policy considerations. Please see pages 4-1299 and 4-1230 in Section 4.12.2.7.1 of the SPAS Draft EIR, to fully mitigate the impact at this location would require the provision of a southbound left-turn lane, which is not feasible within the existing right-of-way. This would require removal of existing one-story office and commercial buildings with multiple tenants on the east side of La Cienega Boulevard, and is considered economically infeasible, socially infeasible, infeasible based upon policy considerations, and infeasible due to inconsistency with the project objectives (i.e., inconsistent with the objective of advancing "economic growth and vitality of the Los Angeles region.") The physical improvement would also create secondary environmental impacts associated with demolition and construction, such as noise, air quality, etc., and therefore is considered infeasible.

- Comment SPAS-AL00008-41 on the SPAS Draft EIR suggested that at the intersection of Ocean Avenue/Via Marina and Washington Boulevard (Intersection 41) "[because of the physical constraints, the finding of "economic and policy infeasibility" would appear to be realistic. Mitigation would require some form of system approach for the Marina Del Rey area, with potential participation by the project." For the reasons discussed in Response to Comment SPAS-AL00008-41 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the comment states agreement with the finding of the SPAS Draft EIR that no mitigation is feasible for the intersection of Ocean Avenue/Via Marina and Washington Boulevard (study intersection 119) but suggests that LAWA should consider contributing to transportation improvements elsewhere in the Marina del Rey area. See also Response to Comment SPAS-AL00001-1 regarding unspecified transportation funding. The comment does not provide any specific information regarding the "system approach"; therefore, it is not possible to provide a more detailed response.
- Comment SPAS-AL00008-42 on the SPAS Draft EIR suggested that at the intersection of Western Avenue and Imperial Highway (Intersection 173) "[t]he improvement identified at this location (addition of a separate eastbound right-turn lane) has the potential for a functional right turn lane, which may require some restriping and minor sidewalk adjustment. This improvement could be pursued as a means of alleviating the projected LOS E." For the reasons discussed in Response to Comment SPAS-AL00008-42 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the comment states that it may be feasible to implement the mitigation concept described for the intersection of Western Avenue and Imperial Highway (study intersection 173), the provision of additional eastbound capacity. The commentor's suggestion is different from the measure evaluated on page 4-1306 of the SPAS Draft EIR. The SPAS Draft EIR analysis assessed the potential to provide a separate eastbound right-turn lane, which would require additional right-of-way acquisition on the private property occupied by a one-story restaurant on the southwest corner of this intersection, and concluded that economic, policy, and environmental reasons made the acquisition of right-of-way infeasible. The comment suggests that roadway restriping and sidewalk narrowing could provide a narrower functional right-turn lane, instead of a standard full right-turn lane. Because the sidewalk there is only approximately 12 feet wide, it was determined that the

sidewalk there could not feasibly be narrowed while maintaining the current level of pedestrian safety and if implemented would result in secondary impacts to alternative modes of transportation (pedestrian access). The location of this intersection is adjacent to other commercial buildings, a residential neighborhood, and a community college, each of which generates pedestrian activity. Therefore, the commentor's suggestion is considered economically infeasible, socially infeasible, infeasible based upon policy considerations, and infeasible due to inconsistency with the project objectives (i.e., inconsistent with the objective of advancing "economic growth and vitality of the Los Angeles region").

- Comment SPAS-AL00008-47 on the SPAS Draft EIR suggested that "[e]nvironmental justice requires consideration of balanced airfield operations to reduce noise impacts on the community of Lennox. As part of the Draft and Final EIR, LAWA should guarantee a semi-equal balance of north/south runway selection similar to a mitigation measure for airfield operations as a means of protecting Lennox and other unincorporated communities from even greater noise impacts. This recommendation is reinforced by the issue of environmental justice: almost 90% percent of the Lennox community, which is the only residential neighborhood around LAX having some homes within the 75 dB CNEL noise contour, is a predominantly minority community and is the most heavily impacted. It is the only community with an additional school potentially noise-impacted above baseline conditions for most SPAS alternatives. Noise protection for this community should be a priority item consistent with LAWA's commitments in the Settlement Agreement. The Draft EIR should identify noise protection for Lennox as a priority consistent with LAWA's commitments in the Settlement Agreement, as well as CEQA's requirements for lead agencies to consider whether environmental and public health burdens associated with a project might disproportionately impact certain communities." For the reasons discussed in Response to Comment SPAS-AL00008-47 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the assignment of aircraft to either the north airfield or the south airfield is at the discretion of the FAA air traffic control tower, consistent with the procedures and responsibilities set forth for air traffic controllers in FAA Order 7110.65, and is not within the jurisdiction or ability of LAWA. However, as described in Section 2.2 of the SPAS Draft EIR, one of the project objectives pertaining to the north airfield improvements is to lengthen the primary departure runway (Runway 6R/24L), which is currently too short for certain large aircraft (e.g., fully-loaded Boeing 747-400) on long-haul flights. Alternative 1, 2, 3, 5, 6, and 7 include a 1,250+ foot easterly extension of Runway 6R/24L, which can support a better balance between the north airfield and south airfield relative to operations of large heavy aircraft. As described in Section 4.9.3.3 of the SPAS Draft EIR, LAWA has an extensive aircraft noise mitigation program (ANMP), which includes homes that are subject to aircraft noise levels of 65 CNEL and above. In conjunction with the ANMP, LAWA supports the soundproofing of homes impacted by aircraft noise through provisions of the LAX Master Plan Community Benefits Agreement (Section III)) and the LAX Master Plan Stipulated Settlement (Exhibit A – Additional Mitigation Measure A). Both the Community Benefits Agreement and the Stipulated Settlement specifically identify the County of Los Angeles, within which Lennox is located, as a recipient of residential soundproofing funds and other aircraft noise mitigation provisions from LAWA. None of the SPAS alternatives negate or diminish those existing commitments. As indicated in Section 4.10.1 of the SPAS Draft EIR, Jefferson Elementary School, which is located in Lennox, would be significantly impacted by aircraft noise for future (2025) conditions compared to baseline (2009) conditions. This impact would occur under any and all of the alternatives for airfield improvements (i.e., Alternatives 1 through 7), irrespective of whether there is a northward runway move (Alternatives 1, 5, and 6), a southward runway move (Alternatives 3 and 7), or no runway move (Alternatives 2 and 4). However, Jefferson Elementary School, along with other schools within the Lennox School District, is specifically included in Exhibit A of the Settlement Agreement entered into between

LAWA and the Lennox School District in February 2005, which provides for the soundproofing of school facilities. Also, CEQA does not require an EIR to include an environmental justice analysis. CEQA is concerned with physical impacts on the environment, such as whether and where the SPAS alternatives increase noise levels. It is not concerned with the social or economic status of the affected communities, or whether low income or minority communities are disproportionately affected by noise impacts. "Economic and social changes resulting from a project shall not be treated as significant effects on the environment." (State CEQA Guidelines Section 15131(a).) "[T]he question under CEQA is whether a project will affect the environment of persons in general, not whether a project will affect particular persons." (Eureka Citizens for Responsible Government v. City of Eureka (2007) 147 Cal.App.4th 357, 377.)

- Comment SPAS-AL00008-50 on the SPAS Draft EIR suggested that "[t]he air quality mitigation plan should eliminate outdated mitigation measures and include state-of-the-art commitments, including use of a specified percentage of low emissions engines in heavy equipment to reduce off-site migration of ozone precursors and carcinogenic diesel particulate matter." For the reasons discussed in Response to Comment SPAS-AL00008-50 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. The mitigation measures that were applied to the SPAS alternatives are summarized in Section 4.2.5 of the SPAS Draft EIR. These measures included 17 mitigation actions that will be applied to construction activities and an additional 17 mitigation actions that will be applied to operational sources. The EIR also identified mitigation measures specifically for SPAS, including one that specifically limits emissions from heavy construction equipment. As discussed Section 2.3.2.2 and Chapter 5 of Part II of the Final EIR, under MM-AQ (SPAS)-1, LAWA will expand the LAX Master Plan for Air Quality Construction-Related Mitigation Measures to require, among other things, that prior to January 1, 2015, all off-road diesel-powered construction equipment greater than 50 horsepower shall meet USEPA Tier 3 off-road emissions standards. After December 31, 2014, all off-road diesel-powered construction equipment greater than 50 horsepower must meet USEPA Tier 4 off-road emissions standards. In light of MM-AQ (SPAS)-1, Where recent federal, state, or local air quality regulations have become more stringent than the mitigation measures, such as in the case of idling restrictions for heavy-duty trucks in California, where the 2008 California Air Resources Board requirement limits most idling to no more than five minutes whereas the 2004 LAX MMRP has a limit of 10 minutes, the more stringent regulations of the state will be followed. Additionally, the SPAS Draft EIR is a programmatic document. Generally speaking, program EIRs analyze broad environmental effects of the program with the acknowledgement that site-specific environmental review will be required when future development projects are proposed under the approved program. (State CEQA Guidelines Section 15168.) Mitigation measures are components of the Draft EIR and are subject to the same requirements regarding their level of detail. (See State CEQA Guidelines Section 15126.4.) An attempt to provide mitigation measures for project-level impacts would be speculative at this point given the lack of information about future site-specific development. When such development is proposed, the project level environmental document prepared will include specific enforceable measures as needed.
- Comment SPAS-PC00005-3 on the SPAS Draft EIR suggested LAWA "buy out every home owner all the way to Manchester." Comment SPAS-PC00050-2 contained a similar suggestion to "simply buy up the rest of Playa del Rey and fly to your hearts content and we will all move on…" For the reasons discussed in Response to Comment SPAS-PC00005-3 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the first comment does not specify whether the reference is to Manchester Square, located east of the airport, or Manchester Avenue, located north of the airport. Under CEQA, impacts are only required for significant impacts,

and mitigation measures must have a rough proportionality and nexus to those impacts. (See State CEQA Guidelines Sections 15041 and 15126.4(a)(3).) Many of the areas potentially included within the scope of the commentors' suggestion are not significantly impacted by the SPAS alternatives (e.g., see Figure 4.10.1-15 of the SPAS Draft EIR for aircraft noise impacts under Alternative 1). As discussed on page 4-666 of the SPAS Draft EIR, "[d]ecisions to pursue noise insulation or acquisition are made by each jurisdiction. Sound insulation under the ANMP has been prioritized for residential land uses." As described on pages 4-664 through 4-667 in Section 4.9.3.3 of the SPAS Draft EIR, incompatible uses (including residential) located within noise impacted areas (i.e., 65 CNEL or higher noise levels) are eligible for sound insulation under the Aircraft Noise Mitigation Program (ANMP). As summarized in Section 4.9.7 of the SPAS Draft EIR, those residential uses and non-residential noise-sensitive facilities newly exposed to noise levels of 65 CNEL or higher under Alternatives 1 through 7, including those alternatives that move runway 6L/24R northward, would be eligible for sound insulation under the ANMP and through implementation of LAX Master Plan Mitigation Measure MM-LU-1. The LAX Master Plan noise and land use mitigation measures fully mitigate the significant noise impacts on interior noise levels once implemented, as defined under California Code of Regulations, Title 21, Section 5033 (see page 4-933 of the SPAS Draft EIR). Furthermore, LAWA has spent hundreds of millions of dollars for soundproofing homes, including homes in areas north of LAX. These types of decisions do not need to be revisited in every subsequent environmental document. (See Citizens of Goleta Valley v. Board of Supervisors of Santa Barbara County (1990) 52 Cal.3d 553.) Regarding the commentor's suggestion to "simply buy up the rest of Playa del Rey," as discussed in Response to Comment SPAS-PC00050-2, not all areas in Playa del Rey would be significantly impacted; therefore, such a measure would be out of proportion to the scope of environmental impacts and would lack a sufficient nexus. (See State CEQA Guidelines Section 15041.)

- Comments SPAS-PC00050-4 and SPAS-PC00130-939 on the SPAS Draft EIR suggested that the project include Noise Cancellation or Active Noise Control technology to reduce aircraft noise impacts. For the reasons discussed in Response to Comment SPAS-PC00050-4 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, this technology cannot be used to reduce noise levels across a broad geographic area of noise receptors. Noise travels in a spherical pattern, and while a speaker might reduce noise at one location, it would increase noise levels at other locations (i.e., constructive interference). While outdoor Active Noise Control research has been conducted at the source of the noise (i.e., the aircraft), that technology is not yet mature and useable for practical application. NASA has current research to use Active Noise Control within aircraft engines to cancel noise at its source and this technology will likely have practical use in future generations of aircraft jet engines. NASA has published research on this technology (NASA FACTS, Making Future Commercial Aircraft Quieter, FS-1999-07-003-GRC, which is available at http://www.nasa.gov/centers/glenn/about/fs03grc.html.) This technology is not yet mature to implement in aircraft, nor does LAWA have the legal or practical authority to set aircraft design standards, which are controlled by the FAA and the aircraft manufacturers.
- Comments SPAS-PC00078-5 and SPAS-PH300035-3 on the SPAS Draft EIR suggested evaluation of an alternative to essentially shift the existing configuration of Terminals 1, 2, and 3 southward in order to accommodate relocating Runway 6R/24L southward by 340 feet and not require the demolition of the concourses for Terminals 1, 2, and 3, as would otherwise occur under SPAS Alternative 3. This concept would allow the retention of more aircraft gates for Terminals 1, 2, and 3 and reduce the gate "imbalance" that would occur under Alternative 3 (i.e., the replacement of the pier concourses at Terminals 1, 2, and 3 with a linear concourse under Alternative 3 would result in substantially fewer gates on the north side of the CTA compared to the south side of the CTA, which, in turn, would require a lot

