5. ALTERNATIVES

5.1 Introduction

Section 15126.6 of the State California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) include a discussion of a reasonable range of project alternatives that would "feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Within that context, this chapter discusses alternatives to the proposed Project.

Key provisions of the State CEQA Guidelines on alternatives (Section 15126.6(a) through (f)) are excerpted below to explain the foundation and legal requirements for the alternatives analysis in the EIR.

- "An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible." (15126.6(a))
- "…the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." (15126.6(b))
- "The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible… and briefly explain the reasons underlying the lead agency's determination… Among the factors that may be used to eliminate alternatives from detailed consideration in the EIR are (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts." (15126.6(c))
- "The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed." (15126.6(d))
- "The specific alternative of 'no project' shall also be evaluated along with its impact." (15126.6(e)(1)) "The 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." (15126.6(e)(2))
- "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making." (15126.6(f))

- "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries,…and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." (15126.6(f)(1))
- For alternative locations, "[o]nly locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." (15126.6(f)(2)(A))
- "If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location." (15126.6(f)(2)(B))
- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative." (15126.6(f)(3))

The following sections discuss the significant impacts of the proposed Project as identified in Chapter 4, *Environmental Impact Analysis*, the objectives of the proposed Project, alternatives considered but rejected, alternatives carried forward for further consideration in this EIR, as well as the environmental impacts of alternatives carried forward, including discussion as to whether such alternatives would avoid or substantially lessen any of the significant environmental impacts associated with the proposed Project. Also included in this chapter is identification of the environmentally superior alternative.

5.2 Significant Impacts of the Proposed Project

In accordance with Section 15126.6(b) of the State CEQA Guidelines, the alternatives in this chapter have been selected to evaluate means for avoiding or substantially reducing the significant impacts of the proposed LAX Airfield and Terminal Modernization Project identified in Chapter 4 of this EIR. **Table 5-1** presents a summary matrix of findings for each of the resources analyzed in this EIR for the proposed Project. A summary of impacts for each significantly impacted resource category is presented below.

Table 5-1
Summary of Impacts - Proposed Project

Resource Category[1]	Proposed Project (Before Mitigation)	Mitigation Proposed	Proposed Project (After Mitigation)
Air Quality and Human Health Risk			
Air Quality			
Emissions (Construction)	Significant (NO_X) Significant (CO, VOC, SO_X; short-term – approx. 4.5 months)[2]	Yes	Significant and Unavoidable (NO_X) Significant and Unavoidable (CO, VOC, SO_X; short-term – approx. 4.5 months)[2]
Emissions (Operations)	Significant (NO_x, SO_x, PM_{10}, $PM_{2.5}$)	Yes	Significant and Unavoidable (NO_x, SO_x, PM_{10}, $PM_{2.5}$)
Concentrations (Construction)	Less than Significant	N/A	Less than Significant
Concentrations (Operations)	Significant (PM_{10})	Yes	Significant and Unavoidable (PM_{10})
Human Health Risk			
Cancer Risk	Less than Significant	N/A[3]	Less than Significant
Cancer Burden	Less than Significant	N/A[3]	Less than Significant

Table 5-1
Summary of Impacts - Proposed Project

Resource Category[1]	Proposed Project (Before Mitigation)	Mitigation Proposed	Proposed Project (After Mitigation)
Incremental Chronic Hazard	Less than Significant	N/A[3]	Less than Significant
Incremental Acute Hazard:	Less than Significant	N/A[3]	Less than Significant
Exceeds Permissible Exposure Limits	Less than Significant	N/A[3]	Less than Significant
Cultural Resources (Historical Resources)			
Substantial Adverse Change in Significance of Historical Resource	Less than Significant	N/A	Less than Significant
Energy			
Wasteful/Inefficient Consumption	Less than Significant	N/A[4]	Less than Significant
Conflict with/Obstruct Energy Efficiency Plans	No Impact	N/A[4]	No Impact
Greenhouse Gas Emissions			
GHG Generation Impact on Environment	Significant	Yes	Significant and Unavoidable
Conflict with GHG Reduction Plans/Policies/Regulations	Significant	Yes	Significant and Unavoidable
Hazardous Materials			
Unauthorized Release (Construction)	Less than Significant	N/A	Less than Significant
Unauthorized Release (Operations)	No Impact	N/A	No Impact
Hazard to Public/Environment (Construction)	Less than Significant	N/A	Less than Significant
Hazard to Public/Environment (Operations)	No Impact	N/A	No Impact
Land Use and Planning			
Conflict with Land Use Plans/Policies/Regulations	Less than Significant	N/A	Less than Significant
Noise			
Aircraft Noise			
Increase noise levels at noise-sensitive uses to 65 CNEL or above (Construction)	Significant (short-term – approx. 4.5 months)[2]	No mitigation feasible	Significant and Unavoidable (short-term – approx. 4.5 months)[2]
Increase noise levels at noise-sensitive uses to 65 CNEL or above (Operations)	Significant	Yes	Significant and Unavoidable
Increase by 1.5 dBA or more (Construction)	Significant (short-term – approx. 4.5 months)[2]	No mitigation feasible	Significant and Unavoidable (short-term – approx. 4.5 months)[2]
Increase by 1.5 dBA or more (Operations)	Less than Significant	N/A	Less than Significant
Classroom Learning Disruption	Less than Significant	N/A	Less than Significant
Roadway Traffic Noise			
Operational Roadway Traffic Noise	Less than Significant	N/A	Less than Significant
Construction Traffic and Equipment Noise and Vibration			
Construction Traffic Noise	Less than Significant	N/A	Less than Significant
Construction Equipment Noise	Significant	Yes	Less than Significant
Construction Equipment Vibration	Less than Significant	N/A	Less than Significant

Table 5-1
Summary of Impacts - Proposed Project

Resource Category[1]	Proposed Project (Before Mitigation)	Mitigation Proposed	Proposed Project (After Mitigation)
Transportation			
Conflict with Transportation Programs/Plans/Ordinances/Policies	Less than Significant	N/A	Less than Significant
VMT per Employee	Significant	Yes	Less than Significant
Daily Passenger VMT	Significant	Yes	Significant and Unavoidable
Induce Additional VMT	Significant	No mitigation feasible	Significant and Unavoidable
Increase Hazards/Incompatible Use	Less than Significant	N/A	Less than Significant
Utilities			
Water Supply			
Relocation/New Facilities Impacts	Less than Significant	N/A	Less than Significant
Water Demand	Less than Significant	N/A	Less than Significant
Wastewater Generation			
Relocation/New Facilities Impacts	Less than Significant	N/A	Less than Significant
Exceed Wastewater Treatment Capacity	Less than Significant	N/A	Less than Significant

Source: CDM Smith, August 2020.

Notes:

1 Impacts represent both construction and operations, unless otherwise noted.

2 Short-term impacts would result from temporary runway closures during construction.

3 Although mitigation is not required, mitigation measures that are recommended to reduce air quality, greenhouse gas (GHG) emissions, and transportation impacts would also reduce human health risk impacts.

4 Although mitigation is not required mitigation measures that are recommended to reduce air quality, greenhouse gas emissions, and transportation impacts would also reduce energy consumption.

Key:
N/A = Not applicable

5.3 Project Objectives

As identified in the State CEQA Guidelines, the achievement of the project objectives was considered in determining potentially feasible alternatives that would avoid or substantially lessen any significant effects of the proposed LAX Airfield and Terminal Modernization Project.

The underlying purpose of the LAX Airfield and Terminal Modernization Project is to support the ongoing modernization of LAX, consistent with the progress that has been made over the past several years in enabling LAX to continue to be a world-class airport, providing excellent passenger service, supporting the economic growth and prosperity of the Los Angeles region, and working closely with the neighboring communities to reduce airport-related impacts. The proposed Project would support the ongoing modernization of LAX by enhancing the safety and efficiency of the airfield; providing a new concourse and terminal to improve the quality of the passenger experience and efficiency of passenger processing; and improving the roadway system to better route airport-related traffic off of, and away from, the public roads that serve the community - all of which would help LAX to prepare early for the continued aviation growth that is projected by LAWA, the Southern California Association of Governments (SCAG), and the Federal Aviation Administration (FAA) to occur at LAX over the next several decades. Additionally, the nature and timing of improvements included in the proposed Project are integral to Los Angeles' plans to

host the 2028 Olympic and Paralympic Games, with LAX serving as the main portal for athletes, dignitaries, and visitors from around the world.

The Project objectives for the LAX Airfield and Terminal Modernization Project that support the underlying purpose are:

- Airfield Improvements - Enhance the safety and operational management of the LAX airfield while working within the limits of the existing 4-runway system (i.e., do not add or relocate runways). Specifically, the proposed airfield improvements seek to:
  - Enhance safety of the north airfield complex
  - Reconfigure north airfield taxiway and runway exits and intersections to meet current FAA design standards
  - Maintain or enhance airfield operational management
  - Provide additional flexibility for management of aircraft movements on the airfield
- Terminal Improvements – Provide for new modern, spacious, and efficient terminal facilities that support the ability to accommodate the projected future growth in passenger levels at LAX and do so in a manner that offers high-quality passenger service and operational flexibility. Specifically, the proposed terminal improvements seek to:
  - Improve passenger experience, increase airlines' efficiency, and reduce busing activity on the airfield through the removal and replacement of most of the West Remote Gates and the elimination of the associated busing of passengers
  - Improve international and domestic passenger processing capabilities
  - Improve immigration and customs processes for international passengers arriving at LAX
  - Provide additional connections to the previously-approved Automated People Mover (APM) system currently under construction
  - Provide connections to adjacent terminals that will allow passengers to move between terminals without having to go back through security screening
- Roadway System Improvements – In conjunction with providing landside (vehicle) access to the proposed new Terminal 9, develop a comprehensive network of roadway system improvements that will help separate and remove airport-related traffic from the local roadway system. Specifically, the proposed roadway system improvements seek to:
  - Reduce airport traffic back-ups onto public streets and surrounding neighborhoods, including, but not limited to, existing airport-related traffic congestion on Sepulveda Boulevard, especially near the entrance to the tunnel
  - Integrate the proposed roadway system improvements, including landside access to Terminal 9, with the approved LAX Landside Access Modernization Program improvements
  - Simplify driver wayfinding, reduce decision points, and provide more distance for maneuvering
  - Reduce concentration of traffic and roadway facilities at and around the Century Boulevard/Sepulveda Boulevard/CTA interchange area
  - Support access to the Intermodal Transportation Facility (ITF) West that is linked with the APM system, which will encourage use of those facilities and reduce vehicle miles traveled (VMT)

- Develop an APM station to provide access to the future APM system for passengers and employees of the proposed Terminal 9, as well as other LAX passengers and employees (e.g., flight crews) that utilize hotel facilities nearby, which can help to reduce VMT

- Additional Objectives
  - Generate business development, employment opportunities and economic activity that draws from the local workforce and benefits the communities located around LAX and the City of Los Angeles
  - Maintain airport operations during construction
  - Implement airport improvements in a sustainable manner that considers the total cost of ownership, including financial, environmental, and social costs
  - Complete construction of the proposed Project prior to the 2028 Olympic and Paralympic Games to be held in Los Angeles

5.4 Alternatives

As described at the beginning of this chapter, the significant impacts associated with the proposed Project pertain to both construction activities and operations. Alternatives presented in this section include (1) alternatives that were initially considered but were screened-out from further consideration due to their infeasibility or inability to avoid or substantially reduce the significant impacts of the Project, and (2) alternatives that were carried forward for analysis. Also, as required by CEQA, the "No Project" Alternative is described in this section.

5.4.1 Alternatives Considered but Rejected

Per Section 15126.6(c) of the State CEQA Guidelines, this section describes preliminary alternatives that were considered but screened-out from detailed consideration in the Draft EIR.

A separate alternative focusing on the airfield improvements was not developed. During conceptual design, multiple airfield configurations were developed for taxiway and runway exit improvements in order to study options for meeting operational and safety requirements. The options included differences in separations, dimensions, and configurations. In terms of impacts, the different airfield improvement options would have minor differences based on the types of enabling projects required to realize the options; however, the relative environmental impact of each of the airfield options would be virtually indistinguishable. Any alternative involving reconfiguring the airfield would require temporary closure of a runway during construction and would thus generate temporary significant noise and air quality impacts associated with the shift in aircraft operations during this period. For these reasons, there are no alternative airfield configurations that would serve to avoid or reduce any of the proposed Project's significant environmental effects. One of the alternatives, Alternative 1, No Project, does not include any airfield improvements. This alternative would avoid the short-term significant air quality and aircraft noise impacts associated with temporary runway closures that would be required to implement the airfield improvements associated with the proposed Project. Alternative 1 is addressed in Section 5.4.2.1 below.

With regard to a landside (roadway) improvements alternative that would address the significant induced VMT impacts of the proposed Project, Section 5.4.2.1 below presents Alternative 1, the No Project Alternative, which does not include the proposed Project's roadway improvements, but instead includes the approved LAX Landside Access Modernization Program Phase 2 roadway improvements. As described in the impacts analysis below, Alternative 1, like the proposed Project, would result in induced VMT because it would take airport-related trips off of Sepulveda Boulevard that, in turn, would induce new or longer trips (i.e., VMT).

5.4.1.1 Alternative Locations

As noted above, if the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR.

The underlying purpose of the proposed Project is to support the ongoing modernization of LAX. An alternate location would not meet any of the proposed Project's purpose and objectives, and LAWA does not have the ability to reasonably acquire, control, or otherwise have access to any alternative site where the proposed Project's purpose and objectives would be able to be achieved. Without these improvements, ongoing modernization of LAX would not be fully realized and the purpose of the Project would not be met. Therefore, construction of the proposed Project at another location would not be feasible.

5.4.1.2 West Terminal Alternative

Under the West Terminal Alternative, a new passenger terminal complex would be constructed at the west end of the airport on Pershing Drive in lieu of constructing Concourse 0 and Terminal 9. The West Terminal Alternative would include the same airfield improvements as the proposed Project. Under this alternative, 12 of the existing 18 West Remote Gates would be eliminated by the westerly extension of Taxiway D, or otherwise decommissioned, leaving the remaining six gates in operation. Roadway improvements under the West Terminal Alternative would be constructed on the west side of the airport around Westchester Parkway, Imperial Highway, Pershing Drive, and World Way West. Because the West Terminal Alternative would re-distribute a portion of passenger traffic from the CTA to the west side of the airport, and because it would not include Terminal 9, this alternative would not require the roadway improvements in or around the CTA that are proposed as part of the Project.

The West Terminal Alternative would provide a new passenger terminal and 12 passenger gates in a three- to four-level structure consisting of 2 million square feet of space. A conceptual layout of the new terminal and gates is provided in **Figure 5-1**. Airside improvements associated with this alternative would include construction of dual north/south Airplane Design Group (ADG) VI taxiways west of the West Terminal. It would also include construction of aircraft apron areas and service roads that would run north/south along the terminal and connect to east/west vehicle service roads. Access to the West Terminal would be provided by Westchester Parkway from the north and Imperial Highway from the south to Pershing Drive and then to World Way West. The new terminal would include multiple curb-front lanes at up to three levels that could be segregated by northbound and southbound traffic. The upper curb would serve enplaning passengers and would consist of multiple lanes, including both multiple curbing lanes (allowing double parking) and through lanes. The center level would include multiple-lanes and accommodate only commercial vehicles (both enplaning and deplaning passengers). The lower level would include multiple-lanes and accommodate deplaning passengers. Close-in parking for the West Terminal would be accommodated by a multiple-level parking facility immediately west of the terminal building (not shown on the figure).

This alternative would accommodate international operations at LAX and the accompanying large widebody fleet size and passenger volume. New terminal development space would be reclaimed from the existing airline maintenance/support areas in the west side of the airport along World Way West, which currently support a Qantas hangar and the recently-completed Delta Air Lines hangar and ground support equipment (GSE) maintenance building.[1]

[1] The Delta Air Lines hangar and GSE maintenance building are not shown on the aerial photo in Figure 5-1.

0 1,500 3,000 Feet
Scale

Sources: Los Angeles World Airports, June 2017 (aerial photography); Ricondo & Associates, Inc, March 2020
Prepared by: CDM Smith, October 2020

Legend

- West Terminal
- Concourse

Note:
1. Delta Air Lines maintenance hangar and GSE facility, which were completed in 2019/2020, are not shown on the aerial photograph.

LAX Airfield and Terminal Modernization Project	West Terminal Alternative	Figure 5-1

The West Terminal Alternative would not include construction of the landside improvements associated with the proposed Project. In addition, the West Terminal would be smaller than the combined total square footage of Concourse 0 and Terminal 9 and would provide fewer new passenger gates than the proposed Project (i.e., 12 new gates at the West Terminal compared to 18 to 27 new passenger gates under the proposed Project). All 12 passenger gates would be available to serve as replacement passenger gates for removed/decommissioned West Remote Gates (i.e., 12 of the existing 18 West Remote Gates would be removed/decommissioned, leaving the remaining six West Remote Gates in operation). As discussed below, this alternative would not meet the Project's purpose or most of the basic Project objectives, and would not be feasible.

This alternative would meet the objectives of the proposed Project related to airfield improvements. This alternative would extend Taxiway D and reconfigure the north airfield taxiway and runway exits and intersections to meet FAA design standards.

This alternative would only partially meet the proposed Project's terminal objectives. The West Terminal Alternative would provide new gates that would support the ability of LAX to accommodate some of the projected future growth in passenger levels in new modern, spacious, and efficient terminal facilities. In addition, the West Terminal building would meet the proposed Project objective of improving international and domestic passenger processing capabilities. However, the alternative would not complement, or be integrated with, the overall terminal system in the CTA, or offer operational flexibility and efficiency. Rather, the west terminal would be a stand-alone facility that would have no connection to the CTA at all. Although this alternative would replace a majority of the West Remote Gates, it would not reduce vehicle activity on the airfield or eliminate busing of passengers. To the contrary, it is likely that a new west terminal could increase the level of busing between the new terminal and gates at the Midfield Satellite Concourse (MSC) North and in the CTA.

The West Terminal Alternative would not meet the majority of the proposed Project's objectives related to roadway system improvements. Although the alternative would include improvements to landside roadways to accommodate the proposed West Terminal, it would not provide a comprehensive network of roadway system improvements that would help to separate and remove airport-related traffic from the local roadway system and provide more distance for maneuvering. The West Terminal Alternative may alleviate some of the existing airport-related traffic congestion on Sepulveda Boulevard by redistributing demand, but it would not meet the objective of reducing the concentration of roadway facilities at and around the Century Boulevard/Sepulveda Boulevard intersection, provide any connections to the CTA or to other terminals within the CTA, or provide more direct access to the ITF West or the APM station in order to encourage the use of those facilities and reduce VMT. Because the West Terminal Alternative would create a new passenger terminal complex in an area separate from the CTA, the alternative would complicate passenger wayfinding and introduce more driver decision points; this would conflict with one of the proposed Project's objectives for the roadway system improvements.

Because it would be a smaller facility than the proposed Project, the West Terminal Alternative would generate fewer employment opportunities during construction. Moreover, although completion of this alternative could occur prior to the 2028 Olympic and Paralympic Games, the West Terminal Alternative would not provide the improvements to the roadway system that would occur under the proposed Project to serve the expected visitors or to accommodate the continued aviation growth that is projected to occur at LAX over the next several decades. The concept of a passenger terminal on the western side of the airport had been proposed in the past as a solution for LAX passenger processing capacity (i.e., a west terminal concept was included in Alternatives A, B, and C of the LAX Master Plan EIR), but this approach was rejected on various grounds. For this and other reasons, the West Terminal would be a less attractive option from the standpoint of community relations and neighborhood objections.

Because the West Terminal would not meet many of the Project objectives, particularly those relating to the landside, the alternative would not achieve the underlying purpose of the Project, which is to support the ongoing modernization of LAX, consistent with the progress that has been made over the past several years in enabling LAX to continue to be a world-class airport, providing excellent passenger service, supporting the economic growth and prosperity of the Los Angeles region, and working closely with the neighboring communities to reduce airport-related impacts.

With respect to feasibility, as mentioned above, the West Terminal Alternative would be built on a portion of the airport that currently is used for West Aircraft Maintenance Area. This area supports a $30 million, Qantas maintenance facility that was opened in 2017 and the recently-completed $36 million Delta Air Lines hangar and GSE maintenance building. There are no adequate replacement sites for these facilities. In addition, the concept of a passenger terminal on the western side of the airport has been studied in the past and rejected as infeasible or undesirable. For these reasons, implementation of the West Terminal Alternative is considered to be infeasible and was not carried forward for further analysis.

5.4.1.3 Alternative Construction Approach Alternative

This alternative would implement the same airfield, terminal, and landside improvements as the proposed Project, but would use a modified construction approach to avoid or substantially lessen the significant construction-related air quality and GHG emission impacts identified in Chapter 4. The construction approach for the proposed Project already includes several measures that would reduce potential impacts to those resources, described in Section 4.1.1, *Air Quality,* and Section 4.4, *Greenhouse Gas Emissions*. These measures include requirements pertaining to the use of trucks and construction equipment that meet U.S. Environmental Protection Agency (USEPA) emission standards, and use of an on-airport rock crushing facility to reduce truck trips and related emissions.

The Alternative Construction Approach Alternative would extend the overall construction period to reduce the amount of daily activity. Some of the significance thresholds for air pollutant emissions focus on the mass of emissions on a per-day basis. By extending the construction schedule, the mass of emissions on a given day would be reduced (although the total mass of emissions would remain the same). With respect to air quality impacts, **Table 5-2** indicates the amount of reduction in daily activity that would be required in order for the daily air pollutant emissions to fall below the SCAQMD CEQA thresholds of significance.

Table 5-2
Alternative Construction Approach (Reduce Daily Activity Duration) Air Pollutant Emissions

Pollutant	SCAQMD Threshold (lbs/day)	Proposed Project Peak Daily Emissions (lbs/day)	Amount (%) of Reduction Required to Avoid Significant Impacts
CO	550	4,247	87%
NO_X	100	781	87%
VOC	75	373	80%
SO_X	150	166	10%
PM_{10}	150	34	NA
$PM_{2.5}$	55	20	NA

Source: **Appendix C** of this EIR.

Key:
CO = carbon monoxide; lbs/day = pounds per day; NO_X = nitrogen oxides; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; SO_X = sulfur oxides; VOC = volatile organic compounds.

As indicated in Table 5-2, the greatest amount of reduction that would be required to avoid a significant impact would be needed with respect to NO_X emissions. Daily activities would need to be reduced by approximately 88 percent, which would limit daily construction activities to approximately 1.2 hours within what would otherwise be a 10-hour work day or 2.9 hours within what would otherwise be a 24-hour work day. Even if the size of the equipment crews were reduced in half, based on a lower intensity of daily construction activity and an extended overall duration of construction, activity within a 10-hour work day could only occur for about an hour in order for the construction-related NO_X emissions to remain less than significant. Based on such limitations, however, it would conceivably take approximately 58 years to complete Project construction. This construction approach is impractical. Although such an alternative would reduce daily emissions to a level that is less than significant and would also reduce the daily construction-related trip generation, it would simply increase the overall duration of air pollutant emissions and construction traffic on local roadways. Further, this alternative would increase the durations of significant aircraft noise impacts associated with temporary runway closures necessary to construct the proposed airfield improvement. Moreover, this alternative would delay achievement of the Project objectives, and would miss entirely the objective of completing construction of the Project prior to the 2028 Olympic and Paralympic Games to be held in Los Angeles. Therefore, this alternative was determined to be infeasible and was not carried forward for further analysis.

5.4.1.4 Airfield Improvements Only

An alternative consisting solely of airfield improvements would consist of the improvements described in Section 2.4.1. Those improvements would consist of constructing a westerly extension of Taxiway D, and reconstructing and realigning exits from Runway 6L-24R. This alternative would meet those objectives addressing enhanced airfield safety. In particular, an "Airfield Improvements Only" alternative would enhance the safety of aircraft operations in the north airfield complex, and reconfigure north airfield taxiway and runway exits so that they meet current FAA design standards. Such an alternative would not avoid or substantially lessen those temporary impacts that would occur while these improvements are under construction (e.g., temporary noise, air quality, and greenhouse gas emission impacts from aircraft operations while the each of the two runways in the north airfield complex is temporarily out of service in consecutive years). In addition, such an alternative would not meet LAWA's objectives addressing improving and upgrading terminals and roadways. In particular, this alternative would not provide replacement gates for the West Remote Gates located at the west end of the airport that would be removed in conjunction with the westerly extension of Taxiway D. Moreover, by excluding the proposed concourse and terminal improvements, this alternative would not "[p]rovide for new modern, spacious, and efficient terminal facilities that support the ability to accommodate the projected future growth in passenger levels at LAX and do so in a manner that offers high-quality passenger service and operational flexibility." For these reasons, this alternative was not carried forward for further analysis.

5.4.2 Alternatives Carried Forward for Further Consideration

The following alternatives have been identified for consideration and were carried into the Draft EIR for detailed analyses:

- Alternative 1: No Project Alternative
- Alternative 2: Concourse 0 Only Alternative
- Alternative 3: Terminal 9 Only Alternative
- Alternative 4: LAMP Roadway Improvements plus Terminal 9 Access Alternative

5.4.2.1 Alternative 1: No Project Alternative

Under the No Project Alternative, none of the improvements and activities proposed for the LAX Airfield and Terminal Modernization Project would occur. It is expected that the proposed Concourse 0 site would be used for surface parking (after the temporary taxi and rideshare pick-up area, termed "LAX-it," is no longer needed), which was its use prior to implementation of LAX-it, because the site is already configured to accommodate vehicle entry, parking, and egress, and had a high utilization rate for parking. Under the No Project Alternative, the Terminal 9 site would continue to be used for airport-related uses (commuter aircraft operations and gates, aircraft parking, cargo handling/storage, and GSE facilities). As property acquisition would no longer be required, the private parcels would continue to be used for commercial airport and non-airport parking, and the existing on-airport taxi holding lot would remain in its current location. LAX would continue to experience growth in aircraft operations and passenger activity levels in the future, including through 2028 (the buildout year for the proposed Project), to meet the region's demand for air service. As such, the projected future passenger levels in 2028 under the No Project Alternative would be the same as for the proposed Project (i.e., 110.8 million annual passengers, or MAP).

Descriptions of reasonably foreseeable LAX development by 2028 under the No Project Alternative are provided below and shown on **Figure 5-2**. For the most part, all of these improvements have already been approved and many are already under construction. As such, these improvements represent what would reasonably be expected to occur in the foreseeable future if the proposed Project were not approved, based on current plans. (See State CEQA Guidelines Section 15126.6(e)(3)(C).)

5.4.2.1.1 Airfield Facilities

Under the No Project Alternative, the following improvement will be implemented to improve operations on the airfield:

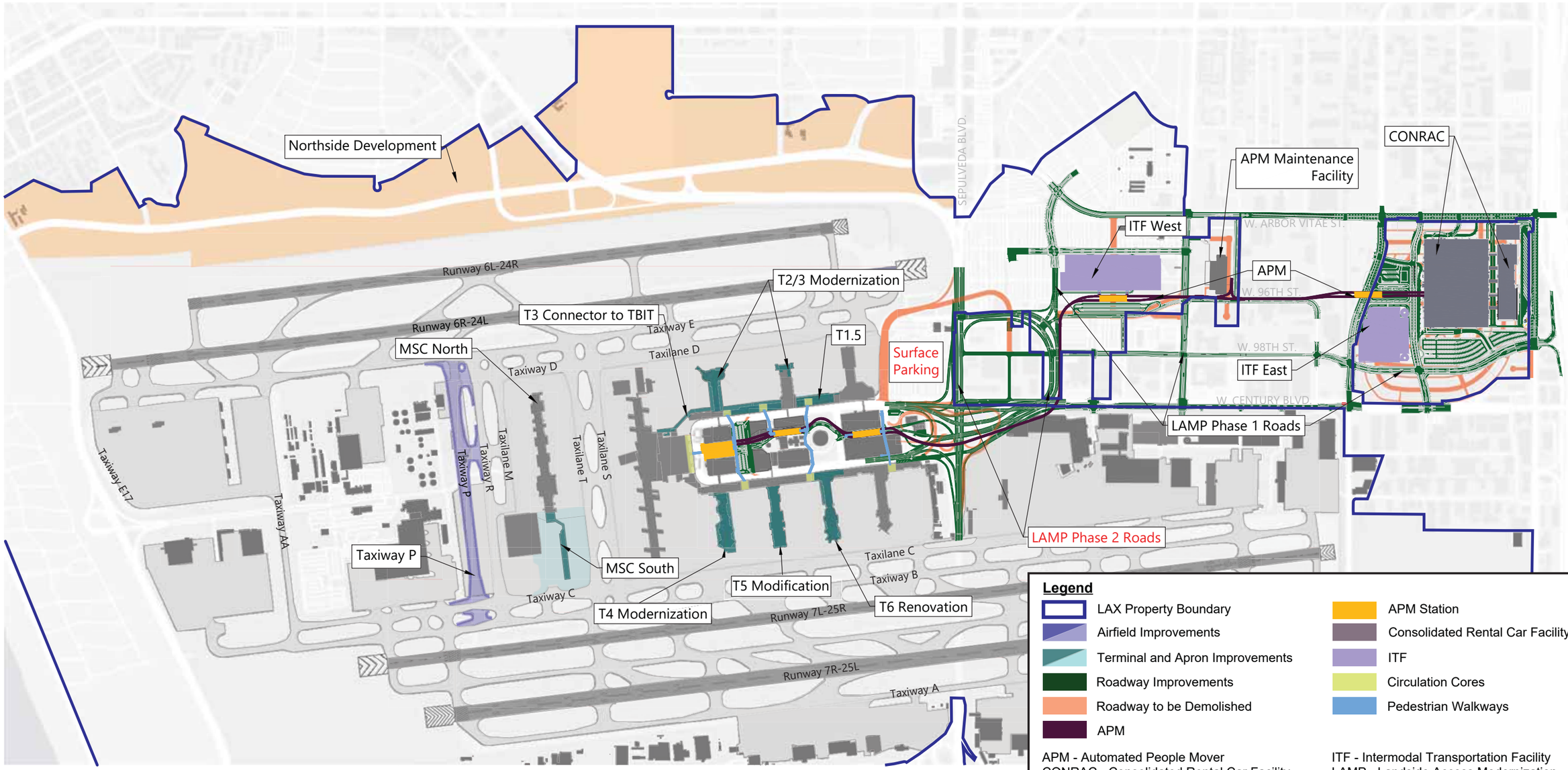
- **Taxiway P.** As part of the MSC North Project, a new north-south ADG VI taxiway will be constructed to connect the north and south airfields. Taxiway P, previously referred to as Taxiway C14, will be 82 feet wide and 3,600 feet long, and will provide connections to existing Taxiway E, Taxiway B, and Taxilane C. Taxiway P has been approved and implementation of this project is not dependent on the proposed Project.

5.4.2.1.2 Terminal Facilities

Under the No Project Alternative, the existing 18 West Remote Gates located at the west end of the airport would not be removed/decommissioned. Passengers would still be bused to and from the West Remote Gates from the CTA. Terminal improvements planned to be completed by 2028, consisting of the construction of new facilities as well as upgrades to existing terminals, include:

- **MSC North Project.** MSC North will be a new multi-level concourse to the west of the existing TBIT.[2] This facility will provide up to 800,000 square feet of floor space and up to 15 aircraft gates[3] to serve both domestic and international flights. The MSC North Project will also include airfield improvements (described above), associated apron areas, a taxilane, and an underground passenger corridor and baggage handling system. The MSC North Project has been approved and is under construction.

[2] At the time of the publication of the Draft EIR, construction of the MSC North Project was nearing completion.
[3] LAWA has operational control over certain gates and, as a result, is able to activate or deactivate gates in operation.



Legend

- LAX Property Boundary
- Airfield Improvements
- Terminal and Apron Improvements
- Roadway Improvements
- Roadway to be Demolished
- APM
- APM Station
- Consolidated Rental Car Facility
- ITF
- Circulation Cores
- Pedestrian Walkways

APM - Automated People Mover
CONRAC - Consolidated Rental Car Facility
ITF - Intermodal Transportation Facility
LAMP - Landside Access Modernization Program

Note:

1. This figure illustrates reasonably foreseeable facilities at LAX in 2028, including land uses and cumulative projects that have been approved or are planned to occur with or without implementation of the LAX Airfield and Terminal Modernization Project, as well as land uses and projects that would only be expected to occur if the LAX Airfield and Terminal Modernization Project were not implemented (identified in orange text).

