4.8 Transportation

4.8.1 Introduction

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743[1] into law and started a process that fundamentally altered transportation impact analysis conducted as part of CEQA compliance. The Governor's Office of Planning and Research (OPR) was charged with developing new guidelines for evaluating transportation impacts under CEQA using methods that no longer focus on measuring automobile delay and level of service (LOS). This change at the state level recognizes the unintended consequences of using LOS as an impact metric, which discouraged more sustainable infill projects and alternative transportation projects. In other words, the application of LOS as a measurement of traffic congestion inadvertently suggests that development of new projects in greenfield areas that do not have much, if any, existing traffic is more desirable (i.e., would not result in, or exacerbate existing, traffic congestion) than infill development in areas with existing traffic congestion, despite the fact that infill development has other complementary uses (e.g., mixed-use development) located nearby and/or has more opportunity to access public transit and other alternative modes of transportation which, in turn, can reduce both the number of vehicle trips generated and the length of those trips. SB 743 directed agencies to develop new guidelines that develop a transportation performance metric that can help promote the reduction of greenhouse gas (GHG) emissions, the development of multimodal networks, and a more sustainable diversity of land uses.

The State Natural Resources Agency certified the changes to State CEQA Guidelines Section 15064.3 to implement SB 743 effective December 28, 2018, and the updated State CEQA Guidelines were published in January 2019. OPR issued a supporting technical advisory in December 2018.[2] The updates establish vehicle miles traveled (VMT) as the primary metric for evaluating a project's environmental impacts on the transportation system. Lead agencies had until July 2020 to implement these new requirements.

The City of Los Angeles embarked on a parallel process to revise its significance thresholds for transportation impacts to be based on VMT, and to revise its transportation impact assessment processes and guidelines accordingly. In July 2019, the City formally adopted the Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines (TAG),[3] which provide new transportation significance thresholds and transportation impact analysis guidance that focus on traditional residential, office, and retail developments. The LADOT TAG provides guidance for transportation projects that:

- Conflict with programs, plans, ordinances, or policies
- Cause substantial VMT
- Induce substantial additional automobile travel
- Substantially increase hazards due to a geometric design feature or incompatible use

However, the TAG Guidance recognizes that "some projects will not fit into the above categories [i.e. residential, office, and retail]. In such cases, with the concurrence of LADOT, a customized approach can be used…" The transportation analysis for the proposed Project was prepared in consultation with LADOT.

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1 Senate Bill 743, *Environmental Quality: Transit Oriented Infill Projects, Judicial Review Streamlining for Environmental Leadership Development Projects, and Entertainment and Sports Center in the City of Sacramento*, approved September 27, 2013. Available: http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201320140SB743.

2 State of California, Governor's Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018. Available: http://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

3 City of Los Angeles, Department of Transportation, *Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines*, July 2019. Available: http://ladot.lacity.org/sites/default/files/documents/ta_guidelines_-20190731_0.pdf.

This analysis takes into consideration certain facilities and factors that relate to the transportation characteristics of the proposed Project, as well as the overall airport. They include the ground transportation system improvements approved and currently under construction for the LAX Landside Access Modernization Program, such as the Automated People Mover (APM) system, consolidated rental car (CONRAC) facility, and Intermodal Transportation Facility (ITF) East and ITF West, as well as off-airport LAX employee and passenger parking facilities and off-airport cargo operations, which are accounted for in the setting of the transportation analysis.

Prior to the preparation of this EIR, an Initial Study (included as **Appendix A** of this EIR) was prepared using the CEQA Environmental Checklist Form to assess potential environmental impacts related to transportation. The Initial Study found that the proposed Project would result in a "Less Than Significant Impact" to emergency access and, thus, no further analysis of this topic in an EIR was required. Based on the Initial Study screening criteria related to transportation, the following potential impact does not require any additional analysis in this EIR:

- The potential for the proposed Project to result in inadequate emergency access was evaluated in the Initial Study. As described therein, the proposed Project would require modifications to the existing circulation system. Temporary lane closures at and near the Central Terminal Area (CTA) entrance may be required to facilitate some construction activities. LAWA's Design and Construction Handbook[4] specifies that a Logistic Plan and fully documented Logistical Work Plan Checklist be developed for construction projects. Required information includes, but is not limited to, identification of emergency access provisions, emergency evacuation routes, and 24-hour emergency contact information. Further, LAWA would coordinate with the Los Angeles Fire Department and LAWA Police Division regarding emergency access and other design needs to ensure that emergency service levels are maintained during construction. In accordance with standard LAWA practice, emergency access routes in the vicinity of the Project site would be kept clear and unobstructed at all times during both construction and operation of the proposed Project in accordance with Federal Aviation Administration (FAA), State Fire Marshal, and Los Angeles Fire Code regulations. In addition, LAWA uses Intelligent Transportation Systems (ITS), including changeable message signs, to notify drivers of construction-related activities and roadway conditions in and around the CTA, which improves traffic flows at LAX. Any work and work zone setups would comply with all applicable permitting requirements including, but not limited to, California Department of Transportation (Caltrans), City of Los Angeles Public Works and Department of Transportation and the requirements set forth in the California Manual of Uniform Traffic Control Devices (MUTCD). As part of these requirements, there are provisions for coordination with local emergency services, training for flagmen for emergency vehicles traveling through the work zone, temporary lane separators that have sloping sides to facilitate crossover by emergency vehicles, and vehicle storage and staging areas for emergency vehicles. MUTCD requirements also provide for construction work during off-peak hours and flaggers. Therefore, the proposed Project would not result in inadequate emergency access and impacts to emergency access would be less than significant; no further evaluation in this EIR is required.

[4] City of Los Angeles, Los Angeles World Airports, *2017 Design and Construction Handbook,* specifically LAWA Construction Safety Program Requirements, Revision 4: July 1, 2016. Available: https://www.lawa.org/-/media/lawa-web/tenants411/file/lawa-construction-safety-program-requirements-rev-4.ashx. Note: subsequent to completion of the Initial Study in April 2019, LAWA updated their Design and Construction Handbook which similarly includes requirements for maintaining emergency access during construction: City of Los Angeles, Los Angeles World Airports, *2020 Design and Construction Handbook (DCH), Version 1.0,* June 30, 2020. Available: https://www.lawa.org/en/lawa-businesses/lawa-documents-and-guidelines/lawa-design-and-construction-handbook.

4.8.1.1 Scenarios Evaluated in the Analysis

The following scenarios were analyzed in the proposed Project transportation study:

- 2019 (i.e., existing traffic conditions without the proposed Project)
- Projected Future Conditions Baseline (2028) (i.e., future conditions with projected growth in background vehicle trips in the area surrounding LAX and anticipated ground transportation system improvements, including Phase 1 of the LAX Landside Access Modernization Program, but without the proposed Project)
- Projected Future Conditions Baseline (2028) With Project (i.e., the future conditions described above plus the proposed Project)

Section 15125(a)(1) of the State CEQA Guidelines provides that "a lead agency may define existing conditions by referencing…conditions expected when the project becomes operational." As discussed in Section 2.6.1, the project would become operational in 2028. Similarly, Section 15125(a)(2) of the State CEQA Guidelines provides that a lead agency "may use projected future conditions… as the sole baseline for analysis … if it demonstrates with substantial evidence that use of existing conditions would be either misleading or without informative value to decision-makers and the public. Use of projected future conditions as the only baseline must be supported by reliable projections based on substantial evidence in the record." For the reasons outlined in the Analytical Framework discussion at the beginning of Chapter 4, *Environmental Impact Analysis*, of this EIR and as explained below, the Projected Future Conditions Baseline (2028) is used as the baseline for the transportation impact analysis.

4.8.2 Methodology

This section describes the methodologies used to evaluate the impacts associated with each of the TAG transportation impact issue areas. The discussion of the VMT methodology includes a description of the Project Travel Demand Model and methodology for determining trip generation.

4.8.2.1 Methodology for Assessing Conflicts with Programs, Plans, Ordinances, or Policies

The LADOT TAG indicates that a proposed project should be analyzed for conflicts with transportation-related programs, plans, ordinances, or policies, subject to certain screening criteria. The TAG provides a methodology for such an analysis. Relative to conducting the analysis, the TAG states: "a project would not be shown to result in an impact merely based on whether a project would not implement a particular program, plan, policy, or ordinance." The relevant inquiry, rather, is whether the project would conflict with adopted programs, plans, ordinances, or policies addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities and result in a physical environmental impact not already disclosed in the other analyses. This evaluation was conducted by reviewing City documents, including the City of Los Angeles Mobility Plan 2035,[5] the LAX Plan,[6] the land

[5] City of Los Angeles, Department of City Planning, *Mobility Plan 2035 - An Element of the General Plan*, amended September 7, 2016. Available: https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility_Plan_2035.pdf.

[6] City of Los Angeles, Department of City Planning, *Los Angeles International Airport - LAX Plan*, adopted December 14, 2004, last amended June 7, 2017. Available: https://www.lawa.org/-/media/lawa-web/lawa-our-lax/plan-and-ordiance/2017-lax-plan.ashx?la=en&hash=A56B9B036C9CC63428A4AC5DC0E910992C1B0F53.

use element of the City's General Plan, the Vision Zero plan,[7] the Century Boulevard Streetscape Plan,[8] and relevant municipal code sections. Descriptions of these plans are provided in Section 4.8.3.1.3.

4.8.2.2 Methodology for Assessing Project VMT

4.8.2.2.1 Project Travel Demand Model

The purpose of this section is to introduce and describe the development process of the travel demand model built for the proposed Project. The following explains the model development process in general, including detail on the base year model development, the sources of data used to develop key model inputs, and model calibration/validation. The travel demand model provides VMT forecasts and traffic volume data for the proposed Project.

A key requirement in estimating VMT is a travel model that is sensitive to changes in the built environment. As such, a Project-specific travel demand model was developed and used as the primary tool for the LAX Airfield and Terminal Modernization Project transportation analysis. This model is capable of estimating VMT for the different proposed Project components, such as Concourse 0, Terminal 9, and the proposed changes to the roadway system. The main purpose of the model is to provide information on the following metrics:

- Vehicle Miles Traveled (VMT)
- Induced Demand (trips and VMT)
- Impacts of Mode Split Changes

Model Development and Framework

The base framework for the travel forecasting is the City of Los Angeles Citywide Model (owned and maintained by LADOT), which itself is based on the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan (RTP) model. This model was used as the starting point for the LAX Airfield and Terminal Modernization Project Travel Demand Model (Project Travel Demand Model) that was used to analyze the proposed Project and alternatives. The Project Travel Demand Model produces a.m. and p.m. peak period, mid-day, and night off-peak period vehicle and transit flows on roadways based on comprehensive socioeconomic data. The model uses a conventional four-step process consisting of trip generation, trip distribution, mode split, and assignment. Further detail regarding the SCAG 2016 RTP model can be obtained from the 2012 SCAG Model Validation Report for the SCAG Planning Model,[9] and additional detail regarding the City of Los Angeles Travel Demand Forecast (TDF) Model can be obtained in the City of Los Angeles Model Development Report.[10] The central purpose of the Project Travel Demand Model is to provide a robust tool to calculate VMT and assess impacts against a threshold of significance.

To develop the 2019 base Project Travel Demand Model to evaluate the proposed Project, the City of Los Angeles Travel Model was utilized with the following refinements incorporated into the model (Note: All data related to existing conditions were collected in 2019):

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7 City of Los Angeles, Department of Transportation, *Vision Zero Los Angeles 2015-2025 Action Plan*, January 2017. Available: https://ladotlivablestreets-cms.org/uploads/cb1ecdfacabb4bcd97c922382b165e79.pdf; City of Los Angeles, Department of Transportation, *Vision Zero Los Angeles 2015-2025: 2018 Action Plan + Progress Report*. Available: https://ladotlivablestreets-cms.org/uploads/d704aa3913e440d5ab4cb91930e902d4.pdf.

8 City of Los Angeles, *Century Boulevard Streetscape Plan*, May 21, 2018. Available: https://planning.lacity.org/plans-policies/overlays/century-boulevard.

9 Southern California Association of Governments, *SCAG Regional Travel Demand Model and 2012 Model Validation*, March 2016. Available: http://www.scag.ca.gov/Documents/SCAG_RTDM_2012ModelValidation.pdf.

10 Fehr & Peers, *2016 City of Los Angeles Model Development Report*, February 2018. Available: https://ladot.lacity.org/sites/default/files/documents/tdf_model_development_report_20180226.pdf.

- The Socio-Economic and Demographic (SED) information for year 2019 was based on the 2019 data provided by SCAG.
- The Traffic Analysis Zones (TAZs) around the airport were further disaggregated to help with vehicle trip distribution and assignment.
- The roadway network was modified. More roadway detail was added in and around the airport to ensure the model produced traffic forecasts that reasonably resembled observed traffic counts.
- The Project Travel Demand Model includes an extensive transit network of routes and stops, which was used to help determine the number of person trips using various modes of transit in the model. All transit routes in the City of Los Angeles were included, along with stops along the routes. The resulting transit network consists of approximately 1,100 transit routes and 18,000 transit stops, representing nearly 40 percent of the transit facilities in the SCAG region.
- There are 40 special generator zones (such as airports and seaports) in the Project Travel Demand Model. There is a total of 12 airport zones and 28 seaport zones in the model, which is consistent with the 2016 SCAG RTP model. All special generators have pre-defined vehicle trip generation and distribution estimates based on information provided by SCAG and LAWA.
- LAX comprises 24 special generator zones, including the CTA, various cargo facilities, passenger on-site airport structure parking, passenger off-site parking, employee parking, and airport administration buildings.
- Extensive 24-hour driveway traffic counts, arterial traffic counts, anonymized employee zip code data, LAX employee and passenger survey data, and "Big Data" (or cellular probe data[11]) were collected in 2019 to develop detailed trip generation and trip distribution estimates for LAX-related zones. Two different sources of "Big Data "were used in the analysis: Teralytics and Streetlight. Data provider Teralytics provided information on the origin destination patterns of both passengers and employees; Streetlight provided data that was used to help with vehicle routing to/from and around LAX. The "Big Data," coupled with the empirical counts, were used to estimate both LAX passenger and employee vehicle trips and subsequent VMT.

Model Calibration and Validation

The original City of Los Angeles Travel Demand Model was tested for accuracy and sensitivity based on the latest California modeling guidance specified in the 2017 California Regional Transportation Plan guidelines.[12] Forecasting models are typically calibrated by adjusting model parameters until model-estimated traffic volumes closely match observed traffic volume counts. For the Project Travel Demand Model, both cell phone and mobile device Global Positioning System (GPS) data (commonly referred to as "Big Data") were used extensively during the calibration and validation process. This approach resulted in a tool that provides a more accurate estimate of VMT.

Model validation is a critical component of the model development process where the model's ability to replicate actual existing conditions is measured. A rigorous approach to validation involves performing both static and dynamic tests, which are further described below.

[11] In the context of transportation planning, "big data" refers to the use of aggregated mobile phone signal data to provide information about human mobility. Anonymized cell phone probe data was provided by Teralytics and Streetlight, who meet all national and international privacy and security standards. Detailed information about these data sources is provided at https://www.teralytics.net/about/ and https://insight.streetlightdata.com/.

[12] State of California, California Transportation Commission, *2017 Regional Transportation Guidelines for Metropolitan Planning Organizations*, January 18, 2017. Available: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/f0009312-2017rtpguidelinesformpos-a11y.pdf.

Model Static Validation

The verification of the model estimates matching counts is called (static) validation. In this case the resulting modeled link volumes were compared to traffic counts on the roadway network. In addition to the 348 ground traffic counts observed in August 2019 around the LAX area, 2019 traffic counts from Regional Integration of Intelligent Transportation Systems (RIITS) and Freeway Performance Measurement System (PeMS) were used for model validation. More details about the static validation tests are presented in **Appendix G.6**, *LAX Travel Demand Model*.

Model Dynamic Validation

The static validation tests ensure the model can replicate existing traffic counts and speeds. Although these tests are useful to confirm the model can replicate existing conditions, models are generally used to forecast change. To determine how well the model responds to changes in land use and the transportation network, a set of dynamic validation tests was performed. Dynamic tests included isolated tests of changes in the land use or roadway network.

Based on the results of the dynamic validation tests, elements of the trip generation, trip distribution, and traffic assignment modules were adjusted. More details about dynamic validation test are presented in **Appendix G.6**, *LAX Travel Demand Model*.

Projected Future Conditions Baseline (2028) Model

As noted in the Analytical Framework discussion at the beginning of Chapter 4, the surface transportation characteristics around LAX will be substantially changed by the improvements associated with Phase 1 of the LAX Landside Access Modernization Program. Those improvements include the APM, the ITFs, CONRAC, and Phase 1 roadways, all of which will be completed and operational prior to completion of the proposed Project in 2028. In addition, Metro's Airport Metro Connector (AMC) 96th Street Transit Station will also be completed by 2028. The changes to the existing (2019) surface transportation characteristics around LAX that result from these improvements will, in turn, change the existing VMT characteristics of LAX. In order to evaluate potential impacts to VMT associated with implementation of the proposed Project, this analysis uses a Projected Future Conditions Baseline (2028) that includes the improvements in Phase 1 of the LAX Landside Access Modernization Program as the baseline against which Project impacts are measured. The use of the Projected Future Conditions Baseline (2028) provides the only truly representative and accurate disclosure of Project-related VMT impacts. Using an Existing (2019) Conditions Baseline would be misleading as it would confound the ability to distinguish VMT changes in 2028 that are due to the proposed Project from the VMT changes in 2028 that are due to Phase 1 of the LAX Landside Access Modernization Program. As such, the model developed for the transportation analysis of the proposed Project included a scenario for 2028 conditions with Phase 1 of the LAX Landside Access Modernization Program, but without the roadway systems improvements associated with the proposed Project.

For modeling future conditions as related to the Projected Future Conditions Baseline (i.e., future without Project), the 2028 future year Project Travel Demand Model was created with updated model SED and roadway network improvements that accounted for estimated future growth and changes in traffic conditions. SED in year 2028 was interpolated based on the 2016 and 2040 City of Los Angeles TDF Model. Cumulative project information and land use growth in the corresponding TAZs were checked against future year model SED and vehicle trip growth was increased as necessary to ensure the model accounted for the likely increase in traffic from the cumulative projects. SED within the TAZs that were created for LAX were further reviewed to represent the future With Project and Without Project conditions. The 2028 future without Project transportation network was updated based on the 2040 City of Los Angeles TDF Model network.

4.8.2.2.2 Trip Generation Methodology

The following is a synopsis of the methodology used to develop the passenger- and employee-generated trips, which are inputs for the Travel Demand Model.