more taxiing of aircraft between the north airfield and gates on the south side of the CTA than would otherwise occur if more gates were on the north side of the CTA). For the reasons discussed in Response to Comment SPAS-PC00078-5 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, this alternative is considered infeasible for the following reasons. The ability to shift Terminals 1, 2, and 3, including the terminal functions, concourse areas, and airfield operations area (AOA including the gate apron/ramp areas and aircraft taxilanes between the concourses), southward is substantially limited by the presence of the existing key airport operations infrastructure, such as the air traffic control tower (ATCT) and the central utility plant (CUP), and the LAX Theme Building, a historic monument, located along the central east-west axis of the CTA. The distances between the southern edge of the buildings comprising Terminals 1, 2, and 3 to the aforementioned facilities are approximately 350 feet to the CUP, 400 feet to the ATCT, and 250 feet to the Theme Building. These dimensions do not include the width of the upper (departures) and lower (arrivals) levels curbside roadways and main travel (through) lanes that front the terminals and collectively, including sidewalks and bus/shuttle passenger islands, extend approximately 125 feet southward. As such, the maximum distance that the terminal complex could be shifted southward without requiring demolition and/or relocation of one or more of the subject facilities is approximately 125 feet, which is only about one-third the distance needed to retain most, if not all, of the existing aircraft gates for Terminals 1, 2, and 3. This dimension assumes that future development of a linear bus or train system within the CTA, as suggested in the comment, would occur above the relocated upper and lower roadways, and not adjacent to them. The base of the terminals' lower level is approximately 15-20 feet below the elevation of the aircraft gate ramp/apron area, which means that a substantial amount of engineered fill would be required in order to extend the airfield operations area southward. In conjunction with shifting Terminals 1, 2, and 3 southward along with World Way North (the roadway that fronts the terminals), all of the major utilities located beneath World Way North would need to be relocated. Additionally, the southward realignment of World Way North, including both the upper level roadway and the lower level roadway, would require demolition and realignment/reconstruction of most, if not all, of the roadway ramps located to the east that connect with World Way North, including at Sepulveda Boulevard and Century Boulevard, and the airport return road. The basic nature and locations of the aforementioned improvements under this alternative occurring in the heart of the CTA suggest that construction would require numerous temporary closures of CTA facilities and roadways, and substantial disruptions to the day-to-day operation of the CTA. Also, the environmental benefits associated with this alternative concept would be very limited compared to the impacts of other alternatives addressed in the SPAS Draft EIR, and those limited benefits would be more than offset by substantially greater construction impacts than under all other alternatives. Under CEQA, an EIR must focus on alternatives that can avoid or substantially lessen a project's significant environmental effects. (State CEQA Guidelines Section 15126.6(b)). The environmental benefits of this alternative would be generally limited to reduced airfield-related operational air pollutant emissions, as compared to Alternative 3. As noted above, this concept would allow the retention of more aircraft gates for Terminals 1, 2, and 3 than would otherwise occur under Alternative 3 and would reduce the gate "imbalance." In so doing, the amount of aircraft taxiing required under this concept would be reduced, compared to Alternative 3, and could be generally comparable to that of Alternative 7, which relocates Runway 6R/24L 100 feet southward, but maintains Terminals 1, 2, and 3. As indicated in Table 4.2-13 of the SPAS Draft EIR, the airfield-related emissions associated with Alternative 7 would be less than those of Alternative 3, but generally greater than the emissions associated with Alternatives 1, 2, 5, and 6. For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.

- Comment SPAS-PC00081-4 on the SPAS Draft EIR suggested that "it may be useful to consider imposing a congestion charge on all private vehicles that enter the terminal area, to

help encourage people to use public transit or parking facilities, and pick up travelers at the transportation centers." For the reasons discussed in Response to Comment SPAS-PC00081-4 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, consideration was given to congestion pricing alternatives as part of the assessment of potential CTA access improvements presented in Option 1 on page 21 in Appendix E2-1 of the Preliminary LAX SPAS Report; however, additional delays caused by revenue collection were expected to result in increased congestion on CTA roadways and extending onto off-airport roadways.

This suggestion was also addressed in a 2008 LADOT Study ("LAX Congestion Pricing (CF 07-2671)"), which noted that "…since not all LA patrons are frequent users, it would be a challenge to get many of these users to sign-up and mount transponders inside their vehicles. This would lead to the need to employ alternative non-intrusive methods of extracting toll charges from those vehicles without the automatic transponders…In December 2004, LAWA released an internal study that estimated the effects of establishing permanent security checkpoints of vehicles entering the CT A at LAX Airport. The report addressed the feasibility of inspecting all traffic entering the CTA, including the necessary roadway modifications and resulting queue lengths. The study noted that queuing lengths are significantly impacted by relatively small changes to the rate of vehicle inspection and processing. Processing rates above ten seconds per vehicle are expected to cause queuing lengths and delays that would affect the operation of the Airport and cause gridlock conditions throughout the entire day in the vicinity of the Airport. The theoretical queuing lengths for a processing rate of 15 seconds per vehicle was estimated to be 27 lane-miles for southbound Sepulveda Boulevard, 30 lane-miles for Century Boulevard, and 33 lane-miles for northbound Sepulveda Boulevard. The extremely long queues are a result of the limited number of lanes entering the CT A and the lack of sufficient queuing distance between terminals and the public roadway system." (LADOT Study Page 4; available online at: http://clkrep.lacity.org/onlinedocs/ 2007/07-2671_rpt_ladot_2-20-08.pdf.)

If congestion pricing were to be implemented in the CTA, the on-airport roadway system would need to include sufficient space to accommodate queuing vehicles waiting to pay their toll, as well as escape routes for drivers unwilling to pay to access CTA roadways. Due to space constraints within the CTA, this is infeasible. While electronic toll collection would, in theory, improve the flow of traffic entering the CTA, it is unlikely that the vast majority of motorists would purchase a transponder for their vehicle to automatically deduct their entrance fee into the CTA, resulting in delays and increased vehicle congestion accessing the CTA. Dedicated conveyance systems, such as an elevated busway provided in Alternatives 1, 2, and 8, or an APM system provided in Alternatives 3 and 9, are intended to offer passengers more time-certain travel time options to the CTA. They also seek to incentivize passengers to use these facilities by choice based on convenience rather than by imposing penalties on use of CTA roadways.

The suggestion is also infeasible within the horizon year of the project. As discussed in the 2008 LADOT LAX Congestion Pricing Study, "deployment of such a program should wait until other infrastructure improvements are constructed. Specifically, the extension of the Metro Green Line to LAX and construction of the Automated People Mover (APM) system…For a congestion pricing program to potentially be feasible at LAX, transportation infrastructure enhancements would need to be in place to provide airport-bound motorists with alternatives to driving their private vehicles into the Airport's Central Terminal Area (CTA)…" (LADOT 2008 LAX Congestion Pricing Study pages 1 and 4.) As also noted in the SPAS Draft and Final EIR, the Airport Metro Connector project is in its early environmental planning stage, has not been approved, and if approved and constructed, would not be operational until after the SPAS horizon year.

- Comment SPAS-PC00096-24 on the SPAS Draft EIR suggested evaluation of an alternative "to develop an airport where there is space for such an airport, and at the same time, build mass transit from downtown that goes directly into that airport." For the reasons discussed in Response to Comment SPAS-PC00096-24 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, Section 2.3.2.1 of the SPAS Draft EIR considered and rejected as infeasible the concept of an alternative location. The SPAS Draft EIR does not evaluate in detail an alternative calling for the development of an airport at a location with the space to avoid geographic constraints such as those at LAX and building mass transit from downtown that goes directly into that airport because such an alternative would not respond to the project objectives presented in Section 2.2 of the SPAS Draft EIR. Also, it is reasonable to anticipate that the development of such a replacement system would be highly problematic, given the limited land area for such projects in Southern California, take many years, if not decades. The operation of LAX would continue while such a replacement system is pursued and developed, and the need to address the problems at LAX that are addressed in the project objectives would remain. For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.
- Comment SPAS-PFA00001-6 on the SPAS Draft EIR suggested "The City should follow the lead of Denver and Dallas and also Sacramento, which put their airports way out in the country, but now have popular, efficient, and thriving airports that are well-used. We should do the same here." Relocation of LAX is not a feasible alternative because it fails to meet the fundamental SPAS project objectives as described in Section 2.2 of the SPAS Draft EIR. Furthermore, LAWA has invested billions of dollars over the life LAX, and it is therefore not considered economically feasible to retire the existing infrastructure. The location of LAX is not the type of decision which needs to be revisited in every subsequent environmental document. (See Citizens of Goleta Valley v. Board of Supervisors of Santa Barbara County (1990) 52 Cal.3d 553.) Furthermore, there would be environmental impacts associated with the construction of a new airport "way out in the county." Therefore, the suggestion is considered infeasible for economic, environmental, and policy considerations.
- Comment SPAS-PC00102-6 on the SPAS Draft EIR suggested to "adopt an "Arrival Level," in the terminals, I was thinking that this level should be equipped with moving walk-ways; and, then moving walk-ways should connect all of the terminals. This way, it would much easier for passengers to go from Terminal 1 to Terminal 6 or vice-versa." For the reasons discussed in Response to Comment SPAS-PC00102-6 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, LAX is already multi-level with arrivals on the lower level and departures on the upper level. Regarding connecting flights and terminal transfers, most airlines provide the gates nearby within the same terminals for connecting flights scheduled through that same airlines. In the event that a connecting flight requires a passenger to transfer to another terminal, LAWA provides free shuttle buses that run on a regular and frequent basis throughout the CTA stopping at each terminal. This existing system is considered to be far more effective and efficient than moving walkways in transporting passengers between terminals, especially in a situation like the example given by the commentor (i.e., transporting a passenger from Terminal 1, where Southwest Airlines operates, to Tom Bradley International Terminal (TBIT) at the other end of the CTA). In looking closer at this example, the distance between Terminal 1 and TBIT is 0.5 mile. A high-speed moving walkway such as that currently employed at Pearson International Airport in Toronto, Canada operates at a passenger entrance/exit speed of 1.2 miles per hour (mph) and accelerates to 4.3 mph. A moving walkway between Terminal 1 and TBIT would actually be three separate segments, with each segment beginning and ending at each intervening terminal (i.e., one segment between Terminals 1 and 2, a second segment between Terminals 2 and 3, and the third segment

between Terminal 3 and TBIT), given that passengers would have to exit one segment and walk across to board the next segment. Assuming an average travel speed of 3 mph, it would take approximately 10 minutes to travel by moving walkway between Terminal 1 and TBIT. This does not include any additional time that would be required for passengers to gather luggage and walk through any crowds in front of terminals when transferring from one walkway segment to the next. On the other hand, boarding a free shuttle bus at Terminal 1 and traveling at an average speed of 15-20 mph to TBIT, with one-minute stops at Terminals 2 and 3 on the way, would take less than half that amount of time (i.e., approximately 4-5 minutes). Also, the handling of luggage taking a shuttle would occur only twice; once when boarding the shuttle and once when alighting from the shuttle, as opposed to handling luggage six times when entering and exiting three segments of a moving walkway. In addition to the operational disadvantages of a moving walkway compared to a shuttle, there would be the adverse impacts associated with constructing a moving walkway system within the CTA, which would require several temporary closures and narrowing of existing walkways within the CTA during construction. Therefore, because the suggested modifications will not remedy any significant environmental impact, and decrease efficiency at LAX, they are considered infeasible and impractical.

- Comments SPAS-PC00108-4 and SPAS-PC00175-5 on the SPAS Draft EIR suggested evaluation of an alternative "close the interior parking and access roads, construct two or three north-south terminals with access by passengers from a subterranean mall, as at the airports in Atlanta or Denver. Passengers would enter the facility east of the airport at Manchester Square or the area now with derelict warehouses between the two points." For the reasons discussed in Response to Comment SPAS-PC00108-4 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the key features in the alternative recommended by the commentor are, for the most part, comparable to those in SPAS Alternative 3, whereby the CTA would be closed to private vehicles and parking, the existing CTA parking structures would be replaced by terminal/passenger processing facilities, and the main public entrance to LAX would be through the Ground Transportation Center at Manchester Square and, to a lesser extent, the Intermodal Transportation Center at Continental City. The main difference between the commentor's alternative and SPAS Alternative 3 would be that an above ground Automated People Mover (APM) system would transport passengers to and from the CTA in Alternative 3, instead of them taking access through a subterranean mall, as the comment suggests. Constructing such a subterranean mall for passenger access between the LAX CTA and Manchester Square would be logistically infeasible because it would require the demolition/removal of numerous major hotels, a major office building, parking structures, and other uses along the one-mile-long stretch of Century Boulevard and 98th Street between Manchester Square and Sepulveda Boulevard, it would require the excavation and export of approximately 4 million cubic yards of earth to create a single-level subsurface cavity approximately one mile long, 1,000 feet wide and 20 feet deep, and it would require relocation of all underground utilities within that area, and construction of new uses underground. Further, a subterranean mall would have significant construction-related air quality impacts, and would not provide as quick and efficient transport of passengers as an APM. Specifically, a passenger traveling between Manchester Square and the CTA would take approximately 20-30+ minutes to walk non-stop through a mile-long underground mall at an average walking speed of 2-3 miles per hour, compared to approximately 4-5 minutes to travel that same distance by elevated bus or APM at 20-25+ miles per hour with a short stop at the ITF, as proposed under all SPAS alternatives except Alternative 4. For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.
- Comments SPAS-PC00130-34, SPAS-PC00130-93, SPAS-PC00130-814, SPAS-PC00130-843, SPAS-PC00130-849, and SPAS-PC00130-984 on the SPAS Draft EIR suggested several elements of a SPAS alternative concept previously suggested by ARSAC in

November 2010. Those and other elements of that concept are described in an ARSAC PowerPoint presentation dated November 28, 2010, which was included as an attachment to comment SPAS-PC00130-814. For the reasons discussed in Response to Comment SPAS-PC00130-814 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the following summarizes the highlights of that alternative concept, as stated in ARSAC's presentation, and then presents LAWA's review and assessment of that concept.