0 1,500 1,680
Scale Feet

Sources: Los Angeles World Airports, Airport Layout Plan – Existing Layout Plan Sheet Working Draft, June 15, 2017; Esri, HERE, Garmin, OpenStreetMap contributors, and the GIS User Community, June 2020 (Basemap); Los Angeles World Airports, July 2020 (LAMP Phase 1); Ricondo & Associates, Inc., 2020 (LAX LAMP Phase 2)
Prepared by: CDM Smith, October 2020

LAX Airfield and Terminal Modernization Project

Alternative 1: No Project Alternative

Figure **5-2**

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- **MSC South Project.** The MSC South Project will provide a new 95,000-square-foot concourse south of the MSC North concourse, with a 50,000-square-foot elevated circulation corridor between the two concourses, up to eight aircraft gates, taxilane connectors to and from Taxiway C, and associated utilities. The MSC South Project has been approved and future implementation of this project is not dependent on the proposed Project.
- **Terminal 1.5.** Terminal 1.5 is being constructed between existing Terminal 1 and Terminal 2 to provide additional passenger processing facilities for the north passenger terminals. Terminal 1.5 has been approved and is under construction.
- **Terminal 2 and 3 Modernization.** Improvements to Terminals 2 and 3 are under construction, consisting of Terminal 2 concourse upgrades and additional floor area; Terminal 3 concourse demolition and reconstruction to provide additional concourse area and a new operation control center; demolition of the Terminal 3 satellite southern appendages; demolition and reconstruction of the passenger and baggage processing facilities (ticketing buildings) at Terminals 2 and 3, including new facilities for passenger and baggage screening, ticketing, and baggage claim; and a secure connector between Terminals 2 and 3. The Terminal 2 and 3 Modernization improvements have been approved and are under construction.
- **Terminal 3 Connection to TBIT.** The Terminal 3 connector will provide a secure passenger connection between TBIT and Terminal 3, similar to the Terminal 4 connector. The Terminal 3 connection to TBIT has been approved and future implementation of this project is not dependent on the proposed Project.
- **Terminal 4 Modernization.** Terminal 4 improvements include the renovation and/or replacement of portions of the existing concourse and ticketing building, realignment of Taxilane C9, and reconstruction of the apron. The Terminal 4 Modernization project has been approved and future implementation of this project is not dependent on the proposed Project.
- **Terminal 5 Gate Downgauging.** Terminal 5 gate downgauging includes repositioning/restriping of aircraft parking positions and adding two passenger boarding bridges to provide up to two new gates, and downgauging of nine Airplane Design Group (ADG) IV aircraft gates to ADG III aircraft gates within the existing aircraft parking limit line. The Terminal 5 gate downgauging has been approved and future implementation of the downgauging is not dependent on the proposed Project.
- **Terminal 6 Renovation.** Terminal 6 improvements include upgrading the Security Screening Check Point, adding holdroom space and lounge areas, adding up to two gates, and reconfiguring existing aircraft gates and ramp area to improve operations. The Terminal 6 Renovation project has been approved by the LAWA Board of Airport Commissioners, and is currently undergoing FAA review. Future implementation of this project is not dependent on the proposed Project.

5.4.2.1.3 Landside Facilities

Under the No Project Alternative, several ground access improvements will be implemented as part of the previously-approved LAX Landside Access Modernization Program. The program components will collectively improve access to and from LAX in two phases, including:

- **Automated People Mover (APM) System**. The APM will offer passengers an opportunity to bypass the existing roadway loop in the CTA. Departing passengers will be able to access the APM system from two Intermodal Transportation Facilities (ITFs), a Consolidated Rental Car Facility (CONRAC), or a future Metro station. The APM System has been approved and is under construction. If the proposed Project is not approved, the Terminal 9 APM station would not be added; however, the rest of the facility would proceed as originally approved as part of the LAX Landside Access Modernization Program.

- **Intermodal Transportation Facilities (ITF West and ITF East) and Consolidated Rental Car Facility**. The ITF West and ITF East, to be completed in 2021 and 2023, respectively, and the CONRAC, to be completed in 2023, will serve as new points of access to and from LAX, catering to all types of airport passengers and users. Arriving passengers will be able to pick up their baggage, board the APM system, and be quickly and efficiently conveyed directly to the ITFs, CONRAC, or Airport Metro Connector station. The ITF West, ITF East, and CONRAC have been approved. Construction of these facilities is not dependent on the proposed Project.
- **Pedestrian Walkways**. Pedestrian walkway connections in the CTA from the APM stations to the passenger terminals will be completed in 2021. The pedestrian walkway connections in the CTA have been approved. Construction of these connections is not dependent on the proposed Project.
- **Phase 1 and Phase 2 Landside Improvements**. Phase 1 of the LAX Landside Access Modernization Program will be completed by 2023. In addition to the APM, the CONRAC, the ITF West, and the ITF East – which are all described above – Phase 1 includes roadway improvements that will serve those facilities. Phase 2 will include construction of additional roadway improvements focused primarily on CTA access at and around the Century Boulevard/Sepulveda Boulevard intersection. Development of the Phase 2 roadway improvements, which were approved as part of the LAX Landside Access Modernization Program, are reasonably expected to occur in the foreseeable future if the proposed Project is not approved. Under the No Project Alternative, the roadway improvements would proceed as designed under the LAX Landside Access Modernization Program. The roadway system improvements would not include any of the modifications proposed under the proposed Project, including the adjustments to the arrival and departure roadways, modifications to ramps and roadway configurations, and modifications to roadway routing and elevations. The roadway system improvements associated with the proposed Project would serve a function generally similar to that of the LAMP Phase 2 roadway improvements. The LAMP Phase 2 roadway improvements are scheduled to be completed after 2028. However, for purposes of this Draft EIR, these improvements are assumed to be completed in 2028 in order to provide a meaningful comparison of the impacts between the two scenarios, without the distortions that would otherwise occur if the analysis were to focus on a short-term, interim condition that would occur due to the fact that LAMP Phase 2 roadway improvements and the proposed Project have slightly different completion dates. For a more detailed description of the proposed Project roadways, refer to Chapter 2, *Description of the Proposed Project.*

5.4.2.1.4 Miscellaneous Facilities

Other changes to LAX and its surrounding area are also included in the No Project Alternative. These changes include:

- **LAX-it Site Returned to Surface Parking Lot**. Under the No Project Alternative, it is reasonably foreseeable that the site being used temporarily for the LAX-it taxi and rideshare pick-up area would be returned to a surface parking lot after the LAX-it facility is no longer needed as this was the long-standing historical use of the site prior to its current use as a temporary taxi and rideshare pickup area.
- **LAX Northside Development**. The LAX Northside Development will develop approximately 340 acres of under-utilized land on the north side of the airport with a mix of commercial uses (including retail, restaurant, office, hotel, civic, and other uses) to better serve the local communities of Westchester and Playa del Rey. The LAX Northside Development has been approved and its implementation is not dependent on the proposed Project.

- **Delta Hangar Complex Demolition**. To enable the construction of the APM guideway, the former Delta Air Lines hangar complex, a 182,500-square-foot building located south of Century Boulevard between Sepulveda Boulevard and Avion Drive, will be demolished. Demolition commenced in 2019, and the final increment of the demolition is to be completed in 2020.

5.4.2.2 Alternative 2: Concourse 0 Only Alternative

Under Alternative 2, only Concourse 0 would be constructed as a terminal area element. Concourse 0 is planned as a concourse facility with eight to 11 aircraft gates[4] that would attach to, and extend to the east of, Terminal 1 in the current location of the LAX-it lot. As with the proposed Project, the two westernmost gates at Concourse 0 would replace the two easternmost existing gates at Terminal 1. As such, net new gates for Alternative 2 would be six to nine aircraft gates. The new gates associated with Concourse 0 would serve to replace the nine existing West Remote Gates that would be eliminated by the proposed westerly extension of Taxiway D. The remaining nine of the 18 West Remote Gates would continue to operate. As discussed in Section 2.4.2.1 in Chapter 2, *Description of the Proposed Project*, Concourse 0 would consist of up to seven levels, including four levels for the proposed concourse/passenger operations and potentially three additional levels of office space that LAWA is considering as an option. There would be a total floor area of up to 745,000 square feet for concourse/passenger operations, and potentially up to an additional 318,000 square feet of office space used for administrative purposes. In conjunction with construction of the passenger building and aircraft gates, development of Concourse 0 would include construction of an aircraft parking apron, including two aircraft parking positions; the easterly extension of Taxiway D as an ADG V taxiway; the easterly extension of Taxiway E as an unrestricted ADG V/restricted ADG VI taxiway; and the relocation of the easternmost portion of Vehicle Service Road E. A paved area would be located at the eastern ends of Taxiways D and E that could be used for aircraft pushbacks for the northeastern gate at Concourse 0 and could also be used to temporarily hold departing aircraft waiting to access Runway 6R-24L for takeoff.

Alternative 2 was developed as an alternative to the proposed Project to minimize impacts related to the construction and operation of Terminal 9. Because Alternative 2 would not require constructing Terminal 9, or the Terminal 9 APM station, parking facility, or ground access improvements, Alternative 2 would have the potential to reduce impacts related to the construction and operation of these facilities. Alternative 2 would avoid or minimize Project-related significant (or significant but mitigable) impacts related to air quality, GHG emissions, and construction noise.

Alternative 2 would have the same airfield improvements as the proposed Project; however, its terminal improvements would not include construction of Terminal 9, the Terminal 9 parking facility, new APM station, or the taxiway improvements associated with Terminal 9. The landside improvements under Alternative 2 would be the same as the proposed Project, with the exception of the roadway improvements designed to integrate Terminal 9 with the roadway system, which would not be included. The airfield, terminal, and landside improvements under Alternative 2 are listed below and illustrated in **Figure 5-3**.

[4] The range of gates is related to size of gates. The gating at Concourse 0 could accommodate up to 11 narrowbody aircraft or five widebody aircraft and three narrowbody aircraft for a total of eight gates.

5.4.2.2.1 Airfield Improvements

Airfield improvements under Alternative 2 include:

- **Taxiway D Westerly Extension**. Taxiway D would be extended to the west, which would improve the operational efficiency of aircraft movements in the north airfield, particularly related to large aircraft.
- **Runway 6L-24R Exits**. The Runway 6L-24R exits would be modified to include construction of new exits outside the high-energy zones of the runway and the removal or decommissioning of existing exits that cross the high-energy zones. The purpose of these modifications is to avoid taxiing aircraft from crossing the portion of the runway where departing aircraft are moving at a high speed before lifting into the air.

5.4.2.2.2 Terminal Improvements

Terminal improvements under Alternative 2 include:

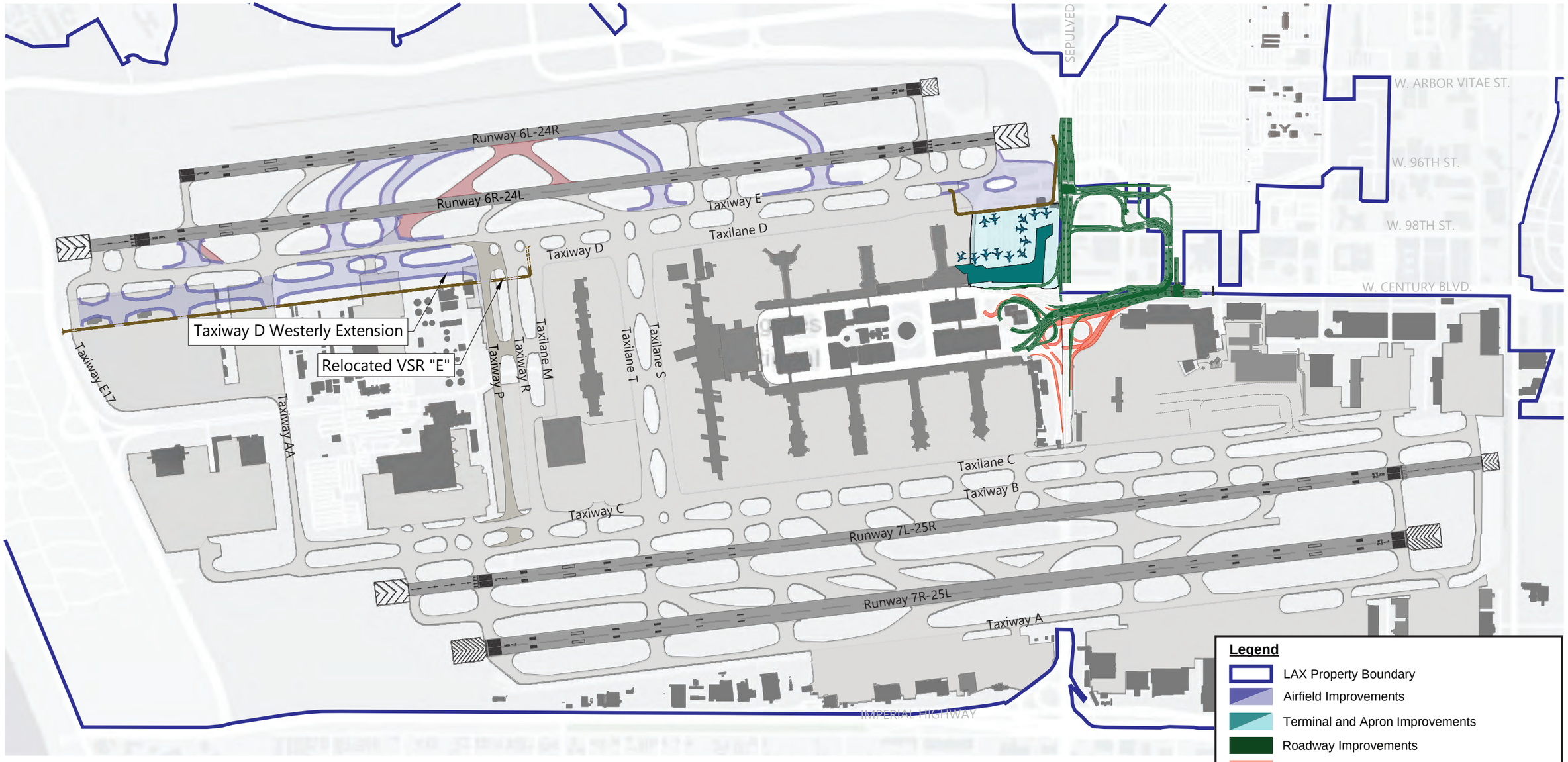
- **Concourse 0**. Concourse 0 would be an eight- to 11-gate concourse facility (adding six to nine net new gates) serving both domestic and international flights.
- **Removal/Replacement of West Remote Passenger Gates**. Alternative 2 includes the removal of nine to 12 of the existing 18 West Remote Gates. Nine of the existing west remote passenger gates would remain under Alternative 2.

5.4.2.2.3 Landside Improvements

The landside improvements under Alternative 2 would be the same as the proposed Project except that no access to Terminal 9 would be provided. The improvements that would be included consist of arrival and departure roadways with new roadway segments that would improve vehicle access to, and egress from, the existing CTA. More specifically, Alternative 2 would reroute the entrance to the CTA from Sepulveda Boulevard via a new at-grade ramp for northbound traffic and a new grade-separated ramp for southbound traffic, all of which would tie into a new elevated roadway system that would include vehicle queuing areas. Alternative 2 would reroute exiting CTA vehicles to Sepulveda Boulevard via new grade-separated ramps north of Century Boulevard to extend the merging zones and vehicle queuing areas. This would improve traffic flow into and out of the CTA.

5.4.2.2.4 Enabling Projects

Alternative 2 would include enabling projects, located in or near the proposed improvement sites, that would remove and/or relocate existing airfield, terminal, and landside elements to accommodate the proposed improvements. The enabling projects that would be implemented under Alternative 2 would be the same as the proposed Project with respect to the Taxiway D Extension West, the Runway 6L-24R Exits, Concourse 0, and the landside project components. These enabling projects are further described in Table 2-4 in Chapter 2, *Description of the Proposed Project*.



Sources: Los Angeles World Airports, Airport Layout Plan – Existing Layout Plan Sheet Working Draft, June 15, 2017 (Runway 6L-24R exit reconfiguration and Taxiway D westerly extension); Esri, HERE, Garmin, OpenStreetMap contributors, and the GIS User Community, June 2020 (Basemap) Ricondo & Associates, Inc., 2020 (Taxiways D and E and Terminal/Apron Improvements); CF Wright Consulting, LLC, July 2020 (improved CTA entrance/exit)
Prepared by: CDM Smith, October 2020

LAX Airfield and Terminal Modernization Project	Alternative 2: Concourse 0 Only	Figure **5-3**

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5.4.2.3 Alternative 3: Terminal 9 Only Alternative

Under Alternative 3, Terminal 9 would be constructed as a terminal area element. Terminal 9 is planned as an international and domestic terminal facility with 12 to 18 gates.[5] The new gates associated with Terminal 9 would serve to replace existing West Remote Gates that would be eliminated by the proposed westerly extension of Taxiway D or otherwise decommissioned. Based on the low end of the range of new gates that could occur at Terminal 9, 12 of the existing West Remote Gates would be removed or decommissioned and six would remain in operation. At the high end of the range for Terminal 9 (i.e., 18 narrowbody gates), 15 of the 18 West Remote Gates would be removed or decommissioned and, similar to the proposed Project, three of the West Remote Gates would remain to provide operational flexibility. As discussed in Section 2.4.2.2 in Chapter 2, *Description of the Proposed Project*, Terminal 9 would be a 1,178,000-square-foot, independently operating, four-level facility with a central passenger processing core, concourses that extend to the east and west of the core, and a pedestrian connector to Terminal 8. All necessary passenger processing functions would be provided within Terminal 9. In conjunction with construction of the passenger building and aircraft gates, development of Terminal 9 would include construction of an aircraft parking apron and a taxilane connecting the terminal to the airfield; relocation and easterly extension of Taxilane C from Taxiway C3 to Taxiway B1; and relocation of Vehicle Service Road C. The relocated vehicle service road would be designed at ADG VI separation from Taxiway C and the relocated/extended Taxilane C would be designed at ADG VI separation from Taxiway B. Other improvements related to Terminal 9 would include construction of a parking facility and a Terminal 9 APM station (platform), and pedestrian corridors connecting these facilities to the terminal.

Alternative 3 was developed as an alternative to the proposed Project to minimize impacts related to the construction and operation of Concourse 0. Because Alternative 3 would not require constructing Concourse 0 or its associated airfield improvements, Alternative 3 would have the potential to reduce impacts related to the construction and operation of these facilities, specifically Project-related significant (or significant but mitigable) impacts associated with air quality, GHG emissions, and construction noise.

Alternative 3 would have the same airfield and landside improvements as the proposed Project; however, its terminal improvements would not include construction of Concourse 0, including the proposed paved area that would be located at the eastern ends of Taxiways D and E that could be used for aircraft pushbacks or to temporarily hold departing aircraft waiting to access Runway 6R 24L for takeoff. Under Alternative 3, it is reasonably foreseeable that the site proposed for Concourse 0 would be returned to a surface parking lot when the LAX-it lot is no longer needed because the site is already configured to accommodate vehicle entry, parking, and egress, and had a high utilization rate for parking. The airfield, terminal, and roadway improvements under Alternative 3 are listed below and illustrated in **Figure 5-4**.

5.4.2.3.1 Airfield Improvements

Airfield improvements under Alternative 3 include:

- **Taxiway D Westerly Extension**. Taxiway D would be extended to the west, which would improve the operational efficiency of aircraft movements in the north airfield, particularly related to large aircraft.
- **Runway 6L-24R Exits**. The Runway 6L-24R exit would be modified to eliminate exits within "high-energy zones" to avoid crossing points for taxiing aircraft in areas where departing aircraft are moving at a high speed before lifting into the air.

[5] The range of gates is related to size of gates. The gating at Terminal 9 could accommodate up to 12 widebody aircraft or 18 narrowbody aircraft.

5.4.2.3.2 Terminal Improvements

Terminal improvements under Alternative 3 include:

- **Terminal 9**. Terminal 9 would be a 12- to 18-gate international and domestic terminal facility.
- **Removal/Replacement of West Remote Passenger Gates**. Alternative 3 includes the removal or decommissioning of between 12 and 15 of the existing 18 west remote passenger gates. Three to six of the existing west remote passenger gates would remain under Alternative 3.

5.4.2.3.3 Landside Improvements

The landside improvements associated with Alternative 3 would include a Terminal 9 parking facility, construction of an APM station at Terminal 9 on the previously approved LAX APM line, and construction of a pedestrian corridor between Terminals 8 and 9 that would bridge across Sepulveda Boulevard.

The roadway component of the landside improvements under Alternative 3 would be the same as the proposed Project. In addition to arrival and departure roadways and new roadway segments that would improve vehicle access to, and egress from, the existing CTA, new roadways would provide access to and egress from Terminal 9, as well as circulation within the terminal area.

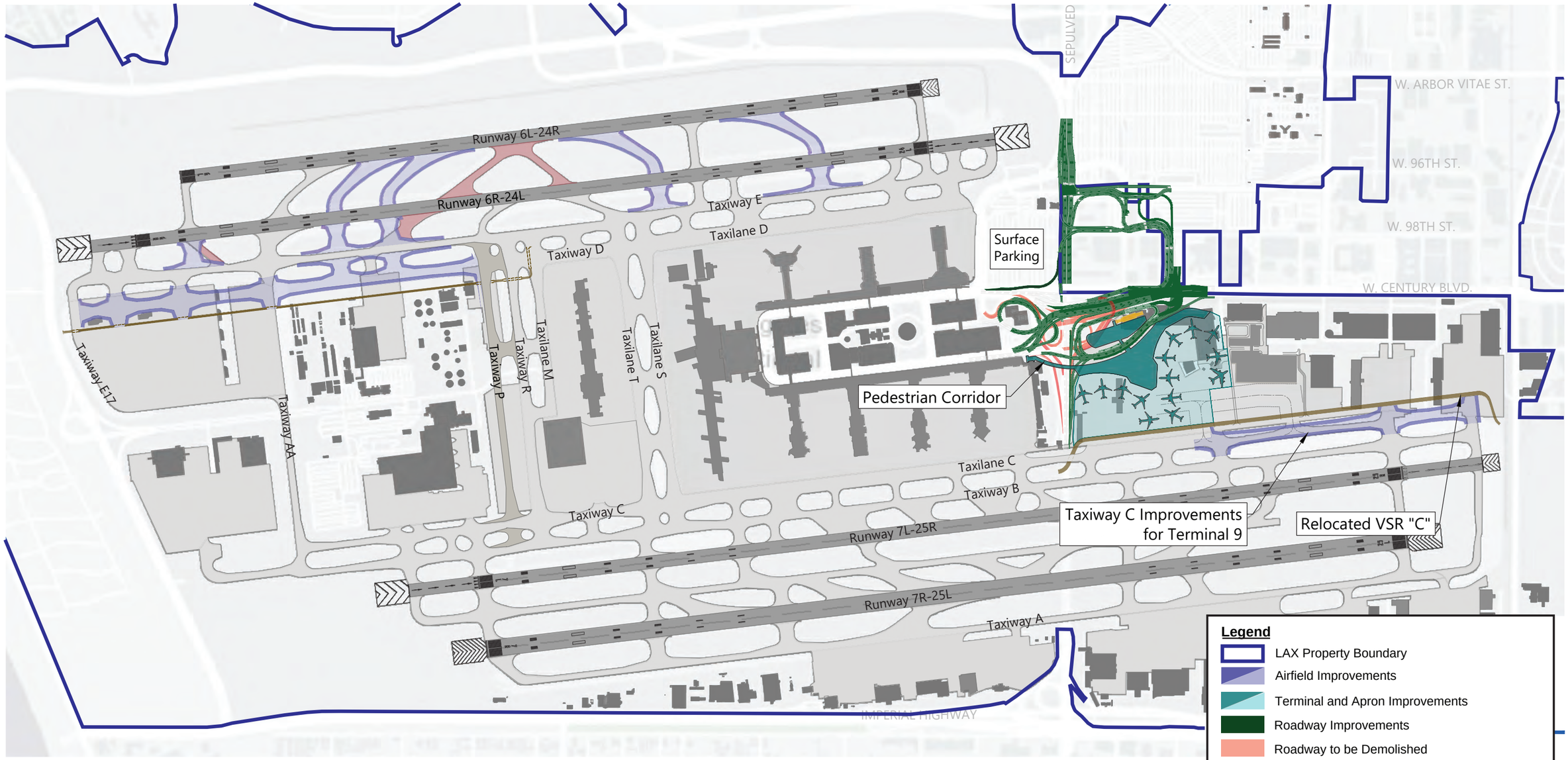
The roadway system for Terminal 9 would have an upper level roadway for departures and a lower level roadway for arrivals, or possibly a single level for both arrivals and departures. Alternative 3 would reroute the entrance to the CTA from Sepulveda Boulevard via a new at-grade ramp for northbound traffic and a new grade-separated ramp for southbound traffic, all of which would tie into a new elevated roadway system that would include vehicle queuing areas. Alternative 3 would reroute exiting CTA vehicles to Sepulveda Boulevard via new grade-separated ramps north of Century Boulevard to extend the merging zones and vehicle queuing areas. This would improve traffic flow into and out of the CTA. Alternative 3 would also provide connections to the proposed Terminal 9 parking facility.

5.4.2.3.4 Enabling Projects

Alternative 3 would include enabling projects, located in or near the proposed improvement sites, that would remove and/or relocate existing airfield, terminal, and landside elements to accommodate the proposed improvements. The enabling projects that would be implemented under Alternative 3 would be the same as the proposed Project with respect to the Taxiway D Extension West, the Runway 6L-24R Exits, Terminal 9, and the landside project components. These enabling projects are further described in Table 2-4 in Chapter 2, *Description of the Proposed Project*.

5.4.2.4 Alternative 4: Approved LAMP Roadway Improvements plus Terminal 9 Access Alternative

Under Alternative 4, both the airfield improvements and the terminal improvements would be the same as the proposed Project. Most of the airfield improvements would occur within the north airfield and would include the westerly extension of Taxiway D in the western portion of the north airfield and the relocation and reconfiguration of runway exits from Runway 6L-24R. The terminal improvements would include construction of Concourse 0 as a new easterly extension of Terminal 1; construction of Terminal 9, a new passenger terminal located southeast of the Sepulveda Boulevard/Century Boulevard intersection, including a new parking facility and APM station; and improvements and modifications to existing taxiways near Concourse 0 and Terminal 9 to facilitate aircraft access to and from the gates at those facilities. However, roadway improvements under Alternative 4 would not include the roadway system developed for the proposed Project. Instead, Alternative 4 would implement the already-approved LAMP Phase 2 roadway system, modified to add access to Terminal 9.



Sources: Los Angeles World Airports, Airport Layout Plan – Existing Layout Plan Sheet Working Draft, June 15, 2017 (Runway 6L-24R exit reconfiguration and Taxiway D westerly extension); Esri, HERE, Garmin, OpenStreetMap contributors, and the GIS User Community, June 2020 (Basemap); Ricondo & Associates, Inc., 2020 (Taxiway C and Terminal/Apron Improvements); CF Wright Consulting, LLC, September 2018 (improved CTA entrance/exit)
Prepared by: CDM Smith, October 2020

LAX Airfield and Terminal Modernization Project	Alternative 3: Terminal 9 Only	Figure **5-4**

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Alternative 4 was developed in light of its potential to reduce the construction and operations-related impacts of the roadway modifications under the proposed Project, specifically Project-related significant (or significant but mitigable) impacts associated with air quality, greenhouse gas emissions, construction noise, and transportation (VMT).

Similar to the proposed Project, the Alternative 4 roadway system would include arrival and departure roadways with new roadway segments that would modify vehicle access to, and egress from, the existing CTA. Similar to the proposed Project, the LAMP Phase 2 roadway improvements would shift northward the entrance to the CTA from northbound Sepulveda Boulevard, which is currently near Century Boulevard just north of the Sepulveda Tunnel, and instead move that access point up to 96th Street. Also similar to the proposed Project is the LAMP Phase 2 design for traffic outbound from the CTA and destined for Sepulveda Boulevard, which would occur via a combination of elevated ramps over Century Boulevard leading north to the intersection of 96th Street and Sepulveda Boulevard. The most notable differences between the two roadway designs pertain primarily to the access routes between the CTA and southbound Sepulveda Boulevard. Under LAMP Phase 2, inbound traffic would take new ramps on the west side of Sepulveda Boulevard to access the CTA, similar to how Sky Way currently connects between southbound Sepulveda Boulevard and the CTA; under the proposed Project, such access would be provided via a new flyover ramp that would cross over Sepulveda Boulevard and circle around on an elevated ramps system to connect to the CTA from the east. Relative to outbound traffic from the CTA to southbound Sepulveda Boulevard, the LAMP Phase 2 roadway design includes CTA exit ramps that connect to Sepulveda Boulevard close to the Sepulveda Tunnel, whereas the proposed Project roadway design would route such traffic out of the CTA on an elevated roadway system that would carry the traffic above, and separate from, the local roadway system before merging back into southbound Sepulveda Boulevard via a flyover ramp that merges at a point well north of, and away from, the Sepulveda Tunnel. As compared to the proposed Project, the Alternative 4 roadway system, which is based on the LAMP Phase 2 roadway design in the area immediately east of the CTA, would not provide extended vehicle queuing areas for vehicles entering the CTA from the north (i.e., from southbound Sepulveda Boulevard) or exiting the CTA heading to the south (i.e., onto southbound Sepulveda Boulevard), and would not create a more consolidated entry point east of Sepulveda Boulevard for vehicles entering the CTA.

The airfield, terminal, and roadway improvements under Alternative 4 are listed below and shown in **Figure 5-5**.

5.4.2.4.1 Airfield Improvements

Airfield improvements under Alternative 4 include:

- **Taxiway D Westerly Extension**. Taxiway D would be extended to the west, which would improve the operational efficiency of aircraft movements in the north airfield, particularly related to large aircraft.
- **Runway 6L-24R Exits**. The Runway 6L-24R exits would be modified to eliminate exits within "high-energy zones" to avoid crossing points for taxiing aircraft in areas where departing aircraft are moving at a high speed before lifting into the air.

5.4.2.4.2 Terminal Improvements

Terminal improvements under Alternative 4 include:

- **Concourse 0**. Concourse 0 would be an 8- to 11-gate concourse facility (adding 6 to 9 net new gates) serving both domestic and international flights.
- **Terminal 9**. Terminal 9 would be a 12- to 18-gate international and domestic terminal facility with capability to support ADG VI operations.

- **Removal/Replacement of West Remote Passenger Gates**. Under Alternative 4, nine existing west remote passenger gates would be removed and an additional six west remote passenger gates would be decommissioned. Three of the existing west remote passenger gates would remain for operational flexibility, as they would under the proposed Project.

5.4.2.4.3 Landside Improvements

The landside improvements associated with Alternative 4 would include a Terminal 9 parking facility, construction of a seventh APM station at Terminal 9 on the previously approved LAX APM line, and construction of a pedestrian corridor between Terminals 8 and 9 that would bridge across Sepulveda Boulevard.

Under Alternative 4, the roadway component of the landside improvements would consist of the LAMP Phase 2 roadway system, with modifications to provide access to Terminal 9. Under this alternative, the LAMP Phase roadway system would be completed by 2028.

5.4.2.4.4 Enabling Projects

Alternative 4 would include enabling projects, located in or near the proposed improvement sites, that would remove and/or relocate existing airfield, terminal, and landside elements to accommodate the proposed improvements. The enabling projects that would be implemented under Alternative 4 would be the same as the proposed Project with respect to the Taxiway D Extension West, the Runway 6L-24R Exits, Concourse 0, and Terminal 9 project components. The enabling projects associated with the landside improvements would differ somewhat from the proposed Project. Implementation of the LAMP Phase 2 roadways under Alterative 4 would require acquisition of several of the same parcels as the proposed Project (i.e., 9600 S. Sepulveda Boulevard and related addresses, and 6155 W. 98th Street), but would not require acquisition of 9750 S. Vicksburg Avenue, and would require less acquisition of 9700 S. Sepulveda Boulevard. In addition, this alternative would affect fewer of the LAX gateway pylons. These enabling projects are further described in Table 2-4 in Chapter 2, *Description of the Proposed Project.*

5.5 Evaluation of Alternatives

The following describes the environmental impacts associated with each of the alternatives described in Section 5.4.2 above as compared to significant impacts of the proposed Project. The discussion below identifies environmental impacts of each resource category as they relate to the Project alternatives. Impacts are discussed collectively for horizon year 2028.