Existing Conditions (2019) Trip Generation

The CTA trip generation for existing conditions was developed using data and information from the Traffic and Automated Vehicle Identification System (TRAVIS), in-pavement loop detector counters, Transportation Networking Company (TNC) volume reports, and parking entries/exits from the airport's parking and revenue control system. The loop detector data provide hourly 24-hour counts of vehicles accessing the CTA from each approach. The TRAVIS data and TNC volumes provide hourly volumes for all commercial modes. These data sets were reviewed and used to represent a 2019 Design Day hourly vehicle volumes entering and exiting both the arrivals (lower) and departures (upper) levels of the CTA.[13] In order to provide a conservative basis for estimating daily trip generation, the Design Day was selected to be a Friday in August, which represents a busy day during the peak month based on LAWA's monthly passenger statistics and, thus, more passenger VMT. The hourly trip volumes for the existing conditions Design Day (a Friday in August 2019) are provided in **Appendix G.4**, *Trip Generation*.

Projected Future Conditions Baseline (2028) Trip Generation

To develop the future airport passenger generated vehicle volumes, the analysis used the most recently created trip generation model calibrated to data reflecting existing (2019) conditions.[14] The trip generation model uses vehicle classification, occupancies, mode splits, and mode assignments to convert hourly passenger data from the Design Day flight schedule to hourly vehicle volumes on the curbside.

To estimate the Projected Future Conditions Baseline (2028) airport passenger generated vehicle trips, the forecasted Projected Future Conditions Baseline (2028) Design Day flight schedule and the existing conditions trip generation model were used. To estimate the number of arriving and departing passengers each hour, a passenger load factor was applied to each flight in the Projected Future Conditions Baseline (2028) Design Day flight schedule. Since the transportation analysis pertains to only the passengers who use the landside facilities (i.e., originating and terminating passengers), the analysis excluded the estimated number of connecting passengers since they do not use landside facilities, leaving only the originating and terminating passengers for each flight. See **Appendix B** of this EIR for additional information regarding the operational assumptions used in the analysis. To estimate the number of passengers that would show up at both the arrivals and departures curbsides each hour, passenger "earliness" and "lateness" time distributions were applied to the originating or terminating passengers for each flight. This represents the estimated time passengers either arrive before their flight or the time it takes each passenger to get from their aircraft to the curbside. Data and information compiled from historic terminal analyses at LAX were used to provide ranges of times representing how early before a flight, passengers show up at the airport. Similarly, how much time it takes passengers alighting a flight to walk from the aircraft to the curbside while considering factors such as the percentage of passengers who walk straight to the curb with carry-on bags only, stop at a restroom or concession, stop at baggage claim, etc. Based on this information, estimates of when either originating or terminating passengers are at the curbside is estimated.

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[13] LAWA Passenger Statistics available at: https://www.lawa.org/lawa-investor-relations/statistics-for-lax/volume-of-air-traffic.

[14] The trip generation model available at the time of the analysis was calibrated to 2018 count data. The model relied on video data for accuracy. Such video data were not available when 2019 trip generation data were obtained; therefore, the model was not recalibrated to 2019. Instead, data from a Friday in August 2018 was used to estimate the hourly vehicle trips at a curbside based on a gated airline passenger schedule also for a Friday in August 2018. Since the difference in time was only one year, use of the 2018 trip generation model is representative of 2019 conditions. Since the analysis was prepared, the 2019 data has become available and shows a -0.01 percent difference in comparison to 2018, thus confirming that the 2018 model is representative of existing (2019) conditions and accurate for use in the analysis.

To account for anticipated changes in passenger mode choice (i.e., choice between various transportation modes, such as a passenger's own private vehicle, a taxi, a shuttle, a rental car, transit, etc.) by 2028, expected to be caused in large part by the continued growth in TNC usage, the existing mode splits were adjusted to estimate the 2028 passenger mode splits. The existing mode split estimates were then replaced with the 2028 mode splits in the trip generation model. The assumed existing and 2028 passenger modes splits are provided in **Appendix G.4**, *Trip Generation*. The future mode splits and assignments assumed for the project analysis were generally similar to those previously used in the LAX Landside Access and Modernization Program EIR,[15] and were estimated based primarily on trends in historical vehicle mode share data maintained by LAWA. The most notable change from previous assumptions pertained to TNCs. TNCs have been gaining mode share at the expense of other legacy modes since they began operating at the airport. While the TNC mode share continues to grow each year, the rate of growth on an annual basis has begun to decrease as there are fewer and fewer passengers in other modes willing to switch to TNCs. Over time the rate of change in TNC growth has been declining. Using the historical data, a regression analysis was used to estimate when the annual growth in TNC mode share would level off and stabilize (see **Appendix G.4**, *Trip Generation*). As part of this analysis, the continued annual growth in TNC mode share was accommodated by reducing the mode share of other modes, again based on historical trends.

By updating the 2028 mode splits and inputting the hourly passenger information in the trip generation model, the Projected Future Conditions Baseline (2028) Design Day vehicle volumes for each hour of the day and defined by vehicle mode were estimated. However, since Phase 1 of the LAX Landside Access Modernization Program is expected to be complete by 2028, the future airport passenger generated traffic was redistributed between the CTA and the new facilities outside the CTA (i.e., the ITF West, ITF East, and CONRAC) based on assumptions made for the transportation analysis of the proposed Project. The redistribution of traffic was based on assumed future vehicle mode assignments (i.e., which facility each mode is assumed for pick-up and/or drop-off passengers at) as projected by LAWA. Additionally, modes such as private vehicles, taxis, TNCs, and limousines are assumed to be permitted to pick-up/drop-off passengers in the CTA or at one of the ITFs. The distribution of trips between each facility took into consideration the assumptions used in the LAX Landside Access Modernization Program EIR, with additional refinements to maximize the capacity of the new APM system by assuming more TNC and taxi trips to the ITFs. To account for this new redistribution, the estimated Projected Future Conditions Baseline (2028) Design Day vehicle volumes were distributed between the CTA and each of the facilities outside the CTA, based on the future vehicle mode assumptions. Finally, the estimated volumes entering and exiting the CTA were based on the regional distributions observed in the existing conditions. The future vehicle mode assumptions and Projected Future Conditions Baseline (2028) trip volumes are provided in **Appendix G.4**, *Trip Generation*.

Proposed Project (2028) Trip Generation

The trip generation for the proposed Project in 2028 (i.e., the With Project scenario) was developed using the same methodology as described for the Projected Future Conditions Baseline (2028). The only difference was that the 2028 proposed Project Design Day flight schedule was used to estimate passengers on both the arrivals and departures level curbsides (see **Appendix B.1** for discussion of the Design Day flight schedule). The difference in the airline/aircraft/passenger assignments for the proposed Project versus the Projected Future Conditions Baseline (2028) pertains to assigned gating in the flight schedules for each scenario. For example, aircraft, and therefore passengers, are assigned to Terminal 9 in the proposed Project condition, but for the Projected Future Conditions Baseline (2028), they are

[15] 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 O – Off-Airport Traffic Study, February 2017. Available: https://www.lawa.org/en/connectinglax/automated-people-mover/documents.

instead assigned throughout the CTA. As a result, traffic assignments are distributed differently between terminals based on which schedule is used. The forecast 2028 passenger mode splits were unchanged, while the 2028 mode assignments were applied to passengers assigned to either the CTA terminals or Terminal 9 to estimate the vehicle trips for each. The 2028 Proposed Project trip volumes are provided in **Appendix G.4**, *Trip Generation*.

4.8.2.2.3 Methodology for Assessing VMT Impacts

The LADOT TAG focuses upon traditional residential, office, and retail developments and does not specifically address unique uses such as LAX. As discussed in the TAG guidance, "some projects will not fit into the above categories [i.e. residential, office, and retail]. In such cases, with the concurrence of LADOT, a customized approach can be used…" In order to determine the proposed Project's impacts related to VMT, a Project-specific methodology was developed by LAWA in consultation with LADOT.

The majority of the VMT associated with LAX is generated by passengers and employees. Therefore, separate methodologies were developed for evaluating VMT associated with each of these users. The Projected Future Conditions Baseline (2028) scenario was used as the basis on which to evaluate employee and passenger VMT.

Daily VMT per Employee

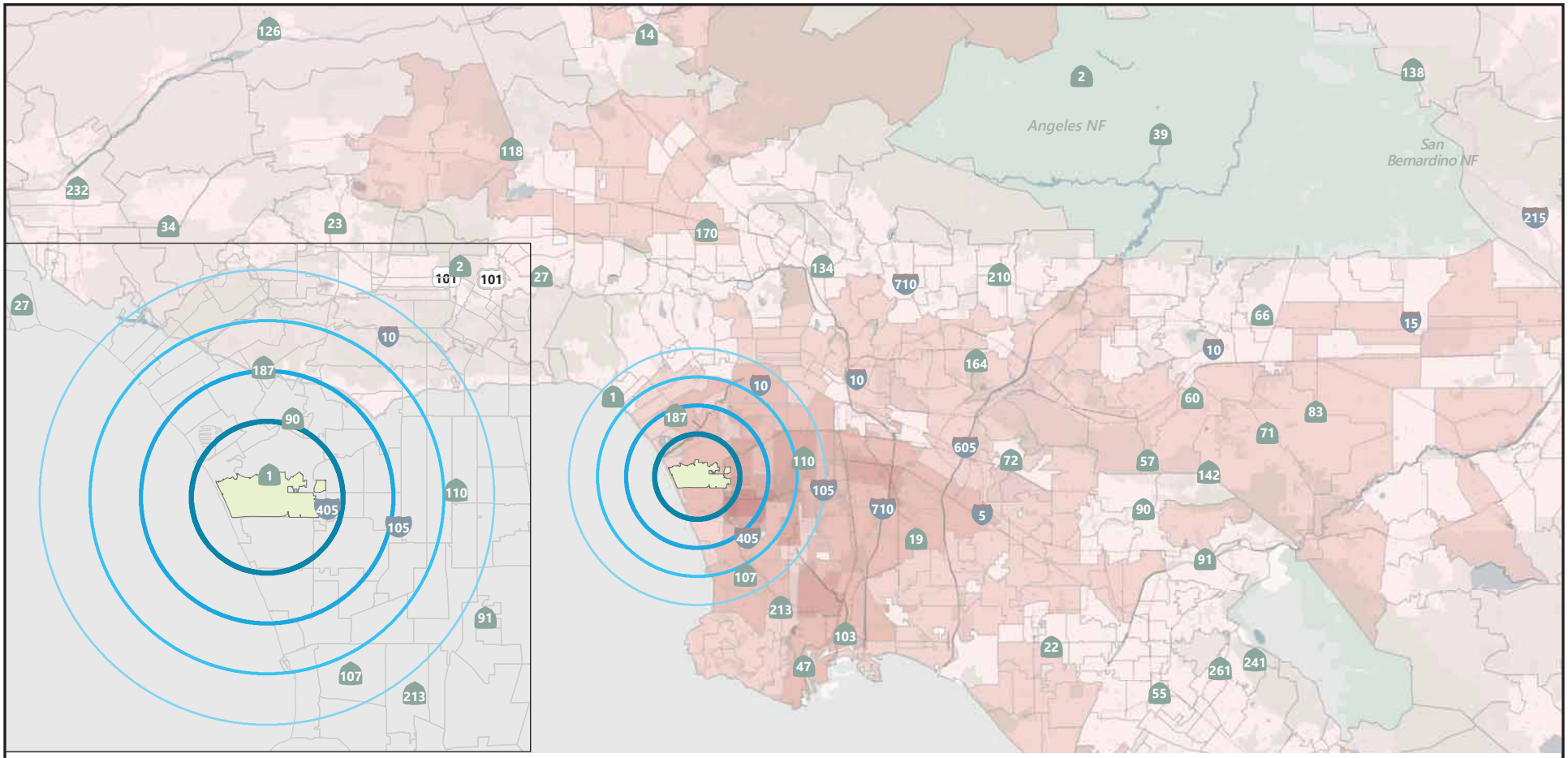
The Daily VMT per Employee metric is the average VMT generated by each employee at airport uses on a typical weekday. This methodology is consistent with the approach suggested by OPR and the LADOT TAG for employee VMT.

Estimation of average daily VMT per employee for LAX is complex and relied upon detailed information from LAWA, extensive data collection, and an in-depth technical analysis as described herein. LAX has over 50,000 employees including LAWA staff, FAA employees, airline crews, operators at cargo facilities, maintenance employees, etc. In normal circumstances, LAX operates 24 hours per day, 365 days per year. As a result, LAX employees work various shifts and have different daily schedules. The number of employees at the airport varies by the day of the week. To calculate existing average Daily VMT per Employee, multiple data sources were used. The following list describes the information used (more detail is available in **Appendix G.11**, *Transportation Data*):

- LAWA employee zip code information
- LAWA ride share program information
- Peak hour traffic counts at 70 airport-related driveways
- Daily (24-hour) traffic counts at 51 airport-related driveways and parking lots
- Hourly inbound/outbound automated parking data for the west and east employee parking lots (located north of Arbor Vitae Street), the south employee parking lot (located south of Arbor Vitae Street),[16] and the parking structures within the CTA
- Vehicle occupancy data at employee parking lots
- 2018 LAX Airport Employee Survey data
- "Big Data" including cell phone probe data for employees commuting to/from the airport

Figure 4.8-1 shows the distribution of the home locations of LAX employees by zip code. Approximately 31 percent of employees reside in the nearby cities of Inglewood, El Segundo, Hawthorne, Long Beach, Torrance, and in unincorporated areas, where their commute (driving distance) to LAX is 10 miles or less.

[16] City of Los Angeles, Los Angeles World Airport, *Los Angeles International Airport (LAX) Remote Employee Parking Program,* Revised January 30, 2020. Available: https://www.flylax.com/-/media/flylax/pdfs/parking/employee-lots-rules-and-regulations.ashx#:~:text=Los%20Angeles%20World%20Airports%20(LAWA,for%20a%20%2460%20monthly%20fee.



LAX Airfield and Terminal Modernization Project	Daily Distribution of LAX Employee Residences by Residential Zip Code	Figure **4.8-1**

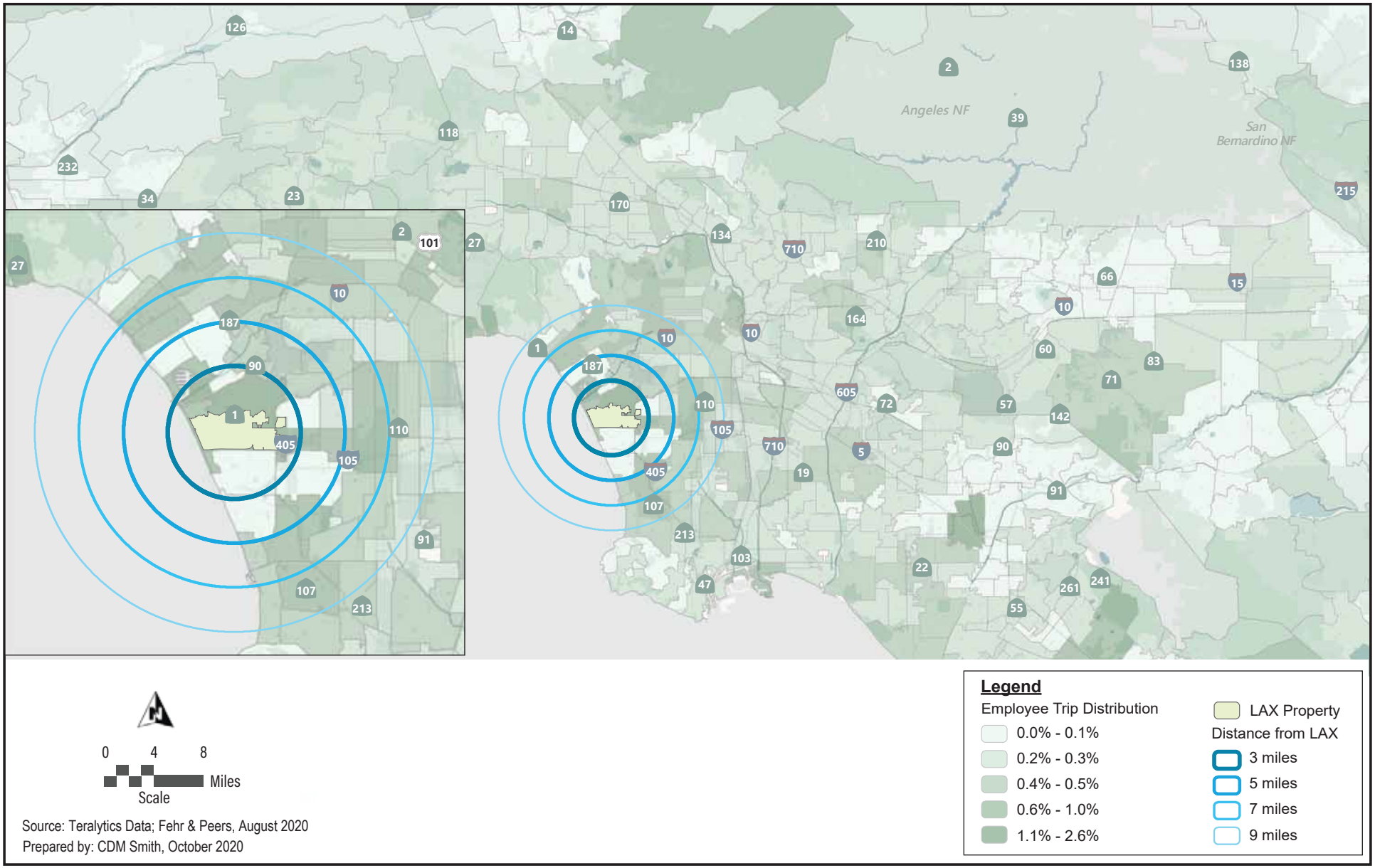
Approximately 17 percent of employees are based in Orange, San Bernardino, and Riverside counties, or in north Los Angeles County (e.g., Palmdale). For these employees, their commute to LAX is between 25 to 50 miles.

Cell phone data (collected in August 2019) was also used to identify daily patterns of origin and destination flows for employees. For purposes of this analysis, a regular work trip to LAX was defined as a trip by an employee who travels to the airport at least three times a week. The cell phone data were compared to the employee zip code distribution and employee survey data to ensure accuracy. Overall, the distribution of employee home locations (from zip codes) was similar to the distribution of employee origin trips going to LAX; therefore, the cell phone data set provided an accurate representation of employee trip distribution. The trip information was provided at an aggregate census tract level data by the data provider. **Figure 4.8-2** shows the average distribution of employee trips to/from LAX.