In summary, six the seven main elements included in this alternative are the same or similar to elements already included in other SPAS alternatives. CEQA does not require an EIR to consider multiple variations or permutations of the alternatives analyzed in an EIR. (See, e.g., Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal.App.4th 477.) The seventh element, an elevated roadway system, is economically infeasible and infeasible from an engineering standpoint; an EIR need not consider alternatives (or elements of alternatives) that are infeasible (State CEQA Guidelines Section 15126.6(a)). Further, the ARSAC alternative concept is not required to be evaluated in detail in the SPAS Draft EIR because it does not avoid or substantially lessen the SPAS alternatives' significant environmental impacts. (State CEQA Guidelines Section 15126.6(a),(b).) Also, as discussed below, the ARSAC alternative concept does not offer substantial operational advantages over the SPAS alternatives evaluated in the SPAS Draft EIR.

ARSAC Alternative Concept Highlights

- Keeps Runway 6L/24R from being moved north and moves Runway 6R/24L 340 feet south
- Terminals 1, 2, 3, and part of north wing of Tom Bradley International Terminal are torn down
- Low Cost Carrier (LCC) Terminals built to replace Terminals 1, 2, and 3 and airlines are regrouped in terminals by airline alliances (e.g., SkyTeam, Star, oneworld)
- No changes to the parking garages in Central Terminal Area
- Consolidated Rent-a-car center (CONRAC) to be located in Manchester Square
- Automated People Mover to connect the CONRAC to the Central Terminal Area (CTA)
- Elevated roadways to connect the CTA to the CONRAC and the freeways

LAWA Analysis of ARSAC Concept

1. Keeps Runway 6L/24R from Being Moved North and Moves Runway 6R/24L 340 Feet South: This airfield improvement concept is no different from that in SPAS Alternative 3. ARSAC indicates that a benefit of this concept is that it moves airport and related operations away from residential communities and makes communities safer, quieter, and healthier. As demonstrated in the impacts analysis presented in Chapter 4 of the SPAS Draft EIR, that stated benefit would, at most, be limited to areas immediately north of the airport, and adverse environmental impacts to areas east of the airport and to the region would generally be worse than would otherwise occur by moving Runway 6L/24R northward and keeping Runway 6R/24L in its current location. As indicated in Table 1-16 of the SPAS Draft EIR, the number of residential units and population newly exposed to 65 dBA CNEL aircraft noise levels under Alternative 3 would be 5,056 and 13,443, respectively. The number of homes and population newly exposed to 65 CNEL under Alternative 1 (move Runway 6L/24R 260 feet north), Alternative 5 (move Runway 6L/24R 350 feet north), and Alternative 6 (move Runway 6L/24R 100 feet north) would be comparable to, or in several cases, less than those of Alternative 3. That is also the case, if not more so, relative to homes and population that would experience a 1.5 dBA CNEL increase over 65 CNEL. Although moving Runway 6R/24L south by 340 feet would shift the north airfield noise contour away from the Westchester and Playa del Rey communities located immediately north of the airport, the

changes in the overall airport noise contours including both the north and south airfields would encompass additional areas northeast and east of the airport, such as in Inglewood and unincorporated areas of the County, that are more intensely developed and more densely populated. In addition, the proposed configuration offers essentially the same safety profile of Alternative 3, which addresses many of the aviation safety objectives, except that it retains residential uses within the Runway Protection Zone (RPZ) of Runway 6L/24R.

As indicated in Tables 4.2-13 through 4.2-16 of the SPAS Draft EIR, the airfield-related (i.e., aircraft) air pollutant emissions and concentrations associated with Alternative 3 would be greater than those associated with Alternatives 1, 5, and 6 relative to carbon monoxide, volatile organic compounds, nitrogen oxides emissions (peak nitrogen dioxide concentrations would be slightly lower for Alternative 3), sulfur dioxide emissions (peak sulfur dioxide emissions concentrations related to the California Ambient Air Quality 1-hour standard would be slightly lower for Alternative 3), and particulate matter. As such, both local and regional air quality impacts would generally be worse in moving Runway 6R/24L south by 340 feet and in moving Runway 6L/24R northward.

Within the ARSAC presentation describing north airfield configurations that should be considered in the SPAS alternative airfield concepts, it was also suggested that the runway designs include runway status lights on all runways and taxiway entrances, Enhanced Final Approach Runway Occupancy Signal (eFAROS), and improved runway and taxiway lighting, signage, and striping. As described on page 4-502 of the SPAS Draft EIR, Phase 1 of installing runway status lights at LAX was completed in 2009 and Phase 2 to complete the installation is anticipated to occur with FAA approval of funding. Regarding Final Approach Runway Occupancy Signal (FAROS) and eFAROS technology, such systems are still in the testing and development phases, including at Dallas-Fort Worth International Airport (eFAROS) and Long Beach International Airport (FAROS). The FAA is currently working to publish an Advisory Circular (AC) for this system, so that any airport receiving AIP funding can procure a FAROS system and install it on the basis of the AC.[1] All runway and taxiway lighting, signage, and striping associated with airfield improvements under any of the SPAS alternatives would occur in compliance with FAA requirements. Such would also be the case relative to the width of runways in the north airfield, as determined in consultation with the FAA at more detailed design and engineering levels of planning.

ARSAC also recommended that the SPAS Draft EIR consider each runway concept with and without a centerline taxiway between Runways 6L/24R and 6R/24L. SPAS Alternatives 2 and 4 already reflect such a design and it is not necessary to consider each of the remaining five alternatives both with and without a centerline taxiway.

2. Terminals 1, 2, 3, and Part of North Wing of Tom Bradley International Terminal Are Torn Down: That aspect of the ARSAC alternative concept is the same as proposed under SPAS Alternative 3. Regarding terminal design described by the commentor, all elements listed by ARSAC in their LCC concept could be accommodated by SPAS Alternative 3, but some of the ARSAC-proposed design elements have operational disadvantages compared to Alternative 3.

The footprint and associated apron of the proposed north linear concourse assumed under SPAS Alternative 3 were inherited from the LAX Master Plan Alternative D concept. While ARSAC suggests that their LCC terminal design is comparable to that of John Wayne Airport (SNA) and San Jose Airport (SJC), the SNA and SJC terminal configurations were established based on narrow airport property configurations leaving minimum areas left for terminal and apron after required runway, taxiway, and landside access requirements are met. In other words, the terminal configurations for those two airports are the result of their particular physical constraints and are not indicative of them being able to specifically accommodate LCC operations.

The design of a linear concourse under Alternative 3 would result in simplified facilities, and would most definitely involve passenger conveyance through elevators and escalators, as requested in the ARSAC alternative concept. SPAS Alternative 3 provides for 20 gates with a combination of narrow and wide-body gates, only 3-4 gates less than the ARSAC alternative concept. The ARSAC configuration has more restricted gate sizing, and therefore is less flexible in providing needed wide-body gates during off-peak LCC operations.

The number of stories of the proposed North Linear Concourse would be determined during project-level design and CEQA review, should a SPAS alternative be selected for implementation. Such a concourse would be constructed following LEED standards or equivalent.

The ARSAC-suggested airside/landside terminal and concourse level stacking is typical of most existing or new terminals with the exception of the interstitial level for baggage screening and handling which often raises the passenger circulation and gate levels to unacceptable heights except for much larger (taller) wide-body aircraft.

Single-use terminals such as the one recommended by ARSAC have more restricted gate utilization from an aircraft parking standpoint than mixed-use terminals, since the flexibility of accommodating other different sized aircraft is lost during off-peak LCC time periods. Single-loaded (linear) concourses are also less efficient (with longer passenger walking distances for connecting passengers, more spread-out airline staffing) and more costly (one side of the concourse is unused) than double-loaded (aircraft gates on both sides) concourses.

3. Low Cost Carrier (LCC) Terminals Built to Replace Terminals 1, 2, and 3 and Airlines Are Regrouped in Terminals by Airline Alliances (e.g., SkyTeam, Star, oneworld): The basic physical design of the terminals proposed under the ARSAC alternative concept is essentially the same as the linear concourse proposed under SPAS Alternative 3. The details of that design would be determined in conjunction with the completion of project-level planning, design, and engineering should a SPAS alternative be selected for implementation; all of the SPAS alternatives are currently at only a program level of detail.

The ARSAC presentation indicates that their proposed terminals design provides opportunities to both LCC and alliance carriers and would allow airline locations to be arranged logically by alliances; however, such opportunities for both LCC and alliance carriers to operate together would be available under any and all of the SPAS alternatives. No assumption used in the SPAS Draft EIR gating analysis, as discussed in Section 4.3 of Appendix F-1 of the Preliminary LAX SPAS Report, would preclude LCC and alliance carriers to efficiently co-locate and/or operate at LAX. The gating approach used in the SPAS Draft EIR does not constitute or reflect a LAWA policy decision in terms of future airline assignments or agreements.

Notwithstanding the above, the ARSAC alternative concept to locate the LCCs along the linear concourse designed for that purpose, which would replace Terminals 1, 2, and 3, would be of very limited benefit to overall airport operations and, if anything, could be detrimental. In August 2011, LCC passengers represented only 24.5 percent of all passengers. Based on today's operations, converting Terminals 1, 2, and 3 into LCC-only terminals would force some international and alliance operations into already busy south CTA terminals, operations which need wide-body gates to operate. This would result in an "imbalance" between the northern and southern portions of the airport, both in terms of landside operations and relative to airside operations (i.e., larger aircraft arriving on or departing from the north airfield would have longer taxiing times and distances by being served primarily on the west and south sides of the CTA).

Common Use Terminal Equipment (CUTE) systems, as suggested in the ARSAC alternative concept, are not limited to new or particular types of airline terminals. For example, the

existing Terminal 3 could be retrofitted with CUTE services without reconstruction in the ARSAC suggested linear alternative.

Rapid aircraft turn round times can also be achieved in SPAS Alternative 3 as two narrow-body aircraft can be accommodated at once on each wide-body position depicted in Figure C in Appendix F-1 of the Preliminary LAX SPAS Report.

4. No Changes to the Parking Garages in Central Terminal Area: This element of the ARSAC alternative concept is no different than that of SPAS Alternatives 1, 2, 4, 5, 6, and 7, all of which are addressed in the SPAS Draft EIR.

5. Consolidated Rent-a-car Center (CONRAC) to be Located in Manchester Square: This element of the ARSAC alternative concept is no different than that of SPAS Alternatives 8 and 9, which are addressed in the SPAS Draft EIR.

6. Automated People Mover to Connect the CONRAC to the CTA: This element of the ARSAC alternative concept is no different than that of SPAS Alternatives 3 and 9. Although the ARSAC presentation includes several specific recommendations regarding the design of the APM, such as the alignment within the CTA, the location of stations, and whether the system has one or two tracks, such design considerations would be determined at more detailed levels of planning, design, and engineering, and CEQA review, should a SPAS alternative be selected for implementation.

7. Elevated Roadways to Connect the CTA to the CONRAC and the Freeways: The ARSAC alternative concept proposes a network of elevated roadways connecting the 405 Freeway (I-405) to the CTA. The in-bound route would extend west from I-405 at Century Boulevard to an access ramp for the CONRAC proposed at Manchester Square, then north to an access ramp connecting with Lot C on 96th Street, and then follow the 96th Street bridge alignment at Sepulveda Boulevard, then turn south to connect with the CTA at the World Way entrance bridge (i.e., relocated Sky Way). The in-bound route also envisions a built-in vehicle security screening area along the 96th Street portion the elevated roadway. The out-bound route from the CTA would extend east as an elevated roadway on piers along the grass median on the south side of Century Boulevard and then turn south at Aviation Boulevard to continue east along 102nd Street to connect with I-405. A separate elevated out-bound roadway would be constructed along Aviation Boulevard between the CONRAC at Manchester Square to connect with the main elevated roadway at 102nd Street.

This alternative concept for an elevated roadway network between I-405 and the CTA was has been reviewed and considered by LAWA, and was not carried forth into the SPAS alternatives for the reasons described below.

Implementation of this elevated roadway network would be very expensive to construct, would have construction-related traffic disruption, would be unlikely to result in substantial improvements in traffic conditions around the airport, and would not provide substantial traffic benefits over the ground transportation system improvements proposed within the current range of SPAS alternatives. Because there is no evidence that this concept would reduce any of the significant and unavoidable impacts of the SPAS alternatives analyzed in the SPAS Draft EIR, it is not necessary to analyze this alternative in detail.

Based on the alignments depicted in the ARSAC presentation, it is estimated that this elevated roadway system would be approximately five miles in length and would include two new interchanges with I-405. Although ARSAC did not provide any cost estimates for this concept, the key features of the system are somewhat analogous to elements of the SPAS alternatives transportation system improvement options for which LAWA completed rough order of magnitude (ROM) cost estimates that are presented in Appendix G of the Preliminary LAX SPAS Report. Table GA-2 in that appendix includes estimates for construction of the elevated busway, which would be a 36-foot-wide elevated platform constructed on piers primarily along existing roadways. Such a system design would be generally analogous to

the elevated roadway system identified in the ARSAC alternative concept. Based on an estimated total length of 5,300 linear feet (LF) of elevated busway at a total estimated construction cost of $50,533,300, the cost per LF would be $9,535. For a five-mile-long system, the total cost would be approximately $251,724,000. Table GA-8 in Appendix G includes a ROM cost estimate of $341,757,000 for construction of a new interchange with the I-405, as envisioned under SPAS Alternative 3. Under the ARSAC alternative concept, construction of the five-mile-long elevated busway system and two new interchanges with the I-405, the ROM estimated total cost would be approximately one billion dollars ($935,238,000). In comparison, the ROM estimated cost of the elevated busway system associated with SPAS Alternatives 1, 2, and 8 is approximately $98,000,000, including the bus stations along the way (see Table GA-1 in Appendix G of the Preliminary LAX SPAS Report). Based on this approximately ten-fold cost differential, the elevated roadway system is considered economically infeasible.