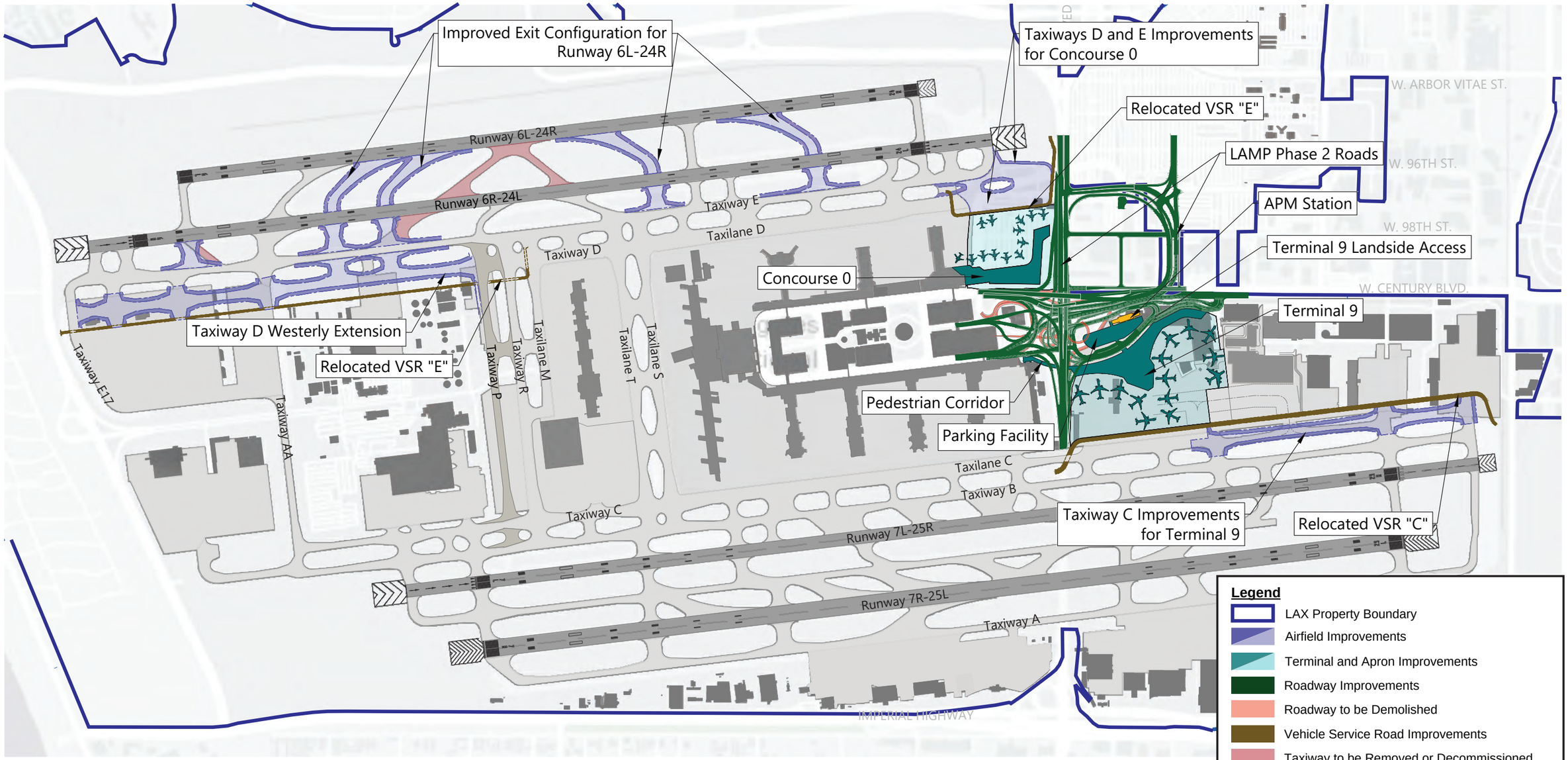
5.5.1 Alternative 1: No Project Alternative

5.5.1.1 Air Quality and Human Health Risk

5.5.1.1.1 Air Quality

5.5.1.1.1.1 Construction

As discussed in Section 4.1.1, *Air Quality*, the proposed Project would result in significant and unavoidable emissions of NO_X associated with construction-related activities throughout the construction period. In addition, the proposed Project would result in a net increase in short-term emissions of criteria pollutants associated with temporary runway closures, with a significant and unavoidable impact with respect to regional emissions of NO_X, CO, VOC, and SO_X for two 4.5-month periods. Localized construction concentrations would be less than significant for all criteria pollutants.



Sources: Los Angeles World Airports, Airport Layout Plan – Existing Layout Plan Sheet Working Draft, June 15, 2017 (Runway 6L-24R exit reconfiguration and Taxiway D westerly extension); Ricondo & Associates, Inc., 2020 (Taxiways D and E, Taxiway C and Terminal/Apron Improvements); CDM Smith Inc., 2020 (Roadway Improvements)
Prepared by: CDM Smith, October 2020

LAX Airfield and Terminal Modernization Project

Alternative 4: Approved LAMP Roadway Improvements plus Terminal 9 Access

Figure **5-5**

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The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9, which are proposed under the Project. In place of the proposed roadway improvements, the No Project Alternative would implement the approved LAMP Phase 2 roadway improvements, construction of which would emit substantially less total emissions than would construction of the proposed Project. Emissions associated with construction of the LAMP Phase 2 roadways would be a subset of the peak day emissions presented in the LAMP EIR and would be less than significant for CO, VOC, SO_X, PM_{10}, or $PM_{2.5}$; projected emissions of NO_X would be less than significant after mitigation.[6] Because the LAMP Phase 2 roadway construction emissions would be a subset of the peak day emissions for which local concentration modeling was performed in the LAMP EIR, it is expected that construction-related impacts of the LAMP Phase 2 roadways with respect to local construction concentrations of CO, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ would be less than significant. Further, the No Project Alternative would not require any runway closures, thereby avoiding the proposed Project's short-term significant and unavoidable impacts with respect to construction emissions of CO, VOC, and SO_X. Overall, construction-related impacts of all criteria air pollutants (i.e., CO, VOC, NO_X, SO_X, PM_{10}, and $PM_{2.5}$) under the No Project Alternative would be ***less than significant***.

5.5.1.1.1.2 Operations

Emissions

As discussed in Section 4.1.1, *Air Quality*, the proposed Project would result in significant and unavoidable emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$ associated with operational activities.

In addition to evaluating air quality impacts of the proposed Project, Section 4.1.1 also includes an evaluation of emissions associated with the Without Project scenario for informational purposes, in order to isolate the impacts of the proposed Project from changes that would occur between the baseline year and the 2028 buildout year with or without Project implementation. The Without Project scenario is very similar to the No Project Alternative, with one notable exception – the Without Project scenario does not include the LAMP Phase 2 roadways, whereas the No Project Alternative does, for reasons described previously.[7] Because of its similarity to the No Project Alternative, the Without Project analysis serves as the basis of the No Project Alternative analysis and is therefore discussed in this analysis.

As discussed in Section 4.1.1, *Air Quality*, the Without Project scenario would result in significant and unavoidable emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$ associated with operational activities. These emissions would be less than, but similar to, those of the proposed Project; SO_X emissions would be slightly higher under the Without Project Alternative compared to the proposed Project due to longer aircraft taxi times assumed under the Without Project scenario than under the proposed Project.[8]

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6 City of Los Angeles, Los Angeles World Airports, *Final Environmental Impact Report for Los Angeles International Airport (LAX) Landside Access Modernization Program*, (SCH 2015021014), Appendix F, Attachment F.1, February 2017. Available: https://www.lawa.org/en/connectinglax/automated-people-mover/documents.

7 The Without Project scenario analyzed in Section 4.1.1 includes the LAMP Phase 1 roadway construction only, while the No Project scenario also includes the LAMP Phase 2 roadway construction. The LAMP Phase 1 roadway construction is scheduled to be completed prior to 2028, whereas the LAMP Phase 2 roadways are scheduled to be completed after 2028. Moreover, because the LAMP Phase 1 roadway construction would be less intense than the LAMP Phase 2 roadway construction, the Without Project scenario provides a more conservative future baseline (lower emissions) for comparison to the proposed Project scenario in Section 4.1.1.

8 The comparison of the proposed Project to Without Project operational emissions is included in Section 4.1.1 *Air Quality*, Table 4.1.1-11. As shown in the table, emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$ from aircraft operations, including taxiing, under the Without Project scenario would be lower than those under the proposed Project. However, emissions from traffic, parking, and stationary sources would be higher under the proposed Project than the Without Project scenario for NO_X, PM_{10}, and $PM_{2.5}$ by enough to make emissions of those pollutant higher under the proposed Project for all sources. Because SO_X emissions are minimal for all sources except aircraft, SO_X emissions would remain higher under the Without Project scenario after considering all operational sources.

The No Project Alternative would not include any of the proposed Project components. However, as noted above, this alternative would include implementation of the LAMP Phase 2 roadways instead of the roadway system proposed as part of the Project. The No Project Alternative is similar to the Without Project scenario evaluated in Section 4.1.1, *Air Quality*, except that it assumes that the LAMP Phase 2 roadway improvements would be constructed by 2028, in order to provide a comparison of impacts to the proposed Project. Both scenarios assume future increases in passenger activity at LAX, as well as development of reasonably foreseeable future projects at LAX. The No Project Alternative differs from the Without Project scenario in its inclusion of the LAMP Phase 2 roadway system, but regional vehicle miles traveled and associated air pollutant emissions are anticipated to be comparable between the scenarios (i.e., the LAMP Phase 2 roadways would not substantially alter the distances traveled on the roadways around the airport compared to the Without Project scenario). Therefore, the operations-related emissions under the No Project Alternative would be essentially the same as those under the Without Project scenario. The Without Project scenario would result in significant and unavoidable emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$ compared to baseline conditions. Thus, it is expected that operations-related impacts of The No Project Alternative with respect to regional emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$ would be ***significant and unavoidable***.

Concentrations

As discussed in Section 4.1.1, *Air Quality*, localized operational concentrations would be significant and unavoidable with respect to PM_{10} under the proposed Project (Table 4.1.1-14), and operational concentrations would be significant and unavoidable with respect to PM_{10} and 1-hour NO_2 under the Without Project scenario (Table 4.1.1-15). Localized concentrations of PM_{10} would be driven by road dust from traffic. Significant localized PM_{10} concentrations would occur within the ITF West facility and along the roadways leading to that facility, along 98th Street, and along Aviation Boulevard at the entrance to the CONRAC under both the proposed Project and Without Project scenarios, and at the location of the new CTA entry roadway under the proposed Project. The No Project Alternative differs from the Without Project alternative in its inclusion of the LAMP Phase 2 roadway system, which would increase traffic flows to the CONRAC and ITF West. Under the Without Project scenario, and likewise under the No Project Alternative, localized concentrations of PM_{10} at the location of the proposed Project CTA new entry roadway would be less than significant. However, near the intersection of 96th Street and Airport Boulevard, the peak localized concentration location, daily traffic volumes would be expected to increase by 7 percent under the No Project Alternative as compared to the Without Project scenario, thereby resulting in a similar increase in localized concentrations of PM_{10} from road dust in that area. Traffic volume increases at the peak location were estimated by summing modeled traffic volumes for the roadway links which make up the peak intersection under the No Project Alternative and comparing them against the summed modeled traffic volumes for the roadway links which make up the peak intersection under Without Project scenario. Detailed calculations are provided in **Appendix C.7** of this EIR. This increased traffic would be expected to result in a peak localized concentration under the No Project Alternative that would be comparable to that of the proposed Project. Therefore, it is expected that, under the No Project Alternative, the operations-related local concentrations of PM_{10} would be comparable to those of the proposed Project, resulting in ***significant and unavoidable*** localized concentrations of PM_{10}.

As shown in Table 4.1.1-15, localized concentrations of NO_2 associated under the Without Project scenario would be significant and unavoidable when compared to baseline conditions, driven by emissions from aircraft operations. Aircraft operations under the Without Project scenario would be virtually indistinguishable to those under the No Project Alternative. Because the airfield improvements under the proposed Project would not occur with the No Project Alternative, aircraft taxi times would be longer, thereby increasing emissions and localized concentrations compared to the proposed Project. Therefore, it is expected that operational impacts from the No Project Alternative with respect to local effects of the

emissions of NO_2 would be greater than under the proposed Project. Unlike the proposed Project, which would have less than significant localized concentrations of NO_2, under the No Project Alternative, operational concentrations of NO_2 would be ***significant and unavoidable***. Detailed calculations are provided in **Appendix C.7** of this EIR.

As shown in Table 4.1.1-15, localized concentrations of CO, SO_2, and $PM_{2.5}$ associated with the Without Project scenario would be less than significant when compared to baseline conditions. Localized concentrations of CO and SO_2 are driven by emissions from aircraft operations, which would be virtually indistinguishable under the No Project Alternative as compared to the Without Project scenario. Localized concentrations of $PM_{2.5}$ are driven by vehicle traffic, which would be higher at peak locations under the No Project Alternative as compared to the proposed Project but would not result in localized concentrations that would approach the $PM_{2.5}$ threshold. Therefore, while it is expected that operational impacts from the No Project Alternative with respect to local effects of the emissions of CO, SO_2, and $PM_{2.5}$ would be greater than those of the proposed Project, as demonstrated in Table 4.1.1-16, the local effects of these pollutants would still be ***less than significant***.

5.5.1.1.1.3 Cumulative

As discussed in Section 4.1.1, *Air Quality*, the geographic study area for evaluation of cumulative construction air quality impacts is focused primarily on projects at LAX and the immediate surroundings. Based on the estimated emissions from construction of other development projects at and immediately adjacent to LAX whose construction could overlap with construction of the proposed Project, cumulative construction emissions of CO, VOC, NO_X, SO_X, PM_{10}, and $PM_{2.5}$ would exceed SCAQMD's quarterly construction emission significance thresholds. Therefore, cumulative construction emissions of these pollutants would be cumulatively significant.

SCAQMD has provided guidance on an acceptable approach to addressing the cumulative impacts issue for air quality.[9] This guidance states as follows: "As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR … Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. … Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

Construction of the proposed Project would exceed the Project-specific construction emission thresholds for CO, VOC, NO_X, and SO_X. As a result, based on the SCAQMD cumulative impact guidance discussed above, the contribution of the proposed Project to cumulative construction-related air pollutant emissions impacts would be cumulatively considerable for CO, VOC, NO_X, and SO_X. The cumulative construction impact would be significant and unavoidable.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9. In place of the proposed roadway improvements, the No Project Alternative would implement the LAMP Phase 2 roadway improvements, construction of which would emit substantially less emissions than would construction of the proposed Project. As discussed above under Section 5.5.1.1.1.1, construction-related impacts of all criteria air pollutants (i.e., CO, VOC, NO_X, SO_X, PM_{10}, and $PM_{2.5}$) under the No Project Alternative would be less than the proposed Project and would be less than significant.

As discussed above under Section 5.5.1.1.1.2, the No Project Alternative would have comparable regional traffic-related emissions to the proposed Project, and the operations-related emissions under the No Project Alternative would be driven by increased aircraft activity, which would occur irrespective of the

[9] South Coast Air Quality Management District, *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*, Appendix D – Cumulative Impact Analysis Requirements Pursuant to CEQA, August 2003, page D-3.

proposed Project. The No Project Alternative would be anticipated to have significant and unavoidable impacts with respect to regional emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$ from operations. In addition, is expected that, under the No Project Alternative, the operations-related local concentrations of PM_{10} would be comparable to those of the proposed Project, resulting in significant and unavoidable localized concentrations of PM_{10}. Unlike the proposed Project, which would have less than significant localized concentrations of NO_2, under the No Project Alternative, operational concentrations of NO_2 would be significant and unavoidable. It is also expected that operational impacts from the No Project Alternative with respect to local effects of the emissions of CO, SO_2, and $PM_{2.5}$ would be greater than those of the proposed Project, and the local effects of these pollutants would still be less than significant.

Because the proposed Project would have a significant and unavoidable cumulative impact with respect to air quality, and because the No Project Alternative would have an equal or greater impact on air quality than the proposed Project, the cumulative impacts from the No Project Alternative on air quality would be ***significant and unavoidable***.

5.5.1.1.2 Human Health Risk

5.5.1.1.2.1 Construction

As discussed in Section 4.1.2, *Human Health Risk*, the modifications and additions to the airfield, terminals, and ground access facilities under the proposed Project would alter the locations and amounts of toxic air contaminants (TAC) released by aircraft, ground support equipment (GSE), vehicles, and stationary sources; however, the incremental impacts to human health from TAC released during construction-related activities of the proposed Project would be less than significant.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9, which are proposed under the Project. In place of the roadway improvements, the No Project Alternative would implement the approved LAMP Phase 2 roadway improvements, construction of which would emit substantially less emissions than would construction of the proposed Project. As with the proposed Project, construction-related impacts to human health from TAC under the No Project Alternative would be ***less than significant***.

5.5.1.1.2.2 Operations

As noted above, the No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9, but would implement the approved LAMP Phase 2 roadway improvements. Traffic emissions under this alternative are anticipated to be comparable to those of the 2028 Without Project scenario presented in Section 4.1.2.5.1.2. The operations-related TAC emissions under the No Project Alternative would be driven by increased aircraft activity (i.e., aircraft taxi times), which would occur irrespective of the Project, and would be virtually indistinguishable to those under the 2028 Without Project scenario. As discussed in Section 4.1.2, *Human Health Risk*, the 2028 Without Project scenario, and consequently the No Project Alternative, would result in ***less than significant*** impacts to human health risk.

5.5.1.1.2.3 Cumulative

As discussed in Section 4.1.2, *Human Health Risk*, no USEPA standards exist that establish acceptable levels of human health risks or that identify a threshold of significance for cumulative health risk impacts. Therefore, a qualitative discussion of cumulative impacts is presented in Section 4.1.2, *Human Health Risk*, but no determination is made regarding the significance of cumulative impacts.

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 cancer risk impacts as for the project-specific cancer risk impacts analyzed in the EIR. Based on this policy, the proposed Project's

contribution to the cumulative cancer risk would not be cumulatively considerable under the construction and operation scenarios since the incremental cancer risk impacts for both construction and operation for evaluated receptors would be below the individual cancer risk significance thresholds of 10 in one million.

In contrast to cancer risk, 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 one (1.0) while the cumulative threshold is 3.0. Based on this SCAQMD policy, chronic and acute non-cancer hazard indices associated with airport emissions for both construction and operation under the proposed Project would not be cumulatively considerable.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9. In place of the proposed roadway improvements, the No Project Alternative would implement the LAMP Phase 2 roadway improvements, construction of which would emit substantially less emissions than would construction of the proposed Project. Traffic emissions under this alternative are anticipated to be comparable to those of the 2028 Without Project scenario presented in Section 4.1.2.5.1.2. The operations-related TAC emissions under the No Project Alternative would be driven by increased aircraft activity (i.e., aircraft taxi times), which would occur irrespective of the Project, and would be virtually indistinguishable to those under the 2028 Without Project scenario. Therefore, as with the proposed Project, the cumulative impacts from the No Project Alternative on human health risk would be ***less than significant***.

5.5.1.2 Cultural Resources (Historical Resources)

5.5.1.2.1 Construction

As discussed in Section 4.2, *Cultural Resources (Historical Resources)*, construction of the proposed Project, specifically Concourse 0, Terminal 9, and/or the landside improvements, would not require demolition or alteration of any of the four properties that have been identified as eligible for historic listing in the near vicinity of the Project site (i.e., the 1961 Airport Traffic Control Tower [ATCT] at the eastern end of the CTA; the former McCulloch Building [now H Hotel/Homewood Suites] at 6151 W. Century Boulevard; the former Union Savings and Loan building at 9800 S. Sepulveda Boulevard; and the former Aircraft School Building at 9700 S. Sepulveda Boulevard). As such, construction of the proposed Project would not cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5 and impacts on historical resources would be less than significant.

Under the No Project Alternative, Concourse 0 and Terminal 9 would not be constructed, and the LAMP Phase 2 roadway improvements, which do not include improvements in close proximity to the Union Savings and Loan Building, and which would include more limited improvements in proximity to the Aircraft School Building, would be constructed in lieu of the landside improvements proposed under the Project. The LAMP Phase 2 roadway improvements would remain within the public right-of-way and would not require demolition or alteration of any historical resources;[10] as with the proposed Project, impacts from construction of the No Project Alternative would be ***less than significant***.

5.5.1.2.2 Operations

The proposed Project would result in alterations to the surroundings of the four historical resources located in the near vicinity of the Project site, as shown in **Table 5-3**. As discussed in Section 4.2, *Cultural Resources (Historical Resources)*, although the proposed Project would introduce new facilities

[10] City of Los Angeles, Los Angeles World Airports, *Final Environmental Impact Report for Los Angeles International Airport (LAX) Landside Access Modernization Program*, (SCH 2015021014), Section 4.4 - Cultural Resources, February 2017. Available: https://www.lawa.org/en/connectinglax/automated-people-mover/documents.

(i.e., Concourse 0, Terminal 9 and its APM station and parking facility, and elevated roadways) that would alter the surroundings of these historic properties, such alterations would not materially impair the buildings such that they can no longer convey their historic significance; therefore, impacts on historical resources associated with proposed Project operations would be less than significant.

Table 5-3
Summary of Alterations to the Surroundings of Historical Resources

Historical Resource	Component			
	Concourse 0	Terminal 9, APM Station, Parking Facility	Proposed Project Landside Improvements	LAMP Phase 2 Roadways
	Proposed Project, Alternatives 2, 4	Proposed Project, Alternatives 3, 4	Proposed Project, Alternatives 2, 3	Alternatives 1, 4
1961 Airport Traffic Control Tower	✓	✓	✓	✓
Union Savings and Loan Building	✓		✓	
Former Aircraft School Building	✓		✓	✓
McCulloch Building		✓	✓	✓

Source: CDM Smith, 2020.

Under the No Project Alternative, the proposed airfield improvements, Concourse 0, Terminal 9, and the Terminal 9 APM station and parking facility would not be constructed. The LAMP Phase 2 roadway system would be constructed in lieu of the landside improvements proposed under the Project. Impacts to historical resources associated with the No Project Alternative are summarized in Table 5-3. Without Concourse 0, Terminal 9, and the Terminal 9 APM station and parking facility, fewer alterations would occur to the immediate surroundings of the 1961 ATCT, the former Aircraft School Building, and the McCulloch Building as compared to the proposed Project and the alterations to the surroundings of the Union Savings and Loan Building would be avoided. The LAMP Phase 2 roadway system would include new roadways surrounding the 1961 ATCT and new roadways immediately to the south and east of the 1964 McCulloch Building, which would alter the surroundings of these historical resources in a manner similar to the proposed Project. The roadway system under the No Project Alternative would also result in minor alterations to the surroundings of the former Aircraft School Building. Operation of the new roadways would not materially impair these historical resources such that they can no longer convey their historic significance. Therefore, as with the proposed Project, impacts from operation of the No Project Alternative on historical resources would be ***less than significant***.

5.5.1.2.3 Cumulative

As discussed in Section 4.2, *Cultural Resources (Historical Resources)*, there are four historical resources located within the near vicinity of the proposed Project. Implementation of the proposed Project would not have any significant cumulative impacts on these historical resources.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9. In place of the proposed roadway improvements, the No Project Alternative would implement the LAMP Phase 2 roadway improvements. The LAMP Phase 2 roadway improvements would not have an adverse effect on historical resources. Because the proposed Project would have a less than significant cumulative impact on historical resources, and because the No Project Alternative would have a lower impact on historical resources than the proposed Project, the cumulative impacts from the No Project Alternative on historical resources would be ***less than significant***.

5.5.1.3 Energy

5.5.1.3.1 Construction

As discussed in Section 4.3, *Energy*, construction of the proposed Project would require relatively minor use of electricity and natural gas. The majority of energy use during construction would consist of diesel and gasoline fuel used to power construction equipment and vehicles; the proposed Project would also result in a temporary increase in Jet A use during the temporary runway closures. The proposed Project's construction activities would comply with federal and state regulations pertaining to energy efficiency, including those related to fuel efficiency. In addition, as discussed in Section 4.3, *Energy*, construction activities would comply with LAWA's Design and Construction Handbook, Sustainable Design and Construction Policy, Sustainable Design and Construction Requirements, and Alternative Fuel Vehicle Requirement Program, and would not interfere with the Los Angeles Department of Water and Power's (LADWP's) work toward meeting the Renewable Portfolio Standard targets. Therefore, construction of the proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, nor would construction of the proposed Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Construction of the proposed Project would result in less than significant impacts on energy resources.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9, which are proposed under the Project. In place of the proposed roadway improvements, the No Project Alternative would implement the LAMP Phase 2 roadway improvements, construction of which would require substantially less energy than would construction of the proposed Project. Construction of the LAMP Phase 2 roadway improvements would comply with applicable plans and policies, including those related to fuel efficiency. Therefore, construction of the No Project Alternative would not result in wasteful, inefficient, or unnecessary consumption of energy resources. As with the proposed Project, the impact of the No Project Alternative on energy resources would be ***less than significant***.

5.5.1.3.2 Operations

As discussed in Section 4.3*, Energy*, operation of the proposed Project would require the use of electricity, natural gas, and mobile source and transportation-related fuels. Electricity and natural gas consumption would result primarily from the operation of Concourse 0 and Terminal 9. Although the proposed Project would increase overall energy use, LAWA's existing sustainability policy and project features would reduce energy use in the form of building energy efficiency improvements and reductions in mobile source and transportation-based fuel consumption. The proposed Project's operational activities would comply with federal, state, and local regulations for energy efficiency. In addition, electricity supplied to the proposed Project would be required to comply with California's Renewable Portfolio Standard. Therefore, operation of the proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, nor conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Operation of the proposed Project would result in less than significant environmental impacts on energy resources.

Operation of the No Project Alternative would require substantially less electricity and natural gas than the proposed Project, as most of the demand for these resources under the proposed Project would be associated with operation of Concourse 0 and Terminal 9. Consumption of Jet A by aircraft and APUs and consumption of diesel and gasoline by GSE would be similar to the proposed Project, as the level of aircraft activity would be the same under both the No Project Alternative and the proposed Project. Operation of the No Project Alternative would result in less demand for vehicle-related fuels due to the lower level of employment without Concourse 0 and Terminal 9 and the lower number of added lane miles associated with the LAMP Phase 2 roadways as compared to the proposed Project roadway improvements. State and local plans pertaining to fuel efficiency would apply to the No Project Alternative; therefore, the No

Project Alternative would not result in wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As with the proposed Project, the No Project Alternative would result in ***less than significant*** impacts on energy resources.

5.5.1.3.3 Cumulative

As discussed in Section 4.3, *Energy*, construction and operation of the proposed Project would consume energy, but would not result in a wasteful or inefficient, or unnecessary consumption of energy resources, nor conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Construction and operation of the proposed Project would result in less than significant cumulative impacts on energy resources.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9. In place of the proposed roadway improvements, the No Project Alternative would implement the LAMP Phase 2 roadway improvements. The No Project Alternative would consume less electricity and natural gas than the proposed Project because there would be no energy used to construct or operate the new facilities. Because the proposed Project would have a less than significant cumulative impact on energy resources, and because the No Project Alternative would have a lower energy demand than that of the proposed Project, the cumulative impacts from the No Project Alternative on energy resources would be ***less than significant***.

5.5.1.4 Greenhouse Gas Emissions

5.5.1.4.1 Construction and Operations

As discussed in Section 4.4, *Greenhouse Gas Emissions*, the proposed Project would result in a net increase in short-term and temporary emissions of GHGs from construction-related activities as well as indirect GHG emissions related to the temporary runway closures. The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9, but would implement the LAMP Phase 2 roadway improvements. Although construction-related GHG emissions would be substantially less for the No Project Alternative than for the proposed Project, construction of the Phase 2 roadway improvements would still result in a net increase in short-term and temporary emissions of GHGs from construction-related activities.

As discussed in Section 4.4, *Greenhouse Gas Emissions*, the proposed Project would result in a net increase in ongoing regional emissions of GHGs from operational activities. The No Project Alternative would not involve construction or subsequent operation of the airfield improvements, Concourse 0, or Terminal 9, but would implement the LAMP Phase 2 roadway improvements. As compared to the Without Project scenario, GHG emissions associated with the No Project Alternative would be comparable, albeit slightly higher due to the additional lane miles and, consequently, vehicle miles traveled (VMT), associated with the addition of the LAMP Phase 2 roadways. Nevertheless, as with GHG emissions from the Without Project scenario, GHG emissions associated with operation of the No Project Alternative would be less than emissions from the proposed Project (see Table 4.4-6). Although traffic-related GHG emissions are expected to be lower under the No Project Alternative as compared to baseline conditions, aircraft activity dominates overall GHG emissions associated with airport operations, and GHG emissions under the No Project Alternative would still be expected to result in a net increase over baseline conditions.

The amortized construction emissions combined with operational emissions under the No Project Alternative would result in total annual emissions of GHGs that would result in a net increase over baseline conditions. Therefore, as with the proposed Project, impacts of GHG emissions from the No Project Alternative would be ***significant and unavoidable***.

5.5.1.4.2 Cumulative

As discussed in Section 4.4, *Greenhouse Gas Emissions*, GHG impacts are treated exclusively as cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. As such, the assessment of significance under CEQA is based on a determination of whether the incremental GHG emissions from the proposed Project represent a cumulatively considerable contribution to global climate change impacts. (See State CEQA Guidelines Section 15064.4(b).) As indicated in Section 4.4.5, implementation of the proposed Project would result in a significant and unavoidable impact related to GHG emissions; hence, the proposed Project's incremental contribution of GHG emissions, both before and after mitigation, is considered to be cumulatively considerable.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9. In place of the proposed roadway improvements, the No Project Alternative would implement the LAMP Phase 2 roadway improvements. As discussed in Section 4.4, *Greenhouse Gas Emissions,* GHG impacts under the Without Project scenario (which is very similar to the No Project Alternative) would be slightly less than that under the proposed Project but would still represent a significant increase over baseline GHG emissions at LAX. With implementation of the No Project Alternative, cumulative impacts related to GHG emissions would be significant and, as with the proposed Project, the No Project Alternative would have a ***cumulatively considerable contribution*** to this significant and unavoidable cumulative impact.

5.5.1.5 Hazardous Materials

5.5.1.5.1 Construction

As discussed in Section 4.5, *Hazardous Materials*, the proposed Project would be located on or adjacent to sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 or other government databases. As shown in **Table 5-4**, construction of the airfield improvements could potentially interfere with future remediation of the Terminal 1 Fuel Valve Vault site, if such remediation is required in the future; construction of Concourse 0 would affect ongoing monitoring and remediation of contamination at the AlliedSignal/Honeywell site and could potentially hinder future remediation activities associated with the per- and poly-fluoroalkyl substances (PFAS) area of interest, if remediation is required to be undertaken; and construction of Terminal 9 would result in removal of up to three groundwater monitoring wells associated with remediation at the adjacent United Airlines (UAL) Maintenance Operations Center (MOC). As described in Section 4.5, *Hazardous Materials,* the effects of the proposed Project on these sites would not result in significant hazards to the public or the environment; therefore, impacts from construction of the proposed Project would be less than significant.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9. As a result, as shown in Table 5-4, this alternative would not interfere with ongoing or future remediation activities that would be otherwise affected by these Project components. However, construction of the LAMP Phase 2 roadways could require closure of one or more of the AlliedSignal/Honeywell groundwater monitoring wells. Closure of the monitoring wells would not have an impact on human health or the environment, because the monitoring wells could be relocated to other areas. As with the proposed Project, construction of the No Project Alternative would result in a ***less than significant impact*** related to hazardous materials.

Table 5-4
Relationship of Proposed Project and Alternatives to Ongoing or Potential Future Remediation Activities

Site with Known Contamination	Component				
	Airfield Improvements	Concourse 0	Terminal 9, APM Station, Parking Facility	Proposed Project Landside Improvements	LAMP Phase 2 Roadways
	Proposed Project, Alternatives 2, 3, 4	Proposed Project, Alternatives 2, 4	Proposed Project, Alternatives 3, 4	Proposed Project, Alternatives 2, 3	Alternatives 1, 4
Terminal 1 Fuel Valve Vault Site[1]	✓				
AlliedSignal/Honeywell Site		✓		✓	✓
United Airlines Maintenance Operations Center			✓		
PFAS Area of Interest[1]		✓			

Source: CDM Smith, 2020.

Note:
[1] Remediation at the site is not currently underway and future remediation plans have not been established.

Key:
PFAS = Per- and poly-fluoroalkyl substance

5.5.1.5.2 Operations

As with the proposed Project, operations under the No Project Alternative would not involve excavation, extraction of groundwater, or any activity that could damage or physically interfere with ongoing or future contamination monitoring or remediation activities. Therefore, as with the proposed Project, operation of this alternative would have ***no impact*** related to hazardous materials.