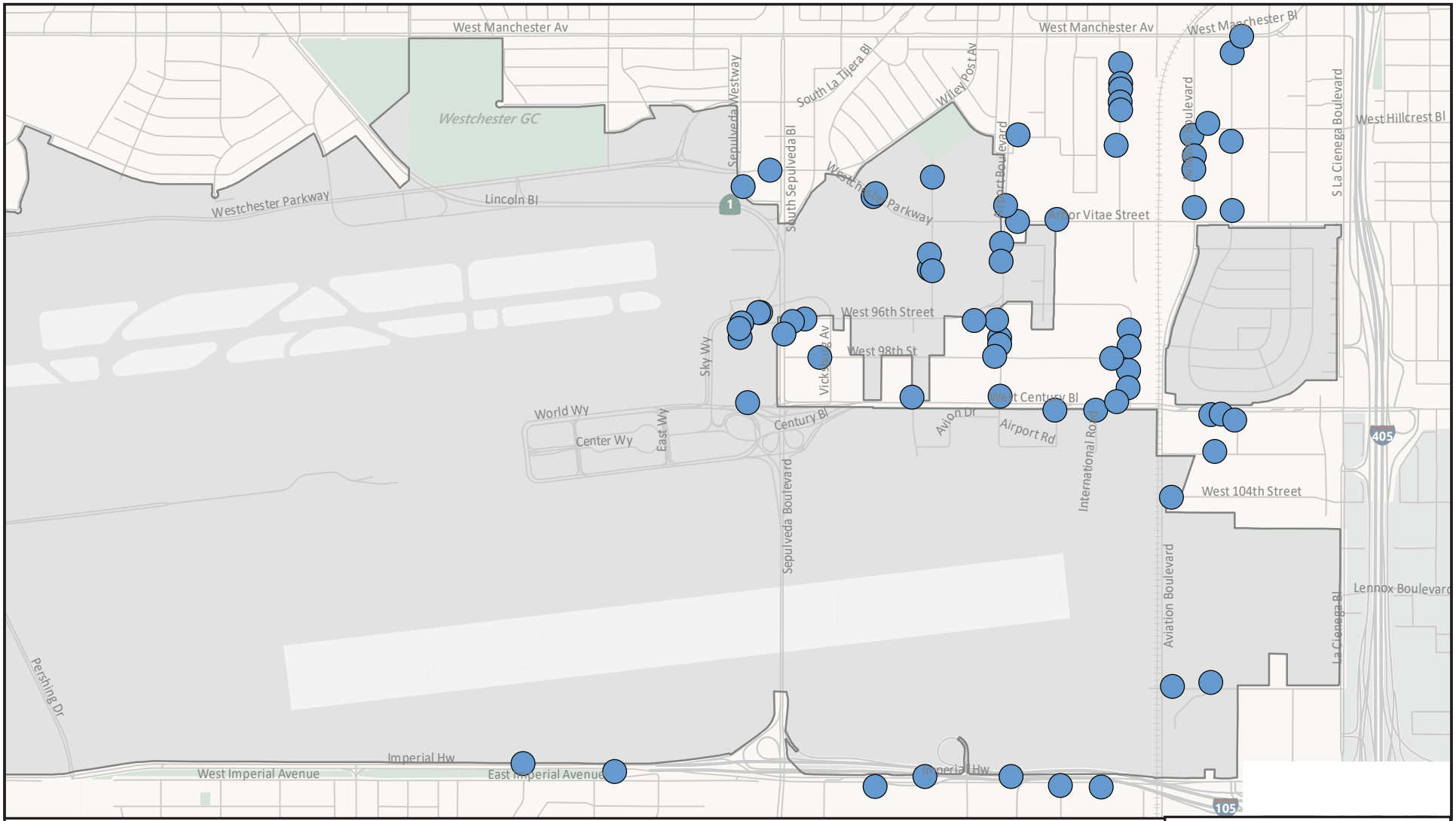
Figure 4.8-3 shows the location of the public and private passenger parking lots, rental car facilities, employee parking lots, and cargo facilities where peak hour and daily counts were collected. Daily employee trip generation was estimated for all facilities based on the available counts. Employee trips also occur between different facilities at LAX; cell phone probe data were used to identify the percentages of intra-airport trips versus commuter trips.

The average Daily VMT per Employee rate was estimated for parking lots where it was possible to isolate employee counts. For these facilities, vehicle trip generation was based on the driveway counts and trip distribution was based on the cell phone data. The Project Travel Demand Model was used to assign the trips to the roadway network and calculate the VMT. Finally, the Average Vehicle Occupancy, observed at a subset of these locations, was applied to estimate the Daily VMT per employee rate.

The number of new employees associated with operation of Concourse 0 and Terminal 9 was estimated based on the number and types of existing employees associated with operation of comparable facilities at LAX. For this analysis, Terminal 1 served as a basis for estimating the number of future employees at Concourse 0 and Terminal 7 was the basis for Terminal 9, with adjustments for the proportional sizes (i.e., square footages of floor area) of the existing and proposed future facilities. More specifically, the type of aircraft and flights anticipated to operate out of Concourse 0 would be generally similar to those nearby at Terminal 1, as currently operated by Southwest Airlines (i.e., narrowbody aircraft on primarily domestic flights with some limited international flights), while the types of flights currently occurring at Terminal 7 would be generally comparable to the types of activity anticipated to occur at Terminal 9 (i.e., combination of domestic and international, including long-haul, flights with on-site international passenger processing capabilities operated by a major airline with alliance partners (i.e., Star Alliance airlines). Approximately 1,880 employees were estimated to be required for a typical 8- to 9-hour shift for operation of Concourse 0 and Terminal 9 (i.e., 590 employees for Concourse 0 and 1,290 employees for Terminal 9), including for security, airline employees, concessions, and custodial/maintenance. Given that the subject facilities would operate 24-hours per day, it was assumed that full staffing would occur for two shifts and staffing would be reduced to about half for the third shift, which is generally consistent with the staffing loads of current terminal operations resulting in a daily total of approximately 4,700 employees (i.e., 1,880 multiplied time 2.5).



LAX Airfield and Terminal Modernization Project	Daily Distribution of LAX Employee Trips Based on Big Data	Figure **4.8-2**



LAX Airfield and Terminal Modernization Project

Driveway Count Locations

Figure
4.8-3

Daily VMT per Passenger

The Daily Passenger VMT metric is the total VMT generated by airport passengers on a typical weekday. This metric was developed in the absence of a recommended approach by OPR or LADOT for airport passengers but was discussed and coordinated with LADOT. This approach is also generally consistent with CEQA case law which explains that evaluation of project impact significance via an efficiency metric is appropriate.

In order to understand and define passenger VMT, the following information was used:

- LAWA passenger surveys (Spring and Fall 2019)
- LAWA shuttle data
- Peak hour traffic counts at 70 airport-related driveways
- Daily (24-hour) traffic counts at 51 airport-related driveways and parking lots
- Hourly inbound/outbound automated parking data for the airport passenger parking lots and the parking structures within the CTA
- "Big Data" including cell phone probe data for passengers traveling to/from the airport

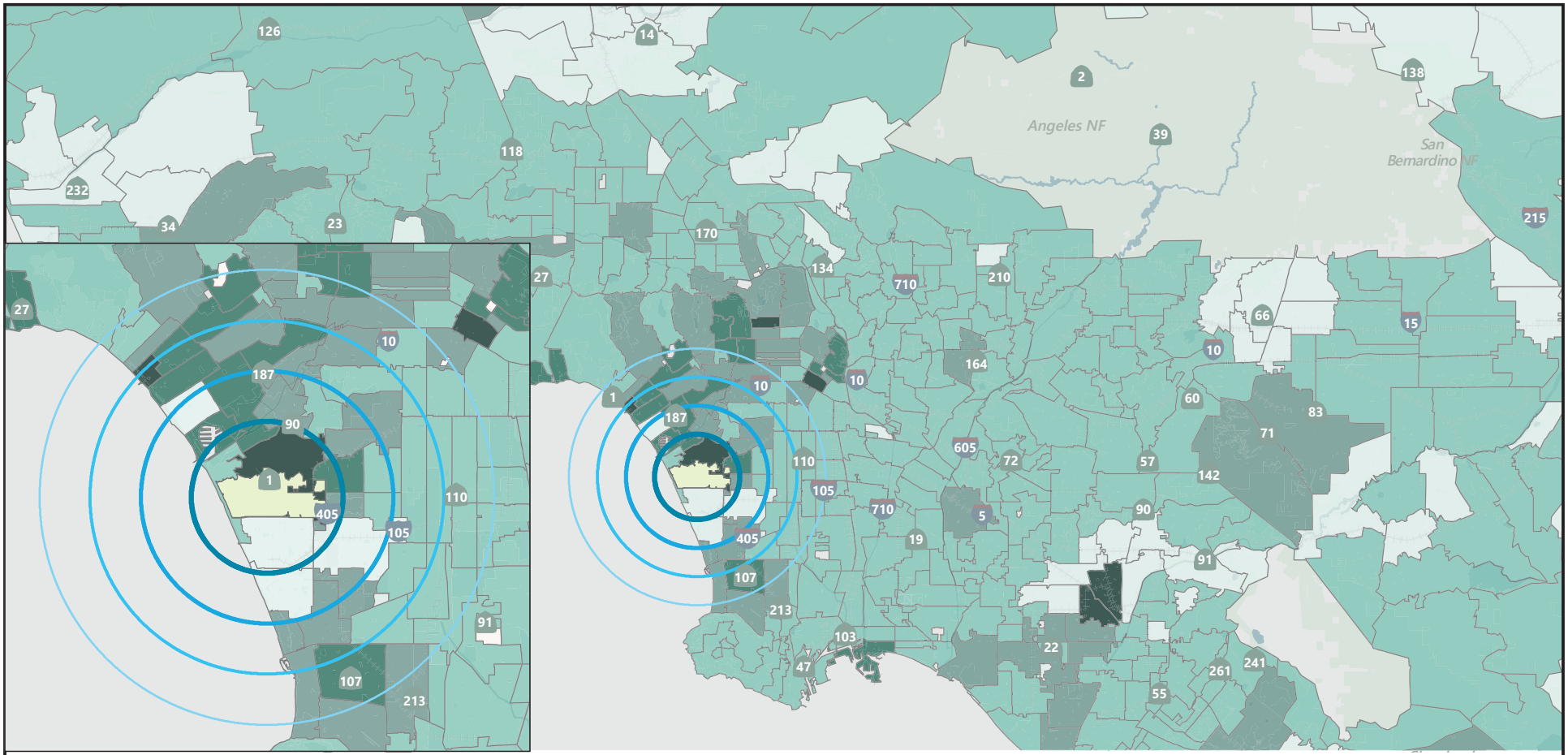
The assessment of passenger VMT differs from employee VMT in that LAX is considered a regional serving land use and, as such, it includes passenger trips from beyond Los Angeles County. Thus, in accordance with the LADOT TAG guidance for regional serving venues, it is important to consider the net effect or increase in total VMT associated with the proposed Project.

The data for the passenger VMT evaluation were also collected in August 2019. When using the Big Data for passenger travel, the origin of a trip was defined as a location where a passenger has previously stayed a minimum of four hours. This assumption was defined to identify the full trip length for passengers, instead of shorter intermediate trips. **Figure 4.8-4** shows the average distribution of passenger trips to/from LAX.

As described above, passenger vehicle trip generation for the CTA (and for ITFs in the 2028 future scenarios) was developed for this analysis. The passenger trip distribution was based on the cell phone data. Using this information, the LAX travel demand model was developed to assign trips to the roadway network and subsequently calculate the VMT. The total airport passenger VMT is the sum of all passenger VMT traveling directly to the CTA (as well as to the ITF East and ITF West in the 2028 future year scenarios) and to the major LAX parking facilities.

4.8.2.3 Methodology for Assessing Induced VMT

Induced travel is a term used to describe how travel demand responds to roadway capacity expansion. Consistent with the theory of supply and demand, the general topic of research concerning induced travel is that reducing the "cost" of travel (i.e., reduced travel time due to a new road improvement) will increase the amount of travel. In other words, some types of road improvements alone can prompt traffic increases. This does not mean that increased roadway capacity necessarily results in new project-related vehicle trips. Instead, it may mean that the effect of increasing roadway capacity results in longer trips, trips shifting from other modes, and newly generated trips. It may also mean that increased roadway capacity alleviates congestion and changes drivers' route selection in a way that increases VMT. In this EIR, induced VMT refers to the VMT that is unrelated to airport trips, but is rather related to the improved roadway operations on nearby surface streets as a result of the roadway improvements that are part of the proposed Project.



LAX Airfield and Terminal Modernization Project	Daily Distribution of LAX Passenger Trips Based on Big Data	Figure **4.8-4**

As described in the LADOT TAG, "[t]ransportation projects that increase vehicular capacity can lead to additional travel on the road network, which can include induced vehicle travel due to factors such as increased speed and induced growth." However, OPR's Technical Advisory and the TAG recognize that not every roadway improvement must be considered growth inducing. For example, the "[i]nstallation, removal, or reconfiguration of traffic lanes that are not for through traffic" may not be growth inducing.[17] The TAG suggests methodology to measure induced VMT. This analysis assesses the effect of the proposed landside (i.e., roadway) improvements that would be added as a result of the proposed Project on total VMT. When evaluating induced VMT, the LADOT TAG provides for consideration of both project impacts and cumulative impacts. The LADOT TAG refers to project impacts as short-term effects, and cumulative effects as long-term effects. The short-term effects are concerned with isolating and understanding the influence new roadways have on inducing new non- airport travel, which may include longer trips; mode shift towards the automobile; route changes; and, in some cases, newly generated trips. The long-term effect measures the same changes as under the short-term, but also considers the effect of land use changes over time due to additional roadway capacity.

The following describes the methodology for determining both the short- and long-term induced VMT effects, which are different from the passenger VMT and employee VMT effects described earlier. The Projected Future Conditions Baseline (2028) scenario was used as the basis on which to evaluate induced VMT.

4.8.2.3.1 Short-Term Induced VMT Methodology

The Projected Future Conditions Baseline (2028) model was run both with and without the roadway network improvements proposed by the Project, with the same land use/SED inputs, in order to isolate the potential change in VMT with the Project as compared to without the Project. To assess the model's sensitivity to the Project's roadway network change effect on VMT (including induced vehicle travel), the analysis measured the VMT changes across the travel model. Total daily VMT (number of vehicles traveling on each street/freeway multiplied by distance of that street/freeway) were estimated within the boundary of the model both with and without roadway improvements included in the proposed Project. The resulting difference in VMT related to non-airport trips was considered to be short-term induced VMT.

4.8.2.3.2 Long-Term Induced VMT Methodology

In accordance with OPR and the latest published research,[18] an induced demand elasticity factor of 1.03[19] was applied to estimate long-term VMT, meaning that every percent increase in lane miles would result in a 1.03 percent increase in vehicle travel. The elasticity applied in this case represents the effect that the additional roadway capacity would have on travel demand. A number that is less than 1 is considered low or inelastic and would indicate that the increase in roadway capacity would have a negligible effect on inducing more travel; a value greater than 1 is considered to be high or elastic and would indicate that induced travel would be likely to occur as a result of the new roadways.

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17 State of California, Governor's Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA*, pp 20-22, December 2018. Available: http://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

18 See, e.g., California Air Resources Board, *Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions*, *Policy Brief*, prepared by S. Handy and M. Boarnet, September 2014. Available: https://ww2.arb.ca.gov/sites/default/files/2020-06/Impact_of_Highway_Capacity_and_Induced_Travel_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Policy_Brief.pdf; National Center for Sustainable Transportation, *Increasing Highway Capacity Unlikely to Relieve Traffic Congestion*, prepared by S. Handy, October 2015. Available: https://dot.ca.gov/-/media/dot-media/programs/research-innovation-system-information/documents/final-reports/10-12-2015-ncst_brief_inducedtravel_cs6_v3.pdf.

19 Duranton and Turner, *The Fundamental Law of Road Congestion: Evidence from US Cities*, American Economic Review 101 (October 2011): 2616–2652. Available: https://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.101.6.2616.

4.8.2.4 Methodology for Evaluating Substantially Increased Hazards

4.8.2.4.1 Geometric Design Hazards

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 proposed Project, 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 new vehicle access point and/or driveways to the site. Detailed screening analysis is presented in **Appendix G.10**, *Assessment of Hazards.* The following five locations would access the Project site from the public right-of-way and may be affected by the proposed Project driveways and infrastructure:

- 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

4.8.2.4.2 Freeway Safety Analysis

Per the LADOT interim guidance[20] for freeway safety analysis, effective May 1, 2020, a freeway ramp queueing analysis is required if a development project would add 25 or more net new trips to a freeway off-ramp during the morning or afternoon peak hour. If a ramp queuing analysis is required, an effect is considered substantial, and therefore considered to be a safety concern, if the addition of project trips would result in the addition of two or more car lengths to a ramp queue that extends into the freeway mainline. If the addition of project trips results in a substantial effect and causes a safety concern, the location must be tested for safety issues which includes testing for a speed differential between the off-ramp queue and the mainline of the freeway during the particular peak hour. To evaluate the adequacy of the existing and future ramp storage lengths, LADOT's interim guidance indicates that the 95th percentile queue length should be used from the Synchro results worksheet, and this should be compared to 100 percent of the storage length on each lane of the ramp measured from the stop bar to the gore point.[21] If an auxiliary lane exists, 50 percent of the length of the auxiliary lane should be added to the ramp storage area.

This analysis focused upon a total of seven freeway off-ramps that may be affected by the proposed Project; these ramps are the main access to the airport's adjacent arterials from the freeway network. The seven freeway off-ramps are as follows:

- I-405 Northbound Off-Ramp & Century Boulevard
- I-405 Southbound Off-Ramp & 98th Street
- I-405 Southbound Off-Ramp & Howard Hughes Parkway

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20 City of Los Angeles, Department of Transportation, *LADOT Transportation Assessments – Interim Guidance for Freeway Safety Analysis,* May 1, 2020. Available: https://ladot.lacity.org/sites/default/files/2020-06/ladot-tag-interim-freeway-safety-analysis-guidance-may-2020-2.pdf.

21 95th percentile queue length estimate means at 95 percent of the times the vehicle queue length (number of vehicles x average length of a vehicle) at this location does not exceed this estimate.

- I-405 Southbound Off-Ramp & Florence Avenue
- I-405 Southbound Off-Ramp & La Tijera Boulevard
- I-105 Westbound Off-Ramp & Sepulveda Boulevard
- I-105 Westbound Off-Ramp & Imperial Highway/Nash Street

4.8.3 Existing Conditions

4.8.3.1 Regulatory Setting

This section identifies the regulatory setting related to applicable federal, state, regional, and local level plans, policies, and regulations. A brief summary of each is described below.