In addition to the very high cost of this system, the proposed locations of the new I-405 interchanges are infeasible from an engineering standpoint. For the in-bound route, the ARSAC alternative concept shows the elevated roadway near the CONRAC as having connection ramps with both the northbound lanes and southbound lanes of the I-105 just north of Century Boulevard. Although there is currently an exit from the southbound I-405 at that location, that interchange would need to be redesigned and reconstructed to allow for separation of LAX traffic going up onto the elevated roadway from local traffic staying at ground level. For the northbound I-405 ramp connecting to the elevated roadway, it is highly uncertain whether a flyover ramp going above all travel lanes on the I-405 could be constructed within any area that is not already occupied by the many existing freeway on-ramps and off-ramps at and north of Century Boulevard. There are similar major engineering and design feasibility uncertainties relative to developing both northbound and southbound freeway ramps for the outbound elevated roadway system at 102nd Street and the I-405. The existing at-grade southbound ramp at that location would need to be redesigned and reconstructed to allow for the connection of the elevated roadway, and the construction of a new flyover ramp to connect with the northbound I-405 lanes would need to extend a substantial distance above ground to pass above the existing freeway ramps at Century Boulevard or would require redesign and reconstruction of those existing ramps.

Even if this alternative concept roadway system could be successfully developed, it is not anticipated to draw a substantial amount of traffic away from other roads and access routes serving LAX. Based on traffic volumes and conditions anticipated to occur in 2025 (the planning horizon year for SPAS) on the I-405 near LAX, the vast majority of which would be regional traffic including as related to the I-105 interchange near LAX, and not necessarily airport traffic, it is likely that travelers to and from LAX may still seek alternative routes.

Another disadvantage is that construction of the elevated roadway system above numerous roadways around LAX would result in traffic disruption, delays, and detours during the construction periods.

Lastly, development of the elevated roadway system proposed under the ARSAC alternative concept would not offer a substantial traffic benefit over the systems proposed under certain SPAS alternatives. Alternatives 1, 2, and 8 include an elevated/dedicated busway system that would connect Manchester Square, which includes a CONRAC under Alternative 8, and a proposed Intermodal Transportation Facility located south of and adjacent to Lot C, and the CTA. Alternative 9 is similar to Alternative 8, but would use an APM in place of the busway. Access to the CONRAC at Manchester Square under Alternatives 8 and 9 would include integration with the existing southbound off-ramp at the I-405. Additionally, that proposed system under all of these alternatives includes a connection at the future Metro Crenshaw/LAX Transit Corridor and Station.

In summary, the ARSAC alternative ground transportation system concept was not carried forth by LAWA because it would be economically infeasible, would be infeasible from an engineering standpoint, would have substantial construction-related traffic disruption, would be unlikely to result in substantial improvements in traffic conditions around the airport, and would not provide substantial traffic benefits over the ground transportation system improvements proposed within the current range of SPAS alternatives.

For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.

[1] U.S. Department of Transportation, Federal Aviation Administration, Advanced Technology Development and Prototyping Group (AJP-67), Final Approach Runway Occupancy Signal (FAROS), Available: http://www.faa.gov /about/office_org/ headquarters_offices/ang/offices/ac_td/td/projects/faros/, accessed December 5, 2012.

- Comment SPAS-PC00042-3 on the SPAS Draft EIR suggested that passenger car traffic be routed down Center Way, which bisects the CTA on an east-west axis, and that commercial vehicles, such as shuttles, buses, and taxis, utilize World Way, which extends around the interior perimeter of the CTA. For the reasons discussed in Response to Comment SPAS-PC00042-3 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, Center Way, including Center Way North and Center Way South, is a one-way street allowing only eastbound traffic movements. It is not wide enough nor is it designed for two-way traffic. As such, in-bound (i.e., westbound) passenger traffic would still have to utilize World Way North coming into the CTA. Much of the daily passenger traffic is associated with dropping off or picking up passengers at the curbsides of the terminals, which are accessible only from World Way. Additionally, entrances to the public parking structures within the CTA are located along World Way and are not accessible from Center Way. Based on the above, implementation of the suggested change in roadway assignments is not considered to be feasible.
- Comment SPAS-PC00073-1 on the SPAS Draft EIR stated that the effect of the changes proposed under each SPAS alternative would differ depending on the sequencing of the individual project elements. "For example busses could be used first on existing streets then on new roadways." For the reasons discussed in Response to Comment SPAS-PC00073-1 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, as discussed on page 2-8 of the SPAS Draft EIR, "The nine SPAS alternatives addressed within this Draft EIR were formulated at a programmatic level of conceptual planning, and no design or engineering plans, or construction phasing plans or schedules, are available for any of the alternatives. In general, however, it is anticipated that all of the improvements proposed under each alternative would be completed by 2025, with construction beginning in 2015." As further discussed on page 2-74 of the SPAS Draft EIR, "[d]epending on the outcome of the SPAS process, additional project-level CEQA review may be required for implementation of the improvements associated with the selected SPAS alternative." A similar programmatic approach was taken with the LAX Master Plan, with project level EIRs prepared for implementing projects, such as the Bradley West Project and the Crossfield Taxiway Project (CFTP).

  Section 4.12.2.6 provides analysis of off-airport transportation impacts. Section 4.12.2.6.3 of the SPAS Draft EIR discusses potential construction impacts and applicable LAX Master Plan mitigation measures and commitments, consistent with the program-level analysis presented in the SPAS Draft EIR. As discussed in that section, "The nine alternatives currently being considered for the SPAS project are only at a conceptual level of planning"" The SPAS Draft EIR analyzes the traffic impacts associated with the completion of each SPAS alternative relative to Existing (2010) conditions and Future (2025) without Alternatives conditions. Similar to the Bradley West Project, any subsequent project level activities will be reviewed in

light of the SPAS Draft EIR to determine whether additional environmental documents must be prepared.

- Comments SPAS-PC00102-5 and SPAS-PH300036-4 on the SPAS Draft EIR suggested dividing vehicle traffic into five levels. For the reasons discussed in Response to Comment SPAS-PC00102-5 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, given the highly developed and constrained nature of the area within the CTA and areas immediately east of the CTA, where there are ramps and connections between the CTA roadways and surrounding roadways such as Century Boulevard and Sepulveda Boulevard, it is not logistically feasible to construct a four- or five-level roadway system as suggested by the commentor, and such construction would likely have costs out of proportion to any benefit potentially achieved. In addition to the infeasibility of constructing such a roadway system, it is also logistically infeasible to modify all of the terminals within the CTA to add two or three additional levels in order to meet/match the elevation of each roadway level. Moreover, such a multi-level roadway system is not needed to avoid or substantially reduce significant environmental impacts, nor is there any evidence that it would do so. The SPAS Draft EIR analysis of the on-airport transportation system presented in Section 4.12.1 concludes that with the exception of one intersection under future cumulative conditions and one to five roadway links (depending on the alternative) under future cumulative conditions, implementation of the SPAS alternatives would not result in significant impacts to the on-airport transportation system. For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.
- Comments SPAS-PC00130-150, SPAS-PC00130-473, SPAS-PC00130-696, and SPAS-PC00130-756 on the SPAS Draft EIR suggested the addition of a third level for buses and emergency vehicles. For the reasons discussed in Response to Comment SPAS-PC00130-150 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, construction of a third-level curbside would require significant reconfiguration of the terminals and CTA roadway system. Construction of a third level roadway and new pedestrian connections to the terminal buildings within the CTA would be infeasible. Accommodating these new facilities would require significant reconfiguration of the CTA's access and egress roadways, along with the simultaneous closures and reconstruction of portions of both the existing arrivals and departures level roadways to facilitate construction of the third level roadway support structure and deck. Additionally, development of a third level roadway and new pedestrian connections would substantially constrain potential alignment and design options for a future Automated People Mover (APM) within the CTA, which is proposed under Alternative 9 (Note: Although Alternative 3 also proposes an APM system within the CTA, the CTA roadway system under that alternative would be closed to private vehicles, therefore there would be no need/purpose for a third level roadway). LAWA's priority for landside development is to implement improvements which encourages passengers to access the CTA using high-occupancy modes via an elevated busway (SPAS Alternatives 1, 2, and 8) or an APM system (SPAS Alternatives 3 and 9) in favor of constructing additional roadway capacity for private vehicles within the CTA. Therefore, the suggestion is considered infeasible for policy reasons. Furthermore, existing physical constraints, the expectation of limited availability of capital funding, and disruptions to CTA operations are additional factors for why construction of a third-level roadway was not considered as part of the SPAS Draft EIR. Further, a third level would be just an alternative to one project component. Under CEQA, for multi-component projects like the SPAS alternatives, an EIR need not evaluate alternatives for each project component. (California Oak Foundation v. Regents of University of California (2010) 190 Cal.App.4th 227, 276-277; Big Rock Mesas Prop. Owners Ass'n v. Board of

Supervisors (1977) 73 Cal.App.3d 218, 277; see also No Oil, Inc. v. City of Los Angeles (1987) 196 Cal.App.3d 223, 235.)

- Comment SPAS-PC00130-199 on the SPAS Draft EIR suggested evaluation of a "dual runway move" alternative. For the reasons discussed in Response to Comment SPAS-PC00130-199 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, Section 2.3.2.6, Dual Runway Relocations, of the SPAS Draft EIR presents reasons why such an approach to reconfiguring the north airfield is considered infeasible, impractical, and likely to result in environmental impacts comparable or greater to the alternatives evaluated in detail in the SPAS Draft EIR. Further, Section 2.3.2.6 describes why this alternative is within the range of the alternatives that the SPAS Draft EIR evaluates in detail. An EIR need not consider multiple variations on the range of alternatives evaluated in detail. (Village Laguna of Laguna Beach Inc. v. Board of Supervisors (1982) 134 Cal.App.3d 1022, 1028.) Nor must an EIR consider every conceivable alternative to the project. (In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1163.) Moreover, an EIR need not analyze alternatives that do not offer significant advantages over the alternatives presented in the EIR, or that constitute a different version of an alternative presented in the EIR. (Sequoia Hills Homeowners Ass'n v. City of Oakland (1993) 23 Cal.App.4th 7045.) For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.
- Comment SPAS-PC00130-334 on the SPAS Draft EIR suggested that the traffic mitigation measures all relate to intersections. The comment also suggested that changeable signage could be used to "direct airport traffic onto La Cienega Boulevard to Century during the day when both streets are relatively empty." For the reasons discussed in Response to Comment SPAS-PC00130-334 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the traffic mitigation program presented in Section 4.12.2.7.2 of the SPAS Draft EIR includes a Transportation Demand Management Program (Mitigation Measure MM-ST (SPAS)-1), which provides for the promotion and expansion of LAWA's successful vanpool program to reduce airport-related traffic. At this time, there is no evidence to suggest that providing additional changeable signs farther from the airport would reduce or avoid a significant impact. As discussed in Section 4.12.2.2.1 of the SPAS Draft EIR and further described in Response to Comment SPAS-PC00130-334, La Cienega Boulevard and Century Boulevard are already two of the key roadways providing access to LAX. Static guide signs are currently posted along the major approach and departure routes in the LAX areas to assist motorists in locating LAX and the freeway network. There is also a permanent, overhead changeable message sign on westbound Century Boulevard east of Airport Boulevard. In addition, LAWA owns and operates portable changeable message signs that are deployed for various incidents, construction detours, or special events. These signs provide information regarding airport security alerts, accidents, lane closures and other unexpected traffic conditions (information that is often not well conveyed by common GPS navigation systems). Many drivers also already have access to GPS navigation systems (either mounted in the car or accessible by cell phone), which provide real time traffic conditions which enable drivers to make personalized routing decisions based upon traffic conditions. To the extent the commentor is also suggesting changeable signs in other locations, other infeasibility factors are also relevant. The commentor raised similar suggestions in 2009 on the Bradley West Project Draft EIR. As LAWA explained in Response to Comment BWP-PC00011-45, in some locations the suggestion is socially infeasible: "In 2005, the Los Angeles Department of Transportation, as part of their Westchester Intelligent Transportation System improvement project, planned to install permanent, overhead changeable message signs on the approaches to LAX. LAWA and LADOT staff discussed the possibility that LAWA could request LADOT to display

electronic messages on these signs during unique occurrences at the airport, such as airport security alerts and information regarding alternate parking locations if CTA parking was full. LADOT planned to use the signs to inform drivers of accidents, lane closures due to construction, and other unexpected traffic conditions. These signs were planned to be located away from the CTA entrances in order for drivers to have time to process the messages and change their routes accordingly. The proposed locations were southbound Lincoln Boulevard near La Tijera Boulevard, southbound Sepulveda Boulevard south of 76th Street/77th Street and westbound Century Boulevard west of Concourse Way. However, public opposition to the proposed signs, culminating with a public meeting held on January 17, 2006 at which several area residents expressed their view that the signs would lead to additional traffic through their community, resulted in LADOT withdrawing its plans to install changeable message signs on Lincoln and Sepulveda Boulevards." Nevertheless, if and when a SPAS alternative is selected, and site specific development progresses, an appropriate program of on-site and off-site signage will be developed to assist motorists consistent with LADOT's transportation planning functions (see Los Angeles Administrative Code Section 22.481(a).). Please also see Responses to Comments SPAS-PC00130-360 and SPAS-AL00004-29 regarding the programmatic nature of SPAS.

- Comments SPAS-PC00130-335 and SPAS-PC00130-480 on the SPAS Draft EIR suggested that LAWA switch from natural gas to electric and solar and wind turbine power. For the reasons discussed in Response to Comment SPAS-PC00130-480 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, as described in Section 4.13.1.3 of the SPAS Draft EIR, LAWA has an ongoing commitment to increasing energy efficiency and implementing energy conservation measures at its airports. Measures implemented to promote energy efficiency and conservation are outlined in Section 4.13.1.3. As discussed therein, "energy conservation initiatives have resulted in a 7 percent decrease in per passenger energy consumption at LAX between 2008 and 2009." Furthermore, as discussed on page 4-1331 of the SPAS Draft EIR, LAWA purchases its power from the LADWP, which generated 20 percent of its power from renewable resources in 2010, and is planning to increase this value to 33 percent by 2020. LADWP's renewable energy sources include solar, wind power, and other renewable sources described in the SPAS Draft EIR. Given that the power LAWA purchases from LADWP is from the LADWP grid system, it is not technically possible for LAWA to receive a higher proportion of energy from renewable sources than otherwise transmitted through the overall LADWP grid. Please see Response to Comment SPAS-AR00002-8 regarding on-site solar power.