5.5.1.5.3 Cumulative

As discussed in Section 4.5, *Hazardous Materials*, construction and operation of the proposed Project would not disrupt the ongoing remediation in the vicinity of the Project site; therefore the proposed Project would result in less than significant cumulative environmental impacts on hazardous materials.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9. As a result, as shown in Table 5-4, this alternative would not interfere with ongoing or future remediation activities that would be otherwise affected by these Project components. However, construction of the LAMP Phase 2 roadways could require closure of one or more of the AlliedSignal/Honeywell groundwater monitoring wells. Closure of the monitoring wells would not have an impact on human health or the environment, because the monitoring wells could be relocated to other areas. In addition, the LAMP Phase 2 roadways would not affect the UAL MOC, and therefore would not contribute to a cumulative impact on the UAL MOC remediation program. Therefore, as with the proposed Project, the cumulative impacts from the No Project Alternative on hazardous materials would be ***less than significant impact***.

5.5.1.6 Land Use and Planning

5.5.1.6.1 Construction and Operations

As discussed in Section 4.6, *Land Use and Planning*, construction and operation of the proposed Project would comply with most of the land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect, including those in the SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the County of Los Angeles Airport Land Use Plan, and the City of Los Angeles General Plan, LAX Specific Plan, Century Boulevard Streetscape Plan, and city zoning. Key Project components – including the proposed roadway improvements and the proposed APM station at Terminal 9 along the future APM system, which would connect with the Metro Crenshaw/LAX Light Rail line – would advance regional and local policies aimed at enhancing mobility options for LAX passengers. However, the proposed Project would not reduce GHG emissions and improve air quality (RTP/SCS Goal 5) or reduce vehicle emissions (LAX Plan Circulation and Access Policy P14). As described in Section 4.4, *Greenhouse Gas Emissions*, emissions from forecasted activity levels associated with future growth at LAX, of which the proposed Project is a part, are accounted for in the Proposed Final 2020-2045 RTP/SCS. Therefore, the Project would be consistent with the RTP/SCS with respect to GHG emissions. Similarly, as discussed in Section 4.6, *Land Use and Planning*, the proposed Project would comply with federal, state, local, and LAX programs, plans, and policies aimed at reducing vehicle emissions, and would also include project features and mitigation measures that would reduce emissions. As a result, the proposed Project would comply with the intent of LAX Plan Circulation and Access Policy P14. For these reasons, the proposed Project would result in less than significant impacts to land use and planning.

Under the No Project Alternative, the proposed airfield and terminal improvements, including Concourse 0, Terminal 9, and the Terminal 9 APM station and parking facility, would not be constructed or operated. The future LAMP Phase 2 roadway system would be constructed in lieu of the landside improvements proposed under the Project. Without construction of the proposed roadway improvements and the proposed APM station, the No Project Alternative would not advance regional and local policies aimed at enhancing mobility options for LAX passengers. However, this would not cause significant environmental impacts due to conflicts with these policies. With respect to the LAMP Phase 2 roadway system specifically, the LAX Landside Access Modernization Program EIR, which evaluated the environmental impacts of the entire program, including the Phase 2 roadway improvements, determined that impacts related to land use and planning would be less than significant.[11] As described in Sections 5.5.1.1.1 and 5.5.1.4 above, GHG and vehicle emissions under this alternative would increase compared to existing baseline conditions, although to a lesser extent than the proposed Project. However, as with the proposed Project, the No Project Alternative would comply with the overall intent of these land use plans. For these reasons, as with the proposed Project, construction and operation of the No Project Alternative would result in ***less than significant*** impacts to land use and planning.

5.5.1.6.2 Cumulative

As discussed in Section 4.6, *Land Use and Planning*, construction and operation of the proposed Project would not be inconsistent with the land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect, including those in the SCAG 2020-2045 RTP/SCS, the County of Los Angeles Airport Land Use Plan, and the City of Los Angeles General Plan, LAX Specific Plan, Century Boulevard Streetscape Plan, and city zoning. As discussed in Section 4.6, *Land Use and Planning*,

[11] City of Los Angeles, Los Angeles World Airports, *Final Environmental Impact Report for Los Angeles International Airport (LAX) Landside Access Modernization Program*, (SCH 2015021014), Section 4.8 – Land Use and Planning, February 2017. Available: https://www.lawa.org/en/connectinglax/automated-people-mover/documents.

construction and operation of the proposed Project would result in less than significant cumulative impacts on land use.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9. In place of the proposed roadway improvements, the No Project Alternative would implement the LAMP Phase 2 roadway improvements. The No Project Alternative would not involve construction of new facilities and would not require changes in land use inconsistent with applicable land use policies. Because the proposed Project would have a less than significant cumulative impact on land use, and because the No Project Alternative would have less of an impact on land use than the proposed Project, the cumulative impacts from the No Project Alternative on land use would be ***less than significant***.

5.5.1.7 Noise

5.5.1.7.1 Aircraft Noise

5.5.1.7.1.1 Construction

As discussed in Section 4.7.1, *Aircraft Noise,* construction of the proposed runway exits would require temporary runway closures in 2023 and 2024, approximately 4.5 months in duration in each year. These temporary runway closures would result in the reassignment of departing and arriving aircraft to other runways, which would result in temporary changes in aircraft noise exposure levels in nearby areas. In some areas, aircraft noise levels would decrease during the runway closures, whereas in other areas, aircraft noise levels would increase to 65 dBA (as measured in terms of the Community Noise Equivalent Level, or CNEL) or above. This would be a short-term (i.e., 4.5-month) significant impact.

Under the No Project Alternative, the proposed airfield improvements, including the proposed runway exits, would not be constructed. As a result, this alternative would avoid the short-term significant impact from aircraft noise that would occur under the proposed Project.

5.5.1.7.1.2 Operations

As discussed in Section 4.7.1, *Aircraft Noise,* aircraft operations under the proposed Project would increase the area that would be subject to elevated aircraft noise levels (i.e., higher than 65 dBA CNEL), which would expose additional residences and other noise-sensitive uses to aircraft noise. Expansion of the LAX Sound Insulation Programs, as set forth in Mitigation Measure MM-AN (ATMP)-1, provides the basis for eligible dwellings and non-residential noise-sensitive facilities that are newly exposed to noise levels 65 CNEL or higher to undergo sound attenuation; however, if sound attenuation of individual eligible structures is not in place by the time the aircraft noise levels occurs, aircraft noise impacts could be significant and unavoidable on an interim basis. Also, such sound attenuation would not reduce aircraft noise impacts at outdoor private habitable areas. For these reasons, the proposed Project would result in significant and unavoidable impacts from aircraft noise. Project implementation would not result in a 1.5 dBA increase within the 65 CNEL contour during operations, nor would it result in a significant impact related to classroom disturbance.

As indicated in Section 2.3.1.2 of Chapter 2, *Description of the Proposed Project,* aircraft activity in 2028 would be the same with or without the proposed Project, and the proposed Project would not alter future arrival or departure patterns. Therefore, future aircraft noise impacts under the No Project Alternative would be the same as for the proposed Project (see Figure 4.7.1-7 and Tables 4.7.1-11 and 4.7.1-12 in Section 4.7.1, *Aircraft Noise)*. As with the proposed Project, under the No Project Alternative, impacts associated with aircraft noise would be ***significant and unavoidable***.

5.5.1.7.1.3 Cumulative

As discussed in Section 4.7.1, *Aircraft Noise*, none of the development projects identified in Chapter 3, *Overview of Project Setting,* would have aircraft operations that could contribute to cumulative aircraft noise impacts. Therefore, cumulative impacts from aircraft noise under the proposed Project would be less than significant (i.e., although aircraft noise impacts associated with the proposed Project, alone, would be significant and unavoidable, there are no other projects involving aircraft activity; hence there is no *cumulative* aircraft noise and there would not be a significant cumulative impact). The lack of other projects that contribute to cumulative aircraft noise impacts applies to the No Project Alternative in the same way as the proposed Project. As with the proposed Project, under the No Project Alternative, cumulative impacts associated with aircraft noise would be ***less than significant***.

5.5.1.7.2 Roadway Traffic Noise

5.5.1.7.2.1 Operations

As discussed in Section 4.7.2, *Roadway Traffic Noise*, implementation of the proposed Project would result in increased operational roadway traffic noise in 2028 compared to baseline conditions; however, the projected increases in roadway traffic noise would not exceed the applicable thresholds of significance (i.e., roadway noise impacts would be less than significant). (Construction traffic noise impacts are addressed in Section 5.5.1.7.3 below.)

Under the No Project Alternative, in place of the proposed roadway improvements, the No Project Alternative would implement the already-approved LAMP Phase 2 roadway improvements. For the most part, roadway traffic associated with the LAMP Phase 2 roadways would be located on alignments similar to those of the proposed Project with respect to nearby noise-sensitive receptors. The exception is that, under the No Project Alternative, the extensive roadway improvements north of 98th Street, which would consist of parallel elevated ramps, would not occur. As a result, traffic volumes on roadways in the vicinity of 98th Street would be lower under the No Project Alternative as compared to the proposed Project. The improvements north of 98th Street that would occur under the proposed Project would be located at a slightly greater distance from nearby noise-sensitive receptors, which are on the south side of 98th Street. Nevertheless, due to the higher traffic volumes, it is expected that the proposed Project would have greater impacts to noise-sensitive receptors along 98th Street from roadway noise than would the No Project Alternative. With respect to other roadways, essentially the same amount of traffic would move through the area roadways under the No Project Alternative as that for the proposed Project. For these reasons, the roadway traffic noise levels on the local roadway network projected for 2028 and the associated increases in roadway traffic noise compared to baseline conditions would not be materially different between the No Project Alternative and the proposed Project. As with the proposed Project, impacts under the No Project Alternative would be ***less than significant***.

5.5.1.7.2.2 Cumulative

As discussed above, the No Project Alternative would have a materially similar impact on roadway traffic noise as the proposed Project. As discussed in Section 4.7.2, *Roadway Traffic Noise*, the proposed Project would have a less than significant cumulative impact on roadway traffic noise. Because the proposed Project would have a less than significant cumulative impact on roadway traffic noise, and because the No Project Alternative would have a similar impact on roadway traffic noise as the proposed Project, the cumulative impacts from the No Project Alternative on roadway traffic noise would be ***less than significant***.

5.5.1.7.3 Construction Traffic and Equipment Noise and Vibration

5.5.1.7.3.1 Construction

As discussed in Section 4.7.3, *Construction Traffic and Equipment Noise and Vibration*, construction of the proposed Project would generate noise; however, construction activities would not cause existing ambient noise levels measured at the property line of noise-sensitive uses to increase by 3 dBA or more in CNEL nor cause excessive ground-borne vibration. As shown in **Table 5-5**, construction activities would exceed existing ambient exterior noise levels by 5 dBA or more at noise-sensitive uses near the proposed Project; however, with implementation of Mitigation Measures MM-N (ATMP)-1, Construction Noise Control Plans, MM-N (ATMP)-2, Construction Scheduling, and MM-N (ATMP)-3, Construction Equipment, this impact would be reduced to a level that is less than significant. (Operational roadway noise impacts are addressed in Section 5.5.1.7.2 above.)

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, Terminal 9, or the conveyance improvements associated with Terminal 9, which are proposed under the Project. In place of the proposed roadway improvements, the No Project Alternative would implement the previously-approved LAMP Phase 2 roadway improvements. Because the No Project Alternative would have less construction than the proposed Project, there would be fewer peak daily construction trips, and construction traffic noise would be reduced as compared to the proposed Project. As with the proposed Project, impacts related to construction traffic noise would be less than significant. Construction activities associated with the LAMP Phase 2 roadways would be located in proximity to the same historical resources as the proposed Project. In particular, construction activities would generally be the same distance from the most noise-sensitive use, the former Aircraft School Building, as the proposed Project. As with the proposed Project, impacts to this building, and to the other historical resources, from construction equipment vibration would be ***less than significant***.

Table 5-5
Comparison of Construction Noise Impacts Associated with the Proposed Project and Alternatives

ID	Receptor	Construction Activity	Would the Project/Alternative Have a Significant Impact[1] from Construction Noise?				
			Proposed Project	Alternative 1	Alternative 2	Alternative 3	Alternative 4
R1	Residential development in Playa del Rey	Airfield improvements	No	NA	No	No	No
R2	Saint Bernard High School	Airfield improvements	No	NA	No	No	No
R3	Residential development along southern edge of Westchester	Airfield improvements	No	NA	No	No	No
R4	Park West Apartments on Lincoln Boulevard	Airfield improvements	No	NA	No	No	No
R5	Residential uses along West 88th Street near Liberator Ave	Airfield improvements	No	NA	No	No	No
R6	Residential uses near Westchester Parkway and Kittyhawk Ave	Airfield improvements	No	NA	No	No	No
		Terminal construction	No	NA	No	No	No
		Roadway construction	No	No	No	No	No
		Combined construction noise	No	NA	No	No	No
R7	Residence Inn by Marriott Los Angeles LAX/Century Boulevard	Terminal construction	No	NA	No	No	No
		Roadway construction	No	No	No	No	No
		Combined construction noise	Yes	NA	No	Yes	Yes
R8	Sheraton Gateway Los Angeles Hotel	Terminal construction	Yes	NA	No	Yes	Yes
		Roadway construction	Yes	Yes	Yes	Yes	Yes
		Combined construction noise	Yes	NA	Yes	Yes	Yes
R9	H Hotel Los Angeles/ Homewood Suites by Hilton Los Angeles International Airport	Terminal construction	Yes	NA	No	Yes	Yes
		Roadway construction	Yes	Yes	Yes	Yes	Yes
		Combined construction noise	Yes	NA	Yes	Yes	Yes

Table 5-5
Comparison of Construction Noise Impacts Associated with the Proposed Project and Alternatives

ID	Receptor	Construction Activity	Would the Project/Alternative Have a Significant Impact[1] from Construction Noise?				
			Proposed Project	Alternative 1	Alternative 2	Alternative 3	Alternative 4
R10	Hyatt Regency Los Angeles International Airport	Terminal construction	Yes	NA	Yes	No	Yes
		Roadway construction	Yes	Yes	Yes	Yes	Yes
		Combined construction noise	Yes	NA	Yes	Yes	Yes
R11	Courtyard Los Angeles LAX/Century Boulevard	Terminal construction	Yes	NA	No	Yes	Yes
		Roadway construction	Yes	No	Yes	Yes	No
		Combined construction noise	Yes	NA	Yes	Yes	Yes

Source: HMMH, CDM Smith, 2020.

Notes:

[1] Construction equipment noise levels conservatively assume all equipment would be utilized at the same time and at all hours of the 24-hour day, both of which are unlikely.

As with the proposed Project, construction of the LAMP Phase 2 roadway improvements under the No Project Alternative would generate noise from construction equipment. The potential noise impacts from this construction activity on the nearest noise-sensitive receptors are shown in **Table 5-6**. As explained in Section 4.7.3, *Construction Traffic and Equipment Noise and Vibration*, the analysis is very conservative, and assumes that all construction equipment would be utilized at the same time, which is unlikely, and that construction activity might occur on a continuous basis over the course of an entire (24-hour) day, which is also unlikely. In fact, actual construction activities would occur on a more limited, partial-day construction schedule; would occur more intermittently; and would not coincide with other construction activities. In addition, the construction-related noise levels presented in Table 5-6 do not account for noise reduction/attenuation from any intervening structures. Hence, the actual construction-related noise levels would be lower than shown in Table 5-6. Under the No Project Alternative, the airfield improvements, Terminal 9, Concourse 0, and the conveyance improvements associated with Terminal 9 would not be constructed. Moreover, instead of constructing the roadway improvements proposed under the proposed Project, the No Project Alternative would implement the LAMP Phase 2 roadways, which do not include improvements on 98th Street. As a result, as shown in Table 5-5 and Table 5-6, the No Project Alternative would avoid significant impacts associated with the proposed Project at two Receptor Sites (R7 Residence Inn by Marriott and R11 Courtyard Los Angeles LAX/Century Boulevard), and reduce, but not avoid, significant impacts associated with the proposed Project at additional three Receptor Sites (R8 Sheraton Gateway Hotel, R9 H Hotel/Homewood Suites, and R10 Hyatt Regency LAX). Nevertheless, as shown in Table 5-6, implementation of the No Project Alternative would result in construction noise levels above the threshold of significance at several noise-sensitive receptors. The cause of those noise impacts is construction of the LAMP Phase 2 roadway improvements; however, the LAMP Phase 2 roadway improvements were already approved with accompanying mitigation measures that would reduce the impacts to a less than significant level. As such, the construction traffic and equipment noise and vibration impacts under the No Project Alternative would, with application of existing mitigation requirements for LAMP Phase 2 roadway improvements, be ***less than significant***.

Construction of the No Project Alternative improvements could use any of the staging areas that would be used for the proposed Project. Therefore, noise associated with the use of staging areas for the No Project Alternative would be the same as the proposed Project (see Table 4.7.3-6). As with the proposed Project, impacts would ***be less than significant***.

5.5.1.7.3.2 Cumulative

As discussed above, the No Project Alternative would have a lower impact on construction traffic and equipment noise and vibration than the proposed Project. As discussed in Section 4.7.3, *Construction Traffic and Equipment Noise and Vibration*, the proposed Project would have a less than significant cumulative impact on construction traffic and equipment noise and vibration. Because the proposed Project would have a less than significant cumulative impact on construction traffic and equipment noise and vibration, and because the No Project Alternative would have a lower impact on construction traffic and equipment noise and vibration than the proposed Project, the cumulative impacts from the No Project Alternative on construction traffic and equipment noise and vibration would be ***less than significant***.

Table 5-6
Construction Noise Levels at Noise-Sensitive Receptor Sites - Alternative 1

ID	Receptor	Background Conditions[1] CNEL (dBA)	Distance from Construction Activity (feet)	Construction Activity	Construction Equipment CNEL (dBA)	Total[2] CNEL (dBA)	Significance Threshold[3]	Above Threshold?
R6	Residential uses near Westchester Parkway and Kittyhawk Ave	72.0	1,600	Roadway construction	66.9	73.2	77.0	No
R7	Residence Inn by Marriott Los Angeles LAX/Century Boulevard	70.2	900	Roadway construction	71.9	74.1	75.2	No
R8	Sheraton Gateway Los Angeles Hotel	69.3	100	Roadway construction	91.0	91.0	74.3	Yes[4]
R9	H Hotel Los Angeles/ Homewood Suites by Hilton Los Angeles International Airport	70.4	55	Roadway construction	96.2	96.2	75.4	Yes[4]
R10	Hyatt Regency Los Angeles International Airport	73.4	150	Roadway construction	87.5	87.7	78.4	Yes[4]
R11	Courtyard Los Angeles LAX/Century Boulevard	71.7	350	Roadway construction	73	75.4	76.0	No

Source: HMMH, CDM Smith, 2020.

Notes:

1 Background condition obtained through AEDT using 24-hour CNEL dBA.

2 Background plus Alternative 1 construction noise.

3 Significance Threshold = Background CNEL + 5 dBA

4 Construction equipment noise levels conservatively assume all equipment would be utilized at the same time and at all hours of the 24-hour day, both of which are unlikely.

5.5.1.8 Transportation

5.5.1.8.1 Plans, Programs, Ordinances, and Policies Analysis

Consistent with the methodology used in Section 4.8.5.1.1 for the proposed Project, a review was conducted to determine whether the No Project Alternative would conflict with a transportation-related City or regional plan, program, ordinance, or policy addressing the circulation system (including transit, roadways, bicycle, and pedestrian facilities) that was adopted to protect the environment. Transportation policies or standards adopted to protect the environment include those that support multimodal transportation options and a reduction in VMT.

Although the No Project Alternative does not include development of Concourse 0 or Terminal 9, which is a notable difference from the proposed Project, the roadway system proposed under the No Project Alternative is generally similar to that of the proposed Project and would still serve LAX overall. The relationship of the No Project Alternative to plans programs, ordinances, and policies pertaining to transportation would be generally similar to that of the proposed Project, as addressed earlier in Table 4.8-11 and Table 4.8-12. Those similarities include, but are not limited to, the relationship to the adopted SCAG 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS recognizes the LAX Landside Access Modernization Program as providing for ground transportation system improvements at LAX, and the RTP/SCS also recognizes the proposed Project as providing for ground transportation system improvements. While LAX Landside Access Modernization Program Phase 1 roadway improvements are included in the RTP/SCS, the Phase 2 roadway improvements, which are a key element of the No Project Alternative, are not included in the RTP/SCS, but could be added at a future time. That is also the case for the roadway improvements associated with the proposed Project. Overall, the No Project Alternative would not be inconsistent with transportation-related plans, policies, ordinances, and programs, and, as with the proposed Project, the impact of the No Project Alternative would be ***less than significant***.

5.5.1.8.2 VMT Analysis

The No Project Alternative was analyzed by modifying the LAX Travel Demand Model (that was developed and calibrated for the proposed Project) to account for all the transportation elements of the No Project Alternative, including LAX Landside Access Modernization Program Phase 2 roadway improvements. The methodology to calculate VMT impacts is consistent with the methodology described in Section 4.8.2 for the proposed Project VMT analysis. The travel demand model is used to calculate VMT per employee, total passenger VMT and induced VMT. However, the No Project Alternative does not include any new employees. Therefore, employee VMT was not assessed for this alternative. The results of the passenger VMT analysis are presented in **Table 5-7**.

Table 5-7
Alternative 1 Passenger VMT

Measure	Projected Future Conditions Baseline	Proposed Project	Alternative 1
Total Passenger VMT	8,676,209	8,708,995	8,696,606
Source: Fehr and Peers, 2020.			

The No Project Alternative would result in a net increase of 20,397 total passenger VMT over the 2028 Projected Future Conditions Baseline, as compared to a net increase of 32,786 under the proposed Project. Relative to the percent increase over baseline conditions, the No Project Alternative would result in a VMT increase of 0.23 percent compared to a 0.37 percent increase associated with the proposed Project The magnitude of the VMT change under the No Project Alternative would be less than proposed Project because the new roadways under LAX Landside Access Modernization Program Phase 2 are

shorter (approximately 4.9 lane miles versus 5.8 lane miles). In addition, maintaining the Park 'N Fly parking lot in its current location would help to slightly reduce VMT relative to the proposed Project. Under the No Project Alternative, passengers would walk to the CTA from Park 'N Fly, whereas under the proposed Project, these passengers are allocated to the other parking facilities and would take a shuttle to ITF West and use APM to access the CTA. As was the case for the proposed Project (described in Section 4.8.5.2.1), this net increase in passenger VMT would result in a significant impact. Even with implementation of the mitigation package for the proposed Project described in Section 4.8.5.2.2, as with the proposed Project, the passenger VMT impact associated with the No Project Alternative would remain ***significant and unavoidable***.

The LAX Landside Access Modernization Program Phase 2 roadway improvements and proposed Project new roadways are expected to have the same effect on induced VMT (with minimal variation), because the level of non-airport trip activities would be the same. Therefore, the short-term induced VMT impacts of the No Project Alternative would be consistent with those of the proposed Project, as described in Section 4.8.5.4, which also notes that there are no feasible mitigation measures for induced VMT impacts. As such, as with the proposed Project, implementation of the No Project Alternative would result in a ***significant and unavoidable*** impact relative to induced VMT.

5.5.1.8.3 Hazard Analysis

Impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from [a] project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts, as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. In the case of the No Project Alternative, these conflicts may be created by ramp configurations or through the placement of ramps, loading areas, or intersections in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections. These impacts were evaluated for permanent conditions after Project completion.

This analysis focused upon locations where the new roadways introduce a new vehicle access point and/or driveways to the site. The following four locations that would access the Project site from the public right-of-way and that may be affected by the No Project Alternative driveways and infrastructure are:

- Century Boulevard and Jetway Boulevard
- Sepulveda Boulevard and 96th Street
- Sepulveda Boulevard and Century Boulevard
- Sepulveda Boulevard south of World Way

Based on the proposed infrastructure, level of existing activity, and anticipated level of activity attributable to the proposed Project, the proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) and would comply with City design standards. Moreover, the land uses associated with the No Project Alternative (i.e., roadway improvements) would not be incompatible with existing land uses in the Project area, which consist of airport and commercial uses. For these reasons, the impact would be ***less than significant*.**

Freeway Safety Analysis

The LADOT interim guidance for freeway safety analysis applied to the proposed Project, described in Section 4.8.5.5.1, was also used to assess freeway safety impacts relative to the No Project Alternative. The No Project Alternative would have very similar passenger levels of activity and a lower number of total employees relative to the proposed Project; therefore, the No Project Alternative would generate less trips on a daily basis than the proposed Project. As a result, it is anticipated that the vehicle trips on freeway off-ramps would be less than the proposed Project. Therefore, as with the proposed Project, the

No Project Alternative would not have a substantial effect at the analyzed location or have a negative effect on traffic safety.

Overall, as with the proposed Project, implementation of the No Project Alternative would have a ***less than significant*** *impact* relative to hazards.

5.5.1.8.4 Cumulative Impacts

Cumulative Impacts Associated with Plans, Programs, Ordinances, and Policies

The cumulative impacts of the No Project Alternative related to plan consistency would be consistent with those of the proposed Project, as described in Section 4.8.6.1, which would be ***less than significant.***

Cumulative Impacts Associated with VMT

Operation of the No Project Alternative would not generate any new employees; therefore, there would not be any cumulative impacts associated with employee VMT.

For passenger VMT, the 2028 Projected Future Conditions Baseline includes all the passenger activity projected to occur at that time. As such, there would be no significant cumulative passenger VMT impacts beyond what is already accounted for in the baseline. Relative to probable future passenger growth that would occur subsequent to 2028, the nature and level of increased VMT would generally be in proportion to the impact identified for the No Project Alternative. The increase in passenger VMT associated with the No Project Alternative, as compared to passenger VMT in the 2028 Projected Future Conditions Baseline, is primarily attributable to the approximately 4.9 additional lane miles that would occur with the LAX Landside Access Modernization Program Phase 2 roadway system improvements. As future passenger levels increase beyond 2028, the total passenger VMT would also increase from the additional passengers on that roadway system. The increase in total passenger VMT would be generally proportional to the increase in MAP, assuming the mode splits (i.e., percentages of passengers driving their own vehicles, taking TNCs, taking shuttles, using rental cars, taking transit, etc.) and mode assignments (i.e., percentages of vehicles going to/from the CTA, or the ITFs, or the CONRAC, etc.) would not change substantially from 2028 conditions. As such, there would be no cumulative passenger VMT impact in 2028 beyond what is already identified for that year, but total passenger VMT would increase in subsequent years. Based on the threshold of significance for passenger VMT being no net increase over Projected Future Conditions Baseline, that increase would represent a significant cumulative impact for passenger VMT. As described in Section 4.8.5.3, the same VMT reduction strategies are proposed as mitigation, but would not reduce the impact to less than significant. Therefore, the cumulative impact would be ***significant and unavoidable***, as would also be the case for the proposed Project.

The LAX Landside Access Modernization Program Phase 2 roadway improvements and proposed Project new roadways are expected to have the same effect on induced VMT (with minimal variation), because the level of non-airport trip activities would be the same. Therefore, cumulative long-term induced VMT impacts of the No Project Alternative would be consistent with those of the proposed Project as described in Section 4.8.6.2, and would be ***significant and unavoidable*** under both scenarios.

Overall, it is anticipated that there would be significant cumulative impacts related to VMT and that the No Project Alternative would have a ***cumulatively considerable contribution*** to that impact, which would also be the case for the proposed Project.

Cumulative Impacts Associated with Hazards

The cumulative impacts of the No Project Alternative related to hazards would be consistent with those of the proposed Project as described in Section 4.8.6.3. Such impacts would be ***less than significant*** for both the No Project Alternative and the proposed Project.

5.5.1.9 Utilities

5.5.1.9.1 Water Supply

5.5.1.9.1.1 Construction

As discussed in Section 4.9.1, *Water Supply*, construction of the proposed Project would not require or result in the relocation or construction of new or expanded water facilities that could result in a significant environmental impact. New conveyance infrastructure, consisting of upsized delivery pipelines or addition of new, localized pipelines, would be required to supply water to Terminal 9. As these conveyance improvements would be located in areas that would already be undergoing construction, their implementation would not result in any new environmental impacts. Moreover, water use during construction would not exceed regional water supply, as construction would use less water than Project operations for which there is available water supply (see the approved Water Supply Assessment (WSA) in **Appendix H**). The proposed Project would result in less than significant impacts from construction on water supply and infrastructure.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, Terminal 9, or the conveyance improvements associated with Terminal 9, which are proposed under the Project. In place of the proposed roadway improvements, the No Project Alternative would implement the LAMP Phase 2 roadway improvements, construction of which would require substantially less water than would construction of the proposed Project. Because sufficient water supplies would be available, as with the proposed Project, impacts of No Project Alternative construction on water supply and infrastructure would be ***less than significant***.

5.5.1.9.1.2 Operations

As discussed in Section 4.9.1, *Water Supply*, operation of the proposed Project would not require or result in the relocation or construction of new or expanded water facilities that could result in a significant environmental impact, and Project-related water demand would not exceed regional water supply, as indicated by LADWP in the approved WSA (see **Appendix H**). The impacts of proposed Project operations on water supply and infrastructure would be less than significant.

Operation of the No Project Alternative would not require water for landscaping, cooling towers, or operations and maintenance (e.g., cleaning) of Concourse 0 and Terminal 9. In addition, the No Project Alternative would not require water for new operational employees. Water demand associated with increased passenger activity under the No Project Alternative would be the same as under the proposed Project. Because a large portion of the future water demand would be associated with increased passenger activity, water demand under the No Project Alternative would only be marginally lower than under the proposed Project. Since sufficient water supplies would be available, as with the proposed Project, impacts of No Project Alternative operations on water supply and infrastructure would be ***less than significant***.

5.5.1.9.1.3 Cumulative

As discussed in Section 4.9.1, *Water Supply*, LADWP's WSA for the proposed Project evaluates the water demand of the proposed Project cumulatively with other known projects in LADWP's service area, using long-term demographic projections for population, housing, and employment from the 2015 Urban Water Management Plan (UWMP). Additionally, the water supply planning requirements of SB 610 provide an additional means of confirming that the cumulative future water demands of individual development projects can be met by planned water supplies. Therefore, the evaluation conducted by LADWP for the proposed Project WSA, along with the applicability of SB 610 to other development projects proposed within LADWP's service area, are inherently cumulative in nature. In the approved WSA for the proposed

Project (provided in **Appendix H**), LADWP concludes that the proposed Project's water demand can be accommodated based on the water demand projections in the 2015 UWMP when considered cumulatively with other projects within the LADWP service area. Moreover, SB 610 applies to other development projects proposed within LADWP's service area that may not be accounted for in the 2015 UWMP. Based on the findings of the WSA that the proposed Project's water demand can be accommodated, in conjunction with similar analyses for projects not accounted for in the 2015 UWMP, there will be an adequate regional water supply. Therefore, the proposed Project would result in less than significant cumulative environmental impacts on water supply.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9. In place of the proposed roadway improvements, the No Project Alternative would implement the LAMP Phase 2 roadway improvements, construction of which would require substantially less water than would construction of the proposed Project. Operation of the No Project Alternative would have a lower water demand than that under the proposed Project because the No Project Alternative would not require water for operating the new facilities; however, water demand under the No Project would still increase compared to existing conditions as a result of increased passenger activity. Because the proposed Project would have a less than significant cumulative impact on water supply, and because the No Project Alternative would have a lower demand than that of the proposed Project, the cumulative impacts from the No Project Alternative on water supply would be ***less than significant***.

5.5.1.9.2 Wastewater Generation

5.5.1.9.2.1 Construction

As discussed in Section 4.9.2, *Wastewater Generation*, construction of the proposed Project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities that could cause significant environmental effects, as there is adequate capacity at LADWP water reclamation plants to accommodate construction-related wastewater. New conveyance infrastructure, consisting of upsized collector pipelines or addition of a new, localized pipeline, would be required to provide service connections for Concourse 0. As these conveyance improvements would be located in areas that would already be undergoing construction, their implementation would not result in any new environmental impacts. Overall, the proposed Project would result in less than significant impacts from construction on wastewater conveyance and treatment capacity.

Under the No Project Alternative, the airfield improvements, Concourse 0, and Terminal 9 and its associated facilities would not be constructed and the conveyance improvements associated with Concourse 0 would not be required. The LAMP Phase 2 roadway system would be constructed in lieu of the landside improvements proposed under the Project. Construction of the LAMP Phase 2 roadway improvements would generate substantially less wastewater than would construction of the proposed Project. As with the proposed Project, construction of the No Project Alternative would result in ***less than significant*** impacts on wastewater conveyance and treatment capacity.

5.5.1.9.2.2 Operations

As discussed in Section 4.9.2, *Wastewater Generation*, operation of the proposed Project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, which could cause significant environmental effects, as there would be adequate existing treatment capacity at the Hyperion Water Reclamation Plant (HWRP) to accommodate operational wastewater flows. The proposed Project would result in less than significant impacts from operations on wastewater conveyance and treatment capacity.