4.8.3.1.1 State

Senate Bill 743

As discussed in Section 4.8.1 above, SB 743 directed OPR to develop revisions to the State CEQA Guidelines to establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic LOS. The subsequent changes to CEQA requirements for transportation impact analyses included elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. Further, parking impacts are not considered significant impacts on the environment for particular types of development projects within certain infill areas with nearby frequent transit service. According to the legislative intent contained in SB 743, these changes to current practice were necessary to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions."

Pursuant to SB 743, CEQA Guidelines Section 15064.3 was adopted in December of 2018, and states:

> (b) Criteria for Analyzing Transportation Impacts.
>
> Lead agencies may use thresholds of significance for vehicle miles traveled recommended by other public agencies or experts provided the threshold is supported by substantial evidence.
>
> (1) Vehicle Miles Traveled and Land Use Projects. A development project that results in vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, development projects that locate within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor may be presumed to cause a less than significant transportation impact. Similarly, development projects that decrease vehicle miles traveled in the project area compared to existing conditions may be considered to have a less than significant transportation impact.
>
> (2) Induced Vehicle Travel and Transportation Projects. Additional lane miles may induce automobile travel, and vehicle miles traveled, compared to existing conditions. Transportation projects that reduce, or have no impact on, vehicle miles traveled may be presumed to cause a less than significant transportation impact. To the extent that the potential for induced travel has already been adequately analyzed at a programmatic level, a lead agency may incorporate that analysis by reference.

California Assembly Bill 32, Senate Bill 32, and Senate Bill 375

With the passage of AB 32, the Global Warming Solutions Act of 2006,[22] the State of California committed itself to reducing statewide GHG emissions to 1990 levels by 2020. AB 32 was supplemented with SB 32 in 2016, which requires statewide GHG emissions to be reduced to 40 percent below the 1990 level by 2030. The California Air Resources Board (CARB) is coordinating the response to comply with AB 32 and SB 32.

In December 2008, CARB approved the AB 32 Climate Change Scoping Plan (Scoping Plan).[23] The Scoping Plan incorporated the framework from SB 375[24] as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the State comply with AB 32. Based on the 2017 GHG inventory data (i.e., the latest year for which data are available), California emitted 424.10 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) if emissions associated with imported electrical power are included, and approximately 400 $MMTCO_2e$ if these emissions are excluded.[25]

There are five major components to SB 375. Three of the five components are potentially relevant to the proposed Project, as follows:[26]

- Regional GHG emissions targets: CARB's Regional Targets Advisory Committee guides the adoption of targets to be met by 2020 and 2035 for each Metropolitan Planning Organization (MPO) in the State. (SCAG is the MPO for a six-county region, including Los Angeles County.) These targets, which MPOs may propose themselves, are updated every eight years in conjunction with the revision of housing and transportation elements.
- MPOs are required to prepare an SCS that provides a plan for meeting regional targets. The SCS and the RTP must be consistent with each other, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details an alternative plan to meet the target.
- MPOs must use transportation and air pollutant emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC). Regional transportation planning agencies, cities, and counties are encouraged, but not required, to use travel demand models consistent with the CTC guidelines.

Other State Programs and Plans

The following state regulatory plans, policies, and regulations also pertain to transportation. Summaries of these documents are provided in **Appendix G.8**, *Other State/Regional/Local Plans, Policies, and Regulations*. These documents were not adopted for the purpose of protecting the environment; therefore, analysis of whether or not the proposed Project would conflict with these plans, policies, and regulations is not required.

- Complete Streets Act[27]

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22 California Assembly Bill 32, Chapter 488, Statutes of 2006.

23 California Air Resources Board, *Climate Change Scoping Plan: a Framework for Change Pursuant to AB 32 The California Global Warming Solutions Act of 2006*, December 2008. Available: https://ww3.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf.

24 California Senate Bill 375, Chapter 728, Statutes of 2008.

25 California Air Resources Board, *California Greenhouse Gas Inventory for 2000-2017 - by Category as Defined in the 2008 Scoping Plan*, August 12, 2019. Available: https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_sum_2000-17.pdf.

26 The two components that are not relevant to the proposed Project include: (1) requirements for coordinating regional housing elements and transportation plans; and (2) CEQA streamlining for certain types of projects.

27 Government Code Sections 65040.2 and 65302.

- Complete Streets Directive[28]
- Statewide Transportation Improvement Program
- Parking Cash Out
- California Vehicle Code

4.8.3.1.2 Regional

A number of regional improvement plans affect transportation in the City of Los Angeles. This includes the Long Range Transportation Plan (LRTP) prepared by Los Angeles County Metropolitan Transportation Authority (Metro), the RTP/SCS, and the Regional Transportation Improvement Plan (RTIP).[29]

Metro 2009 Long Range Transportation Plan

The 2009 LRTP[30] includes funding for general categories of improvements through the 2040 planning horizon year, such as Arterial Improvements, Non-motorized Transportation, Rideshare and Other Incentive Programs, Park-and-Ride Lot Expansion, and ITS improvements for which Call for Project Applications can be submitted for projects in Los Angeles County. Metro also has a Short-Range Transportation Plan (SRTP)[31] to define the near-term (through year 2024) transportation priorities in Los Angeles County. In addition to the regional transportation plans, Metro has recently adopted a Complete Streets Policy[32] and a First Last Mile Strategic Plan.[33] Descriptions of these plans are provided in **Appendix G.8**, *Other State/Regional/Local Plans, Policies, and Regulations*.

Regional Transportation Plan/Sustainable Communities Strategy and Regional Transportation Improvement Program

In September 2020, the SCAG Regional Council adopted the 2020-2045 RTP/SCS,[34] referred to as Connect SoCal.

The RTP/SCS is a planning document required under state and federal statutes that encompasses six counties in the SCAG region: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The RTP/SCS forecasts long-term transportation demands and identifies policies, actions, and funding sources to accommodate these demands. The RTP/SCS identifies proposed new regional transportation facilities, regional transportation systems management strategies, regional transportation demand management, and regional land use strategies. The RTP/SCS also takes into account the RTIP, which lists all of the regional funded/programmed improvements over a six-year period. Metro provides input to SCAG regarding new proposed transportation system improvements to add to the RTP/SCS, which are also incorporated in the RTIP.

With respect to transportation projects in the vicinity of LAX, the Aviation and Airport Ground Access Technical Report for the 2020-2045 RTP/SCS identifies the new Metro Crenshaw/LAX Line and LAX APM

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28 State of California, Department of Transportation, *Deputy Directive DD-64-R2: Complete Streets – Integrating the Transportation System*, October 17, 2014. Available: https://www.calbike.org/wp-content/uploads/2019/08/DD64_R2.pdf.

29 Los Angeles County Metropolitan Transportation Authority, *2020 Regional Transportation Improvement Program – Los Angeles County Submittal*, December 2019. Available: http://media.metro.net/projects_studies/funding/images/2020_RTIP.pdf.

30 Los Angeles County Metropolitan Transportation Authority, *2009 Long Range Transportation Plan*, 2009. Available: https://www.metro.net/projects/lrtp/.

31 Los Angeles County Metropolitan Transportation Authority, *2014 Short Range Transportation Plan,* 2014. Available: http://media.metro.net/projects_studies/srtp/report_srtp_2014.pdf.

32 Los Angeles County Metropolitan Transportation Authority, *Metro Complete Streets Policy*, October 2014. Available: http://media.metro.net/projects_studies/sustainability/images/policy_completestreets_2014-10.pdf.

33 Los Angeles County Metropolitan Transportation Authority and Southern California Association of Governments, *First Last Mile Strategic Plan & Planning Guidelines*, March 2014. Available: https://media.metro.net/docs/First_Last_Mile_Strategic_Plan.pdf.

34 Southern California Association of Governments, *Connect SoCal: The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*, adopted September 3, 2020. Available: https://www.connectsocal.org/Documents/Adopted/0903fConnectSoCal-Plan.pdf.

as major transit capital projects on the Transportation System Project List.[35] It also acknowledges both the LAX Landside Access and Modernization Program – including the APM, ITFs, CONRAC, and roadway improvements – and the proposed Project (i.e., the LAX Airfield and Terminal Modernization Project) as projects that address ground access at LAX. The Metro Crenshaw/LAX Line and LAX Landside Access Modernization Program improvements are included on the Connect SoCal Transportation System Project List,[36] as are the AMC 96th Street Transit Station and other transit and transportation improvements in the vicinity of LAX. The roadway improvements that are part of the proposed Project are not on this list, but can potentially be added after they are further developed and designed.

4.8.3.1.3 Local

City of Los Angeles General Plan Framework Element

The City of Los Angeles General Plan Framework Element,[37] which helps guide the formation of the land use policies therein, provides relevant objectives to implement its land use goals including accommodating a diversity of uses that support the needs of the City's existing and future residents, businesses, and visitors (Objective 3.1), as well as encouraging the development of new regional centers that provide job opportunities and are accessible to the region (Objective 3.10). The primary goals of the Transportation Chapter of the Framework Element are to provide accessibility to commerce, to work opportunities, and to essential services, and to maintain acceptable levels of mobility of all those who live, work, travel, or move goods in Los Angeles (Chapter 8). The objectives are set forth in the proceeding Transportation Element of the General Plan.

Los Angeles Mobility Plan 2035

Los Angeles Mobility Plan 2035[38] is the transportation element of the City of Los Angeles General Plan. It lays out a vision for designing safer, more vibrant streets that are accessible to people no matter how they travel. The Mobility Plan 2035 was adopted on August 11, 2015. The Mobility Plan 2035 is compliant with the 2008 Complete Streets Act (AB 1358), which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. The Mobility Plan 2035 objectives include, among others, Policy 2.1: Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands, Policy 2.5: Improve the performance and reliability of existing and future bus service, and Policy 3.9: Increase network access.

City of Los Angeles General Plan Land Use Element

The City of Los Angeles maintains 35 community plans and the LAX Plan and the Port of Los Angeles Plan, which establish neighborhood-specific and commercial goals and implementation strategies and form the General Plan's Land Use Element. The community plan for the airport is the LAX Plan.

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35 Southern California Association of Governments, *Connect SoCal Technical Report: Transportation System - Aviation and Airport Ground Access*, adopted September 3, 2020. Available: https://www.connectsocal.org/Documents/Adopted/0903fConnectSoCal_Aviation-And-Airport-Ground-Access.pdf.

36 Southern California Association of Governments, *Connect SoCal Technical Report: Transportation Systems Project List Technical Report*, adopted May 7, 2020. Available: https://www.connectsocal.org/Documents/Adopted/0903fConnectSoCal_Project-List.pdf.

37 City of Los Angeles, Department of City Planning, *The Citywide General Plan Framework - An Element of the City of Los Angeles General Plan*, December 11, 1996, re-adopted August 8, 2001. Available: https://planning.lacity.org/cwd/framwk/chapters/00/00.htm.

38 City of Los Angeles, Department of City Planning, *Mobility Plan 2035 - An Element of the General Plan*, amended September 7, 2016. Available: https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility_Plan_2035.pdf.

The LAX Plan

The LAX Plan is a community plan of the land use element of the City of Los Angeles General Plan.[39] The LAX Plan is intended to promote an arrangement of airport uses that encourages and contributes to the modernization of the airport in an orderly and flexible manner that promotes the safe and secure movement and processing of passengers and cargo. It provides a land use policy framework to guide implementation on a broad level by establishing goals, objectives, policies, and programs for development. The LAX Plan is intended to allow the airport to respond to emerging new technologies, economic trends, and functional needs. One of the main goals of the LAX Plan (Goal 6) is to improve ground access to LAX. The Plan includes specific policies relating to circulation and access intended to provide options for passengers and employees to access the airport, including Policy P9 (relieve traffic congestion in the CTA and on area surface streets and roads).

Vision Zero Los Angeles

The Vision Zero Los Angeles Action Plan[40] 2015-2025 strives to eliminate traffic-related deaths in Los Angeles by 2025 through multiple strategies, such as modifying streets to better serve vulnerable road users. Originating in Sweden, Vision Zero is an international movement to eliminate traffic deaths and is based on the philosophy that each death is both unacceptable and preventable. One section of Sepulveda Boulevard, the east leg of Century Boulevard, and segments of World Way North and World Way South within the CTA are designated as part of the City's High Injury Network (HIN). The HIN comprises just 6 percent of City streets but represents nearly two-thirds of all severe and fatal collisions involving people walking and biking.

Century Boulevard Streetscape Plan

The Century Boulevard Streetscape Plan[41] provides guidelines and standards for streetscape improvements in the public right-of-way and the Pedestrian Amenity Area on private properties along Century Boulevard within the City of Los Angeles. The Century Boulevard Streetscape Plan governs an approximately 1.5-mile segment of Century Boulevard between Sepulveda Boulevard to the west and La Cienega Boulevard to the east (excluding the two end streets). This portion of the corridor is considered by many to be the "Gateway to Los Angeles" due to the millions of annual passengers that access LAX via Century Boulevard from Interstate 405 (I-405) and adjacent arterials. The properties along the corridor also represent a significant regional economic asset with a variety of high-rise hotels and office buildings. Other uses include restaurants, retail shops, airport facilities, rental car services, off-airport parking, and other neighborhood and airport supportive services. The Plan identifies improvements to the segments of Century Boulevard that are adjacent to the proposed Project roadway improvements and Terminal 9 (i.e., Segments 1a, 1b, and 1c), including wider and buffered sidewalks, and landscaping. Implementation of the improvements identified in the Plan is accomplished by private property owners along the corridor through the entitlement process, in conjunction with the permitting of other improvements.

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[39] City of Los Angeles, Department of City Planning, *Los Angeles International Airport - LAX Plan*, adopted December 14, 2004, last amended June 7, 2017. Available: https://www.lawa.org/-/media/lawa-web/lawa-our-lax/plan-and-ordiance/2017-lax-plan.ashx?la=en&hash=A56B9B036C9CC63428A4AC5DC0E910992C1B0F53.

[40] City of Los Angeles, Department of Transportation, *Vision Zero Los Angeles 2015-2025 Action Plan*, January 2017. Available: https://ladotlivablestreets-cms.org/uploads/cb1ecdfacabb4bcd97c922382b165e79.pdf.

[41] City of Los Angeles, *Century Boulevard Streetscape Plan*, May 21, 2018. Available: https://planning.lacity.org/plans-policies/overlays/century-boulevard.

Plan for a Healthy Los Angeles[42]

The plan includes policies directing several City departments to develop plans that promote active transportation and safety. The intent of the plan is to build a healthy and resilient environment that provides access to affordable and safe opportunities for all. With respect to transportation, the objective is to provide a balanced, multi-modal, and sustainable transportation system that offers safe and efficient options for all users.

Other Local Programs and Plans

Additionally, the following local regulatory documents were evaluated with respect to the proposed Project to determine the potential for inconsistencies. Although they may not be included as part of the City documents that establish the regulatory framework, they were reviewed given their relevancy to the proposed Project and the association to other plans and policies such as Vision Zero and the Mobility Plan. More information about these other local plans and policies, including their descriptions, is provided in **Appendix G.8**, *Other State/Regional/Local Plans, Policies, and Regulations*:

- City of Los Angeles Safety Element[43]
- Great Streets for Los Angeles/LADOT Strategic Plan[44]
- Los Angeles Fire Department Strategic Plan 2018-2020[45]

4.8.3.2 Environmental Setting

4.8.3.2.1 Existing Facilities

This section provides a description of existing transportation infrastructure and conditions in the vicinity of the proposed Project site (**Figure 4.8-5**). An inventory of the existing street system, transit system, bicycle system, and pedestrian system serving the airport, as well as the names, locations, sizes, and trip generation for other (cumulative) projects, are described in this section.

Existing Street System

The existing street system in the vicinity of LAX consists of a regional highway system, major arterials ("Boulevards" per Mobility Plan 2035), and a local street system including secondary arterials ("Avenue" per Mobility Plan 2035), collectors and local streets (see Figure 4.8-5).

The San Diego Freeway (I-405), the Glenn Anderson Freeway (I-105), and Marina Freeway (SR-90) provide regional access to the Project site. W. Century Boulevard, Lincoln Boulevard, W. Manchester Avenue and W. Florence Avenue provide the main east-west access to the Project site, while La Cienega Boulevard, Aviation Boulevard, Airport Boulevard, La Tijera Boulevard, and Sepulveda Boulevard provide the main north-south access. Some of the smaller roadways also serve the airport such as 96th Street, 98th Street, Avion Drive, Jenny Avenue, and Vicksburg Avenue. Brief descriptions of these roadways, including number of lanes, speed limits, parking availability, and functional classes per Mobility Plan 2035, are presented in **Appendix G.8**, *Other State/Regional/Local Plans, Policies, and Regulations*.