  LAWA does not currently have any plans to install wind turbines at LAX. As with solar power generation, wind power requires a large amount of land, as well as appropriate wind conditions. In addition, installation of low profile wind turbines near the runways would need to be consistent with FAA requirements pertaining to Runway Safety Areas, Object Free Areas, and Obstacle Free Zones. Specifically, a 1.5 megawatt (MW) wind turbine of a type frequently seen in the United States has a tower 80 meters (260 feet) high.[1] A 1.5 MW wind turbine, which is on the smaller side of the range of commercial wind turbines currently in operation around the world, which range from approximately 0.6 MW to 8.0 MW (based on a list of the different models of wind turbines from the top 10 wind turbine manufacturers),[2] would typically have a rotor diameter (i.e., the area swept by the turbine blades) of approximately 70 meters (230 feet), as in the case of a 1.5 MW GE Model 1.5i wind turbine.[3] As such, the total height of a 1.5 MW wind turbine would be approximately 375 feet. The base elevation of LAX is approximately 125.5 feet above mean sea level (MSL), which means that the installation of a 1.5 MW wind turbine at LAX would reach of height of approximately 500 MSL (125.5 feet MSL base elevation plus 375 feet). Figure 4.7.2-1 of the SPAS Draft EIR illustrates the Federal Aviation Regulation (FAR) Part 77 Imaginary Surfaces associated with any commercial runway, indicating the various imaginary surfaces within which any

penetration of those surfaces represents a potential concern relative to the safe operation of aircraft at and around the runway. For LAX, the transitional surfaces at the ends of the runways extend up to approximately 276 feet MSL (125.5 MSL base elevation plus 150 feet), which means that placement of such a wind turbine near the ends of the runways would penetrate that imaginary surface by more than 224 feet. Similarly, the Horizontal Surface illustrated in Figure 4.7.2-1, which extends well around the sides of LAX is also set at the 276 feet MSL elevation, which means placement of the wind turbine anywhere to the side of the runways would also penetrate that imaginary surface by 224 feet. In moving farther away from the airport and into the Conical Surface illustrated in Figure 4.7.2-1, per the Airport Master Plan Airport Layout Plan, a 500-foot tall object would have to be more than approximately 14,000 feet (2.65 miles) from the runways in order to not penetrate that surface.[4] Such a wind turbine placement would be well beyond the limits of the airport property.

As indicated in Section 4.13.1 6 of the SPAS Draft EIR, a sufficient supply of electricity and natural gas is expected to be available to serve the SPAS improvements.

[1] http://en.wikipedia.org/wiki/Wind_turbine, accessed December 27, 2012.
[2] http://en.wikipedia.org/wiki/Wind_turbine, accessed December 27, 2012.
[3] http://en.wikipedia.org/wiki/Wind_turbine, accessed December 27, 2012.
[4] City of Los Angeles, Los Angeles World Airports, Airport Master Plan Airport Layout Plan, Sheet 13, FAR Part 77 Approach Surfaces, prepared by Landrum & Brown, Draft April 28, 2004.

- Comment SPAS-PC00130-374 on the SPAS Draft EIR suggested evaluation of an "off site passenger check in… for location near the 405 Freeway in Howard Hughes Center with a bus or people mover to improve the CTA. This commuter passenger option at Howard Hughes, was suggested so that their single vehicle transportation need not drive all the way from the freeway to LAX. Howard Hughes passengers would be taken by mass transit instead." For the reasons discussed in Response to Comment SPAS-PC00130-374 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the development of what would amount to a new LAX FlyAway station at the Howard Hughes Center is unlikely to draw a substantial amount of passengers/riders, given that it is only about two miles from LAX and would primarily serve areas to the north of the airport. Therefore, this suggestion was not evaluated in detail in the SPAS Draft EIR.
- Comments SPAS-PC00130-390 and SPAS-PC00130-427 on the SPAS Draft EIR suggested "a solid 20 foot block wall along the north and east side perimeters to help contain ground generated particulates within the airport flight field" and an "extra high solid fences to keep in particles generated by aircraft on the ground" respectively. For the reasons discussed in Response to Comment SPAS-PC00130-390 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, installing a solid 20-foot block wall along the north and east sides of the airport would not noticeably reduce the particulate matter concentrations in the surrounding communities. The particulate matter concentrations in these communities come from a variety of mobile and stationary sources, many of which are not associated with the airport or are not located within the confines of the airport property line. Construction of such a wall would be subject to CEQA review and could have potentially adverse impacts on aesthetics, traffic circulation, and biological resources, among others.
- Comment SPAS-PC00130-398 on the SPAS Draft EIR suggested "Why is LAX allowing so many empty buses to circulate in the CTA? Why hasn't LAX made the rental car agencies that use LAX to use only 1 consolidated vehicle every 15 minutes?" For the reasons discussed in Response to Comment SPAS-PC00130-398 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific

economic, legal, social, technological, or other considerations make it infeasible. Specifically, since the existing car rental agencies that serve passengers in the CTA are located in separate facilities in the LAX area (Alamo/National and Advantage are located in the City of Inglewood), it is infeasible to establish a consolidated busing operation under the current configuration of the airport that would serve all the various companies. However, as indicated under the heading of "Ground Access Improvements" on pages 2-21, 2-25, 2-38, and 2-41 in Chapter 2 of the SPAS Draft EIR, SPAS Alternatives 3, 4, 8, and 9 include a Consolidated Rental Car Facility, or CONRAC, that would relocate rental car companies into a single location that would lend itself much more easily to a consolidated bus operation. As discussed on page 4-3 of the SPAS Draft EIR, the current SPAS alternatives are conceptual in nature and the Draft EIR provides a programmatic analysis. These types of operational changes will be considered, depending upon the selection of the alternatives, at a time where specific development proposals are made. It should be noted, however, that one consolidated vehicle every 15 minutes would not provide sufficient seating capacity to serve the rental car customer demand.

- Comment SPAS-PC00130-406 on the SPAS Draft EIR suggested "[w]hy hasn't LAX built a fully standard group 6 taxiway next to the northern complex? How much cheaper would the taxiway be than the moving of the runway? If ground vehicles are interferring [sic] with taxing aircraft on nearby service roads, why not move the service road out of aircraft taxiways?" For the reasons discussed in Response to Comment SPAS-PC00130-406 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, there may be a misunderstanding as to the relationship between taxiways and vehicle service roads, in that ground vehicles are not allowed on aircraft taxiways and taxiing aircraft are not allowed on vehicle service roads; hence, that is not a problem that SPAS is attempting to resolve. The problem relates to the required safety clearance distances between taxiways and service roads. Due to limited space between Runway 6R/24L and the ends of the concourses for Terminals 1, 2, and 3 and Tom Bradley International Terminal, placement of a Group VI taxiway adjacent to that runway is not feasible without a negative impact to other taxiways/taxilanes such as Taxilane D or Taxiway E or to the vehicle service road. Alternatives 1, 2, 3, 5, 6, and 7 include moving the vehicle service road (VSR) from its current location between Taxiway E and Taxilane D to a more suitable location (i.e., typically south of Taxilane D). However, also due to the aforementioned limited space between Runway 6R/24L and the north concourses, the new location of the VSR affects the available spacing between the taxilanes, taxiways, and runway. In short, the ability to accommodate an ADG VI taxiway adjacent to Runway 6R/24L and the ability to relocate the existing vehicle service road is subject to the space constraints described above, which make such improvements infeasible.
- Comments SPAS-PC00130-428 and SPAS-PC00130-919 on the SPAS Draft EIR suggested the installation of a berm to lessen noise pollution. For the reasons discussed in Response to Comment SPAS-PC00130-428 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, as described on page 4-29 and shown on Figure 4.1-4 (Photograph U) in Section 4.1.3.21 of the SPAS Draft EIR, LAWA has constructed 20-foot high buffers between LAX Northside and residential development to the north, consisting of 12-foot-high sound walls on the crest of 8-foot-high landscaped berms on 88th Street and 88th Place between Sepulveda Westway and the Westchester Golf Course. There are also sound walls along portions of La Tijera Boulevard which range in height from 8 to 20 feet. The purpose of these buffers and barriers is to reduce airport-related ground noise in nearby residential areas and to reduce noise impacts from traffic on adjacent roadways. Furthermore, as described on page 4-654 and shown on Figures 4.9-3, 4.9-4, and 4.9-5 of the SPAS Draft EIR, LAX Northside serves as an airport buffer zone between the airport and the Westchester community to the north. Please also

see Response to Comment SPAS-PC00130-737 for an additional description of the LAX Northside buffer area which would serve to reduce noise impacts to the north. In addition, acoustical barriers are only useful for reducing noise impact from aircraft ground activities, and their benefits are greatly affected by surface topography and wind conditions. The effectiveness of a barrier depends on the distance of the noise source from the receiver and the distance of each from the barrier itself, as well as the angle between the ends of the berm and the receiver. While noise berms and noise walls can attenuate noise, they would be largely ineffective for attenuation of aircraft overflight noise. As the noise levels at LAX are dominated by the noise of aircraft in flight, the reduction of ground noise by berms is not considered effective for noise abatement. Therefore, the installation of berms in additional locations is not expected to result in a noticeable decrease in noise at land uses located within Westchester at greater distances from the airport. Section 4.10.1.7 of the SPAS Draft EIR discusses various abatement and mitigation techniques of aircraft noise at LAX to reduce the impacts of the SPAS alternatives.

- Comment SPAS-PC00130-450 on the SPAS Draft EIR suggested that the SPAS Draft EIR include a funding mechanism to pay for cancer treatment costs and death benefits. For the reasons discussed in Response to Comment SPAS-PC00130-450 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, there are no reported impacts that require or warrant the proposed mitigation. As described in Section 4.7.1.6.5 of the SPAS Draft EIR, and Table 4.7.1-10, cancer risks, chronic non-cancer health hazards, and health effects for on-airport workers were all less than significant. Acute non-cancer health hazards were found to be significant and unavoidable. However, the impact was due to exposure to the TAC acrolein and was only found at or near the fence-line. Acute exposure to acrolein causes mild irritation of the eyes and mucous membranes. Such exposure and impact does not require the extreme measure and costs proposed by the commentor. Therefore, identification of potential sources of funding for treatments is beyond the scope of the SPAS Draft EIR. The SPAS HHRA was prepared in accordance with California Environmental Protection Agency (CalEPA) and U.S. EPA guidance. Neither of these agencies require the actions requested by the commentor. See also Response to Comment SPAS-PC00130-454. Also, cancer risks are evaluated based on an exposure duration of 70 years, and it would be highly speculative, and nearly impossible, to determine whether a specific emissions source, such as LAX, was responsible for a cancer case.
- Comment SPAS-PC00130-453 on the SPAS Draft EIR suggested "Why hasn't LAWA implemented some form of Air purification in so called "hot spots"? If taxing time for aircraft on the ground is a major source why aren't aircraft being towed by clean air vehicles? Wouldn't airlines save significant amounts of money on fuel by being towed? How much fuel is required in its entirety by taxing? Would fence line hazards be mitigated? By what agency? Who would be measuring?" For the reasons discussed in Response to Comment SPAS-PC00130-453 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Attempting to clean ambient air with an air purification system is not effective since the sources emitting pollutants will continue to impact air quality. Reducing the concentration impacts is best accomplished by measures that control emissions at the sources. Methods to reduce aircraft emissions during taxiing are being studied by various airlines and aircraft equipment manufacturers. Towing aircraft was briefly attempted by Virgin Atlantic, however potential damage to the landing gear over time has caused them to stop the practice.[1]

  [1] Deonandan, I. and Balakrishnan, H., Evaluation of Strategies for Reducing Taxi-out Emissions at Airports, American Institute of Aeronautics and Astronautics, 2010.

- Comment SPAS-PC00130-454 on the SPAS Draft EIR suggested "some form of mitigation that would clean the air going beyond the fence line and providing filtered face masks for all

workers exposed." For the reasons discussed in Response to Comment SPAS-PC00130-454 (Section 4.3 of Part II of the SPAS Final EIR), the suggested measure would not reduce or avoid the impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, regarding mitigation of toxic air contaminants (TAC), many of the mitigation measures that LAWA has committed to as part of the LAX Master Plan with respect to air quality impacts, and that would be applicable to the SPAS alternatives, aim to reduce exhaust emissions from construction equipment (MM-AQ-2) and mobile sources such as aircraft and ground support equipment (MM-AQ-4), and reduce traffic congestion near the airport (MM-AQ-3). There were also a number of project-specific mitigation measures included to decrease emissions from construction and operational sources, including MM-AQ (SPAS)-1, MM-AQ (SPAS)-2, and MM-AQ (SPAS)-3. These mitigation measures focus on reducing emissions from the source before they even go beyond the fence-line rather than trying to capture and treat the air containing TAC as it passes the fence-line. Treating the source is more effective, efficient, and significantly more practical, in that such a single measure would ultimately benefit a larger number of potential receptors and reduce the amount of TAC that are emitted from LAX. In assessing any health and safety issue, the hierarchy for instituting protective measures is: elimination, substitution, engineering controls, administrative controls, and lastly personal protective equipment (PPE). Usually the higher the control in the hierarchy, the more effective it is as a control that offers protection. However, worker health and safety is regulated under the Office of Safety and Health Administration (OSHA) and workers at LAX, including contractors hired by LAWA for construction or other tasks, fall under these regulations. If exposures might exceed protective workplace levels (i.e., permissible exposure limits (PELs)) and cannot be controlled in any other way, personal protective equipment (PPE), including respiratory protection, is provided. The type of respiratory protection is dictated by TAC of concern and airborne concentrations of these TAC. Compliance with OSHA safety and health standards is necessary for airport construction and operations.