Operation of the No Project Alternative would not result in wastewater generation by new operational employees; however, wastewater generation associated with increased passenger activity under the No

Project Alternative would be the same as under the proposed Project. Because the majority of future wastewater generation would be associated with increased passenger activity, wastewater generation under the No Project Alternative would only be marginally lower than under the proposed Project. Since sufficient wastewater treatment capacity would be available, as with the proposed Project, operation of the No Project Alternative would result in ***less than significant*** impacts on wastewater conveyance and treatment capacity.

5.5.1.9.2.3 Cumulative

As discussed in Section 4.9.2, *Wastewater*, The City of Los Angeles' projection of future wastewater generation within the Hyperion Service Area, including at HWRP and the Donald C. Tillman Water Reclamation Plant (DCTWRP), is cumulative in nature and takes into account projected population increases, as well as future commercial and industrial activity within the City and contract agencies. The projections are based in part on LADWP's 2015 UWMP in conjunction with census data prepared by SCAG, and account for projected economic activity, weather, and water conservation activities. Together, wastewater from the proposed Project (approximately 0.03 mgd) and the cumulative projects at or adjacent to LAX (approximately 0.425 mgd), would generate approximately 0.455 mgd of wastewater, which would not cause HWRP to exceed its treatment capacity. Therefore, cumulative projects would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, and the proposed Project would result in less than significant cumulative environmental impacts on wastewater.

The No Project Alternative would not involve construction of the airfield improvements, Concourse 0, or Terminal 9. In place of the proposed roadway improvements, the No Project Alternative would implement the LAMP Phase 2 roadway improvements, construction of which would generate substantially less wastewater than would construction of the proposed Project. Operation of the No Project Alternative would generate less wastewater than the proposed Project because the No Project Alternative would not generate wastewater from operating the new facilities; however, wastewater generation under the No Project would still increase compared to existing conditions as a result of increased passenger activity. Because the proposed Project would have a less than significant cumulative impact on wastewater, and because the No Project Alternative would generate less wastewater than the proposed Project, the cumulative impacts from the No Project Alternative on wastewater would be ***less than significant***.

5.5.2 Alternative 2: Concourse 0 Only

5.5.2.1 Air Quality and Human Health Risk

5.5.2.1.1 Air Quality

5.5.2.1.1.1 Construction

Emissions

Alternative 2 would include the construction of all proposed Project components except for Terminal 9 and its associated facilities. As discussed in Section 4.1.1, *Air Quality*, temporary runway closures during construction of the proposed Project would result in short-term significant and unavoidable construction-related indirect emissions of CO, VOC, NO_X, and SO_X. Construction activities associated with the proposed Project would also result in significant and unavoidable direct emissions of NO_X that would occur in four of the years during the construction period. The short-term impacts caused by temporary runway closures would occur under both the proposed Project and Alternative 2. With respect to impacts from ongoing construction activities, because Alternative 2 would omit the construction of Terminal 9 and its associated facilities, it would have reduced emissions of CO, VOC, NO_X, SO_X, PM_{10}, and $PM_{2.5}$ related to

ongoing construction activities as compared to the proposed Project. The direct construction NO_X emissions would exceed the construction daily significance threshold for two of the years during the construction period. The same mitigation measures would apply as those recommended for the proposed Project. Nevertheless, construction-related impacts with respect to regional emissions of CO, VOC, NO_X, and SO_X under Alternative 2 would still be ***significant and unavoidable***.

Concentrations

The proposed Project would result in a less than significant impact with respect to localized concentrations of CO, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ during construction. Because Alternative 2 would omit the construction of Terminal 9 and its associated facilities, concentrations of criteria air pollutants would be expected to be less than the proposed Project. Construction concentration impacts are driven by the roadway improvements, which are situated in closest proximity to off-site receptors. Because Alternative 2 would include construction of the majority of the roadway improvements proposed as part of the Project, construction concentrations associated with Alternative 2 would be similar to the proposed Project. As with the proposed Project, it is expected that construction-related concentrations of CO, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ under Alternative 2 would be ***less than significant***.

5.5.2.1.1.2 Operations

Emissions

Alternative 2 would include all proposed Project components except for Terminal 9 and its associated facilities, including the Terminal 9 parking facility and APM station. As discussed in Section 4.1.1, *Air Quality*, operation of the proposed Project would result in significant and unavoidable regional emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$. These operations-related emissions would be driven by increased aircraft activity that would occur irrespective of the Project. Thus, as with the proposed Project, it is expected that operations-related impacts with respect to regional emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$ under Alternative 2 would be ***significant and unavoidable***.

Concentrations

The proposed Project would result in significant and unavoidable localized concentrations of PM_{10}. As discussed in Section 4.1.1, *Air Quality*, localized concentrations of PM_{10} would be driven by road dust from traffic and would occur within the ITF West facility and along the roadways leading to that facility, along 98th Street and Aviation Boulevard at the entrance to the CONRAC under both the proposed Project and Without Project scenarios, and at the location of the new CTA entry roadway under the proposed Project. It is expected that, under Alternative 2, traffic that would otherwise use the Terminal 9 parking facility under the proposed Project would be redirected to other parking areas, including at the ITF West and the CONRAC. Therefore, it is expected that the operations-related local concentrations of PM_{10} would be greater under Alternative 2 than under the proposed Project; impacts under both would be ***significant and unavoidable***.

Under both the proposed Project and Alternative 2, local concentrations of NO_2 would be driven by aircraft activity. Although Alternative 2 would include the airfield improvements proposed under the Project, the omission of Terminal 9 would result in an increase in aircraft taxi time estimated to be 8.5 percent under Alternative 2 as compared to the proposed Project, as shown in **Table 5-8**. Although operation of the proposed Project would result in a less than significant impact with respect to local concentrations of NO_2, it is expected that the increased aircraft taxi times under Alternative 2 would result in a ***new significant and unavoidable impact*** with respect to local concentrations of NO_2.

Table 5-8
Total Taxi Idle Times - Proposed Project Compared to Alternative 2

Total Taxi Time, min/LTO		Change in Taxi Time Relative to Proposed Project	
2028 Proposed Project	2028 Alternative 2	min/LTO	Percent
36.40	39.48	3.09	8.5%

Prepared by: CDM Smith, August 2020.

Key:
min/LTO = minutes per landing and takeoff

As shown in Table 4.1.1-14, localized concentrations of CO, SO_2, and $PM_{2.5}$ associated with the proposed Project would be less than significant when compared to baseline conditions. Localized concentrations of CO, and SO_2 are driven by emissions from aircraft operations, which would be higher under Alternative 2 as compared to the proposed Project. Despite the increase in emissions, an 8.5 percent increase in taxi idle times under Alternative 2 would not result in localized concentrations of these pollutants that would approach the respective thresholds of significance. Localized concentrations of $PM_{2.5}$ are driven by vehicle traffic, which would be higher at peak locations under Alternative 2 as compared to the proposed Project, but would also not result in localized concentrations that would approach the $PM_{2.5}$ threshold. Therefore, as with the proposed Project, it is expected that operational impacts from Alternative 2 with respect to local effects of the emissions of CO, SO_2, and $PM_{2.5}$ would be ***less than significant***.

5.5.2.1.1.3 Cumulative

Alternative 2 would include the construction and operation of all proposed Project components except for Terminal 9, the Terminal 9 parking facility, and Terminal 9 APM station. As discussed above, construction of Alternative 2 would have a slightly lower impact on air quality than the proposed Project, while operations under Alternative 2 would have an equal or greater impact on air quality than the proposed Project. As discussed in Section 4.1.1, *Air Quality*, the proposed Project, in conjunction with other cumulative projects, would have a cumulatively significant and unavoidable impact on air quality, and the proposed Project's contribution to that impact would be cumulatively considerable. Because the proposed Project would have a significant and unavoidable cumulative impact on air quality, and because Alternative 2 would have an equal or greater impact on air quality than the proposed Project, the cumulative impacts from Alternative 2 on air quality would be ***significant and unavoidable*** and the contribution of Alternative 2 would be ***cumulatively considerable***.

5.5.2.1.2 Human Health Risk

5.5.2.1.2.1 Construction

Alternative 2 would include the construction of all proposed Project components except for Terminal 9, the Terminal 9 parking facility, and Terminal 9 APM station. Because Alternative 2 would omit the construction of Terminal 9 and its associated facilities, there would be less construction than the proposed Project, with a related reduction in the concentrations of TAC under Alternative 2 as compared to the proposed Project. As with the proposed Project, construction-related impacts to human health from TAC under Alternative 2 would be ***less than significant***.

5.5.2.1.2.2 Operations

Operations-related emissions would be driven by increased aircraft activity, which would occur irrespective of the Project. Although Alternative 2 would include the airfield improvements proposed under the Project, the omission of Terminal 9 would result in an increase in aircraft taxi time, consequently resulting in an increase in emissions of TAC as compared to the proposed Project from additional fuel

burn. Even though TAC emissions would be slightly higher, as with the proposed Project, operations-related impacts to human health risk associated with Alternative 2 would be ***less than significant***. (Note that Section 4.1.2.5.1.2 presents the impacts of the 2028 Without Project scenario. This scenario does not include the airfield improvements that would occur under both the proposed Project and Alternative 2. Aircraft taxi times under the 2028 Without Project scenario would be even higher than under Alternative 2, and would thus result in higher emissions of TAC from additional fuel burn. Operational emissions of TAC from aircraft under Alternative 2 would be lower than under the 2028 Without Project scenario and higher than the proposed Project).

5.5.2.1.2.3 Cumulative

Alternative 2 would include the construction and operation of all proposed Project components except for Terminal 9, the Terminal 9 parking facility, and Terminal 9 APM station. Because Alternative 2 would omit Terminal 9 and its associated facilities, there would be a lower concentration of TAC from construction and operation compared to the proposed Project. As discussed in Section 4.1.2, *Human Health Risk*, cumulative impacts associated with the proposed Project would be less than significant impact. Therefore, as with the proposed Project, the cumulative impacts from Alternative 2 on human health risk would be ***less than significant***.

5.5.2.2 Cultural Resources (Historical Resources)

5.5.2.2.1 Construction

Alternative 2 proposes the construction of all proposed Project components with the exception of Terminal 9 and the Terminal 9 APM and parking facility. As with the proposed Project, construction of Alternative 2 would not require demolition or alteration of any of the four properties that have been identified as eligible for historic listing in the near vicinity of the Project site (i.e., the 1961 ATCT, the former McCulloch Building, the former Union Savings and Loan building, and the former Aircraft School Building). As with the proposed Project, construction of Alternative 2 would not cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5 and impacts on historical resources would be ***less than significant***.

5.5.2.2.2 Operations

Alternative 2 would include Concourse 0 and the same landside improvements that are proposed as part of the Project. Therefore, impacts on the former Union Savings and Loan Building and the former Aircraft School Building would be the same as under the proposed Project (see Table 5-3). For both resources, the proposed improvements would alter the immediate surroundings of the historical buildings, but not to a level that would result in a significant impact. Under Alternative 2, Concourse 0 and the landside improvements would alter the immediate surroundings of the 1961 ATCT, and the landside improvements would alter the surroundings of the former McCulloch Building. However, because this alternative would not include Terminal 9 and its associated facilities (parking facility, APM station, and Terminal 9 elevated roadways), the immediate surroundings of these historical resources would be altered to a lesser degree than under the proposed Project. As with the proposed Project, these alterations would not materially impair the buildings such that they can no longer convey their historic significance; therefore, impacts on historical resources associated with operation of Alternative 2 would be ***less than significant***.

5.5.2.2.3 Cumulative

Alternative 2 would include the construction and operation of all proposed Project components except for Terminal 9, the Terminal 9 parking facility, and Terminal 9 APM station. As discussed above, construction and operation of Alternative 2 would have a lower impact on historical resources than the proposed Project. As discussed in Section 4.2, *Cultural Resources (Historical Resources)*, the proposed

Project would have a cumulatively less than significant impact on historical resources. Because the proposed Project would have a less than significant cumulative impact on historical resources, and because Alternative 2 would have a lower impact on historical resources than the proposed Project, the cumulative impacts from Alternative 2 on historical resources would be ***less than significant***.

5.5.2.3 Energy

5.5.2.3.1 Construction

Alternative 2 would include construction of all the proposed Project components, with the exception of Terminal 9 and the Terminal 9 APM station and parking facility. Energy use during construction of Alternative 2 would be lower than under the proposed Project because fewer components would be constructed. Construction would comply with applicable plans and policies, including those related to building energy use and fuel efficiency. As a result, construction of this alternative would not result in wasteful, inefficient, or unnecessary consumption of energy resources, nor would it conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As with the proposed Project, construction of Alternative 2 would result in ***less than significant*** impacts on energy resources.

5.5.2.3.2 Operations

Operation of Alternative 2 would not require electricity or natural gas for Terminal 9 and its associated facilities, therefore energy demand from operation of the Alternative 2 facilities would be less than the proposed Project. Consumption of Jet A by aircraft and APUs and consumption of diesel and gasoline by GSE would be similar to the proposed Project, as the level of aircraft activity would be the same under both alternatives. Operation of Alternative 2 would result in slightly less demand for vehicle-related fuels due to the lower level of employment without Terminal 9. State and local plans pertaining to building, lighting, and fuel efficiency would apply to Alternative 2; therefore, operation of Alternative 2 would not result in wasteful, inefficient, or unnecessary consumption of energy resources, nor would it conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As with the proposed Project, operation of Alternative 2 would result in ***less than significant*** impacts on energy resources.

5.5.2.3.3 Cumulative

Alternative 2 would include the construction and operation of all proposed Project components except for Terminal 9, the Terminal 9 parking facility, and Terminal 9 APM station. As discussed above, construction and operation of Alternative 2 would have a lower impact on energy resources than the proposed Project. As discussed in Section 4.3, *Energy*, the proposed Project would have a cumulatively less than significant impact on energy resources. Because the proposed Project would have a less than significant cumulative impact on energy resources, and because Alternative 2 would have a lower impact on energy resources than the proposed Project, the cumulative impacts from Alternative 2 on energy resources would be ***less than significant***.

5.5.2.4 Greenhouse Gas Emissions

5.5.2.4.1 Construction and Operations

Alternative 2 would include the construction of all proposed Project components except for Terminal 9 and its associated facilities, including the Terminal 9 parking facility and APM station. Consequently, GHG emissions are expected to be less than that predicted for the proposed Project. Although construction-related GHG emissions would be less than the proposed Project, emissions from the construction of Alternative 2 would still result in a net increase in short-term and temporary emissions of GHGs from construction-related activities.

Although Alternative 2 would include the airfield improvements proposed under the Project, the omission of Terminal 9 would result in an increase in aircraft taxi time estimated to be 8.5 percent under Alternative 2. The increase in aircraft taxi time would result in an increase in operational GHG emissions compared to the proposed Project from additional fuel burn. Therefore, overall GHG emissions associated with airport operations would be expected to result in a net increase over baseline conditions that would be more severe than under the proposed Project.

The amortized construction emissions combined with operational emissions under Alternative 2 would result in total annual emissions of GHGs that would result in a net increase over baseline conditions. Therefore, as with the proposed Project, impacts of GHG emissions from Alternative 2 would be ***significant and unavoidable***.

5.5.2.4.2 Cumulative

Alternative 2 would include the construction and operation of all proposed Project components except for Terminal 9, the Terminal 9 parking facility, and Terminal 9 APM station. As discussed above, construction of Alternative 2 would have a slightly lower impact on GHG emissions than the proposed Project, while operations under Alternative 2 would have a greater impact on GHG emissions than the proposed Project. As discussed in Section 4.4, *Greenhouse Gas Emissions*, implementation of the proposed Project would result in a cumulatively significant and unavoidable impact on GHG emissions, and the proposed Project's contribution would be cumulatively considerable. Because the proposed Project would have a significant and unavoidable cumulative impact on GHG emissions, and because Alternative 2 would have an equal or greater impact on GHG emissions than the proposed Project, the cumulative impacts with implementation of Alternative 2 on GHG emissions would be significant and unavoidable and the contribution of Alternative 2 to this impact would be ***cumulatively considerable***.

5.5.2.5 Hazardous Materials

5.5.2.5.1 Construction

Alternative 2 proposes the construction of all proposed Project components, with the exception of Terminal 9 and the Terminal 9 APM station and parking facility. As a result, as shown in Table 5-4, Alternative 2 would have the same impacts as the proposed Project on the Terminal 1 Fuel Valve Vault site, the AlliedSignal/Honeywell site, and the PFAS area of interest. As with the proposed Project, these impacts would be less than significant. Alternative 2 would not involve construction of Terminal 9 and its associated facilities. As such, construction of this alternative would avoid closure of up to three monitoring wells associated with remediation of the UAL MOC site that would occur under the proposed Project. As discussed in Section 4.5, *Hazardous Materials*, closure of the monitoring wells would not interfere with free product removal at the UAL MOC site and, consequently, the proposed Project would not have a significant impact on human health or the environment. Therefore, Alternative 2 would not avoid any significant impacts related to hazardous materials. As with the proposed Project, construction of Alternative 2 would result in a ***less than significant impact*** related to hazardous materials.

5.5.2.5.2 Operations

Operations under Alternative 2 would not involve excavation, extraction of groundwater, or any activity that could damage or physically interfere with ongoing or future contamination monitoring or remediation activities at the listed sites. As such, as with the proposed Project, operation of Alternative 2 would have ***no impact*** related to hazardous materials.

5.5.2.5.3 Cumulative

Alternative 2 would include the construction and operation of all proposed Project components except for Terminal 9, the Terminal 9 parking facility, and Terminal 9 APM station. As discussed above,

construction and operation of Alternative 2 would have a lower impact on hazardous materials than the proposed Project. As discussed in Section 4.5, *Hazardous Materials*, the proposed Project would have a cumulatively less than significant impact on hazardous materials. Because the proposed Project would have a less than significant cumulative impact on hazardous materials, and because Alternative 2 would have a lower impact on hazardous materials than the proposed Project, the cumulative impacts from Alternative 2 on hazardous materials would be ***less than significant***.

5.5.2.6 Land Use and Planning

5.5.2.6.1 Construction and Operations

Alternative 2 would include construction and operation of all the proposed Project components, with the exception of Terminal 9 and the Terminal 9 APM station and parking facility. Although this alternative would include the proposed roadway improvements, without construction of the proposed APM station, Alternative 2 would not advance regional and local policies aimed at enhancing mobility options for LAX passengers to the same extent as the proposed Project. However, the omission of Terminal 9 and the Terminal 9 APM station would not cause significant environmental impacts due to inconsistency with these policies. As described in Sections 5.5.2.1.1 and 5.5.2.4 above, GHG and vehicle emissions under this alternative would increase compared to existing baseline conditions, although to a lesser extent than the proposed Project. However, as with the proposed Project, Alternative 2 would comply with the overall intent of these land use plans and Alternative 2 would result in ***less than significant*** impacts to land use and planning.

5.5.2.6.2 Cumulative

Alternative 2 would include the construction and operation of all proposed Project components except for Terminal 9, the Terminal 9 parking facility, and Terminal 9 APM station. As discussed above, Alternative 2 would not advance regional and local policies aimed at enhancing mobility options for LAX passengers to the same extent as the proposed Project. As discussed in Section 4.6, *Land Use and Planning*, the proposed Project would have a cumulatively less than significant impact on land use. Because the proposed Project would have a less than significant cumulative impact on land use, and because Alternative 2 would, like the proposed Project, comply with the overall intent of these plans, the cumulative impacts from Alternative 2 on land use would be ***less than significant***.

5.5.2.7 Noise

5.5.2.7.1 Aircraft Noise

5.5.2.7.1.1 Construction

Alternative 2 would include construction of all the airfield improvements, including the proposed modifications to the runway exits. As with the proposed Project, this alternative would require temporary runway closures in 2023 and 2024, which would result in temporary changes in aircraft noise exposure levels in nearby areas. As with the proposed Project, for some noise-sensitive land uses, the temporary increase in aircraft noise during construction of Alternative 2 would result in a short-term (i.e., 4.5-month) ***significant and unavoidable impact***.

5.5.2.7.1.2 Operations

Future aircraft activity under Alternative 2 would be the same as under the proposed Project; therefore, future aircraft noise impacts would be the same under both. As with the proposed Project, aircraft operations under Alternative 2 would increase the area that would be subject to elevated aircraft noise levels (i.e., higher than 65 dBA CNEL), which would expose additional residences and other noise-sensitive uses to aircraft noise that exceed the threshold of significance. As with the proposed Project, even with

implementation of the proposed mitigation measure (MM-AN (ATMP)-1, Sound Insulation Programs), impacts associated with aircraft noise under Alternative 2 would be ***significant and unavoidable.***

5.5.2.7.1.3 Cumulative

As discussed in Section 4.7.1, *Aircraft Noise*, none of the development projects identified in Chapter 3, *Overview of Project Setting,* would have aircraft operations that could contribute to cumulative aircraft noise impacts. Therefore, cumulative impacts from aircraft noise under the proposed Project would be less than significant (i.e., although aircraft noise impacts associated with the proposed Project, alone, would be significant and unavoidable, there are no other projects involving aircraft activity; hence there is no *cumulative* aircraft noise and there would not be a significant cumulative impact). The lack of other projects that contribute to cumulative aircraft noise impacts applies to Alternative 2 in the same way as the proposed Project. As with the proposed Project, under Alternative 2, cumulative impacts associated with aircraft noise would be ***less than significant***.

5.5.2.7.2 Roadway Traffic Noise

5.5.2.7.2.1 Operations

Under Alternative 2, the roadway alignments would be the same as the proposed Project, except that the access to Terminal 9 would not be constructed. The proximity of the roadway alignments that would be construction under Alternative 2 would be the same as the proposed Project with respect to where noise-sensitive receptors are located and the roadways would carry a similar amount of traffic. The most notable difference between Alternative 2 and the proposed Project would be that, in the absence of Terminal 9, there would not be the extension of Jetway Boulevard south of Century Boulevard that would provide access to and from Terminal 9. That roadway is not in close proximity to noise-sensitive receptors. For these reasons, the roadway traffic noise levels on the local roadway network projected for 2028 and the associated increases in roadway traffic noise compared to baseline conditions would not be materially different between Alternative 2 and the proposed Project. As with the proposed Project, impacts under Alternative 2 would be ***less than significant***.

5.5.2.7.2.2 Cumulative

As discussed above, Alternative 2 would have a materially similar impact on roadway traffic noise as the proposed Project. As discussed in Section 4.7.2, *Roadway Traffic Noise*, the proposed Project would have a less than significant cumulative impact on roadway traffic noise. Because the proposed Project would have a less than significant cumulative impact on roadway traffic noise, and because Alternative 2 would have a similar impact on roadway traffic noise as the proposed Project, the cumulative impacts from Alternative 2 on roadway traffic noise would be ***less than significant***.

5.5.2.7.3 Construction Traffic and Equipment Noise and Vibration

5.5.2.7.3.1 Construction

Alternative 2 would include construction of all proposed Project components with the exception of Terminal 9, and the Terminal 9 APM station and parking facility. As with the proposed Project, construction of Alternative 2 would result in construction noise associated with airfield improvements, roadway improvements, and Concourse 0 construction. Because Alternative 2 would have less construction than the proposed Project, there would be fewer peak daily construction trips, and construction traffic noise would be reduced as compared to the proposed Project. As with the proposed Project, impacts related to construction traffic noise would be less than significant. Alternative 2 would include the same roadway improvements as the proposed Project. As impacts associated with construction vibration would be associated with construction of the roadways, construction vibration

impacts would be the same as with the proposed Project. As with the proposed Project, impacts from construction equipment vibration would be less than significant.

As with the proposed Project, construction of the airfield improvements, roadways, and Concourse 0 would generate noise from construction equipment. The potential noise impacts from each construction activity on the nearest noise-sensitive receptors are shown in **Table 5-9**. As explained above in Section 5.5.1.7.3, the noise levels shown in the table are very conservative; actual construction-related noise levels associated with Alternative 2 would be lower than those identified in Table 5-9. Because the Terminal 9 facilities would not be constructed, as shown in Table 5-5 and Table 5-9, Alternative 2 would avoid significant impacts associated with the proposed Project at one Receptor Site (R7 Residence Inn by Marriott), and reduce, but not avoid, significant impacts associated with the proposed Project at four Receptor Sites (R8 Sheraton Gateway Hotel, R9 H Hotel/Homewood Suites, R10 Hyatt Regency LAX, and R11 Courtyard Los Angeles LAX/Century Boulevard). Nevertheless, as shown in Table 5-9, implementation of Alternative 2 would result in construction noise levels above the threshold of significance at several noise-sensitive receptors due to the construction of Concourse 0 and the roadway improvements, as well as from the combined construction activities. As with the proposed Project, Mitigation Measures MM-N (ATMP)-1, Construction Noise Control Plans, MM-N (ATMP)-2, Construction Scheduling, and MM-N (ATMP)-3, Construction Equipment, would reduce impacts associated with construction traffic and equipment noise under Alternative 2 to a level that is ***less than significant.***

Noise associated with the use of staging areas for Alternative 2 would be the same as the proposed Project (see Table 4.7.3-6). As with the proposed Project, impacts would be ***less than significant***.

5.5.2.7.3.2 Cumulative

As discussed above, Alternative 2 would have a lower impact on construction traffic and equipment noise and vibration than the proposed Project. As discussed in Section 4.7.3, *Construction Traffic and Equipment Noise and Vibration*, the proposed Project would have a less than significant cumulative impact on construction traffic and equipment noise and vibration. Because the proposed Project would have a less than significant cumulative impact on construction traffic and equipment noise and vibration, and because Alternative 2 would have a lower impact on construction traffic and equipment noise and vibration than the proposed Project, the cumulative impacts from Alternative 2 on construction traffic and equipment noise and vibration would be ***less than significant***.

Table 5-9
Construction Noise Levels at Noise-Sensitive Receptor Sites - Alternative 2

ID	Receptor	Background Conditions[1] CNEL (dBA)	Distance from Construction Activity (feet)	Construction Activity	Construction Equipment CNEL (dBA)	Total[2] CNEL (dBA)	Significance Threshold[3]	Above Threshold?
R1	Residential development in Playa del Rey	67.8	3,200	Airfield improvements	60.5	68.5	72.8	No
R2	Saint Bernard High School	67.7	2,500	Airfield improvements	62.6	68.9	72.7	No
R3	Residential development along southern edge of Westchester	68.4	1,500	Airfield improvements	67.1	70.8	73.4	No
R4	Park West Apartments on Lincoln Boulevard	66.3	1,200	Airfield improvements	69.0	70.9	71.3	No
R5	Residential uses along West 88th Street near Liberator Ave	67.9	2,500	Airfield improvements	62.6	69.0	72.9	No
R6	Residential uses near Westchester Parkway and Kittyhawk Ave	72.0	1,750	Airfield improvements	65.7	72.9	77.0	No
		72.0	2,850	Terminal (C0) construction	61.9	72.4	77.0	No
		72.0	1,500	Roadway construction	67.5	73.3	77.0	No
		72.0	NA	Combined airfield improvements, terminal (CO) construction, and roadway construction	70.4	74.3	77.0	No
R7	Residence Inn by Marriott Los Angeles LAX/Century Boulevard	70.2	2,900	Terminal (C0) construction	61.7	70.9	75.2	No
		70.2	900	Roadway construction	71.9	74.1	75.2	No
		70.2	NA	Combined terminal (C0) and roadway construction	72.3	74.4	75.2	No
R8	Sheraton Gateway Los Angeles Hotel	69.3	1,600	Terminal (C0) construction	66.9	71.3	74.3	No
		69.3	100	Roadway construction	91.0	91.0	74.3	Yes[4]
		69.3	NA	Combined terminal (C0) and roadway construction	91.0	91.1	74.3	Yes[4]

Table 5-9
Construction Noise Levels at Noise-Sensitive Receptor Sites - Alternative 2

ID	Receptor	Background Conditions[1] CNEL (dBA)	Distance from Construction Activity (feet)	Construction Activity	Construction Equipment CNEL (dBA)	Total[2] CNEL (dBA)	Significance Threshold[3]	Above Threshold?
R9	H Hotel Los Angeles/ Homewood Suites by Hilton Los Angeles International Airport	70.4	1,200	Terminal (C0) construction	69.4	72.9	75.4	No
		70.4	55	Roadway construction	96.2	96.2	75.4	Yes[4]
		70.4	NA	Combined terminal (C0) and roadway construction	96.2	96.2	75.4	Yes[4]
R10	Hyatt Regency Los Angeles International Airport	73.4	350	Terminal (C0) construction	80.1	80.9	78.4	Yes[4]
		73.4	150	Roadway construction	87.5	87.7	78.4	Yes[4]
		73.4	NA	Combined terminal (C0) and roadway construction	88.2	88.3	78.4	Yes[4]
R11	Courtyard Los Angeles LAX/Century Boulevard	71.7	1,000	Terminal (C0) construction	71.0	74.4	76.0	No
		71.7	150	Roadway construction	87.5	87.6	76.0	Yes[4]
		71.7	NA	Combined terminal (C0) and roadway construction	87.6	87.7	76.0	Yes[4]

Source: HMMH, CDM Smith, 2020.

Notes:

1 Background condition obtained through AEDT using 24-hour CNEL dBA.

2 Background plus Alternative 2 construction noise.

3 Significance Threshold = Background CNEL + 5 dBA

4 Construction equipment noise levels conservatively assume all equipment would be utilized at the same time and at all hours of the 24-hour day, both of which are unlikely.

Key:
C0 = Concourse 0

5.5.2.8 Transportation

5.5.2.8.1 Plans, Programs, Ordinances, and Policies Analysis

Consistent with the methodology used in Section 4.8.5.1.1. for the proposed Project, a review was conducted to determine whether Alternative 2 would conflict with a transportation-related City or regional plan, program, ordinance, or policy addressing the circulation system (including transit, roadways, bicycle, and pedestrian facilities) that was adopted to protect the environment. Transportation policies or standards adopted to protect the environment include those that support multimodal transportation options and a reduction in VMT.

Similar to what was discussed in Table 4.8-11 and Table 4.8-12 for the proposed Project, Alternative 2 would not be inconsistent with transportation-related plans, policies, ordinances, and programs; hence, the impact of both Alternative 2 and the proposed Project would be ***less than significant*** relative to plans, programs, ordinances, and policies.

5.5.2.8.2 VMT Analysis

An additional model run for Alternative 2 was not undertaken due to the similarity of this alternative (with the exception of Terminal 9, and the Terminal 9 APM station and parking facility) to the proposed Project. Such a model run would not provide meaningful information regarding the VMT impacts of Alternative 2 as compared to the proposed Project. It is anticipated that the employee VMT rate (i.e., VMT per employee) would be similar to the Projected Future Conditions Baseline. This is because, as with the Projected Future Conditions Baseline, the new employees for Concourse 0 would use the employee parking lot near the ITF West and the new proposed Project roadways would not influence their trip choice and routing.

The access to Concourse 0 is provided via the CTA. Under the proposed Project, passengers drop off and pick up are allocated to CTA and Terminal 9. Under Alternative 2 all passenger drop off and pick up activity will occur in the CTA. The total passenger VMT under Alternative 2 is expected to be slightly more than the proposed Project, as passengers accessing Terminal 9 directly from northbound Sepulveda Boulevard or Jetway Boulevard would be required to access the CTA using the new proposed Project roadways.

Alternative 2 is estimated to have 1,472 new employees at Concourse 0 (less than the proposed Project). Because the location of employee parking destinations would be the same as under the Projected Future Conditions Baseline, however, the VMT per employee rate would be the same. Thus, the VMT per employee under Alternative 2 is not 15 percent below the baseline threshold of significance of 20.4 VMT per employee and would be a ***significant impact***. Because Alternative 2 has fewer employees than the proposed Project due to the elimination of Terminal 9, however, the magnitude of the impact is less than the proposed Project. With implementation of the mitigation proposed in Section 4.8.5.2.2, the impact related to employment VMT would be reduced to ***less than significant*** for both Alternative 2 and the proposed Project.

Alternative 2 would also result in a net increase in total passenger VMT over the 2028 Projected Future Conditions Baseline. The magnitude of the impact would be slightly higher than the proposed Project due to additional travel distance for passengers traveling in the CTA (i.e., without the parking facility proposed as part of Terminal 9, some proportion of passengers that would have used Terminal 9 would travel to/from the main portion of the CTA, which is slightly farther away). Therefore, Alternative 2 would result in a significant impact. Even with implementation of the mitigation package for the proposed Project as described in Section 4.8.5.2.2, the passenger VMT impact would remain a ***significant and unavoidable impact*** for both Alternative 2 and the proposed Project

Roadway improvements under Alternative 2 are essentially the same as those of the proposed Project. Therefore, the short-term and long-term induced VMT impacts of Alternative 2 would be consistent with those of the proposed Project as described in Section 4.8.5.4 and would be a ***significant and unavoidable impact*** for both Alternative 2 and the proposed Project.