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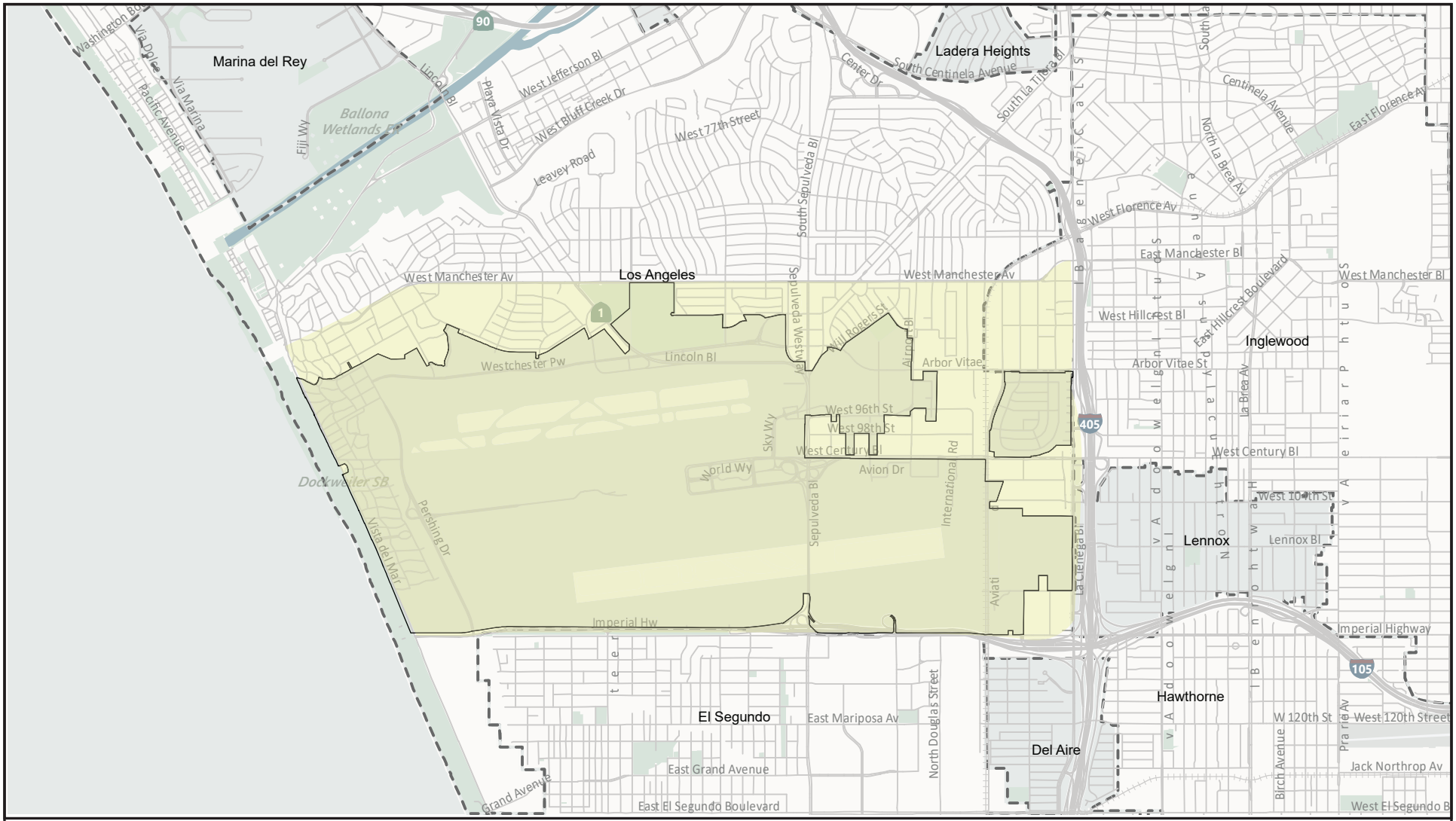
42 City of Los Angeles, Department of City Planning, *Plan for a Healthy Los Angeles*, March 2015. Available: https://planning.lacity.org/odocument/7f065983-ff10-4e76-81e5-e166c9b78a9e/Plan_for_a_Healthy_Los_Angeles.pdf.

43 City of Los Angeles, Department of City Planning, *Safety Element of the City of Los Angeles General Plan,* November 1996.

44 City of Los Angeles, Department of Transportation, *Great Streets For Los Angeles – Strategic Plan*, 2014. Available: https://ladot.lacity.org/sites/g/files/wph266/f/LACITYP_029076.pdf.

45 City of Los Angeles Fire Department, *Strategic Plan 2018-2020: A Safer City 2.0*, March 2018. Available: https://www.lafd.org/about/about-lafd/strategic-plan.



Source: Fehr & Peers, August 2020
Prepared By: CDM Smith, October 2020

LAX Airfield and Terminal Modernization Project

Transportation Analysis Study Area and Existing Street System

Figure
4.8-5

Central Terminal Area Roadway System

The CTA roadway system consists of a two-level roadway (upper and lower levels circulating in a counterclockwise direction) with vehicular access to both the departure (upper) and arrival (lower) levels from Century Boulevard, Sepulveda Boulevard, and the 96th Street Bridge/Sky Way. **Figure 4.8-6** illustrates the CTA roadway system. The upper level roadway is primarily dedicated to passenger departure activity, while the lower level roadway is dedicated to passenger arrival activity. The CTA roadway network provides access to the CTA's parking garages, which accommodate short-term and daily parking for passengers and employees. A recirculation ramp located at the eastern end of the CTA and a ramp at the western end of Center Way, connecting to West Way, provide on-airport circulation from the departures level to the arrivals level. Center Way provides egress from the parking garages to Century Boulevard and Sepulveda Boulevard. The CTA roadway system has a posted speed limit of 25 mph.

The departures level roadway curbside consists of a 22-foot-wide stopping lane for passenger drop-offs and pick-ups in front of the various terminals, and three 10- to 12-foot-wide travel lanes for vehicles to circulate. Sepulveda Boulevard and Century Boulevard provide direct inbound access to the departures level. Direct egress from the departures level to southbound Sepulveda Boulevard and eastbound Century Boulevard is available. Vehicles headed northbound on Sepulveda Boulevard must use the ramp to Center Way and exit the airport with the arrivals level traffic at Center Way to access the northbound Sepulveda Boulevard clover-leaf ramp.

The arrivals level is served by two curbsides (an inner and outer curbside) and the associated roadway system. The inner and outer curbsides are separated by a 10-foot-wide pedestrian loading area. The inner curbside roadway generally consists of a 10-foot-wide loading lane and two 10-foot-wide circulating lanes. The outer roadway consists of a 20-foot-wide lane adjacent to a commercial loading area and three to five additional travel lanes used for circulation. Northbound and southbound Sepulveda Boulevard and westbound Century Boulevard provide direct inbound access to the arrivals level. Direct egress from the arrivals level roadway is provided to northbound and southbound Sepulveda Boulevard and eastbound Century Boulevard.

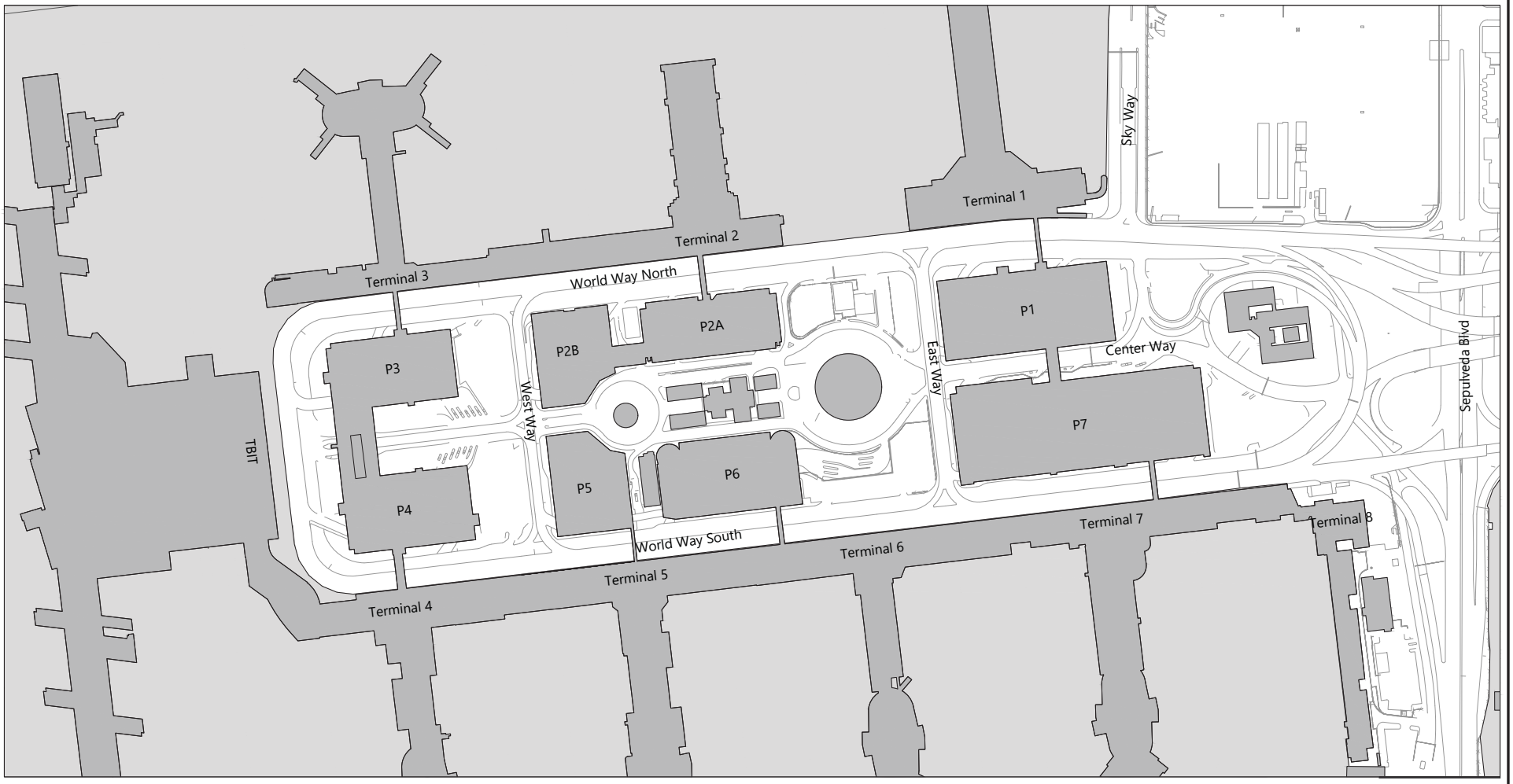
Existing Pedestrian Facilities

The main pedestrian connection to LAX is via Century Boulevard. Sidewalks and crosswalks are located on the north and south sides of Century Boulevard between I-405 and World Way. A gap in the sidewalk exists on the south side of Century Boulevard between World Way and Avion Drive. Landscaped buffers between the roadway and the pedestrian walkway are located on both sides of the street between Avion Drive and Aviation Boulevard. The sidewalk pavement is generally in good condition.

The crosswalks do not have continental striping.[46] Most crossings have actuated pedestrian push buttons,[47] with the exception of a few signalized intersections with east-west pedestrian crossings along Century Boulevard.

[46] Continental crosswalks have higher visibility, the design of which consists of two-foot-wide longitudinal stripes (the two transverse lines are omitted), paired with a limit (stop) line setback from the crosswalk to reduce vehicular encroachment into the crosswalk.

[47] At locations where pedestrian activity is infrequent and pedestrian signal phasing is not warranted on a full-time basis, the use of pedestrian-actuated signals (i.e., push-buttons) may be justified. Actuation of the push-buttons may be used to extend the green phase to allow pedestrians sufficient crossing time.



0 150 300
Feet
Scale

Source: Fehr & Peers, August 2020
Prepared by: CDM Smith, October 2020

LAX Airfield and Terminal Modernization Project	Existing CTA Roadway System	Figure **4.8-6**

Existing Bicycle Facilities

The City of Los Angeles 2010 Bicycle Plan[48] documents existing bicycle facilities in the vicinity of the airport. Class I Bikeways (Bike Path) provide an exclusive paved right-of-way separated from the street or highway. Class II Bikeways (Bike Lane) provide a striped and signed bike lane for one-way travel on a street or highway. Class III Bikeways (Bike Route) provide for a shared use of the roadway with posted signage for bicycle use which can include "sharrow" pavement markings.[49] **Figure 4.8-7** shows the existing designated bicycle facilities.

City of Los Angeles Mobility Plan 2035 has identified future planned bicycle facilities along segments of Lincoln Boulevard, South La Tijera Boulevard, Westchester Parkway, and Manchester Avenue in the vicinity of the Project area. In addition, the LAX Landside Access Modernization Program includes additional modifications to the bike facilities in the Project area including removing existing bike lane on 96th Street between new Jetway Boulevard and Airport Boulevard and construction of a combination bike lane and multi-use paths for shared use by pedestrians and bicyclists. Bike facilities will include: bike lanes on Westchester Boulevard from new Jetway Boulevard to Airport Boulevard and on Airport Boulevard from Arbor Vitae Street to Century Boulevard; striped bike paths along new Jetway Boulevard from Arbor Vitae Street to Century Boulevard and along new 94th Street from new Jetway Boulevard to Airport Boulevard; and a multi-use path on the south side of Century Boulevard between Airport Boulevard and Aviation Boulevard, continuing north on the west side of Aviation Boulevard and turning west along the south side of Arbor Vitae Street to La Cienega Boulevard.

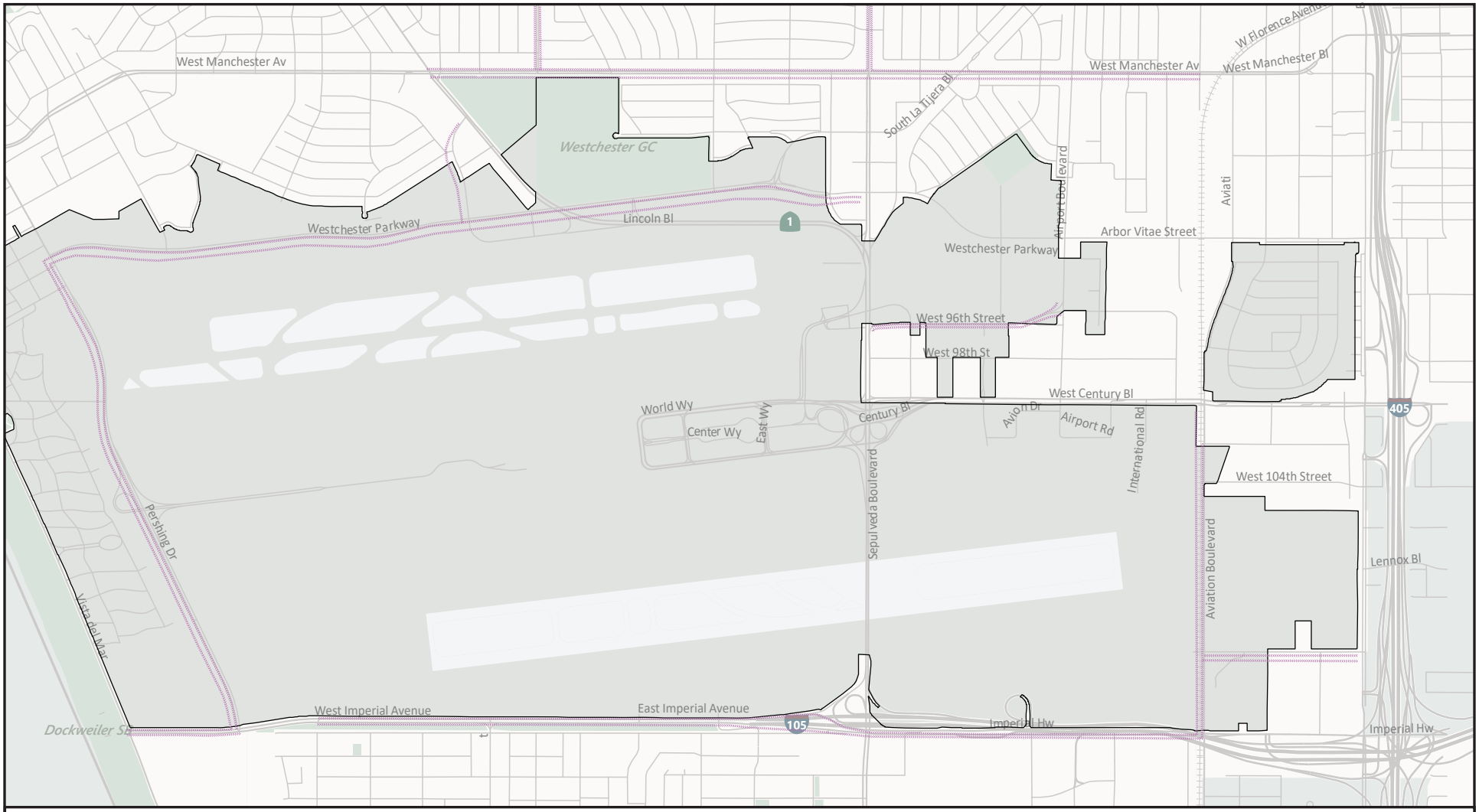
Existing Transit Conditions

Fifteen bus lines currently serve the LAX City Bus Center and the Metro Green Line Aviation/LAX Station. Seven bus lines are operated by Metro, two bus lines are operated by the Culver City Bus (CC), two bus lines are operated by Santa Monica Big Blue Bus (SM), two bus lines are operated by LADOT Commuter Express (CE), one bus line is operated by Torrance Transit (TT), and one bus line is operated by the City of Redondo Beach – Beach Cities Transit (BCT). In addition, the LAX FlyAway serves the CTA. **Figure 4.8-8** shows the routes for these 15 bus lines and the Metro Green Line. These transit lines are described in **Appendix G.3**, *Existing Transit System*.

In addition to these direct routes, there are dozens of other transit lines that connect to the Metro Green Line and are, therefore, accessible to LAX via one transfer at a Metro Green Line station. These transit lines are shown in **Figure 4.8-9**.

[48] City of Los Angeles, Department of City Planning, *2010 Bicycle Plan – A component of the City of Los Angeles Transportation Element*, adopted March 1, 2011. Available: https://planning.lacity.org/odocument/1378be7a-c7e2-4941-b2e2-937f929c17c2/Bicycle%20Plan%20-%202010.pdf.

[49] A "sharrow" is a road marking in the form of two inverted V-shapes above a bicycle, indicating which part of a road should be used by cyclists when the roadway is shared with motor vehicles.