- Comment SPAS-PC00130-482 on the SPAS Draft EIR suggested the use of more fuel efficient planes, substituting solar power for other fuels, and more environmental means of expansion. For the reasons discussed in Response to Comment SPAS-PC00130-482 (Section 4.3 of Part II of the SPAS Final EIR), the suggestions would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, LAWA does not have the legal or practical authority to set aircraft design standards such as aircraft fuel efficiency, which are controlled by the federal government, the FAA, and aircraft manufacturers. Furthermore, as discussed on page 4-1330 of the SPAS Draft EIR, airplanes are becoming more fuel efficient: "New aircraft are 70% more fuel efficient than 40 years ago and 20% better than 10 years ago. Airlines are aiming for a further 25% fuel efficiency improvement by 2020. Modern aircraft achieve fuel efficiencies of 3.5 liters per 100 passenger kilometers. The [Airbus] A380 and [Boeing] B787 are aiming for 3 liters per 100 passenger kilometer [approximately 78 miles per gallon]."

  The commentor also asks why solar has not been substituted for other fuels. To the extent the commentor is referring to electricity generation for use at on-site facilities, please see Responses to Comments SPAS-PC00130-480 and SPAS-AR00002-8. To the extent the commentor is referring to incorporation of solar power into airplanes, such a suggestion is infeasible to fully power multi-passenger commercial aircraft. As described in the previous paragraph, LAWA does not have the legal authority to mandate plane design, nor would solar power on passenger planes provide sufficient energy to noticeably offset fuel consumption since the weight of such panels would offset any energy they produce.

  LAWA has an ongoing commitment to increasing energy efficiency and implementing energy conservation measures at its airports. Please see Response to Comment SPAS-PC00130-390 regarding programs undertaken at LAX to reduce emissions from ongoing airport activity, including converting LAWA fleet vehicles to alternative fuels, promoting electric automobile

use, and encouraging use of transit and carpools/vanpools. Please see page 4-417 of the SPAS Draft EIR and Response to Comment SPAS-AR00002-19 for discussion of LAWA's existing employee carpool/vanppol program.

- Comment SPAS-PC00130-488 on the SPAS Draft EIR suggested that a one runway alternative be considered in the SPAS Draft EIR. For the reasons discussed in Response to Comment SPAS-PC00130-488 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the concept of having only one runway in the north airfield, leaving LAX with a three-runway system is described and evaluated in Section 2.3.2.3, Three-Runway Airfield, of the SPAS Draft EIR. This section presents several operational problems associated with this alternative and indicates that it would likely result in environmental impacts comparable or greater to the alternatives evaluated in detail in the SPAS Draft EIR. Please also see Response to Comment SPAS-PC00130-1033 for additional discussion regarding operational problems and infeasibility of this airfield concept. The comment does not indicate any environmental advantages of a three-runway system relative to the alternatives evaluated in the SPAS Draft EIR. For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.
- Comments SPAS-PC00130-563 and SPAS-PC00130-564 on the SPAS Draft EIR suggested planting 1,000 new trees around a specific parking lot. For the reasons discussed in Response to Comment SPAS-PC00130-563 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, LAWA has a number of mitigation measures, which involve planting of trees, including LAX Master Plan Mitigation Measure MM-BC-3 which provides for 2:1 tree replacement ratio for 300 mature trees. Similarly, trees would be planted in compliance with the LAX Street Frontage and Landscape Development Plan Update, which includes the planting of street trees in some locations (see pages 4-11 through 4-13 of the SPAS Draft EIR). However, it is not appropriate to mechanically assign a number of trees to a specific parking lot. Size limitations would preclude planting this number of trees at the subject location. The perimeter of the Parking Lot D and the Jenny Lot is approximately 5,800 linear feet. The planting of at least 1,000 trees to "ring" the site, as requested by the commentor, would place each tree less than six feet from each other, which would not be sufficient room for the root system and branches of most trees. Additionally, the continuous lining of the perimeter of the site with trees would pose the potential for damage to adjacent sidewalk, street, and infrastructure due to root growth. Also, the subject parking lot is located east of, and in proximity to, the north runways and the placement of over 1,000 trees directly beneath the runway flight path could pose an aircraft safety concern relative to being a bird attractant. (See page 4-176 of the SPAS Draft EIR and FAA Advisory Circular 150/5200-33B.)
- Comment SPAS-PC00130-614 on the SPAS Draft EIR suggested Alternatives 8 and 9 be used as stand-alone options. For the reasons discussed in Response to Comment SPAS-PC00130-614 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, as indicated on page 2-8 in Section 2.3.1 of the SPAS Draft EIR, the ground access improvements associated with Alternatives 8 and 9 are compatible with, and could be paired with, the airfield and terminal improvements proposed under Alternatives 1, 2, 5, 6 and 7. Implementation of only the ground access improvements proposed under Alternatives 8 and 9 is not proposed and such a scenario would not respond most of the project objectives presented in Section 2.2. Specifically, such a scenario would not provide north airfield improvements that support the safe and efficient movement of aircraft at LAX, would not maintain LAX's position as the premier international gateway in supporting and advancing the economic growth and vitality of the Los Angeles region, would not plan improvements that do not result in more than 153 passenger gates at

78.9 MAP, and would not produce an improvement program that is efficient, sustainable, feasible, and fiscally responsible.

- Comment SPAS-PC00130-622 on the SPAS Draft EIR suggested relocating the taxi holding lot inside the CTA parking lot area. For the reasons discussed in Response to Comment SPAS-PC00130-622 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, there is insufficient space to construct a commercial vehicle holding lot within the CTA. Also, there is no evidence that relocating the commercial vehicle holding lot to the CTA would improve efficiency. As can be seen SPAS Draft EIR Figures 1-5, 1-6, 1-12, and 1-13, which delineate the location and size of the commercial vehicle holding lot proposed under SPAS Alternatives 1, 2, 8, and 9, and also depict the CTA relative to building areas (gray shading) and open areas between buildings, there is insufficient space available within the CTA to efficiently accommodate the area needed for commercial vehicles such as taxis and shuttle vans. Moreover, there is no evidence that placing the commercial vehicle holding lot within the CTA would improve the efficiency by which taxis and shuttles could get to passengers awaiting pick up, given the one-way direction of most roads within the CTA. For example, if the holding lot were to be placed in the middle of the CTA, a taxi or shuttle dispatched to pick up passengers at Terminal 1 would be required to travel west on World Way North and/or south on West Way, then east on World Way South to the airport return road at the east end of the CTA, and then circle around to stop at Terminal 1. The dispatch of a taxi or shuttle to Terminal 1 from the currently proposed commercial vehicle holding lot would simply require the vehicle to travel south on Sky Way and stop at the first terminal. Although the physical straight-line distance between Terminal 1 and a holding lot within the CTA might be comparable or even less than the straight-line distance between Terminal 1 and the holding lot associated with the SPAS alternatives, the travel distance of the former would be substantially greater (i.e., approximately 2 to 5 times greater) than the latter, due to the one-way nature of roads within the CTA. Regarding the location of existing commercial vehicle holding lots at LAX, as indicated on page 2-55 of the SPAS Draft EIR, the taxi holding lot is located northeast of the CTA, near 96th Street and Sepulveda Boulevard, as shown on Figure 2-10 of the SPAS Draft EIR. The existing shared ride van holding lot is located on Avion Drive south of Century Boulevard and the charter bus/limousine holding lot is located in the southwest corner of Jenny Street and Westchester Parkway.
- Comment SPAS-PC00130-632 on the SPAS Draft EIR suggested that the US Airways building could be retained if LAWA would shorten the length of the runways. For the reasons discussed in Response to Comment SPAS-PC00130-632 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, as stated on page 2-56 in Section 2.3.1.10 of the SPAS Draft EIR, the US Airways Maintenance Building would be removed under Alternatives 3, 5, and 7. Removal of this building would be required due to the lateral movement of Runway 6R/24L and/or the Taxilane D and Taxiway E improvements associated with those alternatives, and is not related to runway length. As can be seen by review of Figure 2-10 in the SPAS Draft EIR, to avoid removal of that structure (Facility #20 on the figure) by reducing the existing length of the runway and still accommodate the lateral runway move and taxilane/taxiway improvements associated with those alternatives, it would be necessary to reduce the length of the runway by about 50 percent. Such a reduction would be contrary to the basic design and function of the runway and therefore would be infeasible.
- Comment SPAS-PC00130-702 on the SPAS Draft EIR suggested that CTA access improvements, Option 3 – Tunnel under CTA Loop Roadway would provide grade separation allowing for the Sky Way approach to shift to the eastern part of Park One. For the reasons discussed in Response to Comment SPAS-PC00130-702 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific

economic, legal, social, technological, or other considerations make it infeasible. Specifically, CTA access improvements, Option 3 -- Tunnel under CTA Loop Roadway described on page 21 of the LAX GTS Report, was determined to be infeasible due to the need to construct the roadway beneath Terminal 0, a reduction in the area available for future airside operations near Terminal 0, and the potential impacts to underground utilities. Therefore, this CTA access option was documented in the LAX GTS Report as one of the options that was preliminarily considered, but rejected for further detailed study.

- Comment SPAS-PC00130-703 on the SPAS Draft EIR suggested "Why has no option for exiting out of CTA from modified skyway been considered? Drop off in an area of Park One could be built and allow for moving sidewalk or other conveyance to terminals 0 and 1 without going through the CTA traffic and instead exiting to Sepulveda." For the reasons discussed in Response to Comment SPAS-PC00130-703 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the LAX GTS Report did consider alternatives to exit traffic out of the CTA northbound via the proposed Sky Way realignment as presented in Figure 28 on page 23 of the LAX GTS Report, but it was determined this alignment was not feasible because it would have required a new, signalized intersection to be constructed to allow traffic exiting via the airport return roadway (east of the LAWA Administration Building) to cross inbound traffic from Sepulveda and Century Boulevards. Physical constraints caused by the alignment of the airport return roadway and the existing departures level roadway support columns limited available queuing area for vehicles (mainly shuttle buses) which would exit the airport via Sky Way to only a few vehicles per signal cycle. This would result in unacceptable backups on the return roadway and likely the primary airport exit, the intersection of Center Way and World Way South. The comment also suggested that a drop off in an area of Park One could be built and allow for moving sidewalk or other conveyance to terminals 0 and 1 without going through the CTA traffic and instead exiting to Sepulveda. As indicated in Table 2-3 and discussed on page 2-55 of the SPAS Draft EIR, under Alternatives 1, 2, and 5 through 9, the existing commercial vehicle holding lot would be relocated to the eastern portion of the Park One facility. Due to the importance of this site for the efficient operation of future commercial vehicle operations within the CTA, neither the LAX GTS Report nor the SPAS Draft EIR considered the development of a new passenger drop off curb in the portion of the existing Park One lot located east of a realigned Sky Way. An EIR need not consider every conceivable alternative to the project. (In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1163; State CEQA Guidelines Section 15126.6(a).) CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commentors. (State CEQA Guidelines Section 15204.) The EIR was prepared with a degree of analysis sufficient to provide the decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. (State CEQA Guidelines 15151.)
- Comment SPAS-PC00130-749 on the SPAS Draft EIR suggested that the EIR evaluate an alternative that does not build or defers all terminal buildings and taxiways in the plan (presumably the LAX Master Plan). For the reasons discussed in Response to Comment SPAS-PC00130-749 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, this alternative would be infeasible because it would not accomplish any of the fundamental project objectives. Further, this alternative would essentially be a "no build" no project alternative calling for no further airport construction. However, LAWA has the discretion to develop a no project alternative that describes existing conditions plus "what would be reasonably be expected to occur in the foreseeable future if the project were approved, based on current plans and assumptions." (State CEQA Guidelines Section 15126.6(e)(2)). When a proposed project is the revision of a plan, the Guidelines (Section 15126,6(e)(3)(A)) specifically provide that the

no project alternative shall be the continuation of the existing plan into the future. For these reasons, the SPAS Draft EIR designates Alternative 3, which calls for LAX Master Plan projects to be implemented as originally envisioned, as the no project alternative. For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.

- Comment SPAS-PC00130-756 on the SPAS Draft EIR suggested relocating bus and commercial vehicle drop-offs to the parking structures. For the reasons discussed in Response to Comment SPAS-PC00130-756 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, as provided in Section 4.12.1 of the SPAS Draft EIR, with the addition of Mitigation Measure MM-ST(OA)(SPAS)-1, the SPAS alternatives would have no significant impact to on-airport traffic. The commentor does not provide any evidence that relocating bus and commercial vehicle drop-off areas to the parking structures would eliminate a significant on-airport traffic impact. Further, relocating bus and commercial vehicle drop-off areas to the parking structure would have a number of disadvantages. The existing public parking structures provide a maximum vertical clearance of eight feet, two inches, which limits the commercial vehicles that could enter the structures. Low ceiling height and limited ventilation, coupled with the increase in the number of vehicles operating within the garage at any given time, would have to be considered. Additionally, relocating commercial modes to the public parking structures would increase the number of passengers who would be required to cross the arrivals level outer roadway. As part of Options 1, 2, and 4 documented in the LAX GTS Report (on pages 9, 10, and 15, respectively), consideration was also given to relocating passenger pick up by private vehicles to inside the public parking structures; however analyses showed that vehicle queues at the garage entrances would adversely impact traffic flow on the arrivals level roadway. Relocating commercial vehicle traffic to the public parking structures would require that new exits, and in some cases new entrances be constructed on the ground level of the structures. These would be necessary to allow a commercial vehicle picking up passengers within the public parking structure at one terminal to exit and then drive to the next terminal's public parking structure to pick up additional passengers. Currently, none of the public parking structures within the CTA have an exit onto either World Way North or World Way South which commercial vehicle use to circulate within the CTA.
- Comments SPAS-PC00130-800, SPAS-PC00130-815, and SPAS-PC00130-1033 on the SPAS Draft EIR suggested a one-runway alternative. For the reasons discussed in Response to Comment SPAS-PC00130-800 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the runway configuration studied in the North Airfield Safety Study is described and evaluated in Section 2.3.2.3, Three-Runway Airfield, of the SPAS Draft EIR. This section presents several operational reasons why this alternative was considered infeasible, and was likely to result in environmental impacts comparable or greater to the alternatives evaluated in detail in the SPAS Draft EIR. For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.
- Comment SPAS-PC00130-848 on the SPAS Draft EIR suggested that no alternative be selected as the preferred alternative until after the North Runway Safety Studies and analysis have been completed and examined. The comment also requests data from the South Airfield Improvement Program to determine the effectiveness of those improvements, such as the centerline taxiway, in reducing incursions. For the reasons discussed in Response to Comment SPAS-PC00130-848 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the SPAS Draft EIR includes a full range of airfield improvement alternatives, proposing seven different options that range from moving Runway 6L/24R 350 feet north, to moving Runway 6R/24L

340 feet south, to not moving either runway but making taxiway improvements, to not making any notable airfield improvements other than federally mandated safety improvements, and other options. As further described below and also addressed in Responses to Comments SPAS-PC00130-849 and SPAS-PC00130-850, the major elements in the additional proposals offered by ARSAC are either not feasible, do not respond to the project objectives, have environmental impacts that are similar to or worse than the alternatives addressed in the SPAS Draft EIR, and/or are already reflected in the range of alternatives addressed in the SPAS Draft EIR.