5.5.2.8.3 Hazard Analysis

Impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from [a] project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts, as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. In the case of Alternative 2, these conflicts may be created by ramp configurations or through the placement of ramps, loading areas, or intersections in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections. These impacts were evaluated for permanent conditions after Project completion.

Consistent with the proposed Project, this analysis focused upon locations where the new roadways introduce a new vehicle access point and/or driveways to the site. The following five locations that would access the Project site from the public right-of-way and that may be affected by Alternative 2 driveways and infrastructure are:

- Century Boulevard and Jetway Boulevard
- Sepulveda Boulevard and 96th Street
- Sepulveda Boulevard and Century Boulevard
- Sepulveda Boulevard south of World Way
- Vicksburg Avenue between 96th Street and 98th Street

Based on the proposed infrastructure, level of existing activity, and anticipated level of activity attributable to the proposed Project, the proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) and would comply with City design standards. Moreover, the land uses associated with Alternative 2 (i.e., roadway improvements and Concourse 0) would not be incompatible with existing land uses in the Project area, which consist of airport and commercial uses. For these reasons, the impact would be ***less than significant*.**

Freeway Safety Analysis

The LADOT interim guidance for freeway safety analysis applied to the proposed Project, described in Section 4.8.5.5.1, was also used to assess freeway safety impacts relative to Alternative 2. This alternative has similar passenger levels of activity and a lower number of total employees relative to the proposed Project; therefore, Alternative 2 would generate less trips on a daily basis than the proposed Project. As a result, it is anticipated that the vehicle trips on freeway off-ramps would be less than the proposed Project. Therefore, as with the proposed Project, Alternative 2 would not have a substantial effect at the analyzed location or have a negative effect on traffic safety.

Overall, implementation of Alternative 2 would have a ***less than significant impact*** relative to hazards, as would also be the case for the proposed Project.

5.5.2.8.4 Cumulative Impacts

Cumulative Impacts Associated with Plans, Programs, Ordinances, and Policies

The cumulative impacts of Alternative 2 related to plan consistency would be consistent with those of the proposed Project, as described in Section 4.8.6.1, which would be ***less than significant.***

Cumulative Impacts Associated with VMT

Alternative 2 would have an estimated 1,472 new employees for Concourse 0 (i.e., less than the proposed Project in the absence of Terminal 9). The measure for employee VMT is efficiency based, and implementation of the VMT reduction strategies presented in Section 4.8.5.2.2 would reduce the project-related VMT per employee for Alternative 2 to a level that is 15 percent or more below the Projected Future Conditions Baseline VMT; specifically, mitigation would reduce the VMT per employee to 20.4 or less. Therefore, similar to the proposed Project, no cumulative impact would occur relative to employment VMT.

For passenger VMT, the Projected Future Conditions Baseline (2028) includes all the passenger activity projected to occur at that time. As such, there would be no significant cumulative passenger VMT impacts beyond what is already accounted for in the baseline. Relative to probable future passenger growth that would occur subsequent to 2028, the nature and level of increased VMT would generally be in proportion to the impact identified for the proposed Alternative 2. The increase in passenger VMT associated with Alternative 2, as compared to passenger VMT in the 2028 Projected Future Conditions Baseline, is primarily attributable to the 5.8 additional lane miles that would occur with the proposed Project roadway system improvements. As future passenger levels increase beyond 2028, the total passenger VMT would also increase from the additional passengers on that roadway system. The increase in total passenger VMT would be generally proportional to the increase in MAP, assuming the mode splits (i.e., percentages of passengers driving their own vehicles, taking TNCs, taking shuttles, using rental cars, taking transit, etc.) and mode assignments (i.e., percentages of vehicles going to/from the CTA, or the ITFs, or the CONRAC, etc.) would not change substantially from 2028 conditions. As such, there would be no cumulative passenger VMT impact in 2028 beyond what is already identified for that year, but total passenger VMT would increase in subsequent years. Based on the threshold of significance for passenger VMT being no net increase over Projected Future Conditions Baseline, that increase would represent a significant cumulative impact for passenger VMT. As described in Section 4.8.5.3, VMT reduction strategies are proposed as mitigation, but would not reduce the impact to less than significant. Such would also be the case for the cumulative impact, which would be ***significant and unavoidable***.

Cumulative long-term induced VMT impacts of Alternative 2 would be consistent with those of the proposed Project, as described in Section 4.8.6.2.

Overall, it is anticipated that there would be significant cumulative impacts related to VMT and that the proposed Alternative 2 would have a ***cumulatively considerable contribution*** to that impact.

Cumulative Impacts Associated with Hazards

The cumulative impacts of Alternative 2 related to hazards would be consistent with those of the proposed Project as described in Section 4.8.6.3. Such impacts would be ***less than significant*** for both Alternative 2 and the proposed Project.

5.5.2.9 Utilities

5.5.2.9.1 Water Supply

5.5.2.9.1.1 Construction

Alternative 2 would include construction of all the proposed Project components, with the exception of Terminal 9 and the Terminal 9 APM station and parking facility. Because Alternative 2 would not include Terminal 9, this alternative would avoid the conveyance improvements needed to provide service connections for Terminal 9. Water use during construction of Alternative 2 would be less than water use during construction of the proposed Project based on the lower level of development under this

alternative. As with the proposed Project, construction of Alternative 2 would result in ***less than significant*** impacts on water supply and infrastructure.

5.5.2.9.1.2 Operations

Operation of this alternative would not require water for Terminal 9 landscaping, the Terminal 9 cooling tower, or operations and maintenance (e.g., cleaning) of the terminal facility. Therefore, water demand from operation of the Alternative 2 facilities would be less than the proposed Project. Water demand associated with increased passenger activity under Alternative 2 would be the same as under the proposed Project. Because a large portion of the future water demand would be associated with increased passenger activity, water demand under Alternative 2 would only be marginally lower than under the proposed Project. Since sufficient water supplies would be available, as with the proposed Project, operation of Alternative 2 would result in ***less than significant*** impacts on water supply and infrastructure.

5.5.2.9.1.3 Cumulative

Alternative 2 would include the construction and operation of all proposed Project components except for Terminal 9, the Terminal 9 parking facility, and Terminal 9 APM station. As discussed above, construction and operation of Alternative 2 would have a lower impact on water supply than the proposed Project. As discussed in Section 4.9.1, *Water Supply*, the proposed Project would have a cumulatively less than significant impact on water supply. Because the proposed Project would have a less than significant cumulative impact on water supply, and because Alternative 2 would have a lower impact on water supply than the proposed Project, the cumulative impacts from Alternative 2 on water supply would be ***less than significant***.

5.5.2.9.2 Wastewater Generation

5.5.2.9.2.1 Construction

This alternative would require the same conveyance improvements for Concourse 0 that would be necessary under the proposed Project. However, wastewater generation from construction of Alternative 2 would be lower than the proposed Project based on the lower level of development under this alternative. As with the proposed Project, construction of Alternative 2 would result in ***less than significant*** impacts on wastewater conveyance and treatment capacity.

5.5.2.9.2.2 Operations

Operation of Alternative 2 would not result in wastewater generation by new employees at Terminal 9; however, wastewater generation associated with increased passenger activity under Alternative 2 would be the same as under the proposed Project. Because the majority of future wastewater generation would be associated with increased passenger activity, wastewater generation under Alternative 2 would only be marginally lower than under the proposed Project. Since sufficient wastewater treatment capacity would be available, as with the proposed Project, operation of Alternative 2 would result in ***less than significant*** impacts on wastewater conveyance and treatment capacity.

5.5.2.9.2.3 Cumulative

Alternative 2 would include the construction and operation of all proposed Project components except for Terminal 9, the Terminal 9 parking facility, and Terminal 9 APM station. As discussed above, construction and operation of Alternative 2 would have a lower impact on wastewater than the proposed Project. As discussed in Section 4.9.2, *Wastewater Generation*, the proposed Project would have a cumulatively less than significant impact on wastewater. Because the proposed Project would have a less than significant cumulative impact on wastewater, and because Alternative 2 would have a lower impact

on wastewater than the proposed Project, the cumulative impacts from Alternative 2 on wastewater would be ***less than significant***.

5.5.3 Alternative 3: Terminal 9 Only

5.5.3.1 Air Quality and Human Health Risk

5.5.3.1.1 Air Quality

5.5.3.1.1.1 Construction

Emissions

Alternative 3 proposes the construction of all proposed Project components except for Concourse 0. As discussed in Section 4.1.1, *Air Quality*, temporary runway closures during construction of the proposed Project would result in short-term significant and unavoidable construction-related indirect emissions of CO, VOC, NO_X, and SO_X. Construction activities associated with the proposed Project would also result in significant and unavoidable direct emissions of NO_X that would occur in four of the years during the construction period. The short-term impacts caused by temporary runway closures would occur under both the proposed Project and Alternative 3. With respect to impacts from ongoing construction activities, because Alternative 3 would omit the construction of Concourse 0, it would have reduced overall emissions of CO, VOC, NO_X, SO_X, PM_{10}, and $PM_{2.5}$ related to ongoing construction activities as compared to the proposed Project. The direct construction NO_X emissions would exceed the construction daily significance threshold for two of the years during the construction period. The same mitigation measures would apply as those recommended for the proposed Project. Nevertheless, it is expected that construction-related impacts with respect to regional emissions of CO, VOC, NO_X, and SO_X under Alternative 3 would still be ***significant and unavoidable***.

Concentrations

The proposed Project would result in a less than significant impact with respect to localized concentrations of CO, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ during construction. Because Alternative 3 would omit the construction of Concourse 0, concentrations of criteria air pollutants would be expected to be less than the proposed Project. Construction concentration impacts are driven by the roadway improvements, which are situated in closest proximity to off-site receptors. Because Alternative 3 would include construction of the same roadway improvements proposed as part of the Project, construction concentrations associated with Alternative 3 would be similar to the proposed Project. As with the proposed Project, it is expected that construction-related concentrations of CO, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ under Alternative 3 would be ***less than significant***.

5.5.3.1.1.2 Operations

Emissions

Alternative 3 would include all proposed Project components except for Concourse 0. As discussed in Section 4.1.1, *Air Quality*, operation of the proposed Project would result in significant and unavoidable regional emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$. These operations-related emissions would be driven by increased aircraft activity that would occur irrespective of the Project. Thus, as with the proposed Project, it is expected that operations-related impacts with respect to regional emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$ under Alternative 3 would be ***significant and unavoidable***.

Concentrations

The proposed Project would result in significant and unavoidable localized concentrations of PM_{10}. As discussed in Section 4.1.1, *Air Quality*, localized concentrations of PM_{10} would be driven by road dust from traffic and would occur near the intersection of 96th Street and Airport Boulevard, adjacent to the location of the ITF West, on Aviation Boulevard, at the entrance to the CONRAC, and at the location of the new CTA entry roadway. Under Alternative 3, instead of the construction of Concourse 0, the Concourse 0 would consist of a passenger parking lot. While the operation the parking lot would provide an alternative parking location for passengers traveling to the airport, and thus would reduce traffic volumes at the ITF West and CONRAC, it is anticipated that such reductions would be minimal. Near the intersection of 96th Street and Airport Boulevard, the peak localized concentration location, daily traffic volumes would be expected to decrease by approximately 2 percent under Alternative 3 as compared to the proposed Project, thereby resulting in a similar nominal decrease in localized concentrations of PM_{10} from road dust in that area. Traffic volume decreases at the peak location were estimated by summing modeled traffic volumes for the roadway links which make up the peak intersection under Alternative 3 and comparing them against the summed modeled traffic volumes for the roadway links which make up the peak intersection under proposed Project. Detailed calculations are provided in **Appendix C.7** of this EIR. Therefore, it is expected that the operations-related local concentrations of PM_{10} would be comparable under Alternative 3 to those under the proposed Project; impacts under both would be ***significant and unavoidable***.

Under both the proposed Project and Alternative 3, local concentrations of NO_2 would be driven by aircraft activity. Although Alternative 3 would include the airfield improvements proposed under the Project, it is anticipated that the omission of Concourse 0 would result in a 3.4 percent increase in aircraft taxi time under Alternative 3 as compared to the proposed Project, as shown in **Table 5-10**. Although operation of the proposed Project would result in a less than significant impact with respect to local concentrations of NO_2, it is expected that the increased aircraft taxi times under Alternative 3 would result in a ***new significant and unavoidable impact*** with respect to local concentrations of NO_2.

Table 5-10
Total Taxi Idle Times - Proposed Project Compared to Alternative 3

Total Taxi Time (min/LTO)		Change in Taxi Time Relative to Proposed Project	
2028 Proposed Project	2028 Alternative 3	min/LTO	Percent
36.40	37.65	1.25	3.4%

Prepared by: CDM Smith, August 2020.

Key:
min/LTO = minutes per landing and takeoff

As shown in Table 4.1.1-14, localized concentrations of CO, SO_2, and $PM_{2.5}$ associated with the proposed Project scenario would be less than significant when compared to baseline conditions. Localized concentrations of CO, and SO_2 are driven by emissions from aircraft operations, which would be higher under Alternative 3 as compared to the proposed Project. Despite the increase in emissions, a 3.4 percent increase in taxi idle times under Alternative 3 would not result in localized concentrations of these pollutants that would approach the respective thresholds of significance. Localized concentrations of $PM_{2.5}$ are driven by vehicle traffic, which would be lower at peak locations under Alternative 3 as compared to the proposed Project. Therefore, as with the proposed Project, it is expected that operational impacts from Alternative 3 with respect to local effects of the emissions of CO, SO_2, and $PM_{2.5}$ would be ***less than significant***.

5.5.3.1.1.3 Cumulative

Alternative 3 would include the construction and operation of all proposed Project components except Concourse 0. As discussed above, construction of Alternative 3 would have a slightly lower impact on air quality than the proposed Project, while operations under Alternative 3 would have an equal or greater impact on air quality than the proposed Project. As discussed in Section 4.1.1, *Air Quality*, the proposed Project would have a cumulatively significant and unavoidable impact on air quality. Because the proposed Project would have a significant and unavoidable cumulative impact on air quality, and because Alternative 3 would have an approximately equal or greater impact on air quality than the proposed Project, the cumulative impacts from Alternative 3 on air quality would be ***significant and unavoidable***.

5.5.3.1.2 Human Health Risk

5.5.3.1.2.1 Construction

Alternative 3 would include the construction of all proposed Project components except for Concourse 0. Because Alternative 3 would omit construction of Concourse 0, there would be less construction than under the proposed Project, with a related reduction in the concentrations of TAC under Alternative 3 as compared to the proposed Project. As with the proposed Project, construction-related impacts to human health from TAC under Alternative 3 would also be ***less than significant***.

5.5.3.1.2.2 Operations

Operations-related emissions would be driven by increased aircraft activity that would occur irrespective of the Project. Although Alternative 3 would include the airfield improvements proposed under the Project, the omission of Concourse 0 would result in an increase in aircraft taxi time, consequently resulting in an increase in emissions compared to the proposed Project from additional fuel burn. Even though TAC emissions would be slightly higher, as with the proposed Project, operations-related impacts to human health risk associated with Alternative 3 would be ***less than significant***. (Note that Section 4.1.2.5.1.2 presents the impacts of the 2028 Without Project scenario. This scenario does not include the airfield improvements that would occur under both the proposed Project and Alternative 2. Aircraft taxi times under the 2028 Without Project scenario would be even higher than under Alternative 3, and would thus result in higher emissions of TAC from additional fuel burn. Operational emissions of TAC from aircraft under Alternative 3 would be lower than those under the 2028 Without Project scenario and higher than the proposed Project.)

5.5.3.1.2.3 Cumulative

Alternative 3 would include the construction and operation of all proposed Project components except Concourse 0. Because Alternative 3 would omit Concourse 0, there would be a lower concentration of TAC from construction and operation compared to the proposed Project. As discussed in Section 4.1.2, *Human Health Risk*, the proposed Project would have a cumulatively less than significant impact on human health risk. Therefore, as with the proposed Project, the cumulative impacts from Alternative 3 on human health risk would be ***less than significant***.

5.5.3.2 Cultural Resources (Historical Resources)

5.5.3.2.1 Construction

Alternative 3 proposes the construction of all proposed Project components with the exception of Concourse 0. As with the proposed Project, construction of Alternative 3 would not require demolition or alteration of any of the four properties that have been identified as eligible for historic listing in the near vicinity of the Project site (i.e., the 1961 ATCT, the former McCulloch Building, the former Union Savings and Loan building, and the former Aircraft School Building). As with the proposed Project, construction of

Alternative 3 would not cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5 and impacts on historical resources would be ***less than significant***.

5.5.3.2.2 Operations

Alternative 3 would include Terminal 9 and its associated facilities and the same landside improvements that are proposed as part of the Project. Therefore, impacts on the former McCulloch Building would be the same as under the proposed Project (see Table 5-3). As with the proposed Project, Alternative 3 would alter the immediate surroundings of this historical building, but not to a level that would result in a significant impact. Because Alternative 3 does not include Concourse 0, it would reduce alteration of the surroundings of the other three historical resources in the near vicinity of the Project site (i.e., the 1961 ATCT, the former Union Savings and Loan building, and the former Aircraft School Building) as compared to the proposed Project. As with the proposed Project, impacts on historical resources associated with operation of Alternative 3 would be ***less than significant***.

5.5.3.2.3 Cumulative

Alternative 3 would include the construction and operation of all proposed Project components except for Concourse 0. Because Alternative 3 does not include Concourse 0, it would reduce alteration of the surroundings of the other three historical resources in the near vicinity of the Project site (i.e., the 1961 ATCT, the former Union Savings and Loan building, and the former Aircraft School Building) as compared to the proposed Project. As discussed in Section 4.2, *Cultural Resources (Historical Resources)*, the proposed Project would have a cumulatively less than significant impact on historical resources. Because the proposed Project would have a less than significant cumulative impact on historical resources, and because Alternative 3 would have a lower impact on historical resources than the proposed Project, the cumulative impacts from Alternative 3 on historical resources would be ***less than significant***.

5.5.3.3 Energy

5.5.3.3.1 Construction

Alternative 3 would include construction of all the proposed Project components, with the exception of Concourse 0 and its associated facilities. Energy use during construction of Alternative 3 would be lower than under the proposed Project because fewer components would be constructed. Construction would comply with applicable plans and policies, including those related to building energy use and fuel efficiency. As a result, construction of this alternative would not result in wasteful, inefficient, or unnecessary consumption of energy resources, nor would it conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As with the proposed Project, construction of Alternative 3 would result in ***less than significant*** impacts on energy resources.

5.5.3.3.2 Operations

Operation of Alternative 3 would not require electricity or natural gas for Concourse 0 and its associated facilities, therefore energy demand from operation of the Alternative 3 facilities would be less than the proposed Project. Consumption of Jet A by aircraft and APUs and consumption of diesel and gasoline by GSE would be similar to the proposed Project, as the level of aircraft activity would be the same under both alternatives. Operation of Alternative 3 would result in slightly less demand for vehicle-related fuels due to the lower level of employment without Concourse 0. State and local plans pertaining to building, lighting, and fuel efficiency would apply to Alternative 3; therefore, operation of Alternative 3 would not result in wasteful, inefficient, or unnecessary consumption of energy resources, nor would it conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As with the proposed Project, operation of Alternative 3 would result in ***less than significant*** impacts on energy resources.

5.5.3.3.3 Cumulative

Alternative 3 would include the construction and operation of all proposed Project components except for Concourse 0. As discussed above, construction and operation of Alternative 3 would have a lower impact on energy resources than the proposed Project. As discussed in Section 4.3, *Energy*, the proposed Project would have a cumulatively less than significant impact on energy resources. Because the proposed Project would have a less than significant cumulative impact on energy resources, and because Alternative 3 would have a lower impact on energy resources than the proposed Project, the cumulative impacts from Alternative 3 on energy resources would be ***less than significant***.

5.5.3.4 Greenhouse Gas Emissions

5.5.3.4.1 Construction and Operations

Alternative 3 would include the construction of all proposed Project components except for Concourse 0. Consequently, GHG emissions are expected to be less than that predicted for the proposed Project. Although construction-related GHG emissions would be less than the proposed Project, emissions from the construction of Alternative 3 would still result in a net increase in short-term and temporary emissions of GHGs from construction-related activities.

Although Alternative 3 would include the airfield improvements proposed under the Project, it is anticipated that the omission of Concourse 0 would result in a 3.4 percent increase in aircraft taxi time under Alternative 3 as compared to the proposed Project. The increase in aircraft taxi time would result in an increase in operational GHG emissions compared to the proposed Project from additional fuel burn. Therefore, overall GHG emissions associated with airport operations would be expected to result in a net increase over baseline conditions that would be more severe than under the proposed Project.

The amortized construction emissions combined with operational emissions under Alternative 3 would result in total annual emissions of GHGs that would result in a net increase over baseline conditions. Therefore, as with the proposed Project, impacts of GHG emissions from Alternative 3 would be ***significant and unavoidable***.

5.5.3.4.2 Cumulative

Alternative 3 would include the construction and operation of all proposed Project components except for Concourse 0. As discussed above, construction of Alternative 3 would have a slightly lower impact on GHG emissions than the proposed Project, while operations under Alternative 3 would have a greater impact on GHG emissions than the proposed Project. As discussed in Section 4.4, *Greenhouse Gas Emissions*, implementation of the proposed Project would result in a cumulatively significant and unavoidable impact on GHG emissions, and the proposed Project's contribution would be cumulatively considerable. Because the proposed Project would have a significant and unavoidable cumulative impact on GHG emissions, and because Alternative 3 would have a greater impact on GHG emissions than the proposed Project, the cumulative impacts with implementation of Alternative 3 on GHG emissions would be significant and unavoidable and the contribution of Alternative 3 to this impact would be ***cumulatively considerable***.

5.5.3.5 Hazardous Materials

5.5.3.5.1 Construction

Alternative 3 proposes the construction of all proposed Project components, with the exception of Concourse 0 and the related airfield improvements at the east end of Taxiway D and Taxiway E. As such, as shown in Table 5-4, Alternative 3 would have the same impacts as the proposed Project on the Terminal 1 Fuel Valve Vault site and the UAL MOC site. In addition, as with the proposed Project, construction of

the roadway improvements under this alternative could result in the closure of monitoring wells at the AlliedSignal/Honeywell site. As discussed in Section 4.5, *Hazardous Materials*, closure of the monitoring wells under the proposed Project would not have an impact on human health or the environment, because the monitoring wells could be relocated to other areas. Therefore, as with the proposed Project, impacts to the AlliedSignal/Honeywell site from construction of the roadway improvements would be less than significant. Construction of Alternative 3 would not involve the construction of Concourse 0 and its associated facilities; therefore, this alternative would avoid modifications to the groundwater remediation system at the AlliedSignal/Honeywell site that would occur during construction of Concourse 0 and its associated facilities under the proposed Project. As discussed in Section 4.5, *Hazardous Materials*, modifications to the groundwater remediation system would be coordinated with, and would be subject to approval by, the Los Angeles Regional Water Quality Control Board; consequently, these modifications would not have an impact on human health or the environment and impacts of the proposed Project would be less than significant. Therefore, Alternative 3 would not avoid any significant impacts related to hazardous materials. As with the proposed Project, construction of Alternative 3 would result in a ***less than significant impact*** related to hazardous materials.

5.5.3.5.2 Operations

Operations under Alternative 3 would not involve excavation, extraction of groundwater, or any activity that could damage or physically interfere with ongoing or future contamination monitoring or remediation activities at the listed sites. As such, as with the proposed Project, operation of Alternative 3 would have ***no impact*** related to hazardous materials.

5.5.3.5.3 Cumulative

Alternative 3 would include the construction and operation of all proposed Project components except for Concourse 0. As discussed above, construction and operation of Alternative 3 would have a lower impact on hazardous materials than the proposed Project. As discussed in Section 4.5, *Hazardous Materials*, the proposed Project would have a cumulatively less than significant impact on hazardous materials. Because the proposed Project would have a less than significant cumulative impact on hazardous materials, and because Alternative 3 would have a lower impact on hazardous materials than the proposed Project, the cumulative impacts from Alternative 3 on hazardous materials would be ***less than significant***.

5.5.3.6 Land Use and Planning

5.5.3.6.1 Construction and Operations

Alternative 3 would include construction and operation of all the proposed Project components, with the exception of Concourse 0 and its associated facilities. The proposed roadway improvements and the proposed APM station at Terminal 9, which would both be constructed under this alternative, would advance regional and local policies aimed at enhancing mobility options for LAX passengers. As described in Sections 5.5.3.1.1 and 5.5.3.4 above, GHG and vehicle emissions under this alternative would increase compared to existing baseline conditions, although to a lesser extent than the proposed Project. However, as with the proposed Project, Alternative 3 would comply with the overall intent of these land use plans and Alternative 3 would result in ***less than significant*** impacts to land use and planning.

5.5.3.6.2 Cumulative

Alternative 3 would include the construction and operation of all proposed Project components except for Concourse 0. As discussed above, construction and operation of Alternative 3 would have a lower impact on land use policies concerning GHG and vehicle emissions than the proposed Project. As discussed in Section 4.6, *Land Use and Planning*, the proposed Project would have a cumulatively less than

significant impact on land use. Because the proposed Project would have a less than significant cumulative impact on land use, and because Alternative 3 would have a lower impact on land use than the proposed Project, the cumulative impacts from Alternative 3 on land use would be ***less than significant***.

5.5.3.7 Noise

5.5.3.7.1 Aircraft Noise

5.5.3.7.1.1 Construction

Alternative 3 would include construction of all the airfield improvements, including the proposed modifications to the runway exits. As with the proposed Project, this alternative would require temporary runway closures in 2023 and 2024, which would result in temporary changes in aircraft noise exposure levels in nearby areas. As with the proposed Project, for some noise-sensitive land uses, the temporary increase in aircraft noise during construction of Alternative 3 would result in a short-term (i.e., 4.5-month) ***significant and unavoidable impact***.

5.5.3.7.1.2 Operations

Future aircraft activity under Alternative 3 would be the same as under the proposed Project; therefore, future aircraft noise impacts would be the same under both. As with the proposed Project, aircraft operations under Alternative 3 would increase the area that would be subject to elevated aircraft noise levels (i.e., higher than 65 dBA CNEL), which would expose additional residences and other noise-sensitive uses to aircraft noise that exceed the threshold of significance. As with the proposed Project, even with implementation of the proposed mitigation measure (MM-AN (ATMP)-1, Sound Insulation Programs), impacts associated with aircraft noise under Alternative 3 would be ***significant and unavoidable.***

5.5.3.7.1.3 Cumulative

As discussed in Section 4.7.1, *Aircraft Noise*, none of the development projects identified in Chapter 3, *Overview of Project Setting,* would have aircraft operations that could contribute to cumulative aircraft noise impacts. Therefore, cumulative impacts from aircraft noise under the proposed Project would be less than significant (i.e., although aircraft noise impacts associated with the proposed Project, alone, would be significant and unavoidable, there are no other projects involving aircraft activity; hence there is no *cumulative* aircraft noise and there would not be a significant cumulative impact). The lack of other projects that contribute to cumulative aircraft noise impacts applies to Alternative 3 in the same way as the proposed Project. As with the proposed Project, under Alternative 3, cumulative impacts associated with aircraft noise would be ***less than significant***.

5.5.3.7.2 Roadway Traffic Noise

5.5.3.7.2.1 Operations

Under Alternative 3, the roadway alignments would be the same as the proposed Project, with the same proximity to noise-sensitive receptors and a similar amount of traffic to the proposed Project. For these reasons, the roadway traffic noise levels on the local roadway network projected for 2028 and the associated increases in roadway traffic noise compared to baseline conditions would not be materially different between Alternative 3 and the proposed Project. As with the proposed Project, impacts under Alternative 3 would be ***less than significant***.

5.5.3.7.2.2 Cumulative

As discussed above, Alternative 3 would have a materially similar impact on roadway traffic noise as the proposed Project. As discussed in Section 4.7.2, *Roadway Traffic Noise*, the proposed Project would have a less than significant cumulative impact on roadway traffic noise. Because the proposed Project would

have a less than significant cumulative impact on roadway traffic noise, and because Alternative 3 would have a similar impact on roadway traffic noise as the proposed Project, the cumulative impacts from Alternative 3 on roadway traffic noise would be ***less than significant***.

5.5.3.7.3 Construction Traffic and Equipment Noise and Vibration

5.5.3.7.3.1 Construction

Alternative 3 would include construction of all proposed Project components with the exception of Concourse 0. As with the proposed Project, construction of Alternative 3 would result in construction noise associated with airfield improvements, roadway improvements, and Terminal 9 construction. Because Alternative 3 would have less construction than the proposed Project, there would be fewer peak daily construction trips, and construction traffic noise would be reduced as compared to the proposed Project. As with the proposed Project, impacts related to construction traffic noise would be less than significant. Alternative 3 would include the same roadway improvements as the proposed Project. As impacts associated with construction vibration would be associated with construction of the roadways, construction vibration impacts would be the same as with the proposed Project. As with the proposed Project, impacts from construction equipment vibration would be ***less than significant***.

As with the proposed Project, construction of the airfield improvements, roadways, and Terminal 9 would generate noise from construction equipment. The potential noise impacts from each construction activity on the nearest noise-sensitive receptors are shown in **Table 5-11**. As explained above in Section 5.5.1.7.3, the noise levels shown in the table are very conservative; actual construction-related noise levels associated with Alternative 3 would be lower than those identified in Table 5-11. Although the Concourse 0 facilities would not be constructed, as shown in Table 5-5 and Table 5-11, Alternative 3 would not avoid any of the significant impacts associated with the proposed Project at any Receptor Sites; however, Alternative 3 would reduce, but not avoid, significant impacts associated with the proposed Project at three Receptor Sites (R7 Residence Inn by Marriott, R10 Hyatt Regency LAX, and R11 Courtyard Los Angeles LAX/Century Boulevard). As shown in Table 5-11, implementation of Alternative 3 would result in construction noise levels above the threshold of significance at several noise-sensitive receptors due to the construction of Terminal 9 and the roadway improvements, as well as from the combined construction activities. As with the proposed Project, Mitigation Measures MM-N (ATMP)-1, Construction Noise Control Plans, MM-N (ATMP)-2, Construction Scheduling, and MM-N (ATMP)-3, Construction Equipment, would reduce impacts associated with construction traffic and equipment noise under Alternative 3 to a level that is ***less than significant.***

Noise associated with the use of staging areas for Alternative 3 would be the same as the proposed Project (see Table 4.7.3-6). As with the proposed Project, impacts would be ***less than significant.***

5.5.3.7.3.2 Cumulative

As discussed above, Alternative 3 would have a lower impact on construction traffic and equipment noise and vibration than the proposed Project. As discussed in Section 4.7.3, *Construction Traffic and Equipment Noise and Vibration*, the proposed Project would have a less than significant cumulative impact on construction traffic and equipment noise and vibration. Because the proposed Project would have a less than significant cumulative impact on construction traffic and equipment noise and vibration, and because Alternative 3 would have a lower impact on construction traffic and equipment noise and vibration than the proposed Project, the cumulative impacts from Alternative 3 on construction traffic and equipment noise and vibration would be ***less than significant***.