0 0.6 Miles
Scale

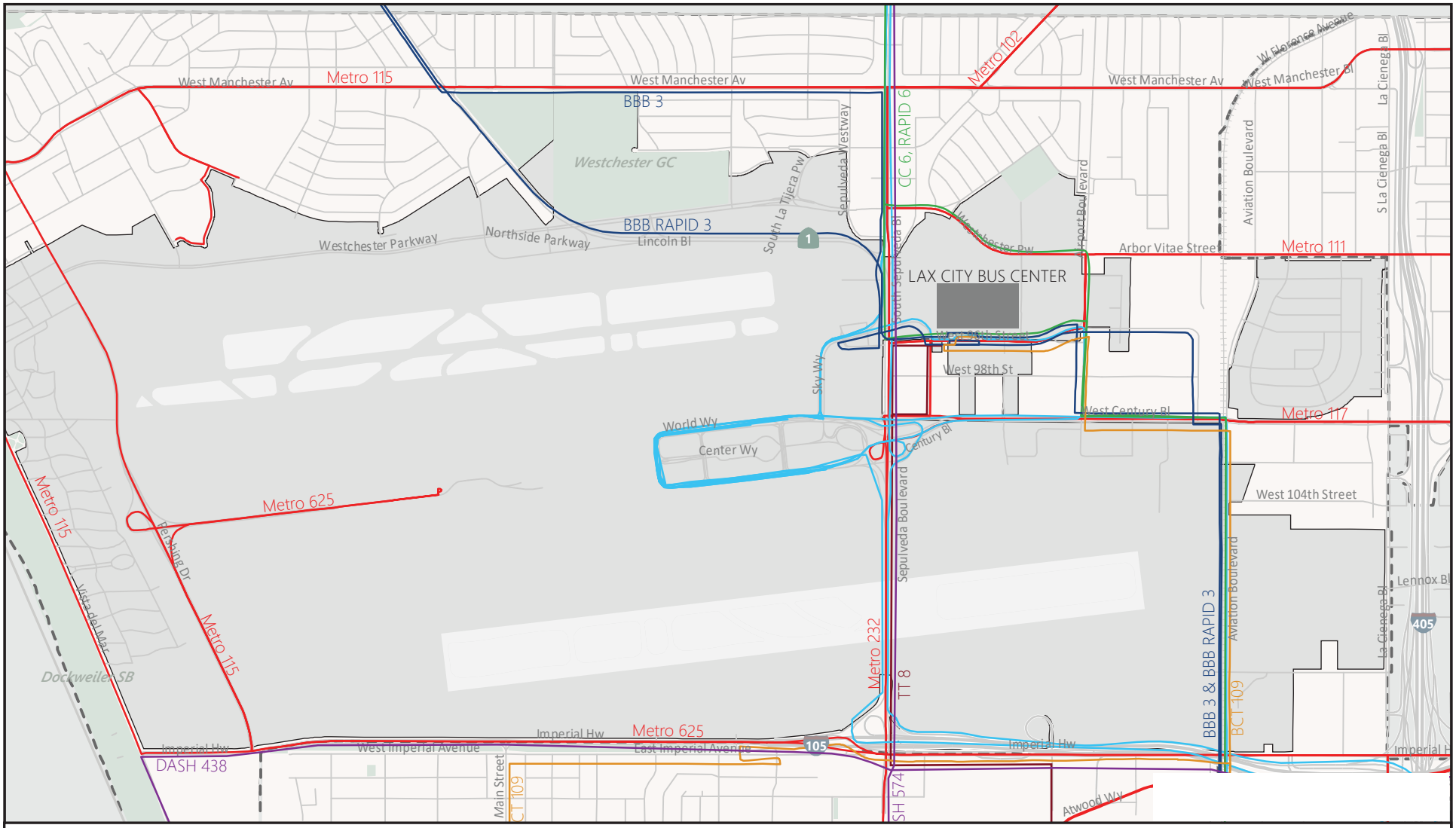
Sources: City of Los Angeles Bicycle Plan; Fehr & Peers, August 2020
Prepared By: CDM Smith, October 2020

Legend

- Existing Bike Lane
- LAX Property Boundary

Note:
Existing bike lane on W. 96th Street will be removed with the implementation of the LAX Landside Access Modernization Program.

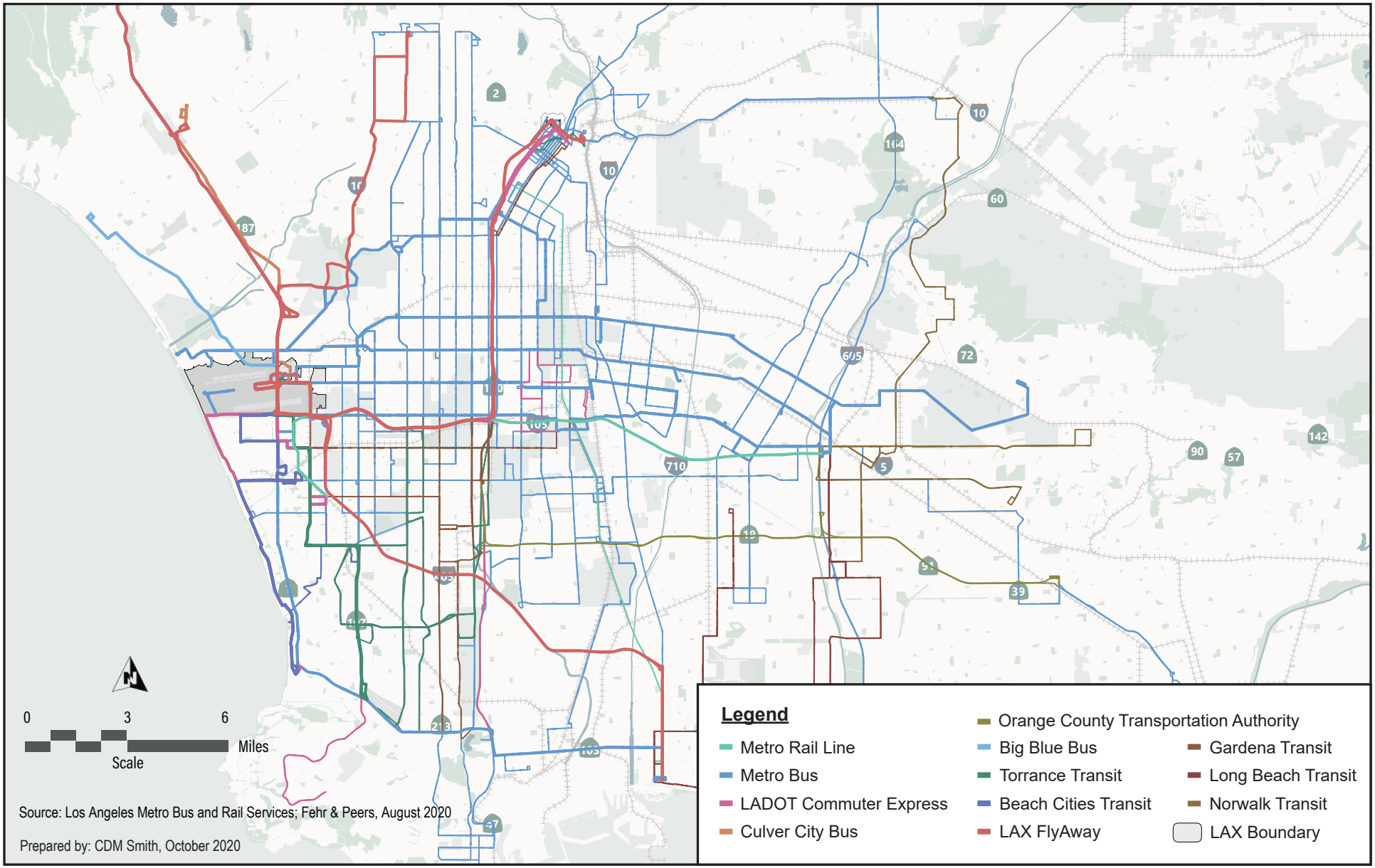
LAX Airfield and Terminal Modernization Project	Existing Bicycle Facilities	Figure **4.8-7**



LAX Airfield and Terminal Modernization Project

Existing Local Transit Connections to LAX and Metro LAX/Aviation Station

Figure **4.8-8**



LAX Airfield and Terminal Modernization Project

Existing Regional Transit Connections to LAX and Metro LAX/Aviation Station

Figure **4.8-9**

These two transit figures show there is a robust transit network serving the LAX area, although for many of the area transit trips to be completed, connections to other transit lines via one or more transfers are required. Furthermore, Metro is constructing the Metro Crenshaw/LAX Line that will extend from the existing Metro Exposition Line at Crenshaw and Exposition Boulevards and travel 8.5 miles south to connect with the Metro Green Line at the Aviation/LAX Station. The Metro Crenshaw/LAX Line is projected to be completed and commence operations in 2021. As part of the Metro Crenshaw/LAX Line, a station will be located near the intersection of Aviation Boulevard and Arbor Vitae Street. The Airport Metro Connector (AMC) station will serve LAX and its planned facilities, particularly those approved as part of the LAX Landside Access Modernization Program including the APM, the ITFs, and the CONRAC, along with related roadway improvements, bikeway improvements, and pedestrian improvements, all of which would support and complement transit services in the local area. Metro will construct this new multimodal transportation center to connect LAX to the regional bus and transit system, including at-grade light rail transit (LRT) platforms, bus plaza, bicycle hub, pedestrian plaza, passenger vehicle pick-up and drop-off area, and Metro transit center/terminal building ("Metro Hub") to connect passengers between the multiple transportation modes. Construction of the AMC transit station is expected to be completed in 2023/24.

4.8.3.2.2 Existing VMT

The majority of airport passenger vehicle trips start or end directly at the CTA. However, to estimate total passenger VMT, indirect trips to the CTA via rental car facilities, nearby hotel shuttles, and other major off-airport parking lots were also included. LAWA annually publishes a traffic generation report for LAX that includes all trips associated with LAX and its facilities.[50] These vehicle trips include all hotels and rental car shuttles, on-airport parking, off-airport parking, employee parking, cargo facilities, and rental car facilities. According to posted statistics for LAX,[51] the peak months for roadway traffic accessing the CTA are typically August and July. Therefore, for this Project, existing airport daily trip generation was estimated for a Friday in August (referred to as the "Design Day"). Trips entering and exiting the CTA are recorded and counted using LAWA's TRAVIS and loop counts. The trip generation of the remaining LAX facilities, such as the cargo area and the West Aircraft Maintenance Area, was compiled from driveway counts collected as part of the annual surveys. Additional 24-hour traffic counts at selected driveways to various airport-related facilities were also collected during August 2019 (Figure 4.8-3).

Table 4.8-1 shows the summary of daily inbound and outbound airport trip generation for the Design Day. Passenger and employee vehicle trips at CTA parking structures were disaggregated based on automated parking data obtained for the month of August 2019.

[50] The annual Traffic Generation Reports are available on LAWA's website at: https://www.lawa.org/lawa-our-lax/studies-and-reports/traffic-generation-report. The *Traffic Generation Report – Los Angeles International Airport/August 2018*, summarizes the number of trips generated by LAX for August 2018.

[51] City of Los Angeles, Los Angeles World Airports, *Statistics for LAX webpage*. Available: https://www.lawa.org/lawa-investor-relations/statistics-for-lax/volume-of-air-traffic.

Table 4.8-1
Existing Daily Trip Generation

Facility	Inbound				Outbound			
	Cars*	Trucks	Van/ Bus	Total	Cars*	Trucks	Van/ Bus	Total
CTA - Passenger	96,149	1,147	5,690	102,986	99,713	1,147	5,702	106,562
CTA - Employee/Crew	2,091	-	883	2,974	2,091	-	883	2,974
Cargo Facilities / World Way West**	16,705	5,681	170	22,556	16,887	5,822	178	22,887
Employee Parking Lots**	6,060	-	-	6,060	7,690	-	-	7,690
Rental Car and Other off-site Passenger Parking Facilities	17,896	1,104	1,650	20,650	17,516	1,635	1,638	20,789
Total Vehicle Trips	138,901	7,932	8,393	155,226	143,897	8,604	8,401	160,902

Source: **Appendix G.5**, *Trip Generation for Travel Demand Model*, of this EIR.

Notes:
* TNC's included under the car mode.
** Includes a reasonable representation of all LAX employee vehicle trips, but may not represent 100 percent of the airport employment.

Some of the parking lots in the area, such as the Joe's Parking facility[52] located south of 96th Street, are shared between airport passengers and other adjacent businesses' employees and visitors. All these trips were allocated to passengers since there is no way to accurately disaggregate the trips, and airport passengers represent, by far, the highest share. It is important to note that total trips and related VMT for these facilities are included in the LAX travel demand model.

The LAX travel demand model was used to estimate employee and passenger VMT. Total passenger VMT and VMT per employee for existing (2019) conditions is presented in **Table 4.8-2** and **Table 4.8-3**. It should be noted that while Table 4.8-2 and Table 4.8-3 present the VMT for existing (2019) conditions, they do not serve as the baseline used to measure the future (2028) VMT impacts of the proposed Project. As described earlier in Section 4.8.1.1, the Projected Future Conditions Baseline (2028) serves as the basis for measuring VMT impacts. As further described below in Section 4.8.3.3, the Projected Future Conditions Baseline (2028) accounts for the fact that key elements of the LAX Landside Access Modernization Program would be completed and in operation prior to 2028, the analysis horizon year for the proposed Project. Those ground transportation system improvements will materially affect the VMT characteristics of travel to and from LAX independent of the proposed Project. More specifically, those improvements will reduce VMT overall. Use of the Projected Future Conditions Baseline (2028) serves to isolate the changes in VMT that are directly attributable to the proposed Project, which would not be possible if existing (2019) conditions were used as the baseline. VMT impact conclusions regarding the Project's impacts in 2028 that are drawn based on a comparison to existing (2019) conditions would be misleading. This is evident in looking ahead to the information presented later in this section, such as the employee VMT data in Table 4.8-10, whereby the VMT per employee in 2019 is 25.2 and it drops to 23.9 in 2028 at buildout of the proposed Project. That comparison would suggest that implementation of the Project, with the addition of new employees, would result in a decrease of 1.2 VMT per employee. However, the VMT per employee in 2028 for the Projected Future Conditions Baseline (2028) is 24.0, which accounts for the VMT reduction benefits attributable to LAX Landside Access Modernization Program, and the VMT reduction directly associated with the proposed Project's new employees, is

[52] Joe's Parking will be redeveloped as part of the LAX Landside Access Modernization Program; however, the facility was present during the time the trip generation was developed for the study.

actually only 0.1 VMT per employee. As such, the VMT information presented in this section regarding existing (2019) conditions is for general information purposes only and is not the baseline for measuring VMT impacts.

It should also be noted that, as indicated earlier in Section 4.8.2.2.3, the measurement of VMT for employees is on a per employee basis, while the measurement of VMT for passengers is on a total VMT basis; hence, two separate tables are provided below.

Table 4.8-2
Summary of Existing (2019) Passenger VMT

Measure	Value
Total Passenger VMT	6,581,811
Source: Fehr and Peers, 2020.	

Table 4.8-3
Summary of Existing (2019) VMT per Employee

Measure	Value
VMT per Employee	25.2
Source: Fehr and Peers, 2020.	

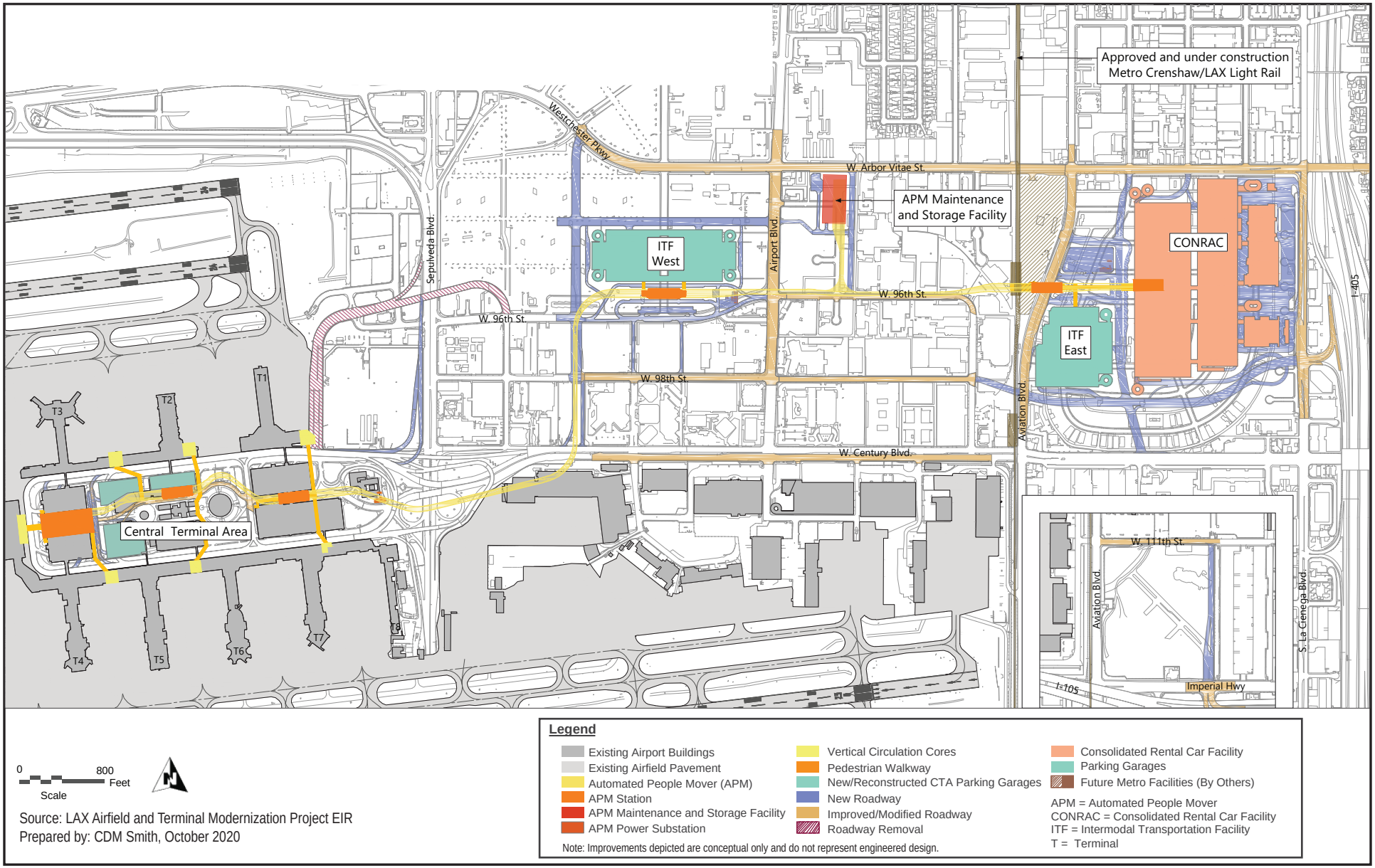
4.8.3.3 Projected Future Conditions Baseline (2028)

4.8.3.3.1 Key Components of Projected Future Conditions Baseline (2028)

As described in the beginning of this chapter (Environmental Impact Analysis), by the time the proposed Project is completed in 2028, Phase 1 of the LAX Landside Access Modernization Program, including the APM, ITF East, ITF West, CONRAC, and Phase 1 roadways will be completed. Metro's Crenshaw/LAX Line and AMC 96th Street Transit Station will also be completed, including an interface between the station and the LAX Landside Access Modernization Program facilities. These improvements will substantially change the surface transportation characteristics around the airport, including VMT. As described in Section 4.8.1, for these reasons, Projected Future Conditions in 2028 serve as the baseline for evaluating the transportation impacts of the proposed Project. This section identifies the components of the Projected Future Conditions Baseline (2028).

LAX Landside Access Modernization Program Improvements

The LAX Landside Access Modernization Program consists of four major elements. These elements include (1) an elevated APM system; (2) two ITFs (ITF East and ITF West); (3) a CONRAC; and (4) a comprehensive series of roadway improvements, as further described below). This system will also connect LAX with Metro's AMC 96th Street Transit Station, to be located at 96th Street/Aviation Boulevard. These future LAX Landside Access Modernization Program components, including the Phase 1 roadway system, are illustrated in **Figure 4.8-10**.