The comment does not indicate any environmental advantages of a three-runway configuration relative to the alternatives evaluated in the SPAS Draft EIR. The three-runway configuration studied in the North Airfield Safety Study is described and evaluated in Section 2.3.2.3 of the SPAS Draft EIR. This section presents several operational problems associated with this alternative and indicates that it would likely result in environmental impacts comparable or greater to the alternatives evaluated in detail in the SPAS Draft EIR. Therefore, this alternative was not evaluated in detail in the SPAS Draft EIR.

The South Airfield Improvement Program, which included the development of a centerfield taxiway, was completed in June 2008. As indicated in Table 4.7.2-7 on page 4-510 of the SPAS Draft EIR, there have been no serious runway incursions (i.e., Category A or Category B) on the south airfield since that time.

- Comment SPAS-PC00130-850 on the SPAS Draft EIR suggested that "LAWA should discuss how a "multi-airport discount rate" system could encourage the shift of flights or the addition of new flights to ONT and PMD. The "Multi-Airport Discount Rate" would give airlines that operate at LAX, ONT and PMD more favorable landing fees and terminal rents than operating solely at LAX. Airlines that operate solely at ONT and/or PMD would get even better rates for not operating to LAX. The "multi-airport discount rate" plan should be available to international carriers, as well as domestic carriers. For international flights, there would have to be parity between those international flights operated by domestic and foreign airlines. LAWA should examine changing the financing model at LAX (residual vs. compensatory) to allow for cross-subsidization of ONT and PMD to support the "multi-airport discount rate" system." For the reasons discussed in Response to Comment SPAS-PC00130-850 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, as it relates to the suggestion that LAWA should consider a "multi-airport discount rate", it is assumed the commentor is suggesting that LAWA provide discounted fees at LAX for air carriers that also offer service at ONT or PMD. Under federal regulation, an airport sponsor is required to set rates, fees, rentals, and other charges without unjust discrimination (49 U.S.C. Sec. 47107). This requirement has been interpreted to mean that an airport sponsor must charge substantially comparable rates, fees, rentals, and other charges to airlines for a similar use of their facilities. Providing discounted rates for certain carriers because they offer service at another LAWA airport could be viewed by the FAA as discriminatory, in that it offers preferential treatment for some "local benefit", similar to providing preferential treatment for carriers that also lease additional maintenance or storage space from an airport sponsor, an action prohibited by the FAA. For these reasons, LAWA will not consider "multi-airport discount rate" in connection with the SPAS process.
- Comment SPAS-PC00130-863 on the SPAS Draft EIR suggested the inclusion of two sub-options: extension of 24R west and no further extension. For the reasons discussed in Response to Comment SPAS-PC00130-863 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the design of Alternative 6 assumes no westerly extension of Runway 6L/24R and it is not necessary to carry a sub-option that assumes a westerly extension. Other alternatives, such as Alternatives 1 and 5, include a westerly extension of the runway, and are sufficient to provide

a general basis of comparison for decision-making at the program level of planning. The SPAS alternatives constitute a reasonable range of alternatives, sufficient to allow informed decision-making. (State CEQA Guidelines Section 15126.6(a); City of Maywood v. Los Angeles Unified School District (2012) 208 Cal.App.4th 362, 419.) The SPAS Draft EIR includes sufficient information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project. (State CEQA Guidelines Section 15126.6(a)). The commentor does not provide any evidence that the proposed "sub-options" offer any substantial environmental advantages and, therefore, no further analysis is required. (City of Maywood v. Los Angeles Unified School District (2012) 208 Cal.App.4th 362, 419.)

- Comment SPAS-PC00162-2 on the SPAS Draft EIR suggested a runway design alternative that would eliminate all runway exits along Runway 6L/24R except for the ones at far ends of the runway. For the reasons discussed in Response to Comment SPAS-PC00162-2 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, this design is infeasible due to the operational problems, environmental impacts, and safety issues that it would pose. Additionally, it would not respond to the project objectives related to improving the north airfield. Therefore, it was not evaluated in detail in the SPAS Draft EIR.

  Under this runway design alternative, all arriving aircraft on Runway 6L/24R would be required to taxi to the end of the runway before crossing Runway 6R/24L, which is the primary departure runway in the north airfield. The implication in this concept is that arriving aircraft on Runway 6L/24R could taxi across Runway 6R/24L more safely at the end of the runway because any departing aircraft would probably be well up in the air by the time it gets to that taxiway crossing point (i.e., the taxiing arriving aircraft could cross beneath the departing aircraft). One of the many problems associated with such a concept is that no aircraft is allowed to taxi across an active runway, that is a runway where an aircraft arrival operation or an aircraft departure operation is occurring, for the entirety of the subject operation. In other words, for a departure operation, the air traffic control tower will hold all nearby aircraft from even starting to cross the departure runway until the departing aircraft has cleared the end of the runway on takeoff. There cannot be any objects, including taxiing and holding aircraft, within the FAA designated Object Free Zone (OFZ), which extends 2,600 feet past the end of the runway, as shown on Figure 4.7.2-2 of the SPAS Draft EIR. Should an aircraft taxi across a departure runway while an aircraft departure operation is occurring, thereby entering the runway in front of a departing aircraft, it would be classified as a Category A or Category B runway incursion, which are the most serious/hazardous incursion types, even if taxiing aircraft end up passing beneath the departing aircraft.

  Runway approaches are always designed so that aircraft land about one thousand feet down the runway. The navigation aids (especially the glide slope) and the runway markings are designed around the one thousand foot target. A single taxiway exit at the very end would require aircraft to remain on the runway until they reach that exit. Given that the normal landing distance needed for aircraft does not put them at the very end of the runway, additional taxi distance would be required to reach the end of the runway. Although most larger ADG V and VI aircraft would finish their landing closer to the runway end, some additional taxiing on the runway would still be required. The majority of aircraft at LAX are typically smaller ADG III type aircraft (i.e., Boeing 737 or Airbus A320) and their required landing distance is much shorter; hence, having one exit taxiway at the very end would require substantially more taxiing time and distance. All of the extra taxiing on the runway would increase runway occupancy time (otherwise known as ROT) which would require increasing "in-trail" distances between aircraft on the approach to avoid "go-arounds." It should be noted that due to safety issues and concerns, it is not practical for aircraft to "land long" or taxi faster in an effort to get to the end of the runway in a shorter amount of time.

The comment also suggested that if larger aircraft need more operating space than what is currently available on the north airfield, they should simply use the south runways, such an approach is contrary to the project objective to improve airfield balance. There is currently a disproportionate amount of large aircraft departures occurring on the south airfield, at which LAWA seeks to improve the north airfield to reduce taxiing between the north and south runway complexes.

In light of the types of operational problems described above, the suggested alternative would fail to respond to the project objectives described in Section 2.2 of the SPAS Draft EIR relative to providing north airfield improvements that support the safe and efficient movement of aircraft at LAX. Additionally, the operational problems associated with this alternative would not support other project objectives. For example, it would not maintain LAX's position as the premier international gateway in supporting and advancing the economic growth and vitality of the Los Angeles region (i.e., ongoing airfield congestion and delays and airspace delays and rerouting of arriving flights could hamper LAX's ability to accommodate international flights), would not enhance safety at LAX, and would not support an improvement program that is efficient, sustainable, feasible, and fiscally responsible. For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.

- Comment SPAS-PC00170-1 on the SPAS Draft EIR suggested the installation of noise walls. For the reasons discussed in Response to Comment SPAS-PC00170-1 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, airport-related noise impacts in the Playa del Rey area are primarily from aircraft that are departing from, or approaching (under "east flow" conditions when aircraft arrive from the west and land towards the east), the north airfield. Such aircraft are typically several hundred feet up in the air when passing by Playa del Rey. Noise attenuation (reduction) associated with noise walls comes from the ability to interrupt (block) the noise path between source and receptor. As such, it is anticipated that the placement of noise walls between the airport and Playa del Rey would not reduce aircraft noise levels. Additionally, placement of noise walls may result in visual impacts to the local area. Therefore, the suggestion to install noise walls in this area is rejected because there is no evidence it would reduce significant environmental impacts and would likely have additional adverse impacts.
- Comment SPAS-PC00176-1 on the SPAS Draft EIR suggested the use of a "pod-type self-driving car" to transfer people from their cars to LAX. For the reasons discussed in Response to Comment SPAS-PC00176-1 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the comment does not indicate any environmental advantages of a "pod-type self-driving car" relative to the alternatives evaluated in the SPAS Draft EIR, nor is there any evidence that such vehicles are technologically feasible.
- Comment SPAS-PC00177-2 on the SPAS Draft EIR suggested incentives such as the removal of power poles and planting of trees. For the reasons discussed in Response to Comment SPAS-PC00177-2 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the SPAS project does not include the removal of power poles or the planting of trees for this area of Westchester. However, along the southern boundary of the area referenced by the commentor, south of 88th Place and 88th Street and east of Emerson Avenue, is LAX Northside which serves as an airport buffer zone (comprised of compatible development and landscape) between airfield operations and the Westchester community. This area is subject to use restrictions, height restrictions, setback requirements, and landscape requirements (including a 30-foot

landscaped buffer setback along 88th Street between Sepulveda Westway and Liberator Avenue).

- Comment SPAS-PFA00001-1 on the SPAS Draft EIR suggested an alternative concept for improvements to LAX with the following main components:

  1. Extend heavy-rail transit service to LAX via Metrolink, Amtrak, and High-Speed Rail (HSR). This would be accomplished via an underground rail tunnel system coming from the north along Aviation Boulevard and turning west at Century Boulevard to extend beneath the CTA, where the Metrolink and Amtrak would continue along beneath the north side of the CTA with stops at the CTA terminals, Tom Bradley International Terminal (TBIT), and the future Midfield Satellite Concourse (MSC). The HSR would continue along beneath the south side of the CTA with stops at the CTA, TBIT, MSC, and an LAX employee commuter station proposed in the western portion of the airport.

  2. Extend light-rail transit service to LAX via an extension of the Metro Green Line along Aviation Boulevard with a western branch line along Century Boulevard extending into and around the CTA. The segments of the Green Line within the CTA, Century Boulevard, and Aviation Boulevard north of Century Boulevard would be on an aerial (elevated) platform, while the segment south of Century Boulevard would be in an underground tunnel.

  3. Convert the CTA's easternmost parking garages (Parking Structures P-1 and P-7) into a municipal bus terminal, with station connecting to the Green Line, Metrolink, and Amtrak.

  4. Do not develop an Automated People Mover (APM) system at LAX.

  5. Leave the north airfield and surrounding areas essentially as they are today. Under this concept, there would be minimal airfield changes and the north airfield would be used primarily for smaller aircraft. Lincoln Boulevard would not be modified at all and there would be no development in LAX Northside.

  6. Extend the south runways east past Aviation Boulevard and place Aviation Boulevard within a tunnel between Century Boulevard and Imperial Highway. With these runway extensions, larger aircraft would operate primarily on the south airfield. Under this concept, uses within the runway extension area, as well in the areas extending north to Century Boulevard and between La Cienega Boulevard and the I-405 would be acquired by LAWA and demolished.

  For the reasons discussed in Response to Comment SPAS-PFA00001-1 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, elements of the alternative concept described above for LAX improvements are similar to elements already included in the SPAS alternatives and/or do not avoid or substantially lessen significant environmental impacts that would occur under the alternatives addressed in the SPAS Draft EIR. Therefore, the alternative concept was not evaluated in detail in the SPAS Draft EIR. The reasons for this are described below, based on the same order of concept elements summarized above.

  1. Heavy-Rail Transit Service to LAX: LAWA does not have any responsibility, authority, or jurisdiction to bring heavy-rail transit to LAX. Such transit services occur directly through Metrolink, Amtrak, and the California High-Speed Rail Authority. None of those agencies currently has plans or funding to extend service to or near LAX. The planned California High-Speed Rail system does not include a stop at or near LAX; however, as currently envisioned, the high-speed rail alignment would stop at Union Station in downtown Los Angeles, where passengers could board the Union Station FlyAway to reach LAX. Therefore, heavy-rail transit service to LAX is considered infeasible. Also, the construction impacts associated with development of an extensive underground tunnel network into and beneath the CTA, extending that tunnel network west beneath the airfield operations area, and development of above-ground station connections would be substantial; these impacts would far exceed

construction impacts of ground transportation system improvements, such as the elevated busway or APM system, proposed under the various SPAS alternatives.