Table 5-11
Construction Noise Levels at Noise-Sensitive Receptor Sites - Alternative 3

ID	Receptor	Background Conditions[1] CNEL (dBA)	Distance from Construction Activity (feet)	Construction Activity	Construction Equipment CNEL (dBA)	Total[2] CNEL (dBA)	Significance Threshold[3]	Above Threshold?
R1	Residential development in Playa del Rey	67.8	3,200	Airfield improvements	60.5	68.5	72.8	No
R2	Saint Bernard High School	67.7	2,500	Airfield improvements	62.6	68.9	72.7	No
R3	Residential development along southern edge of Westchester	68.4	1,500	Airfield improvements	67.1	70.8	73.4	No
R4	Park West Apartments on Lincoln Boulevard	66.3	1,200	Airfield improvements	69.0	70.9	71.3	No
R5	Residential uses along West 88th Street near Liberator Ave	67.9	2,500	Airfield improvements	62.6	69.0	72.9	No
R6	Residential uses near Westchester Parkway and Kittyhawk Ave	72.0	1,750	Airfield improvements	65.7	72.9	77.0	No
		72.0	1,500	Roadway construction	67.5	73.3	77.0	No
		72.0	NA	Combined airfield improvements and roadway construction	69.7	74.0	77.0	No
R7	Residence Inn by Marriott Los Angeles LAX/Century Boulevard	70.2	900	Terminal (T9) construction	71.9	74.1	75.2	No
		70.2	900	Roadway construction	71.9	74.1	75.2	No
		70.2	NA	Combined terminal (T9) and roadway construction	74.9	76.2	75.2	Yes[4]
R8	Sheraton Gateway Los Angeles Hotel	69.3	300	Terminal (T9) construction	81.4	81.7	74.3	Yes[4]
		69.3	100	Roadway construction	91.0	91.0	74.3	Yes[4]
		69.3	NA	Combined terminal (T9) and roadway construction	91.5	91.5	74.3	Yes[4]

Table 5-11
Construction Noise Levels at Noise-Sensitive Receptor Sites - Alternative 3

ID	Receptor	Background Conditions[1] CNEL (dBA)	Distance from Construction Activity (feet)	Construction Activity	Construction Equipment CNEL (dBA)	Total[2] CNEL (dBA)	Significance Threshold[3]	Above Threshold?
R9	H Hotel Los Angeles/ Homewood Suites by Hilton Los Angeles International Airport	70.4	250	Terminal (T9) construction	83.3	83.3	75.4	Yes[4]
		70.4	55	Roadway construction	96.2	96.2	75.4	Yes[4]
		70.4	NA	Combined terminal (T9) and roadway construction	96.4	96.4	75.4	Yes[4]
R10	Hyatt Regency Los Angeles International Airport	73.4	550	Terminal (T9) construction	76.2	78.0	78.4	No
		73.4	150	Roadway construction	87.5	87.7	78.4	Yes[4]
		73.4	NA	Combined terminal (T9) and roadway construction	87.8	88.0	78.4	Yes[4]
R11	Courtyard Los Angeles LAX/Century Boulevard	71.7	600	Terminal (T9) construction	75.4	76.9	76.0	Yes[4]
		71.7	150	Roadway construction	87.5	87.6	76.0	Yes[4]
		71.7	NA	Combined terminal (T9) and roadway construction	87.8	87.9	76.0	Yes[4]

Source: HMMH, CDM Smith, 2020.

Notes:
1 Background condition obtained through AEDT using 24-hour CNEL dBA.
2 Background plus Alternative 3 construction noise.
3 Significance Threshold = Background CNEL + 5 dBA
4 Construction equipment noise levels conservatively assume all equipment would be utilized at the same time and at all hours of the 24-hour day, both of which are unlikely.

Key:
T9 = Terminal 9

5.5.3.8 Transportation

5.5.3.8.1 Plans, Programs, Ordinances, and Policies Analysis

Consistent with the methodology used in Section 4.8.5.1.1. for the proposed Project, a review was conducted to determine whether Alternative 3 would be inconsistent with a transportation-related City or regional plan, program, ordinance, or policy addressing the circulation system (including transit, roadways, bicycle, and pedestrian facilities) that was adopted to protect the environment. Transportation policies or standards adopted to protect the environment include those that support multimodal transportation options and a reduction in VMT.

Similar to what was discussed in Table 4.8-11 and Table 4.8-12 for the proposed Project, Alternative 3 would not be inconsistent with transportation-related plans, policies, ordinances, and programs; hence, the impact of Alternative 3 would be ***less than significant,*** which would also be the case for the proposed Project.

5.5.3.8.2 VMT Analysis

Alternative 3 was analyzed by modifying the LAX Travel Demand Model (that was developed and calibrated for the proposed Project) to account for all the transportation elements of Alternative 3. The methodology to calculate VMT impacts is consistent with the methodology described in Section 4.8.2 for the proposed Project VMT analysis. The travel demand model is used to calculate VMT per employee, total passenger VMT and induced VMT. The results of the passenger and employee VMT analysis are presented in **Table 5-12**.

Table 5-12
Alternative 3 Passenger and Employee VMT

Measure	Projected Future Conditions Baseline	Proposed Project	Alternative 3
VMT per Employee	24.0	23.9	23.9
Total Passenger VMT	8,676,209	8,708,995	8,708,065
Source: Fehr and Peers, 2020.			

Alternative 3 has 3,228 new employees for Terminal 9 (less than the total new employees with the proposed Project, based on the absence of Concourse 0). The VMT per employee under Alternative 3 is similar to proposed Project, however it is not 15 percent below the baseline (i.e., 20.4), which is the threshold of significance. Because Alternative 3 would generate VMT per employee that would exceed 15 percent below the Projected Future Conditions Baseline VMT per employee rate, this would be a ***significant impact***, which would also be the case for the proposed Project. However, the magnitude of the impact is less than the proposed Project and with implementation of similar mitigation, as proposed in Section 4.8.5.2.2, the impact related to employment VMT for Alternative 3 would be reduced to a level that is ***less than significant***, also be the case for the proposed Project**.**

Alternative 3 would result in a net increase of 31,856 total passenger VMT over the 2028 Projected Future Conditions Baseline. The difference between Alternative 3 and the proposed Project is 930 VMT. Relative to the percent increase over baseline conditions, both Alternative 3 and the proposed Project would result in a VMT increase of 0.37 percent. Maintaining the Park 'N Fly parking lot in its current location helps to reduce VMT relative to the proposed Project. Under Alternative 3, passengers would walk to the CTA from Park 'N Fly, whereas under the proposed Project, these passengers are allocated to the other parking facilities and would take a shuttle to ITF West and use APM to access the CTA. Although, the magnitude of the impact would be less than the proposed Project, this would still be a ***significant impact***. Even with implementation of the mitigation package for the proposed Project as described in Section 4.8.5.2.2, the

passenger VMT impact would remain a ***significant and unavoidable impact***., as would also be the case for the proposed Project.

Roadway improvements under Alternative 3 would be consistent with those of the proposed Project. Therefore, the short-term and long-term induced VMT impacts of Alternative 3 would be consistent with those of the proposed Project as described in Section 4.8.5.4. Under both Alternative 3 and the proposed Project, the short-term and long-term induced VMT would be a ***significant and unavoidable impact.***

5.5.3.8.3 Hazard Analysis

Impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from [a] project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts, as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. In the case of Alternative 3, these conflicts may be created by ramp configurations or through the placement of ramps, loading areas, or intersections in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections. These impacts were evaluated for permanent conditions after Project completion.

This analysis focused upon locations where the new roadways introduce a new vehicle access point and/or driveways to the site. The following four locations that would access the Project site from the public right-of-way and that may be affected by Alternative 3 driveways and infrastructure are:

- Century Boulevard and Jetway Boulevard
- Sepulveda Boulevard and 96th Street
- Sepulveda Boulevard and Century Boulevard
- Sepulveda Boulevard south of World Way

Based on the proposed infrastructure, level of existing activity, and anticipated level of activity attributable to the proposed Project, the proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) and would comply with City design standards. Moreover, the land uses associated with Alternative 3 (i.e., roadway improvements and Terminal 9) would not be incompatible with existing land uses in the Project area, which consist of airport and commercial uses. For these reasons, the impact would be ***less than significant.***

Freeway Safety Analysis

The LADOT interim guidance for freeway safety analysis applied to the proposed Project, described in Section 4.8.5.5.1, was also used to assess freeway safety impacts relative to Alternative 3. This alternative has similar passenger levels of activity and a lower number of total employees relative to the proposed Project; therefore, Alternative 3 would generate less trips on a daily basis than the proposed Project. As a result, it is anticipated that the vehicle trips on freeway off-ramps would be less than the proposed Project. Therefore, as with the proposed Project, Alternative 3 would not have a substantial effect at the analyzed location or have a negative effect on traffic safety.

Overall, implementation of Alternative 3 would have a ***less than significant impact*** relative to hazards, as would also be the case for the proposed Project.

5.5.3.8.4 Cumulative Impacts

Cumulative Impacts Associated with Plans, Programs, Ordinances, and Policies

The cumulative impacts of Alternative 3 related to plan consistency would be consistent with those of the proposed Project, as described in Section 4.8.6.1, which would be ***less than significant.***

Cumulative Impacts Associated with VMT

Alternative 3 would have 3,228 new employees for Terminal 9 (less than the proposed Project due to the elimination of Concourse 0). The measure for employee VMT is efficiency based, and implementation of the VMT reduction strategies presented in Section 4.8.5.2.2 would reduce the project-related VMT per employee for Alternative 3 to a level that is 15 percent or more below the Projected Future Conditions Baseline VMT; specifically, mitigation would reduce the VMT per employee to 20.4 or less. Therefore, similar to the proposed Project, no cumulative impact would occur relative to employment VMT.

The level of passenger activity for Alternative 3 is consistent with the proposed Project. Therefore, for passenger VMT, cumulative impacts of Alternative 3 would be ***significant and unavoidable,*** similar to the proposed Project as described in Section 4.8.6.2**.**

The roadway improvements under Alternative 3 and the proposed Project are similar. Therefore, the cumulative induced VMT impacts would also be consistent with those of the proposed Project and, as such, would have a ***significant and unavoidable impact***

Overall, it is anticipated that there would be significant cumulative impacts related to VMT and that the proposed Alternative 3 would have a ***cumulatively considerable contribution*** to that impact.

Cumulative Impacts Associated with Hazards

The cumulative impacts of Alternative 3 related to hazards would be consistent with those of the proposed Project as described in Section 4.8.6.3. Such impacts would be ***less than significant*** for both Alternative 3 and the proposed Project.

5.5.3.9 Utilities

5.5.3.9.1 Water Supply

5.5.3.9.1.1 Construction

Alternative 3 would include construction of all the proposed Project components, with the exception of Concourse 0 and its associated facilities. This alternative would require the same conveyance improvements for Terminal 9 that would be necessary under the proposed Project. Water use during construction of Alternative 3 would be less than water use during construction of the proposed Project based on the lower level of development under this alternative. As with the proposed Project, construction of Alternative 3 would result in ***less than significant*** impacts on water supply and infrastructure.

5.5.3.9.1.2 Operations

Operation of this alternative would not require water for Concourse 0 landscaping, the Concourse 0 cooling tower, or operations and maintenance (e.g., cleaning) of the facility. Therefore, water demand from operation of the Alternative 3 facilities would be less than the proposed Project. Water demand associated with increased passenger activity under Alternative 3 would be the same as under the proposed Project. Because a large portion of the future water demand would be associated with increased passenger activity, water demand under Alternative 3 would only be marginally lower than under the proposed Project. Since sufficient water supplies would be available, as with the proposed Project, operation of Alternative 3 would result in ***less than significant*** impacts on water supply and infrastructure.

5.5.3.9.1.3 Cumulative

Alternative 3 would include the construction and operation of all proposed Project components except for Concourse 0. As discussed above, construction and operation of Alternative 3 would have a lower impact on water supply than the proposed Project. As discussed in Section 4.9.1, *Water Supply*, the

proposed Project would have a cumulatively less than significant impact on water supply. Because the proposed Project would have a less than significant cumulative impact on water supply, and because Alternative 3 would have a lower impact on water supply than the proposed Project, the cumulative impacts from Alternative 3 on water supply would be ***less than significant***.

5.5.3.9.2 Wastewater Generation

5.5.3.9.2.1 Construction

Since Alternative 3 would not include Concourse 0, this alternative would avoid the conveyance improvements needed to provide service connections for Concourse 0. Wastewater generation during construction of Alternative 3 would be lower than wastewater generation during construction of the proposed Project based on the lower level of development under this alternative. As with the proposed Project, construction of Alternative 3 would result in ***less than significant*** impacts on wastewater conveyance and treatment capacity.

5.5.3.9.2.2 Operations

Operation of Alternative 3 would not result in wastewater generation by new employees at Concourse 0; however, wastewater generation associated with increased passenger activity under Alternative 3 would be the same as under the proposed Project. Because the majority of future wastewater generation would be associated with increased passenger activity, wastewater generation under Alternative 3 would only be marginally lower than under the proposed Project. Since sufficient wastewater treatment capacity would be available, as with the proposed Project, operation of Alternative 3 would result in ***less than significant*** impacts on wastewater conveyance and treatment capacity.

5.5.3.9.2.3 Cumulative

Alternative 3 would include the construction and operation of all proposed Project components except for Concourse 0. As discussed above, construction and operation of Alternative 3 would have a lower impact on wastewater than the proposed Project. As discussed in Section 4.9.2, *Wastewater Generation*, the proposed Project would have a cumulatively less than significant impact on wastewater. Because the proposed Project would have a less than significant cumulative impact on wastewater, and because Alternative 3 would have a lower impact on wastewater than the proposed Project, the cumulative impacts from Alternative 3 on wastewater would be ***less than significant***.

5.5.4 Alternative 4: Approved LAMP Roadway Improvements plus Terminal 9 Access

5.5.4.1 Air Quality and Human Health Risk

5.5.4.1.1 Air Quality

5.5.4.1.1.1 Construction

Emissions

Alternative 4 would include construction of all the proposed Project components except for the proposed roadway improvements. In lieu of these improvements, the LAMP Phase 2 roadways with modifications to provide access to Terminal 9 would be constructed. As discussed in Section 4.1.1, *Air Quality*, temporary runway closures during construction of the proposed Project would result in short-term significant and unavoidable construction-related emissions of CO, VOC, NO_X, and SO_X. Construction activities associated with the proposed Project would also result in significant and unavoidable emissions of NO_X that would extend for the duration of the construction period. The short-term impacts caused by temporary runway

closures would occur under both the proposed Project and Alternative 4. With respect to impacts from ongoing construction activities, emissions of CO, VOC, NO_X, SO_X, PM_{10}, and $PM_{2.5}$ from the construction of the LAMP Phase 2 roadways are expected to be less than, but very similar to, those of the proposed Project roadways. The LAMP Phase 2 roadways would have slightly fewer linear miles and none of the elevated roadways included in the proposed Project. Because emission thresholds are relative to peak daily construction emissions, which in the case of the proposed Project and Alternative 4 would be driven by the temporary runway closures, the implementation of the LAMP Phase 2 roadways in lieu of the proposed roadways would be expected to result in a relatively minor differences to peak daily emissions. As discussed in Section 4.1.1, *Air Quality*, the proposed Project would result in significant and unavoidable construction-related emissions of CO, VOC, NO_X, and SO_X. As with the proposed Project, CO, VOC, NO_X, and SO_X regional emissions from the construction of Alternative 4 would be ***significant and unavoidable***.

Concentrations

The proposed Project would result in a less than significant impact with respect to localized concentrations of CO, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ during construction. Alternative 4 would involve construction of the airfield improvements, Concourse 0, and Terminal 9, which are proposed under the Project. However, in place of the proposed Project's roadway improvements, Alternative 4 would implement the LAMP Phase 2 roadway improvements. It is expected that construction-related emissions associated with the LAMP Phase 2 roadways would be lower than those of the proposed roadways. Because the LAMP Phase 2 roadways would be constructed in the same general location as the proposed roadways and construction-related emissions would be lower, localized concentrations would also be lower. Therefore, as with the proposed Project, construction-related impacts of criteria air pollutants under Alternative 4 would be ***less than significant***.

5.5.4.1.1.2 Operations

Emissions

Alternative 4 would include all of the proposed Project components except that it would implement LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. As discussed in Section 4.1.1, *Air Quality*, operation of the proposed Project would result in significant and unavoidable regional emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$. These operations-related emissions would be driven by increased aircraft activity that would occur irrespective of the Project. Although Alternative 4 has a different roadway system than the proposed Project, regional traffic emissions are anticipated to be comparable between the scenarios. Thus, as with the proposed Project, it is expected that operations-related impacts of Alternative 4 with respect to regional emissions of NO_X, SO_X, PM_{10}, and $PM_{2.5}$ would be ***significant and unavoidable***.

Concentrations

The proposed Project would result in significant and unavoidable localized concentrations of PM_{10}. As discussed in Section 4.1.1, *Air Quality*, localized concentrations of PM_{10} would be driven by road dust from traffic and significant localized concentrations would occur within the ITF West facility and along the roadways leading to that facility, along 98th Street and Aviation Boulevard at the entrance to the CONRAC, and at the location of the new CTA entry roadway under the proposed Project. Alternative 4 differs from the proposed Project in that Alternative 4 includes the LAMP Phase 2 roadway system, which would increase traffic flows to the CONRAC and ITF West. Under Alternative 4, it is anticipated that localized concentrations of PM_{10} at the location of the CTA entry roadway system would be less than significant. Near the intersection of 96th Street and Airport Boulevard, the peak localized concentration location, daily traffic volumes would be expected to decrease by 9 percent under Alternative 4 as compared to the proposed Project, thereby resulting in a similar decrease in localized concentrations of PM_{10} from road

dust in that area. Traffic volume increases at the peak location were estimated by summing modeled traffic volumes for the roadway links which make up the peak intersection under the Alternative 4 and comparing them against the summed modeled traffic volumes for the roadway links which make up the peak intersection under proposed Project. Detailed calculations are provided in **Appendix C.7** of this EIR. This reduction would result in a peak localized concentration under Alternative 4 that would be lower than that of the proposed Project but would remain above the operational thresholds for PM_{10}. Therefore, it is expected that Alternative 4, would result in ***significant and unavoidable*** localized concentrations of PM_{10}.

As shown in Table 4.1.1-14, localized concentrations of CO, NO_2, SO_2, and $PM_{2.5}$ associated with the proposed Project would be less than significant when compared to baseline conditions. Localized concentrations of CO, NO_2, and SO_2 are driven by emissions from aircraft operations, which would be virtually indistinguishable under Alternative 4 as compared to the proposed Project. Localized concentrations of $PM_{2.5}$ are driven by vehicle traffic, which would be lower at peak locations under Alternative 4 as compared to the proposed Project. Therefore, as with the proposed Project, it is expected that operational impacts from Alternative 4 with respect to local effects of the emissions of CO, NO_2, SO_2, and $PM_{2.5}$ would be ***less than significant***.

5.5.4.1.1.3 Cumulative

Alternative 4 would include the construction and operation of all proposed Project components, except that it would implement the approved LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. As discussed above, construction of Alternative 4 would result in a slightly lower, but very similar, impact on air quality than the proposed Project; similarly, operation of Alternative 4 would have a lower, but similar, impact on air quality than the proposed Project. As discussed in Section 4.1.1, *Air Quality*, the proposed Project would have a cumulatively significant and unavoidable impact on air quality. Because the proposed Project would have a significant and unavoidable cumulative impact on air quality, and because Alternative 4 would have a slightly lower but similar impact on air quality than the proposed Project, the cumulative impacts from Alternative 4 on air quality would be ***significant and unavoidable***.

5.5.4.1.2 Human Health Risk

5.5.4.1.2.1 Construction

Alternative 4 would include construction of all the proposed Project components except for the proposed roadway improvements, instead implementing the approved LAMP Phase 2 roadways with modifications to provide access to Terminal 9. Since the LAMP Phase 2 roadways are not as extensive as those for the proposed Project, slightly less construction would occur under Alternative 4 than under the proposed Project, with a resulting decrease in construction emissions. As with the proposed Project, construction-related impacts to human health from TAC under Alternative 4 would be ***less than significant***.

5.5.4.1.2.2 Operations

Alternative 4 would include all of the airfield improvements proposed under the Project, except that it would implement the approved LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. Although Alternative 4 has a different roadway system than the proposed Project, regional traffic emissions under Alternative 4 are anticipated to be comparable to the proposed Project; therefore, TAC concentrations at sensitive receptors under Alternative 4 are expected to be similar to the proposed Project. As with the proposed Project, operations-related impacts to human health from TAC under Alternative 4 would be ***less than significant***.

5.5.4.1.2.3 Cumulative

Alternative 4 would include the construction and operation of all proposed Project components, except that it would implement the approved LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. Although Alternative 4 has a different roadway system than the proposed Project, emissions from construction and operation of Alternative 4 are anticipated to be comparable to the proposed Project. TAC concentrations at sensitive receptors under Alternative 4 are anticipated to be similar to the proposed Project. As discussed in Section 4.1.2, *Human Health Risk*, the proposed Project would have a cumulatively less than significant impact on human health risk. Therefore, as with the proposed Project, the cumulative impacts from Alternative 4 on human health risk would be ***less than significant***.

5.5.4.2 Cultural Resources (Historical Resources)

5.5.4.2.1 Construction

Alternative 4 proposes the construction of all proposed Project components with the exception of the proposed roadway improvements, instead implementing the LAMP Phase 2 roadways, with modifications to provide access to Terminal 9. As with the proposed Project, construction of Alternative 4 would not require demolition or alteration of any of the four properties that have been identified as eligible for historic listing in the near vicinity of the Project site (i.e., the 1961 ATCT, the former McCulloch Building, the former Union Savings and Loan building, and the former Aircraft School Building). As with the proposed Project, construction of Alternative 4 would not cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5 and impacts on historical resources would be ***less than significant***.

5.5.4.2.2 Operations

Alternative 4 would include Concourse 0 and Terminal 9 and its associated facilities. The landside improvements associated with the proposed Project would not be implemented; instead, the LAMP Phase 2 roadways would be constructed, with modifications to provide access to Terminal 9. Impacts to historical resources associated with Alternative 4 are summarized in Table 5-3. Under this alternative, new roadways would be constructed immediately to the south and east of the McCulloch Building, similar in nature to the roadways that would be constructed under the proposed Project. Roadways would also be constructed in proximity to the ATCT. Impacts to the McCulloch Building and to the ATCT would be the same as under the proposed Project. For both resources, the proposed improvements would alter the immediate surroundings of the historical buildings, but not to a level that would result in a significant impact. Although Concourse 0 would alter the surroundings of the former Aircraft School Building, the roadway improvements under Alternative 4 would be less intrusive to this historical resource as compared to the proposed Project. Similarly, although Concourse 0 would alter the surroundings of the Union Savings and Loan building, the roadway improvements would not; therefore, the overall alteration would be less than under the proposed Project. As with the proposed Project, impacts from operation of Alternative 4 on historical resources would be ***less than significant***.

5.5.4.2.3 Cumulative

Alternative 4 would include the construction and operation of all proposed Project components, except that it would implement the approved LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. As discussed above, Alternative 4 would have a lower impact on historical resources than the proposed Project. As discussed in Section 4.2, *Cultural Resources (Historical Resources)*, the proposed Project would have a cumulatively less than significant impact on historical resources. Because the proposed Project would have a less than significant cumulative impact on historical

resources, and because Alternative 4 would have a lower impact on historical resources than the proposed Project, the cumulative impacts from Alternative 3 on historical resources would be ***less than significant***.

5.5.4.3 Energy

5.5.4.3.1 Construction

Alternative 4 would include construction of all the proposed Project components, with the exception of the proposed roadway improvements, instead implementing the LAMP roadways with modifications to provide access to Terminal 9. Energy use during construction of Alternative 4 would generally be the same as the proposed Project as the level of development would be similar. Construction would comply with applicable plans and policies, including those related to building energy use and fuel efficiency. As a result, construction of this alternative would not result in wasteful, inefficient, or unnecessary consumption of energy resources, nor would it conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As with the proposed Project, construction of Alternative 4 would result in ***less than significant*** impacts on energy resources.

5.5.4.3.2 Operations

Energy demand under Alternative 4 would generally be the same as the proposed Project because it would require operating the same energy-consuming facilities as the proposed Project, and fuel consumption associated with aircraft, APUs, GSE, and passenger and employee trips would generally be the same. Operation of Alternative 4 would result in slightly less demand for vehicle-related fuels due to the lower number of added lane miles associated with the LAMP Phase 2 roadways as compared to the proposed Project roadway improvements. State and local plans pertaining to building, lighting, and fuel efficiency would apply to Alternative 4; therefore, operation of Alternative 4 would not result in wasteful, inefficient, or unnecessary consumption of energy resources, nor would it conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As with the proposed Project, operation of Alternative 4 would result in ***less than significant*** impacts on energy resources.

5.5.4.3.3 Cumulative

Alternative 4 would include the construction and operation of all proposed Project components, except that it would implement the approved LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. As discussed above, construction and operation of Alternative 4 would have a lower impact on energy resources than the proposed Project. As discussed in Section 4.3, *Energy*, the proposed Project would have a cumulatively less than significant impact on energy resources. Because the proposed Project would have a less than significant cumulative impact on energy resources, and because Alternative 4 would have a lower impact on energy resources than the proposed Project, the cumulative impacts from Alternative 4 on energy resources would be ***less than significant***.

5.5.4.4 Greenhouse Gas Emissions

5.5.4.4.1 Construction and Operations

Alternative 4 would include construction of all the proposed Project components except for the proposed roadway improvements, instead implementing the LAMP Phase 2 roadways with modifications to provide access to Terminal 9. Changes in construction-related GHG emissions from changes to the roadways are expected to be minor and, thus, GHG emissions would be similar to the proposed Project. As with the proposed Project, GHG emissions from the construction of Alternative 4 would result in a net increase in GHG emissions over baseline conditions.

Changes in operational GHG emissions from changes to the roadways are expected to be minor and, thus, GHG emissions would be similar to the proposed Project. As with the proposed Project, GHG emissions

from the airport operation under Alternative 4 would result in a net increase in GHG emissions over baseline conditions.

The amortized construction emissions combined with operational emissions under Alternative 4 would result in total annual emissions of GHGs that would result in a net increase over baseline conditions. Therefore, as with the proposed Project, impacts of GHG emissions from Alternative 4 would be ***significant and unavoidable***.

5.5.4.4.2 Cumulative

Alternative 4 would include the construction and operation of all proposed Project components, except that it would implement the approved LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. As discussed above, construction and operation of Alternative 4 would have a similar impact on GHG emissions than the proposed Project. As discussed in Section 4.4, *Greenhouse Gas Emissions*, implementation of the proposed Project would result in a cumulatively significant and unavoidable impact on GHG emissions and the contribution of Alternative 2 to this impact would be ***cumulatively considerable***. Because the proposed Project would have a significant and unavoidable cumulative impact on GHG emissions, and because Alternative 4 would have a similar impact on GHG emissions as the proposed Project, the cumulative impacts with implementation of Alternative 4 on GHG emissions would be significant and unavoidable and the contribution of Alternative 4 to this impact would be ***cumulatively considerable***.

5.5.4.5 Hazardous Materials

5.5.4.5.1 Construction

Alternative 4 would include construction of all proposed Project components, with the exception of the proposed roadway improvements, instead implementing the LAMP Phase 2 roadways with modifications to provide access to Terminal 9. As a result, as shown in Table 5-4, Alternative 4 would have the same impacts as the proposed Project on the Terminal 1 Fuel Valve Vault site, the UAL MOC, and the PFAS area of interest. Moreover, Concourse 0 and LAMP Phase 2 roadways would have the same impacts on the AlliedSignal/Honeywell as the proposed Project. Therefore, as with the proposed Project, construction of Alternative 4 would result in a ***less than significant impact*** related to hazardous materials.

5.5.4.5.2 Operations

Operations under Alternative 4 would not involve excavation, extraction of groundwater, or any activity that could damage or physically interfere with ongoing or future contamination monitoring or remediation activities at the listed sites. As such, as with the proposed Project, operation of Alternative 4 would have ***no impact*** related to hazardous materials.

5.5.4.5.3 Cumulative

Alternative 4 would include the construction and operation of all proposed Project components, except that it would implement the approved LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. As discussed above, construction and operation of Alternative 4 would have a lower impact on hazardous materials than the proposed Project. As discussed in Section 4.5, *Hazardous Materials*, the proposed Project would have a cumulatively less than significant impact on hazardous materials. Because the proposed Project would have a less than significant cumulative impact on hazardous materials, and because Alternative 4 would have a lower impact on hazardous materials than the proposed Project, the cumulative impacts from Alternative 4 on hazardous materials would be ***less than significant***.

5.5.4.6 Land Use and Planning

5.5.4.6.1 Construction and Operations

Alternative 4 would include construction and operation of all proposed Project components, with the exception of the proposed roadway improvements, instead implementing the LAMP roadways with modifications to provide access to Terminal 9. Although this alternative would include the proposed APM station, the proposed LAMP Phase 2 roadway system would not advance regional and local policies aimed at transportation to the same extent as the proposed Project. However, this would not cause significant environmental impacts due to inconsistencies with these policies. As described in Sections 5.5.2.4.1 and 5.5.4.4 above, GHG and vehicle emissions under this alternative would increase compared to existing baseline conditions, although to a slightly lesser extent than the proposed Project. However, as with the proposed Project, Alternative 4 would comply with the overall intent of these land use plans and Alternative 4 would result in ***less than significant*** impacts to land use and planning.

5.5.4.6.2 Cumulative

Alternative 4 would include the construction and operation of all proposed Project components, except that it would implement the approved LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. As discussed above, construction and operation of Alternative 4 would have a lower impact on land use policies concerning GHG and vehicle emissions than the proposed Project. As discussed in Section 4.6, *Land Use and Planning*, the proposed Project would have a cumulatively less than significant impact on land use. Because the proposed Project would have a less than significant cumulative impact on land use, and because Alternative 4 would have a lower impact on land use than the proposed Project, the cumulative impacts from Alternative 4 on land use would be ***less than significant***.

5.5.4.7 Noise

5.5.4.7.1 Aircraft Noise

5.5.4.7.1.1 Construction

Alternative 4 would include construction of all the airfield improvements, including the proposed modifications to the runway exits. As with the proposed Project, this alternative would require temporary runway closures in 2023 and 2024, which would result in temporary changes in aircraft noise exposure levels in nearby areas. As with the proposed Project, for some noise-sensitive land uses, the temporary increase in aircraft noise during construction of Alternative 4 would result in a short-term (i.e., 4.5-month) ***significant and unavoidable impact***.

5.5.4.7.1.2 Operations

Future aircraft activity under Alternative 4 would be the same as under the proposed Project; therefore, future aircraft noise impacts would be the same under both. As with the proposed Project, aircraft operations under Alternative 4 would increase the area that would be subject to elevated aircraft noise levels (i.e., higher than 65 dBA CNEL), which would expose additional residences and other noise-sensitive uses to aircraft noise that exceed the threshold of significance. As with the proposed Project, even with implementation of the proposed mitigation measure (MM-AN (ATMP)-1, Sound Insulation Programs), impacts associated with aircraft noise under Alternative 4 would be ***significant and unavoidable.***

5.5.4.7.1.3 Cumulative

As discussed in Section 4.7.1, *Aircraft Noise*, none of the development projects identified in Chapter 3, *Overview of Project Setting,* would have aircraft operations that could contribute to cumulative aircraft noise impacts. Therefore, cumulative impacts from aircraft noise under the proposed Project would be less than significant (i.e., although aircraft noise impacts associated with the proposed Project, alone, would be significant and unavoidable, there are no other projects involving aircraft activity; hence there is no *cumulative* aircraft noise and there would not be a significant cumulative impact). The lack of other projects that contribute to cumulative aircraft noise impacts applies to Alternative 4 in the same way as the proposed Project. As with the proposed Project, under Alternative 4, cumulative impacts associated with aircraft noise would be ***less than significant***.

5.5.4.7.2 Roadway Traffic Noise

5.5.4.7.2.1 Operations

Under Alternative 4, in place of the proposed roadway improvements, Alternative 4 would implement the already-approved LAMP Phase 2 roadway improvements. For the most part, roadway traffic associated with the LAMP Phase 2 roadways would be located on alignments similar to those of the proposed Project with respect to nearby noise-sensitive receptors. The exception is that, under Alternative 4, the extensive roadway improvements north of 98th Street, which would consist of parallel elevated ramps, would not occur. As a result, traffic volumes on roadways in the vicinity of 98th Street would be lower under Alternative 4 as compared to the proposed Project. The improvements north of 98th Street that would occur under the proposed Project would be located at a slightly greater distance from nearby noise-sensitive receptors, which are on the south side of 98th Street. Nevertheless, due to the higher traffic volumes, it is expected that the proposed Project would have greater impacts to noise-sensitive receptors along 98th Street from roadway noise than would Alternative 4. With respect to other roadways, essentially the same amount of traffic would move through the area roadways under Alternative 4 as that for the proposed Project. For these reasons, the roadway traffic noise levels on the local roadway network projected for 2028 and the associated increases in roadway traffic noise compared to baseline conditions would not be materially different between Alternative 4 and the proposed Project. As with the proposed Project, impacts under Alternative 4 would be ***less than significant***.

5.5.4.7.2.2 Cumulative

As discussed above, Alternative 4 would have a materially similar impact on roadway traffic noise as the proposed Project. As discussed in Section 4.7.2, *Roadway Traffic Noise*, the proposed Project would have a less than significant cumulative impact on roadway traffic noise. Because the proposed Project would have a less than significant cumulative impact on roadway traffic noise, and because Alternative 4 would have a similar impact on roadway traffic noise as the proposed Project, the cumulative impacts from Alternative 4 on roadway traffic noise would be ***less than significant***.