LAX Airfield and Terminal Modernization Project

LAX Landside Access Modernization Program Components and Phase 1 Roadways

Figure
4.8-10

Roadway Network Improvements added to the LAX Projected Future Conditions Baseline (2028) Model

The SCAG 2016-2040 RTP/SCS network was used to develop the roadway network for the Projected Future Conditions Baseline (2028) scenario. The travel model represents the roadway and transit networks from a regional perspective. Some of the network improvements that are identified in the 2016-2040 RTP/SCS will be completed after year 2028; these improvements were removed from the network and not included in the LAX Projected Future Conditions Baseline (2028) model.

LAX Landside Access Modernization Program roadway improvements will include, among others, new roadway segments, additional lanes, realignment of segments of some existing roads, restriping, new or realigned driveways, road closures, intersection improvements, and sidewalk improvements. A detailed list of these roadway improvements is available on LAWA's website.[53]

2028 Land Use Growth

As described in Section 4.8.2.2, to estimate the future growth and change in traffic for 2028 conditions, a future year 2028 Project Travel Demand Model was developed with updated model SED and transportation networks. SED for year 2028 was interpolated based on the 2016 and 2040 City of Los Angeles TDF Model. The final SED for TAZs within five miles of the Project site were reviewed for any growth related to specific future developments (see discussion of cumulative projects below). The SED within TAZs that were created for LAX were further reviewed/adjusted to represent the LAX Landside Access Modernization Program Phase I improvements.

Cumulative Projects

The future traffic forecasts also include the effects of specific development projects (cumulative projects), expected to be implemented in the vicinity of the proposed Project site prior to the buildout date (2028) of the proposed Project. Cumulative LAX projects are identified in Table 3-1 in Chapter 3, *Overview of Project Setting*. In addition, cumulative projects in surrounding jurisdictions were identified for incorporation into the Projected Future Conditions Baseline (2028) Model.

The list of non-airport cumulative projects was prepared based on data provided by LADOT, the City of Los Angeles Department of City Planning, the City of Culver City, the City of El Segundo, the City of Gardena, the City of Hawthorne, the City of Inglewood, Los Angeles County, as well as approved traffic studies in the vicinity of the Project site, websites, and field observations. A total of 123 cumulative projects were identified and the growth associated with these projects was cross checked with the travel model data and adjustments were made to accommodate the growth where necessary. Fifty-three of these projects are within the City of Los Angeles (including LAWA projects). Detailed information about the locations and specifications of these cumulative projects is provided in **Appendix G.7**, *Cumulative Projects*.

[53] 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 O – Off-Airport Traffic Study, page 94, February 2017. Available: https://www.lawa.org/en/connectinglax/automated-people-mover/documents.

Major Transit Projects

The following major transit projects will be completed before year 2028 and are included as part of the Projected Future Conditions Baseline (2028):

The Metro Crenshaw/LAX Line (currently under construction and projected to open in 2021) will extend from the existing Metro Exposition Line at Crenshaw and Exposition Boulevards and end at Aviation/Century Boulevard. The Line will travel 8.5 miles to the Metro Green Line and will serve the cities of Los Angeles, Inglewood and El Segundo, and portions of unincorporated Los Angeles County. The new Metro Rail extension will offer an alternative transportation option to access LAX.

Airport Metro Connector 96th Street Transit Station will be a new major transit hub connecting the Metro Crenshaw/LAX Line and Metro Green Line and a number of bus routes with the LAX APM. This station will serve as a true "Multi-Modal Transit Gateway" to LAX. The AMC 96th Street Transit Station is scheduled to open in late 2023/early 2024.

4.8.3.3.2 Projected Future Conditions Baseline (2028) VMT

Table 4.8-4 shows the summary of daily inbound and outbound airport trip generation for the design day. The estimated 2028 vehicle trip generation used to estimate the VMT for the Projected Future Conditions Baseline (2028) is based on following assumptions:

- LAX Landside Access Modernization Program Phase I project elements will be completed and in operation.
- Passenger and employee vehicle trips at CTA structure parking lots will be disaggregated based on similar ratios observed in existing data from August 2019. In other words, the 2019 data was used to provide the basis for the assumptions on where trips would start/end at a variety of airport facilities.
- Cargo facilities and other off-airport passenger and employee trip generation are assumed to grow at an annual rate of 1.6 percent.[54]
- All hotel and off-airport parking related shuttles to/from CTA are assumed to be moved to the ITF facilities.
- There will be no rental car shuttles and buses in the CTA because the majority of rental car facilities will be transferred to CONRAC, and passengers will use the APM to access the CTA. There will also be no rental car trips from/to all facilities along Century Boulevard, since these trips will be part of ITF East/CONRAC trip generation. The current rental car facilities also generate a small number of truck trips. These truck origins/destinations will stay at their original rental car location, as these companies are expected to use these facilities for staging and maintenance.

[54] This rate is estimated based on annual average of airport operations and the MAP growth rate.

Table 4.8-4
Projected Future Conditions Baseline (2028) Daily Trip Generation

Facility	Inbound				Outbound			
	Cars*	Trucks	Van/Bus	Total	Cars*	Trucks	Van/Bus	Total
CTA - Passenger	93,427	-	82	93,509	95,982	-	82	96,064
CTA - Employee/Crew	2,035	-	672	2,707	2,035	-	672	2,707
ITF East - Passenger	13,988	-	1,472	15,460	13,988	-	1,472	15,460
IFT West - Passenger	38,363	-	6,972	45,335	39,601	-	7,000	46,601
Cargo Facilities / Employee Parking World Way West**	17,512	6,152	104	23,768	17,737	6,305	178	24,220
Employee Parking Lots (Including employee parking near the ITF West) **	7,809	-	636	8,445	9,519	-	562	10,081
Rental Car and Other Passenger Parking Facilities (Private and Public)	5,115	781	1,526	7,422	5,330	1,144	1,498	7,972
Total Vehicle Trips	178,249	6,933	11,464	196,646	184,192	7,449	11,464	203,105

Source: **Appendix G.5**, *Trip Generation for Travel Demand Model,* of this EIR.

Notes:
* TNCs included under the car mode.
** Includes a reasonable representation of all LAX employee vehicle trips, but may not represent 100 percent of the airport employment.

The LAX travel demand model was used to calculate the total passenger VMT and VMT per employee for the Project Future Conditions Baseline (2028). This information is presented in **Tables 4.8-5** and **4.8.6**.

Table 4.8-5
Summary of Projected Future Conditions Baseline (2028) Passenger VMT

Measure	Projected Future Conditions Baseline (2028)
Total Passenger VMT	8,676,209
Source: Fehr and Peers, 2020.	

Table 4.8-6
Summary of Projected Future Conditions Baseline (2028) VMT per Employee

Measure	Projected Future Conditions Baseline (2028)
VMT per Employee	24.0
Source: Fehr and Peers, 2020.	

4.8.4 Thresholds of Significance

The proposed Project was evaluated for potential significant transportation impacts using the criteria described below consistent with Section 15064.3 and Appendix G of the State CEQA Guidelines.

Because the proposed Project at LAX involves a unique land use, specific impact thresholds were developed in coordination with LADOT, and in accordance with available State guidance.[55] As described in the VMT methodology section above, these thresholds focus on three main types of VMT created by the proposed Project: (1) VMT per employee; (2) net change in total passenger VMT; and (3) short-term and long-term induced VMT. Two additional thresholds, related to consistency with programs, plans, ordinances, and policies, and to hazards associated with a geometric design feature, were also evaluated.

A significant transportation impact would occur if the proposed Project would:

Threshold 4.8-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system (including transit, roadways, bicycle, and pedestrian facilities) that was adopted to protect the environment.

Threshold 4.8-2 Generate VMT per employee exceeding 15 percent below the Projected Future Conditions Baseline (2028) VMT per employee.

This threshold only applies to VMT associated with commute trips by workers employed at LAX. The Projected Future Conditions Baseline (2028) VMT per employee is 24.0. Therefore, the threshold for VMT per employee is 20.4.

Threshold 4.8-3 Increase total passenger VMT over the Projected Future Conditions Baseline (2028).

This threshold only applies to VMT generated by passengers at LAX.

Threshold 4.8-4 Induce substantial additional VMT compared to the Projected Future Conditions Baseline (2028).

Threshold 4.8-5 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

4.8.5 Project Impacts

As described in Section 4.8.2, to evaluate transportation impacts, trip generation and VMT were determined for passengers and employees. The following tables show the trip generation and VMT associated with the proposed Project in 2028. These tables serve as the basis for the impacts analysis that follows.

Proposed Project Daily Airport Trip Generation

The total number of passengers with implementation of the proposed Project would be the same as under the Projected Future Conditions Baseline (2028); however, about 11.5 percent of CTA trips would be shifted to Terminal 9. Total vehicle trips related to the ITF East and ITF West facilities would also be very similar to the Project Future Conditions Baseline.

An estimated 4,700 new employees would work daily (across three shifts) at Concourse 0 and Terminal 9. The mode share for these new employees was estimated based on 2016 employee survey results.[56] The

[55] State of California, Governor's Office of Planning and Research, *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA – Implementing Senate Bill 743 (Steinberg, 2013)*, January 20, 2106. Available: http://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf.

[56] City of Los Angeles, Los Angeles World Airports, *Employee Travel Study of Los Angeles International Airport,* prepared by Point C, updated July 2016.

Walk/Bike/Transit mode share and Average Vehicle Occupancy (AVO) were presented as a range in the survey; in order to be conservative and account for maximum potential Project VMT impacts, the lower end of the range was used. For example, based on information from the LAWA vanpool program, the vanpool occupancy is in the range of six to eight people per van and two to three people per carpool. For purposes of the EIR analysis, the VMT calculations for Project employees assumed six people per van and two people per car. Considering the AVO for each mode, the total new daily vehicle trips generated by these employees would be approximately 8,190, as shown in **Table 4.8-7**. It should be noted that LAX Landside Access Modernization Program and other ongoing LAWA programs are aimed at improving the mode share beyond the 2018 employee survey results and ultimately reducing VMT further.

Table 4.8-7
Concourse 0 and Terminal 9 Employee Trip Generation Summary

Mode	Mode Share	Average Vehicle Occupancy (AVO)*	Number of Employees	Total Daily Vehicle Trip Generation
Vanpool	5.5%	6	259	86
Carpool	4.6%	2	216	216
Walk/Bike/Transit/ Metro Bus or Rail	6.0%	-	282	-
Drive Alone	83.9%	1	3,944	7,888
Total	100.0%	-	4,700	8,190

Source: City of Los Angeles, Los Angeles World Airports, *Employee Travel Study of Los Angeles International Airport,* prepared by Point C, updated July 2016 and **Appendix G.5**, *Trip Generation for Travel Demand Model*, of this EIR.

Note:
*AVO = average vehicle occupancy

Table 4.8-8 shows the summary of daily inbound and outbound airport trip generation for the design day. The 2028 vehicle trip generation with implementation of the proposed Project is estimated based on the following assumptions:

- All assumptions related to the Project Future Conditions Baseline scenario trip generation were applied to the proposed Project scenario
- Passenger and employee vehicle trips at CTA structure parking lots are disaggregated based on CTA automated parking data during the month of August 2019
- New employees at Concourse 0 and Terminal 9 would use the employee parking lot adjacent to the ITF West and nearby APM station (i.e., Employee Lot South)

Table 4.8-8
Total LAX Daily Trip Generation with the Project

Facility	Inbound				Outbound			
	Cars*	Trucks	Van/Bus	Total	Cars*	Trucks	Van/Bus	Total
CTA - Passenger	82,679	-	74	82,753	84,960	-	74	85,034
Terminal 9 - Passenger	10,755	-	8	10,763	11,008	-	8	11,016
CTA and Terminal 9 Employee/Crew	2,037	-	675	2,712	2,037	-	675	2,712
ITF East - Passenger	13,993	-	1,467	15,460	13,993	-	1,467	15,460
IFT West - Passenger	38,366	0	6972	45,338	39,589	0	7,000	46,589
Cargo Facilities/ Employee Parking World Way West**	17,512	6,152	104	23,768	17,737	6,305	178	24,220
Employee Parking Lots (including employee parking near the ITF West)	11,886	-	636	12,522	13,640	-	562	14,202
Rental Car and Other Passenger Parking Facilities	5,115	781	1,526	7,422	5,330	1,144	1,498	7,972
Total Vehicle Trips	182,343	6,933	11,462	200,738	188,293	7,449	11,462	207,204

Source: **Appendix G.5**, *Trip Generation for Travel Demand Model*, of this EIR.

Notes:
* TNC's included under the car mode.
** Includes a reasonable representation of all LAX employee vehicle trips, but may not represent 100 percent of the airport employment.

As shown in Table 4.8-8, with the addition of the proposed Project, the total daily airport inbound and outbound passenger/employee trips are respectively 200,738 and 207,204. This amounts to an overall increase in trip generation over the Projected Future Conditions Baseline (2028) of approximately 2 percent.

A comparison of total LAX daily trip generation under existing conditions, Projected Future Conditions Baseline (2028), and the proposed Project is provided in **Table 4.8-9**.

Table 4.8-9
Total Airport Daily Trip Generation for Existing Conditions, Projected Future Conditions Baseline (2028), Proposed Project (2028)

Trips	Existing Conditions (2019)	Projected Future Conditions Baseline (2028)	Proposed Project (2028)
Inbound	155,226	196,647	200,738
Outbound	160,902	203,105	207,204
Total	316,128	399,752	407,942

Source: Fehr and Peers, 2020.

Proposed Project VMT

As described in Section 4.8.2.2.1, the Project Travel Demand Model was used to calculate the total passenger VMT and VMT per employee for the proposed Project. This information is presented in **Table 4.8-10**, along with VMT for existing conditions and Projected Future Conditions Baseline (2028).

Table 4.8-10
Summary of Projected VMT for Existing Conditions, Projected Future Conditions Baseline (2028), and Proposed Project (2028)

Measure	Existing Conditions (2019)	Projected Future Conditions Baseline (2028)	Proposed Project (2028)
Total Passenger VMT	6,581,811	8,676,209	8,708,995
VMT per Employee	25.2	24.0	23.9
Short-term Induced VMT	-	-	3,306
Long-term Induced VMT	-	-	18,220
Source: Fehr and Peers, 2020.			

4.8.5.1 Impact 4.8-1

Summary Conclusion for Impact 4.8-1: The proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system (including transit, roadways, bicycle, and pedestrian facilities) that was adopted to protect the environment. This would be a be *less than significant impact.*

4.8.5.1.1 Project Impacts

A review was conducted to determine whether the proposed Project would conflict with a transportation-related City or regional plan, program, ordinance, or policy that was adopted to protect the environment. Transportation policies or standards adopted to protect the environment are those that support multimodal transportation options and a reduction in VMT. A project would not be shown to result in an impact merely based on whether a project would not implement an adopted plan, program, ordinance, or policy. Rather, it is the intention of this threshold test to ensure that a proposed project does not conflict with nor preclude the City from implementing adopted plans, programs, ordinances, or policies.

This evaluation was conducted by reviewing the relevant City and regional plans, programs, ordinances, and policies. A summary of the plans, programs, ordinances, and policies reviewed, and the general conclusions of the review, are provided in **Table 4.8-11** and **Table 4.8-12**. Table 4.8-11 includes the City and regional documents and ordinances that establish the regulatory framework and identifies whether or not the Project would be inconsistent with policies or standards in these documents that address the circulation system. Table 4.8-12 includes a structured approach with guiding questions to address consistency with relevant transportation-related plans, programs, ordinances, and policies. Under CEQA, a project is considered consistent with an applicable plan if it is consistent with the overall intent of the plan and would not preclude the attainment of its primary goals. A project does not need to be in perfect conformity with each and every policy. Finally, any inconsistency with an applicable policy, plan, or regulation is only a significant impact under CEQA if the policy, plan, or regulation was adopted for the purpose of avoiding or mitigating an environmental effect and if the inconsistency itself would result in a direct physical impact on the environment.

Table 4.8-11
Proposed Project's Consistency with
Applicable City and Regional Plans, Programs, Ordinances, or Policies

Plan, Program, Ordinance, or Policy	Proposed Project Consistency
SCAG 2020-2045 RTP/SCS and RTIP	
The SCAG 2020-2045 RTP/SCS and the RTIP identify proposed new regional transportation systems. The RTP/SCS identifies that the proposed Project would address ground access at LAX and complement the future APM. The specific roadway improvements associated with the proposed Project are not yet included in the RTP/SCS given that those improvements along with the rest of the Project elements have not yet been approved. In conjunction with future Project approval, roadway improvements associated with the Project can be integrated into the RTP/SCS, including the Transportation System Project List and the RTIP, as appropriate. This process is similar to what occurred with the ground transportation improvements associated with the LAX Landside Access Modernization Program, which is also acknowledged in the SCAG 2020-2045 RTP/SCS.	While the ATMP Project is included in the RTP/SCS, the proposed Project roadway improvements are not yet identified or included in the 2020-2045 RTP/SCS road network or the RTIP, as they, along with the rest of the Project, have not been approved. Subject to receiving necessary approvals, LAWA will inform Metro and SCAG of the revisions to the road network in the immediate vicinity of LAX, which, in turn can be integrated into the RTP/SCS. The environmental effects of those roadway improvements including, but not limited to, VMT and GHG, have been addressed and accounted for in this EIR (see Section 4.8, *Transportation,* and Section 4.4, *Greenhouse Gas Emissions*). The Project's proposed roadway improvements would not be inconsistent with the RTP/SCS**.**
City of Los Angeles General Plan Framework	
Objective 3.1 – Accommodate a diversity of uses that support the needs of the City's existing and future residents, businesses, and visitors	The proposed Project would not be inconsistent with Objective 3.1 and its respective policies. The Project includes transportation, office and retail uses to accommodate those traveling to or from, and those working at, LAX.
Objective 3.10 – Reinforce existing and encourage the development of new regional centers that accommodate a broad range of uses that serve, provide job opportunities, and are accessible to the region, are compatible with adjacent land uses, and are developed to enhance urban lifestyles	The proposed Project would not be inconsistent with Objective 3.10, and specifically Policy 3.10.2 (Accommodate and encourage the development of multi-modal transportation centers, where appropriate). The Project includes facilities to accommodate pedestrians, as well as those using the APM to access the CTA.