2. Light-Rail Transit Service to LAX: LAWA does not have the responsibility or authority to bring light-rail transit service into LAX, as that service is within the jurisdiction of Metro. However, with the exception of Alternative 4, all of the SPAS alternatives include improvements to enhance connections with and use of Metro light-rail transit service at LAX. This would occur primarily through the integration of SPAS-related ground transportation system improvements with Metro light-rail transit corridors and stations, such as the connectivity between the elevated busway or APM systems proposed under Alternatives 1, 2, 8, and 9 and the future Metro Crenshaw/LAX Transit Corridor and Station, or the pedestrian walkway between the Intermodal Transportation Center (ITC) and the existing Green Line Aviation Station proposed under Alternative 3. Additionally, LAWA and Metro have been coordinating, and will continue to coordinate, on the Airport Metro Connector Project described on page 5-22 of the SPAS Draft EIR to provide light-rail transit service directly into the CTA. It is anticipated that Metro's formulation and evaluation of alternative concepts for the Airport Metro Connector Project may include the types of alignments and facilities suggested by the commentor. (See Topical Response TR-SPAS-T-1 for further discussion of transit options into LAX.)

3. Municipal Bus Terminal Within CTA: Regarding the suggested conversion of existing parking facilities at the east end of the CTA to a municipal bus terminal, having a major bus facility within the CTA would adversely affect traffic conditions within the CTA, based on the size and number of buses that would likely be added to the traffic mix within the CTA. Of particular concern would be the one intersection within the CTA that is anticipated to have unavoidable significant impacts under all of the SPAS alternatives in future (2025) conditions. That intersection, World Way South and Center Way, is one of the main exit points from the CTA and the placement of a municipal bus facility immediately adjacent to it, and addition of numerous bus trips to the intersection, would exacerbate that significant impact. Also, the bus trips within the CTA could result in additional intersections being significantly impacted, that would not otherwise occur under the current range of SPAS alternatives. The worsening of traffic conditions within the CTA would be contrary to the project objective of improving traffic conditions in the CTA, as described in Section 2.2 of the SPAS Draft EIR. In addition to the adverse impacts to CTA traffic, the placement of the municipal bus center within the CTA would not, from a bus route logistics standpoint, be as efficient as the location currently proposed by Metro, that being adjacent to the future Crenshaw/LAX Century/Aviation Station. The location proposed by Metro would enable buses to take access to and from a number of major streets in the nearby area, whereby the location within the CTA would require all buses to travel on Century Boulevard and Sepulveda Boulevard before accessing other major streets in the nearby area.

4. No APM: Although this concept suggests that all non-automobile access to and within the CTA be provided by a combination of the aforementioned heavy-rail transit and light-rail transit systems, such systems would not provide the traffic benefits of having an APM or elevated busway connect the CTA with the ITF, ITC, CONRAC, or GTC proposed under various SPAS alternatives, which would transport passengers/customers between these airport-related facilities using a dedicated route removed from the local street system. Not providing an APM would be contrary to the project objective of improving the ground access system to improve traffic conditions within the CTA.

5. No/Minimal Improvements to the North Airfield: SPAS Alternative 4 already reflects a scenario where no improvements are made to the north airfield, except for federally-mandated Runway Safety Area improvements. As described in the impacts analysis presented in Chapter 4 of the SPAS Draft EIR, implementation of this alternative would substantially reduce construction-related impacts compared to the other SPAS alternatives, but would result in greater long-term operations-related air quality and aircraft noise impacts.

However, this concept would not respond to the project objective described in Section 2.2 of the SPAS Draft EIR relative to improving the north airfield to support safe and efficient movement of aircraft. Regarding the suggestion that there be no LAX Northside development, the LAX Northside project is not part of SPAS.

6. Extend Runways in South Airfield: The concept of further improving the south airfield to better accommodate large aircraft, in lieu of improving the north airfield, not only fails to address other problems associated with the north airfield, as described in Section 2.2 of the SPAS Draft, but would exacerbate the existing imbalance between the north and south airfields relative to large aircraft. As described in Section 2.2, the inability of some large heavy aircraft to depart from Runway 6R/24L due to insufficient runway length requires them to use Runway 7L/25R, which causes an imbalance in such operations between the two airfields. Although the south airfield can already accommodate large heavy aircraft and there is not a need to lengthen the runways, as suggested under this alternative concept, any degree to which additional operations of large aircraft are shifted to the south airfield under this concept (i.e., by leaving the north airfield unimproved and discouraging large aircraft operations in that area while improving the south airfield to draw such operations), would result in greater air quality and aircraft noise impacts than would otherwise occur by leaving the south airfield in its current configuration and improving the north airfield. Adverse air quality and noise impacts associated with shifting a greater number of aircraft operations from the north airfield to the south airfield would occur due to longer taxiing times and distances for aircraft (i.e., more air pollutant emissions from aircraft engines) that are gated near the north airfield but have to use the south runway and from placing a greater number of aircraft arrivals and departures over densely populated areas east of the south airfield (higher concentrations of homes and people exposed to aircraft noise impacts). Additionally, the easterly extension of the runways would shift the aircraft noise contours for the south airfield eastward, which, in turn, would increase noise impacts on highly populated areas east of the airport. Also, the extent of land area proposed for acquisition and demolition of existing uses under this concept would substantially increase construction-related impacts as well as land use impacts (i.e., loss of existing land uses). For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.

- Comment SPAS-PFA00001-6 on the SPAS Draft EIR suggested relocating the municipal bus terminal to the CTA. For the reasons discussed in Response to Comment SPAS-PFA00001-6 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, it is assumed that by the SPAS horizon year (2025), Metro will relocate the current 96th Street Metro Bus Station, with is located between Vicksburg Avenue and Jenny Street, to a new bus center located adjacent to the planned Aviation/Century Station. Access to the CTA from the relocated bus center would be provided by the SPAS APM or dedicated busway. Relocation of the bus station to the CTA is not under consideration by either LAWA or Metro and is considered infeasible for a number of reasons. Specifically, relocating this station to the CTA would result in delays for the non-airport passengers who are believed to make up the majority of the passengers on these buses. The existing garages on the eastern end of the CTA do not have sufficient vertical clearance to accommodate Metro buses; accommodation of buses could only occur if a garage was demolished and reconstructed. Moreover, use of a garage for regional bus service would reduce the amount of on-airport parking. Finally, airport passengers arriving on Metro buses to the easternmost parking garage in the CTA could be required to walk in excess of 2,300 feet to reach their terminal or transfer to the airport's inter-terminal shuttle. Please also see Response to Comment SPAS-PFA00001-1 for additional reasons supporting the conclusion that relocating the municipal bus terminal to the CTA is considered infeasible. Additional details on the infeasibility of the commentor's suggestions are provided in Response to Comment SPAS-PFA00001-6.

- Comment SPAS-PH300034-1 on the SPAS Draft EIR suggested several features of San Francisco International Airport (SFO) that the commentor recommends for LAX. For the reasons discussed in Response to Comment SPAS-PH300034-1 (Section 4.3 of Part II of the SPAS Final EIR), the suggestion would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, regarding rail transit, such as BART having a line to SFO, Los Angeles Metro has approved development of the Crenshaw/LAX Transit Corridor and Station which will provide a new transit line near LAX, in addition to the existing Metro Green Line, and will include a station near the intersection of Aviation Boulevard and Century Boulevard. As described in Section 2.3 of the SPAS Draft EIR, Alternatives 1, 2, 8, and 9, propose an elevated busway or APM system to the CTA that can be integrated with the new Metro station. The APM system under Alternative 3 could also link to that station. Regarding the automated people mover (APM) to the consolidated rental car (CONRAC) facility at SFO, SPAS Alternatives 3 and 4 propose the same type system, and SPAS Alternative 8 provides essentially the same system using an elevated/dedicated busway instead of an APM. In summary, the very suggestions offered by the commentor are already included in the range of alternatives currently being considered for SPAS. For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.
- Comment SPAS-PH300034-2 on the SPAS Draft EIR suggested LAX become organized like Heathrow Airport. For the reasons discussed in Response to Comment SPAS-PH300034-2 (Section 4.3 of Part II of the SPAS Final EIR), the suggested alternative would not reduce or avoid impacts of the project, and specific economic, legal, social, technological, or other considerations make it infeasible. Specifically, the comment does not describe a specific potentially feasible alternative that should have been evaluated in the SPAS Draft EIR. Many of the improvements associated with the various SPAS alternatives seek to improve efficiency and quality of service at LAX. These include airfield improvements to improve the safety and efficiency, as summarized in Table 1-12 of the SPAS Draft EIR, and ground transportation system improvements as described in Chapter 2 of the SPAS Draft EIR. While the commentor's comparisons between Heathrow International Airport and LAX suggest that it's possible to "do more with less" (i.e., Heathrow handling more passengers within a smaller footprint and with fewer runways), such simple comparisons are not necessarily a true indicator of airport efficiency. There are many factors that influence the number of passengers accommodated at an airport, not the least of which is air travel market activity. Heathrow handled more passengers in 2011 than LAX not because it was more efficient than LAX, but rather there was comparatively more market demand for air travel through Heathrow. Heathrow has long been the major international airport serving Europe. In 2011, over 97 percent of the passenger activity was international,[1] compared to approximately 16 percent for LAX. Another key difference between the airports is approximately 35 percent of the passenger activity at Heathrow was on connecting flights, compared to 30 percent at LAX. While Heathrow operates with fewer runways than LAX (2 at Heathrow compared to 4 at LAX), it has a greater number of aircraft gates to accommodate high volumes of passengers (203 passenger gates at Heathrow compared to 159 passenger gates at LAX). Again as noted above, however, it is not so much the physical layout of the two airports and number of facilities with each that makes the difference between the passenger activity levels at the two airports in 2011, but rather the air travel market demands specific to each airport. For these reasons, the commentor's suggested alternative was not evaluated in detail in the SPAS Draft EIR.

  [1] Heathrow Airport, Heathrow Facts and Figures, Available: www.heathrowairport.com/ about-us/facts-and-figures, accessed November 30, 2012.
- A letter from Bill Rosendahl to Mr. William Roschen, President, City Planning Commission, dated January 16, 2013 suggested “a new Metrolink connection to L.A./Ontario Airport, as an effort to mitigate for traffic growth to LAX and regionalize air traffic in Southern California...This would link Santa Barbara, Palmdale, Ontario, and Palm Springs to our

regional transportation network. It's a no brainer, and it would allow international passengers to fly through Ontario and get to Downtown Los Angeles in 20 minutes, as compared to a 40-minute commute to LAX."[1] The suggestion is infeasible at this time as it is not reasonably foreseeable within the horizon year of the SPAS analysis and would therefore not reduce or avoid significant impacts because: (1) According to Metrolink spokesman Scott Johnson, "At our current schedule, we will not be able to provide a 20-minute route. Our schedule may be anywhere between 45 minutes to an hour but that's still faster than traveling the 60 Freeway or the 10 and 210 freeways,"[1] (2) such a project will require substantial consultation with Metro and SCAG, (3) such a project will require Metro and SCAG to make various policy choices to amend the RTP and related long term transportation plans which cannot be determined at this time (e.g., funding such a suggestion could potentially eliminate or delay other regional projects which may be of higher priority), (4) Metro and SCAG would have to perform additional transportation planning to determine the effectiveness of such a suggestion, (5) given the large scope of the suggested project, such planning should be done on regional level rather than based upon the needs of individual components of the transportation system such as LAX (i.e., regional planning should be based upon regional concerns, see Citizens of Goleta Valley v. Board of Supervisors of Santa Barbara County (1990) 52 Cal.3d 553 ["...the keystone of regional planning is consistency-between the general plan, its internal elements, subordinate ordinances, and all derivative land-use decisions...Case-by-case reconsideration of regional land-use policies, in the context of a project specific EIR, is the very antithesis of that goal."]) While such a suggestion is not considered feasible at this time, LAWA will continue to study such options with Metro and SCAG consistent with regional transportation planning requirements.

[1] "LA subcommittee to discuss Metrolink connection to ONT," Inland Valley Daily Bulletin, Liset Marquez, January 22, 2013, Available: http://www.dailybulletin.com/breakingnews/ci_22429097/la-subcommittee-discuss-metrolink-connection-ont, accessed January 28, 2013.

H. Findings on Responses to Comments on the Draft EIR and Revisions to the Final EIR

The SPAS Final EIR does not identify any new significant environmental impacts that were not already identified by the SPAS Draft EIR. No new mitigation measures were imposed on the project that could result in a new significant environmental impact. The SPAS Final EIR also does not identify any increases in the severity of any environmental impacts discussed in the SPAS Draft EIR. In addition, public comment on the SPAS Draft EIR did not identify any new alternatives to the project that are considerably different from those evaluated in the EIR and that would clearly lessen the significant environmental impacts of the project.

The environmental effects of the LAWA Staff-Recommended Alternative are the same as Alternative 1, Alternative 9, or a combination of the impacts of these alternatives, as set forth in the SPAS Draft EIR, or the impact of the LAWA Staff-Recommended Alternative falls within the low and high ends of the ranges of impacts presented in the Draft EIR. Similarly, all LAX Master Plan commitments, LAX Master Plan mitigation measures, and SPAS-specific mitigation measures that pertain to the LAWA Staff-Recommended Alternative were identified in the SPAS Draft EIR, except for those that were modified as a result of responses to comments, and added to the SPAS Draft EIR through corrections and additions to that document, as identified in Chapter 5 of Part II of the Final EIR. The LAWA Staff-Recommended Alternative would not result in any new significant environmental impact beyond those described in the SPAS Draft EIR or a substantial increase in the severity of an environmental impact described in the SPAS Draft EIR, and does not represent an alternative or mitigation measure that is considerably different from others analyzed in the SPAS Draft EIR, as amended by corrections and additions as noted above.

Responses to comments made on the SPAS Draft EIR and revisions made in the SPAS Final EIR merely clarify and amplify the analysis presented in the document and do not amount to significant new information that changes the EIR in a way that deprives the public of a meaningful opportunity to comment on a substantial adverse environmental effect of the project or a feasible

way to mitigate or avoid such an effect that LAWA has declined to implement. Therefore, the BOAC finds that recirculation of the SPAS EIR is not required pursuant to CEQA Guidelines §15088.5(b).

I. Location and Custodian of Records

The documents and other materials that constitute the administrative record for LAWA's actions related to the project are located at the City of Los Angeles, Los Angeles World Airports, 7301 World Way West, 3rd floor, Los Angeles, CA 90045. The LAWA Capital Programming and Planning Division is the custodian of the administrative record for the project.