5.5.4.7.3 Construction Traffic and Equipment Noise and Vibration

5.5.4.7.3.1 Construction

Alternative 4 would include construction of all the proposed Project components with the exception of the roadway improvements. Instead of constructing the roadway improvements proposed under the proposed Project, Alternative 4 would implement the LAMP Phase 2 roadways, but would modify the roadways to provide access to Terminal 9. As with the proposed Project, construction of Alternative 4 would result in construction noise associated with airfield improvements, roadway improvements, and Concourse 0 and Terminal 9 construction. Alternative 4 would have a similar level of construction as the proposed Project. Therefore, peak daily construction trips would be similar, and construction traffic noise

would generally be the same as the proposed Project. As with the proposed Project, impacts related to construction traffic noise would be less than significant. Construction activities associated with the LAMP Phase 2 roadways would be located in proximity to the same historical resources as the proposed Project. In particular, construction activities would generally be the same distance from the most noise-sensitive use, the former Aircraft School Building, as the proposed Project. As with the proposed Project, impacts to this building, and to the other historical resources, from construction equipment vibration would be ***less than significant***.

As with the proposed Project, construction of the airfield improvements, roadways, and Terminal 9 would generate noise from construction equipment. The potential noise impacts from each construction activity on the nearest noise-sensitive receptors are shown in **Table 5-13**. As explained above in Section 5.5.1.7.3, the noise levels shown in the table are very conservative; actual construction-related noise levels associated with Alternative 4 would be lower than those identified in Table 5-13. Instead of constructing the roadway improvements proposed under the proposed Project, Alternative 4 would implement the LAMP Phase 2 roadways, but would modify the roadways to provide access to Terminal 9. The LAMP Phase 2 roadways do not include improvements on 98th Street. As shown in Table 5-5 and Table 5-13, implementation of the LAMP Phase 2 roadways in lieu of the proposed Project roadways would not avoid any of the significant impacts associated with the proposed Project at any Receptor Sites; however, Alternative 4 would reduce, but not avoid, significant impacts associated with the proposed Project at one Receptor Site (R11 Courtyard Los Angeles LAX/Century Boulevard). As shown in Table 5-13, implementation of Alternative 4 would result in construction noise levels above the threshold of significance at several noise-sensitive receptors due to the construction of Terminal 9, Concourse 0, and the roadway improvements, as well as from the combined construction activities. As with the proposed Project, Mitigation Measures MM-N (ATMP)-1, Construction Noise Control Plans, MM-N (ATMP)-2, Construction Scheduling, and MM-N (ATMP)-3, Construction Equipment, would reduce impacts associated with construction traffic and equipment noise under Alternative 4 to a level that is ***less than significant.***

Noise associated with the use of staging areas for Alternative 4 would be the same as the proposed Project (see Table 4.7.3-6). As with the proposed Project, impacts would be ***less than significant***.

5.5.4.7.3.2 Cumulative

As discussed above, Alternative 4 would have a materially similar impact on construction traffic and equipment noise and vibration than the proposed Project. As discussed in Section 4.7.3, *Construction Traffic and Equipment Noise and Vibration*, the proposed Project would have a less than significant cumulative impact on construction traffic and equipment noise and vibration. Because the proposed Project would have a less than significant cumulative impact on construction traffic and equipment noise and vibration, and because Alternative 4 would have a materially similar impact on construction traffic and equipment noise and vibration than the proposed Project, the cumulative impacts from Alternative 4 on construction traffic and equipment noise and vibration would be ***less than significant***.

Table 5-13
Construction Noise Levels at Noise-Sensitive Receptor Sites - Alternative 4

ID	Receptor	Background Conditions[1] CNEL (dBA)	Distance from Construction Activity (feet)	Construction Activity	Construction Equipment CNEL (dBA)	Total[2] CNEL (dBA)	Significance Threshold[3]	Above Threshold?
R1	Residential development in Playa del Rey	67.8	3,200	Airfield improvements	60.5	68.5	72.8	No
R2	Saint Bernard High School	67.7	2,500	Airfield improvements	62.6	68.9	72.7	No
R3	Residential development along southern edge of Westchester	68.4	1,500	Airfield improvements	67.1	70.8	73.4	No
R4	Park West Apartments on Lincoln Boulevard	66.3	1,200	Airfield improvements	69.0	70.9	71.3	No
R5	Residential uses along West 88th Street near Liberator Ave	67.9	2,500	Airfield improvements	62.6	69.0	72.9	No
R6	Residential uses near Westchester Parkway and Kittyhawk Ave	72.0	1,750	Airfield improvements	65.7	72.9	77.0	No
		72.0	2,850	Terminal (C0) construction	61.9	72.4	77.0	No
		72.0	1,600	Roadway construction	66.9	73.2	77.0	No
		72.0	NA	Combined airfield improvements and roadway construction	70.1	74.2	77.0	No
R7	Residence Inn by Marriott Los Angeles LAX/Century Boulevard	70.2	2,900	Terminal (C0) construction	61.7	70.9	75.2	No
		70.2	900	Terminal (T9) construction	71.9	74.1	75.2	No
		70.2	900	Roadway construction	71.9	74.1	75.2	No
		70.2	NA	Combined terminal (C0 and T9) and roadway construction	75.1	76.3	75.2	Yes[4]

Table 5-13
Construction Noise Levels at Noise-Sensitive Receptor Sites - Alternative 4

ID	Receptor	Background Conditions[1] CNEL (dBA)	Distance from Construction Activity (feet)	Construction Activity	Construction Equipment CNEL (dBA)	Total[2] CNEL (dBA)	Significance Threshold[3]	Above Threshold?
R8	Sheraton Gateway Los Angeles Hotel	69.3	1,600	Terminal (C0) construction	66.9	71.3	74.3	No
		69.3	300	Terminal (T9) construction	81.4	81.7	74.3	Yes[4]
		69.3	100	Roadway construction	91.0	91.0	74.3	Yes[4]
		69.3	NA	Combined terminal (C0 and T9) and roadway construction	91.5	91.5	74.3	Yes[4]
R9	H Hotel Los Angeles/ Homewood Suites by Hilton Los Angeles International Airport	70.4	1,200	Terminal (C0) construction	69.4	72.9	75.4	No
		70.4	250	Terminal (T9) construction	83.3	83.3	75.4	Yes[4]
		70.4	55	Roadway construction	96.2	96.2	75.4	Yes[4]
		70.4	NA	Combined terminal (C0 and T9) and roadway construction	96.4	96.4	75.4	Yes[4]
R10	Hyatt Regency Los Angeles International Airport	73.4	350	Terminal (C0) construction	80.1	80.9	78.4	Yes[4]
		73.4	550	Terminal (T9) construction	76.2	78.0	78.4	No
		73.4	150	Roadway construction	87.5	87.7	78.4	Yes[4]
		73.4	NA	Combined terminal (C0 and T9) and roadway construction	88.5	88.6	78.4	Yes[4]

Table 5-13
Construction Noise Levels at Noise-Sensitive Receptor Sites - Alternative 4

ID	Receptor	Background Conditions[1] CNEL (dBA)	Distance from Construction Activity (feet)	Construction Activity	Construction Equipment CNEL (dBA)	Total[2] CNEL (dBA)	Significance Threshold[3]	Above Threshold?
R11	Courtyard Los Angeles LAX/Century Boulevard	71.7	1,000	Terminal (C0) construction	71.0	74.4	76.0	No
		71.7	600	Terminal (T9) construction	75.4	76.9	76.0	Yes[4]
		71.7	350	Roadway construction	73	75.4	76.0	No
		71.7	NA	Combined terminal (C0 and T9) and roadway construction	77.4	78.4	76.0	Yes[4]

Source: HMMH, CDM Smith, 2020.

Notes:
1 Background condition obtained through AEDT using 24-hour CNEL dBA.
2 Background plus Alternative 4 construction noise.
3 Significance Threshold = Background CNEL + 5 dBA
4 Construction equipment noise levels conservatively assume all equipment would be utilized at the same time and at all hours of the 24-hour day, both of which are unlikely.

Key:
C0 = Concourse 0; T9 = Terminal 9

5.5.4.8 Transportation

5.5.4.8.1 Plans, Programs, Ordinances, and Policies Analysis

Consistent with the methodology used in Section 4.8.5.1.1 for the proposed Project, a review was conducted to determine whether Alternative 4 would conflict with a transportation-related City or regional plan, program, ordinance, or policy addressing the circulation system (including transit, roadways, bicycle, and pedestrian facilities) that was adopted to protect the environment. Transportation policies or standards adopted to protect the environment include those that support multimodal transportation options and a reduction in VMT. Similar to what was discussed in Table 4.8-11 and Table 4.8-12 for the proposed Project, Alternative 4's relationship to transportation-related plans, policies, ordinances, and programs would not result in significant impacts to the environment. Those similarities include, but are not limited to, the relationship to the adopted SCAG 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS recognizes the LAX Landside Access Modernization Program as providing for ground transportation system improvements at LAX, and the RTP/SCS also recognizes the proposed Project as providing for ground transportation system improvements. While LAX Landside Access Modernization Program Phase 1 roadway improvements are included in the RTP/SCS, the Phase 2 roadway improvements, which are a key element of Alternative 4, are not included in the RTP/SCS, but could be added at a future time. That is also the case for the roadway improvements associated with the proposed Project. Overall, Alternative 4would not be inconsistent with transportation-related plans, policies, ordinances, and programs, and the impact of Alternative 4 would be ***less than significant***, as would also be the case for the proposed Project.

5.5.4.8.2 VMT Analysis

Alternative 4 was analyzed by modifying the LAX Travel Demand Model (that was developed and calibrated for the proposed Project) to account for all the transportation elements of Alternative 4. The methodology to calculate VMT impacts is consistent with the methodology described in Section 4.8.2 for the proposed Project VMT analysis. The travel demand model is used to calculate VMT per employee, total passenger VMT and induced VMT. The results of the passenger and employee VMT analysis are presented in **Table 5-14.**

Table 5-14
Alternative 4 Passenger and Employee VMT

Measure	Projected Future Conditions Baseline	Proposed Project	Alternative 4
VMT per Employee	24.0	23.9	23.9
Total Passenger VMT	8,676,209	8,708,995	8,692,322
Source: Fehr and Peers, 2020.			

Alternative 4 would result in 4,700 new employees associated with Concourse 0 Terminal 9, consistent with the proposed Project. As shown in Table 5-14, the VMT per employee under Alternative 4 would not be 15 percent below the baseline (i.e., 20.4), which is the threshold of significance. Because Alternative 4 would generate VMT per employee that would exceed 15 percent below the Projected Future Conditions Baseline VMT per employee rate, this would be a ***significant impact***, which would also be the case for the proposed Project. However, with implementation of similar mitigation as proposed in Section 4.8.5.2.2, the impact related to employment VMT for Alternative 4 would be reduced to a ***less than significant*** level, as is also the case for the proposed Project.

Alternative 4 would result in a net increase of 16,123 total passenger VMT over the 2028 Projected Future Conditions Baseline. Alternative 4 would result in a VMT increase of 0.19 percent over baseline conditions

compared to a 0.37 percent increase associated with the proposed Project. Although the magnitude of the impact under Alternative 4 is less than that of the proposed Project (Project's net increase in total passenger VMT is 32,786), passenger-related VMT would still be a ***significant impact***. Even with implementation of the mitigation package for the proposed Project as described in Section 4.8.5.2.2, the passenger VMT impact would remain a ***significant and unavoidable impact*****,** which would also be the case for the proposed Project.

The LAX Landside Access Modernization Program Phase 2 roadway improvements and proposed Project new roadways are expected to have the same effect on induced VMT (with minimal variation), because the level of non-airport trip activities would be the same. Therefore, the short-term induced VMT impacts of Alternative 4 would be consistent with those of the proposed Project, as described in Section 4.8.5.4; hence, there would be a ***significant and unavoidable impact*** for both Alternative 4 and the proposed Project.

5.5.4.8.3 Hazard Analysis

Impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from [a] project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts, as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. In the case of Alternative 4, these conflicts may be created by ramp configurations or through the placement of ramps, loading areas, or intersections in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections. These impacts were evaluated for permanent conditions after Project completion.

This analysis focused upon locations where the new roadways introduce a new vehicle access point and/or driveways to the site. The following four locations that would access the Project site from the public right-of-way and that may be affected by Alternative 4 driveways and infrastructure are:

- Century Boulevard and Jetway Boulevard
- Sepulveda Boulevard and 96th Street
- Sepulveda Boulevard and Century Boulevard
- Sepulveda Boulevard south of World Way

Based on the proposed infrastructure, level of existing activity, and anticipated level of activity attributable to the proposed Project, the proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) and would comply with City design standards. Moreover, the land uses associated with Alternative 4 (i.e., roadway improvements, Concourse 0 and Terminal 9) would not be incompatible with existing land uses in the Project area, which consist of airport and commercial uses. For these reasons, the impact would be ***less than significant***.

Freeway Safety Analysis

The LADOT interim guidance for freeway safety analysis applied to the proposed Project, described in Section 4.8.5.5.1, was also used to assess freeway safety impacts relative to Alternative 4. This alternative has comparable passenger and employee levels of activity as the proposed Project. It is anticipated that the impacts on freeway off-ramps would, therefore, be similar to the proposed Project. Therefore, as with the proposed Project, Alternative 4 would not have a substantial effect at the analyzed location or have a negative effect on traffic safety.

Overall, implementation of Alternative 4 would have a ***less than significant impact*** relative to hazards, as would also be the case for the proposed Project.

5.5.4.8.4 Cumulative Impacts

Cumulative Impacts Associated with Plans, Programs, Ordinances, and Policies

The cumulative impacts of Alternative 4 related to plan consistency would be consistent with those of the proposed Project, as described in Section 4.8.6.1, which would be ***less than significant.***

Cumulative Impacts Associated with VMT

Alternative 4 would have 4,700 new employees as part of Concourse 0 and Terminal 9 (consistent with the proposed Project). The passenger activity forecast is also similar to the proposed Project. Therefore, the employee and passenger cumulative impacts of Alternative 4 are similar to the proposed Project as described in Section 4.8.6.2.

The LAX Landside Access Modernization Program Phase 2 roadway improvements and proposed Project new roadways are expected to have the same effect on induced VMT (with minimal variation), because the level of non-airport trip activities would be the same. Therefore, cumulative long-term induced VMT impacts of Alternative 4 would be consistent with those of the proposed Project as described in Section 4.8.6.2, and would be ***significant and unavoidable*** under both scenarios.

Overall, it is anticipated that there would be significant cumulative impacts related to VMT and that Alternative 4 would have a ***cumulatively considerable contribution*** to that impact, which would also be the case for the proposed Project.

Cumulative Impacts Associated with Hazards

The cumulative impacts of Alternative 4 related to hazards would be consistent with those of the proposed Project as described in Section 4.8.6.3. Such impacts would be ***less than significant*** for both Alternative 4 and the proposed Project.

5.5.4.9 Utilities

5.5.4.9.1 Water Supply

5.5.4.9.1.1 Construction

Alternative 4 would include construction of all the proposed Project components, with the exception of the proposed roadway improvements, instead implementing the LAMP roadways with modifications to provide access to Terminal 9. This alternative would require the same conveyance improvements for Terminal 9 that would be necessary under the proposed Project. Water use during construction of Alternative 4 would generally be the same as the proposed Project as the level of development would be similar. As with the proposed Project, construction of Alternative 4 would result in ***less than significant*** impacts on water supply and infrastructure.

5.5.4.9.1.2 Operations

Water demand from operation of Alternative 4 would be associated with the proposed buildings and passenger activity, which would not change with the replacement of the proposed roadway improvements. Since increased passenger activity under Alternative 4 would be the same as under the proposed Project, water demand from operation of Alternative 4 would be the same as the proposed Project. Because sufficient water supplies would be available, as with the proposed Project, operation of Alternative 4 would result in ***less than significant*** impacts on water supply and infrastructure.

5.5.4.9.1.3 Cumulative

Alternative 4 would include the construction and operation of all proposed Project components, except that it would implement the approved LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. As discussed above, construction and operation of Alternative 4 would have a lower impact on water supply than the proposed Project. As discussed in Section 4.9.1, *Water Supply*, the proposed Project would have a cumulatively less than significant impact on water supply. Because the proposed Project would have a less than significant cumulative impact on water supply, and because Alternative 4 would have a lower impact on water supply than the proposed Project, the cumulative impacts from Alternative 4 on water supply would be ***less than significant***.

5.5.4.9.2 Wastewater Generation

5.5.4.9.2.1 Construction

Alternative 4 would include construction of all the proposed Project components, with the exception of the proposed roadway improvements, instead implementing the LAMP roadways with modifications to provide access to Terminal 9. This alternative would require the same conveyance improvements for Concourse 0 that would be necessary under the proposed Project. Wastewater generation from construction of Alternative 4 would generally be the same as the proposed Project as the level of development would be similar. As with the proposed Project, construction of Alternative 4 would result in ***less than significant*** impacts on wastewater conveyance and treatment capacity.

5.5.4.9.2.2 Operations

Wastewater generation from operation of Alternative 4 would be the same as the proposed Project because the level of passenger activity would be equivalent. Since sufficient wastewater treatment capacity would be available, as with the proposed Project, operation of Alternative 4 would result in ***less than significant*** impacts on wastewater conveyance and treatment capacity.

5.5.4.9.2.3 Cumulative

Alternative 4 would include the construction and operation of all proposed Project components, except that it would implement the approved LAMP Phase 2 roadway improvements in place of the proposed Project roadway improvements. As discussed above, construction and operation of Alternative 4 would have a lower impact on wastewater than the proposed Project. As discussed in Section 4.9.2, *Wastewater Generation*, the proposed Project would have a cumulatively less than significant impact on wastewater. Because the proposed Project would have a less than significant cumulative impact on wastewater, and because Alternative 4 would have a lower impact on wastewater than the proposed Project, the cumulative impacts from Alternative 4 on wastewater would be ***less than significant***.

5.6 Environmentally Superior Alternative

Section 15126.6(e)(2) of the State CEQA Guidelines indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR. The State CEQA Guidelines also state that, should it be determined that the No Project Alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives. With respect to identifying an environmentally superior alternative among those analyzed in this Draft EIR, the range of potentially feasible alternatives includes Alternative 1: No Project Alternative, Alternative 2: the Concourse 0 Only, Alternative 3: Terminal 9 Only, and Alternative 4: Approved LAMP Roadway Improvements plus Terminal 9 Access Alternative.

A comparative summary of the environmental impacts associated with each alternative and the environmental impacts associated with the proposed Project is provided in **Table 5-15**. A more detailed description of the potential impacts associated with each alternative is provided above. Pursuant to Section 15126.6(c) of the State CEQA Guidelines, the analysis below addresses the ability of the alternatives to "avoid or substantially lessen one or more of the significant effects" of the proposed Project.

5.6.1 Alternative 1 – No Project

As summarized in Table 5-15, implementation of the No Project Alternative would avoid the proposed Project's significant and unavoidable impacts associated with construction-related air pollutant emissions and short-term increases in aircraft noise levels due to temporary runway closures during construction of the airfield improvements. In addition, the No Project Alternative would avoid the significant, but mitigable, impacts on two noise-sensitive receptors (hotels) due to construction noise and would reduce the severity of the significant impacts at three noise-sensitive receptors. With the implementation of the LAMP Phase 2 roadways instead of the roadway improvements associated with the proposed Project, the No Project Alternative would result in a smaller passenger VMT increase compared to the proposed Project; passenger VMT, however, would be significant and unavoidable under both alternatives. Also, the No Project Alternative would avoid the significant, but mitigable, employee VMT impact. The No Project Alternative would also have comparatively lower impacts or no impacts at all for some environmental issue areas where the proposed Project's impacts would be less than significant, such as related to historical resources, wasteful/inefficient consumption of energy, unauthorized releases of hazardous materials during construction, hazard to the public/environment during construction, and conflict with land use plans/policies/regulations. With respect to impacts that would be more severe under the No Project Alternative as compared to the proposed Project, the No Project Alternative would result in a new significant impact with respect to air pollutant concentrations; specifically, operations under the No Project Alternative would exceed the significance threshold for NO_2 concentrations. The impacts for all other environmental issue areas would be generally similar between the No Project Alternative and the proposed Project.

5.6.2 Alternative 2 – Concourse 0 Only

As summarized in Table 5-15, implementation of Alternative 2 would result in the same overall impact conclusions as would the proposed Project. Alternative 2 would not avoid any of the significant and unavoidable impacts of the proposed Project; however, as discussed below, the alternative would result in a significant impact to one pollutant that would not occur under the proposed Project. As discussed in the analysis of impacts for Alternative 2, presented earlier, there are some additional differences from the proposed Project with respect to the nature and severity of impacts under Alternative 2, which are described below.

Table 5-15
Summary Comparison of Impacts Associated with the Proposed Project and Alternatives

Resource Category[1]	Proposed Project (After Mitigation)	Alternative 1: No Project	Alternative 2: Concourse 0 Only	Alternative 3: Terminal 9 Only	Alternative 4: LAMP Roadway Improvements plus Terminal 9 Access
Air Quality and Human Health Risk					
Air Quality					
Emissions (Construction)	Significant and Unavoidable (NO_X) Significant and Unavoidable (CO, VOC, SO_X; short-term – approx. 4.5 months)[2]	Less than Significant	Significant and Unavoidable (NO_X) Significant and Unavoidable (CO, VOC, SO_X; short-term – approx. 4.5 months)[2]	Significant and Unavoidable (NO_X) Significant and Unavoidable (CO, VOC, SO_X; short-term – approx. 4.5 months)[2]	Significant and Unavoidable (NO_X) Significant and Unavoidable (CO, VOC, SO_X; short-term – approx. 4.5 months)[2]
Emissions (Operations)	Significant and Unavoidable (NO_X, SO_X, PM_{10}, $PM_{2.5}$)	Significant and Unavoidable (NO_X, SO_X, PM_{10}, $PM_{2.5}$)	Significant and Unavoidable (NO_X, SO_X, PM_{10}, $PM_{2.5}$)	Significant and Unavoidable (NO_X, SO_X, PM_{10}, $PM_{2.5}$)	Significant and Unavoidable (NO_X, SO_X, PM_{10}, $PM_{2.5}$)
Concentrations (Construction)	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Concentrations (Operations)	Significant and Unavoidable (PM_{10})	Significant and Unavoidable (NO_2, PM_{10})	Significant and Unavoidable (NO_2, PM_{10})	Significant and Unavoidable (NO_2, PM_{10})	Significant and Unavoidable (PM_{10})
Human Health Risk					
Cancer Risk	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Cancer Burden	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Incremental Chronic Hazard	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Incremental Acute Hazard	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Exceeds Permissible Exposure Limits	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Cultural Resources (Historical Resources)					
Substantial Adverse Change in Significance of Historical Resource	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Energy					
Wasteful/Inefficient Consumption	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Conflict with/Obstruct Energy Efficiency Plans	No Impact	No Impact	No Impact	No Impact	No Impact

Table 5-15
Summary Comparison of Impacts Associated with the Proposed Project and Alternatives

Resource Category[1]	Proposed Project (After Mitigation)	Alternative 1: No Project	Alternative 2: Concourse 0 Only	Alternative 3: Terminal 9 Only	Alternative 4: LAMP Roadway Improvements plus Terminal 9 Access
Greenhouse Gas Emissions					
GHG Generation Impact on Environment	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
Conflict with GHG Reduction Plans/Policies/Regulations	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
Hazardous Materials					
Unauthorized Release (Construction)	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Unauthorized Release (Operations)	No Impact	No Impact	No Impact	No Impact	No Impact
Hazard to Public/Environment (Construction)	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Hazard to Public/Environment (Operations)	No Impact	No Impact	No Impact	No Impact	No Impact
Land Use and Planning					
Conflict with Land Use Plans/Policies/Regulations	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Noise					
Aircraft Noise					
Increase noise levels at noise-sensitive uses to 65 CNEL or above (Construction)	Significant and Unavoidable (short-term – approx. 4.5 months)[2]	No impact	Significant and Unavoidable (short-term – approx. 4.5 months)[2]	Significant and Unavoidable (short-term – approx. 4.5 months)[2]	Significant and Unavoidable (short-term – approx. 4.5 months)[2]
Increase noise levels at noise-sensitive uses to 65 CNEL or above (Operations)	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
Increase by 1.5 dBA or more (Construction)	Significant and Unavoidable (short-term – approx. 4.5 months)[2]	No impact	Significant and Unavoidable (short-term – approx. 4.5 months)[2]	Significant and Unavoidable (short-term – approx. 4.5 months)[2]	Significant and Unavoidable (short-term – approx. 4.5 months)[2]
Increase by 1.5 dBA or more (Operations)	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Classroom Learning Disruption	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Roadway Traffic Noise					
Operational Roadway Traffic Noise	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant

Table 5-15
Summary Comparison of Impacts Associated with the Proposed Project and Alternatives

Resource Category[1]	Proposed Project (After Mitigation)	Alternative 1: No Project	Alternative 2: Concourse 0 Only	Alternative 3: Terminal 9 Only	Alternative 4: LAMP Roadway Improvements plus Terminal 9 Access
Construction Traffic and Equipment Noise and Vibration					
Construction Traffic Noise	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Construction Equipment Noise	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Construction Equipment Vibration	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Transportation					
Conflict with Transportation Programs/Plans/Ordinances/Policies	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
VMT per Employee	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Daily Passenger VMT	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
Induce Additional VMT	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
Increase Hazards/Incompatible Use	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Utilities					
Water Supply					
Relocation/New Facilities Impacts	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Water Demand	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Wastewater Generation					
Relocation/New Facilities Impacts	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Exceed Wastewater Treatment Capacity	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant

Source: CDM Smith, August 2020.

Notes:
1 Impacts represent both construction and operations, unless otherwise noted.
2 Short-term impacts would result from temporary runway closures during construction.

Under Alternative 2, Terminal 9 would not be constructed and, therefore, there would be comparatively less overall construction-related air pollutant emissions; however, Alternative 2 would still result in significant air pollutant emissions impacts, including impacts, associated with the construction-related temporary runway closures. From an operations standpoint, Alternative 2 would have a comparatively worse impact related to air pollutant concentrations than the proposed Project because there would be an exceedance of NO_2 concentrations that would not otherwise occur under the proposed Project. This would be a new significant impact for this pollutant and, as such, would exacerbate the significant and unavoidable operations-related air quality impact. Human health risk impacts under Alternative 2 would be less than those of the proposed Project relative to construction because of less overall construction activity, but would be the same relative to operations-related impacts, all of which would be less than significant. Energy consumption under Alternative 2 would be less than the proposed Project because there would be no Terminal 9. GHG emissions associated with operation of Alternative 2 would be higher than those of the proposed Project because the taxi/idle times for aircraft operations would be comparatively greater, which would result in more GHG emissions. As such, this would exacerbate the significant and unavoidable operations-related GHG impact. Alternative 2 would result in the same significant, unavoidable impacts associated with aircraft noise due to the construction-related temporary runway closures as would the proposed Project. Without the development of Terminal 9, Alternative 2 would avoid a significant construction equipment noise impact at one noise-sensitive receptor (i.e. hotel), and would reduce the severity of impacts at an additional four sensitive receptors; however, the significant construction equipment noise impacts would be fully mitigated under both the proposed Project and Alternative 2. With regard to transportation impacts, implementation of Alternative 2 would result in slightly greater passenger-related VMT than the proposed Project, which would exacerbate the significant and unavoidable impact associated with the proposed Project. Also, because Alternative 2 would have fewer employees than the proposed Project, the VMT per employee impact would be reduced compared to the proposed Project. With proposed mitigation, the impact related to employment VMT would be reduced to less than significant for both Alternative 2 and the proposed Project. VMT impacts associated with passengers and induced travel would be significant and unavoidable, as they would be for the proposed Project.

5.6.3 Alternative 3 – Terminal 9 Only

As summarized in Table 5-15, implementation of Alternative 3 would result in the same overall impact conclusions as would the proposed Project. Alternative 3 would not avoid any of the significant and unavoidable impacts of the proposed Project; however, as discussed below, the alternative would result in a significant impact to one pollutant that would not occur under the proposed Project. As discussed in the analysis of impacts for Alternative 3, presented earlier, there are some additional differences from the proposed Project with respect to the nature and severity of impacts under Alternative 3, which are described below.

Under Alternative 3, Concourse 0 would not be constructed and, therefore, there would be comparatively less overall construction-related air pollutant emissions; however, Alternative 3 would still result in significant air pollutant emissions impacts, including impacts associated with the construction-related temporary runway closures. From an operations standpoint, Alternative 3 would have a comparatively worse impact related to air pollutant concentrations than the proposed Project because there would be an exceedance of NO_2 concentrations that would not otherwise occur under the proposed Project. This would be a new significant impact for this pollutant and, as such, would exacerbate the significant and unavoidable operations-related air quality impact. Human health risk impacts under Alternative 3 would be less than those of the proposed Project relative to construction because of less overall construction activity, but would be the same relative to operations-related impacts, all of which would be less than significant. Energy consumption under Alternative 3 would be less than the proposed Project because there would be no Concourse 0. GHG emissions associated with operation of Alternative 3 would be higher than those of the

proposed Project because the taxi/idle times for aircraft operations would be comparatively greater, which would result in more GHG emissions. As such, this would exacerbate the significant and unavoidable operations-related GHG impact. Alternative 3 would result in the same significant, unavoidable impacts associated with aircraft noise due to the construction-related temporary runway closures as would the proposed Project. Without the development of Concourse 0, Alternative 3 would reduce the severity of significant construction noise impacts at three noise-sensitive receptors (i.e., hotels); however, those significant noise impacts would be fully mitigated under both the proposed Project and Alternative 3. With regard to transportation impacts, implementation of Alternative 3 would result in slightly lower passenger-related VMT than the proposed Project. Also, because Alternative 3 would have fewer employees than the proposed Project, the VMT per employee impact would be reduced compared to the proposed Project. With proposed mitigation, the impact related to employment VMT would be reduced to less than significant for both Alternative 3 and the proposed Project. VMT impacts associated with passengers and induced travel would be significant and unavoidable, as they would be for the proposed Project.

5.6.4 Alternative 4 - Approved LAMP Roadway Improvements plus Terminal 9 Access

As summarized in Table 5-15, implementation of Alternative 4 would result in the same impact conclusions as would the proposed Project. Alternative 4 would not avoid any of the significant and unavoidable impacts of the proposed Project, although it would reduce the severity of some impacts, as described below.

The construction-related impacts associated with Alternative 4 would be less than those of the proposed Project because the landside (roadway) improvements proposed under this alternative would be less extensive than those of the proposed Project. Nevertheless, Alternative 4 would result in the same significant, unavoidable impacts associated with construction air pollutant emissions, including impacts associated with the construction-related temporary runway closures. Human health risk impacts under Alternative 4 would be slightly less than those of the proposed Project relative to construction because of less overall construction activity, but would be the same relative to operations-related impacts, all of which would be less than significant. GHG emissions associated with Alternative 4 would be similar to the proposed Project. Alternative 4 would result in the same significant, unavoidable impacts associated with aircraft noise due to the construction-related temporary runway closures as would the proposed Project. Implementation of the LAMP Phase 2 roadways in lieu of the proposed Project roadways under Alternative 4 would reduce the severity of the significant construction noise impact at one noise-sensitive receptor (i.e., a hotel); however, that significant noise impact would be fully mitigated under the both proposed Project and Alternative 4. Another difference in impacts between the two development scenarios is related to VMT. Implementation of Alternative 4 would result in slightly lower passenger-related VMT than the proposed Project, which would reduce the severity of this significant and unavoidable impact. VMT impacts associated with passengers and induced travel would be significant and unavoidable, as they would be for the proposed Project.

5.6.5 Environmentally Superior Alternative

Alternative 1, the No Project Alternative, is the Environmentally Superior Alternative based on the fact that it would avoid several of the significant and unavoidable impacts of the proposed Project, although it would also result in a new significant impact to one pollutant during operations.

Alternative 4, the Approved LAMP Roadway Improvements plus Terminal 9 Access, is the next best Environmentally Superior Alternative. Alternative 4 would reduce the severity of a significant but mitigable impact related to construction noise and would slightly reduce the severity of the significant and unavoidable impact associated with increased passenger VMT.

While Alternatives 2 and 3 would provide notable benefits relative to reducing, but not avoiding, significant construction-related impacts, some of the key reductions in construction-related impacts would be offset by increased operational impacts, including some that would exacerbate significant and unavoidable impacts. Specifically, although implementation of Alternative 2 or Alternative 3 would help reduce construction-related air pollutant emissions, those reductions during construction would be offset by a new and more severe long-term significant impact associated with operations-related pollutant concentrations (i.e., operations-related NO_2 exceedance and increased GHG emissions) that would not occur with the proposed Project.