Table 4.8-11
Proposed Project's Consistency with
Applicable City and Regional Plans, Programs, Ordinances, or Policies

Plan, Program, Ordinance, or Policy	Proposed Project Consistency
Los Angeles Mobility Plan 2035	
Policy 2.1: Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands. Policy 2.5: Transit Network — Improve the performance and reliability of existing and future bus service. Policy 3.9: Increase network access.	The proposed Project would not be inconsistent with the policies relating to the circulation system. Street cross-sections would not be inconsistent with designations outlined within the Plan, and the proposed Project would not be inconsistent with the goods movement. The proposed Project may require repositioning of two bus stops on 96th Street in conjunction with the proposed realignment of a portion of that street. Such repositioning of the bus stops, if needed, would be coordinated with the affected transit operator(s). Bus service in the area would continue and the Project would not be inconsistent with the Mobility Plan 2035 relative to transit. The proposed Project includes replacement of existing sidewalks along 96th Street as part of the realignment of that portion of 96th Street. As such, the Project would not be inconsistent with the Mobility Plan 2035 relative to pedestrian access. The proposed Project would require the removal of existing bicycle lanes on 96th Street; however the LAX Landside Access Modernization Program EIR included Figure 2-55, Proposed Amendment to Mobility Plan 2035 Bicycle Plan, which shows these bicycle facilities would be removed along 96th Street and an alternative connection would be provided by the construction of bike and multi-use paths in the vicinity. The Project's required removal of the bicycle lanes would not be inconsistent with the Mobility Plan 2035 as they will be replaced with an extensive bicycle network in the vicinity.
LAX Plan	
Goal 6 – Improve Ground Access to LAX	The proposed Project would not be inconsistent with, and would advance, Goal 6 and Circulation and Access Policy P9. Pedestrian facilities would provide access to Terminal 9 from the parking facility and adjacent terminals. Access would be provided to both Concourse 0 and Terminal 9 from APM stations.
Vision Zero Los Angeles	
Vision Zero Action Plan Vision Zero Corridor Plans	The proposed Project would not be inconsistent with the design standards of the City of Los Angeles, which is in line with Vision Zero Los Angeles. Although segments of Sepulveda Boulevard and Century Boulevard are designated as part of the City's HIN, none of these sections are on the list of Prioritized (targeted) Corridors as part of Vision Zero Los Angeles. The proposed Project would not preclude the City from implementing future planned improvements as part of Vision Zero Los Angeles.

Table 4.8-11
Proposed Project's Consistency with
Applicable City and Regional Plans, Programs, Ordinances, or Policies

Plan, Program, Ordinance, or Policy	Proposed Project Consistency
Century Boulevard Streetscape Plan	
The Plan includes planned streetscape improvements along the segments of Century Boulevard that are adjacent to proposed Project roadway improvements and Terminal 9.	The proposed roadway improvements, including the access to Terminal 9, are not identified in the Plan; therefore, the exact details of the implementation would vary slightly from the exhibits provided in the Plan. The improvements guidelines set forth in the Plan would be taken into account in the more detailed design of the proposed roadway improvements. Overall, the proposed Project would not be inconsistent with the overall intent of the plan to create a vibrant corridor and would not preclude the City from implementing the plan.
Citywide Design Guidelines	
Guideline 1: Promote a safe, comfortable and accessible pedestrian experience for all. Guideline 2: Carefully incorporate vehicular access such that it does not degrade the pedestrian experience. Guideline 3: Design projects to actively engage with streets and public space and maintain human scale.	The proposed Project would not be inconsistent with the Citywide Design Guidelines. Pedestrian access facilities would be provided connecting Concourse 0 and Terminal 9 to the APM system, to the new parking facility for Terminal 9, and to adjacent terminals.
City of Los Angeles Safety Element	
The Safety Element includes goals, objectives, and policies applicable to emergency services.	The proposed Project would not be inconsistent with the Safety Element. The project road improvements would be designed to City standards and provide access for emergency response vehicles.
Plan for a Healthy Los Angeles	
The plan includes policies directing several City departments to develop plans that promote active transportation and safety.	The proposed Project would not be inconsistent with the overall intent of the plan to provide a safe and efficient transportation system for all users.
Great Streets for Los Angeles/LADOT Strategic Plan	
The plan focuses on making the city safe, prosperous, and livable with a well-run government.	The proposed Project would not be inconsistent with the plan. The road improvements would not be inconsistent with the plan's goal of providing a system that supports the economy by connecting places.
Los Angeles Fire Department Strategic Plan 2018-2020	
The Strategic Plan focuses on nine goals and corresponding strategic actions that guide the Los Angeles Fire Department (LAFD).	The proposed Project would not be inconsistent with the plan. The Project would not be inconsistent with the plan's airport resource units that are allocated to the service delivery area of LAX.
Source: Fehr & Peers, 2020.	

Table 4.8-12
Guiding Questions to Address Proposed Project's Consistency with Transportation-Related City Plans, Programs, Ordinances, and Policies[1]

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
A. Mobility Plan 2035 Public Right of Way Classification Standards for Dedications and Improvements			
A.1	Does the project include additions or new construction along a street designated as a Boulevard I, and II, and/or Avenue I, II, or III on property zoned for R3 or less restrictive zone?	MP 2.1, 2.3, 3.2, and Mobility Plan 2035 Street Designations and Standard Roadway Dimensions	Yes, the proposed Project would include new construction along Sepulveda Boulevard and Century Boulevard (Boulevard I), 96th Street (Avenue II), 98th Street (Collector), and Vicksburg Avenue (Local Street). These road segments front property zoned for LAX (restrictive) and commercial (less restrictive).
A.2	If A.1 is yes, is the project required to make additional dedications or improvements to the Public Right of Way as demonstrated by the street designation?		No, no additional dedications or improvements to the Public Right of Way are required as street cross-sections of the proposed Project would not be inconsistent with designations and modifications in the Mobility Plan 2035 and the City of Los Angeles Complete Streets Design Guide. ▪ Sepulveda Blvd: Boulevard I ▪ Century Boulevard: Boulevard I (the Mobility Plan 2035 has this section modified to 133 ft of ROW and 124 ft of ROW) ▪ 96th Street: Avenue II ▪ 98th Street: Collector Source: City of Los Angeles Complete Streets Design Guide (Boulevard designations pages 37-39), NavigateLA.lacity.org.
A.3	If A.2 is yes, is the project making the dedications and improvements as necessary to meet the designated dimensions of the fronting street (Boulevard I, and II, or Avenue I, II, or III)?		Not applicable.
A.4	If the answer to A.3. is NO, is the project applicant asking to waive from the dedication standards? The following factors may contribute to determine if the dedication or improvement is necessary: Is the project site along any of the following networks identified in the City's Mobility Plan? ▪ Transit Enhanced Network ▪ Bicycle Enhanced Network		No, the project applicant is not asking to waive dedication standards. The proposed Project area includes the following networks identified in the City's Mobility Plan: ▪ Sepulveda Boulevard: Transit enhanced network (north leg), Pedestrian enhanced district (north leg), Goods movement (truck route) ▪ Century Boulevard: Transit enhanced network, Pedestrian enhanced network ▪ 96th Street: Neighborhood enhanced network, and Pedestrian Enhanced District ▪ 98th Street: Citywide General Plan Circulation System Source: Mobility Plan 2035 (pages 134-149). 2.3 Pedestrian Infrastructure: Mobility Plan 2035 identifies Pedestrian Enhanced Districts (PED) where initial analysis suggests arterials can be improved and further analysis and prioritization will occur as funding and projects become available. The proposed Project

Table 4.8-12
Guiding Questions to Address Proposed Project's Consistency with Transportation-Related City Plans, Programs, Ordinances, and Policies[1]

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
	▪ Bicycle Lane Network ▪ Pedestrian Enhanced District ▪ Neighborhood Enhanced Network Is the project within the service area of Metro Bike Share, or is there demonstrated demand for micro-mobility services?		would include replacement of existing sidewalks along 96th Street that would occur in conjunction with the proposed realignment of a portion of 96th Street. 2.4 Neighborhood Enhanced Network: The Neighborhood Enhanced Network (NEN) is a selection of streets to provide comfortable and safe routes for localized travel of slower-moving modes, such as walking or biking. The proposed Project includes replacement of existing sidewalks along 96th Street that would occur in conjunction with the proposed realignment of a portion of 96th Street. 2.5 Transit Network: This policy identifies specific streets as part of the Transit Enhanced Network (TEN) to receive improvements that enhance the performance and reliability of existing and future bus service. Implementation of the proposed Project would not adversely affect transit service. 2.6 Bicycle Networks: This policy establishes a Bicycle Enhanced Network (BEN), which is comprised of protected bicycle lanes and bicycle paths, to provide bikeways for a variety of users. Although the proposed Project proposes to modify 96th Street east of Sepulveda Boulevard, the bicycle lanes on 96th Street are planned to be removed as part of the LAX Landside Access and Modernization Program. Notwithstanding, should removal of those bicycle lanes occur as part of the proposed Project in lieu of the removal anticipated under the LAX Landside Access and Modernization Program, their removal would be offset by other replacement bicycle lanes in the vicinity under the LAX Landside Access and Modernization Program. 2.7 Vehicle Network: This policy establishes a Vehicle Enhanced Network (VEN) to identify corridors that will remain critical to vehicular circulation and to balance regional and local circulation needs. None of the streets in the Project area are on the VEN. Source: From the City's Mobility Plan 2035 and NavigateLA. No, the proposed Project is not within the service area of Metro Bike Share, nor is there demonstrated demand for micro-mobility services.
B. Mobility Plan 2035 Public Right of Way Policy Alignment with Project-Initiated Changes			
B.1	Does the project physically modify the curb placement or turning radius and/or physically alter the sidewalk and parkways space that changes how people access a property?	MP 2.1, 2.3, 3.2, 2.10, and Street Designations and Standard Roadway Dimension	Yes, the proposed Project would realign sidewalks along 96th Street in conjunction with realignment of that street. The proposed Project may include redesigning the existing landscaping at Sepulveda and Century boulevards due to construction of new ramps. The physical changes in the Public Right of Way, including curb placement, sidewalks and parkways, that would occur relative to the proposed roadway improvements, could change the current specifics of how people access the property, but would not degrade the experience of vulnerable roadway users, nor preclude the City from advancing the safety of vulnerable roadway users.

Table 4.8-12
Guiding Questions to Address Proposed Project's Consistency with Transportation-Related City Plans, Programs, Ordinances, and Policies[1]

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
B.2	Does the project add new driveways along a street designated as an Avenue or a Boulevard that conflict with LADOT's Driveway Design Guidelines?	MP 2.10, PL.1, CDG 2, MPP 321	Yes, the proposed Project would add a new driveway along an Avenue or a Boulevard. The new driveway access along Vicksburg Avenue, between 98th Street and 96th Street, would be designed in accordance with LADOT's Driveway Design Guidelines.
B.2.1	Would the physical changes in the public right of way or new driveways that conflict with LADOT's Driveway Design Guidelines degrade the experience of vulnerable roadway users such as modify, remove, or otherwise negatively impact existing bicycle, transit, and/or pedestrian infrastructure?	Mobility Plan 2035: Transit Enhanced Network, Bicycle Enhanced Network, Bicycle Lane Network, Pedestrian Enhanced District, Neighborhood Enhanced Network, High Injury Network, TOC Guidelines	Transit Enhanced Network: The proposed Project would not adversely affect existing transit services in the Project area. Roadway improvements proposed along 96th Street would occur in close proximity to two bus stops located near Sepulveda Boulevard, which may require a nearby relocation of, and/or modification to, one or both of the stops and would be coordinated with the affected transit agency(s). 2.3 Pedestrian Infrastructure: The proposed Project would include replacement of existing pedestrian facilities on 96th Street. Specifically, the existing sidewalks along the portions of 96th Street that would be realigned as part of the Project would be replaced in conjunction with road construction. As such, pedestrian access and infrastructure would not be lost. MP-BEN: Although the proposed Project proposes to modify 96th Street east of Sepulveda Boulevard, the bicycle lanes on 96th Street are planned to be removed as part of the LAX Landside Access and Modernization Program. The Project would not disrupt existing bicycle facilities since these are already planned for removal under the LAX Landside Access and Modernization Program and other bicycle lanes and multi-use paths are being added in the vicinity. Healthy LA: This plan states a balanced, affordable, and sustainable transportation system is a cornerstone of a healthy city. Policy 2.11, Foundation for Health, highlights the role of sidewalks as an important asset that promotes active transportation, safe community corridors, and healthy neighborhoods. The Project would not be inconsistent with, limit, or preclude the City's ability to implement programs and policies in furtherance of Healthy LA. Vision Zero: The City of Los Angeles Vision Zero initiative strives to enable all people to move freely and safely on the street. The proposed Project would not be inconsistent with the design standards of the City of Los Angeles, which is in line with Vision Zero Los Angeles. Although segments of Sepulveda Boulevard and Century Boulevard are designated as part of the City's HIN, none of these sections are on the list of Prioritized (or targeted) Corridors as part of Vision Zero Los Angeles. The proposed Project would not preclude the City from implementing future planned improvements as part of Vision Zero Los Angeles.

Table 4.8-12
Guiding Questions to Address Proposed Project's Consistency with Transportation-Related City Plans, Programs, Ordinances, and Policies[1]

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
			Sustainability pLAn: The Sustainability pLAn focuses on public transit, bicycling, walking, and locating Angeleno's residences near transit and places they would want to travel. The proposed Project would not be inconsistent with the overall intent of the plan to provide a safe and efficient transportation system for all users.
B.2.2	Would the physical modifications or new driveways that conflict with LADOT's Driveway Design Guidelines preclude the City from advancing the safety of vulnerable roadway users?		No, the physical modifications of the proposed Project would not preclude the City from advancing the safety of vulnerable roadway users.
C. Network Access			
C1.1	Does the project propose to vacate or otherwise restrict public access to a street, alley, or public stairway?	MP 3.9	No, the Project does not propose to vacate or otherwise restrict public access to a street, alley, or public stairway. More specifically, 96th Street west of Sepulveda Boulevard would be a street vacation without public access, while east of Sepulveda Boulevard, it would still have access with a private street easement. Vicksburg Avenue between 96th Street and 98th Street would be a street vacation to a private street easement, but would still have public access.
C.1.2	If the answer to C.1.1 is Yes, will the project provide or maintain public access to people walking and biking on the street, alley or stairway?		Not applicable.
C.2.1	Does the project create a cul-de-sac or is the project located adjacent to an existing cul-de-sac?	MP 3.10	MP 3.10 Cul-de-sacs: This policy discourages the use of cul-de-sacs that do not provide access for active transportation options. The Project does not create a cul-de-sac, nor is it adjacent to an existing cul-de-sac.
C.2.2	If yes, will the cul-de-sac maintain convenient and direct public access to people walking and biking to the adjoining street network?		Not applicable.
D. Parking Supply and Transportation Demand Management			
D.1	Would the project propose a supply of onsite parking that exceeds the baseline amount as required in the Los Angeles Municipal Code or a Specific plan, whichever requirement prevails?	MP 3.8, 4.8, 4.13	Not applicable. The LAX Specific Plan applicable to this area does not have a parking requirement.

Table 4.8-12
Guiding Questions to Address Proposed Project's Consistency with Transportation-Related City Plans, Programs, Ordinances, and Policies[1]

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
D.2	If the answer to D.1. is YES, would the project propose to actively manage the demand of parking by independently pricing the supply to all users (e.g., parking cash-out), or for residential properties, unbundle the supply from the lease or sale of residential units?		Not applicable.
D.3	Would the project provide the minimum on and off-site bicycle parking spaces as required by Section 12.21 A.16 of the LAMC?		Not applicable. The main use of Project facilities would be by airline passengers, which would involve negligible use of bicycles. Bicycle travel to and from Concourse 0 and Terminal 9 utilizing CTA roadways poses safety and efficiency concerns for traffic on those roadways. Such bicycle use is, however, supported by the LAX Landside Access and Modernization Program facilities that provide bicycle access outside the CTA, with connections to the CTA via the APM.
D.4	Does the Project include more than 25,000 square feet of gross floor area construction of new non-residential gross floor?		Yes, the proposed Project includes over two million square feet of gross floor area construction of new non-residential gross floor.
D.5	If the answer to D.4. is YES, does the project comply with the City's TDM Ordinance in Section 12.26 J of the LAMC?		Yes, the proposed Project would comply with applicable provisions of Section 12.26 J of the LAMC.
E. Consistency with Regional Plans			
E.1	Does the Project or Plan apply one of the City's efficiency-based impact thresholds (i.e., VMT per capita, VMT per employee, or VMT per service population) as discussed in Section 2.2.3 of the TAG?		Yes, the Project applies one of the City's efficiency-based impact thresholds: VMT per employee.
E.2	If the Answer to E.1 is YES, does the Project or Plan result in a significant VMT impact?		Yes, the Project does result in a significant VMT impact related to an efficiency-based impact threshold (i.e., VMT per employee); however, that impact can be mitigated to a level that is less than significant.

Table 4.8-12
Guiding Questions to Address Proposed Project's Consistency with Transportation-Related City Plans, Programs, Ordinances, and Policies[1]

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
E.3	If the Answer to E.1 is NO, does the Project result in a net increase in VMT?		Although the Project analysis applies an efficiency-based impact threshold related to employment VMT, the analysis also applies non-efficiency-based impact thresholds for passenger VMT and induced VMT. The Project would result in a net increase in VMT relative to those impacts.
E.4	If the Answer to E.2 or E.3 is YES, then further evaluation would be necessary to determine whether such a project or land use plan would be shown to be consistent with VMT and GHG reduction goals of the SCAG RTP/SCS		See discussion above in Table 4.8-11 as related to the SCAG RTP/SCS. The Project would not be inconsistent with the VMT or GHG reduction goals of the SCAG RPT/SCS.

Source: Fehr and Peers, 2020.

Notes:

[1] Item Number; Guiding Questions; Relevant Plans, Policies, and Programs; and Supporting/Complementary City Plans, Policies, and Programs to Consult from LADOT TAG.

[2] City of Los Angeles, Bureau of Street Services, *Coordinated Street Furniture Program webpage*. Available: https://streetsla.lacity.org/coordinated-street-furniture-program, accessed July 8, 2020.

Key:

LAMC = City of Los Angeles Municipal Code; MP = Mobility Plan 2035; TEN = Transit Enhanced Network; PED = Pedestrian Enhanced District; BEN = Bicycle Enhanced Network; TOC = Transit Oriented Communities; ENG = Engineering; PL = Planning; CDG = Citywide Design Guidelines; MPP = Manual of Policies and Procedures

Based on the information and analyses presented in Table 4.8-11 and Table 4.8-12 above, the proposed Project's relationship to transportation-related plans, policies, ordinances, and programs would not result in significant impacts to the environment; hence, the impact of the proposed Project would be ***less than significant***.

4.8.5.1.2 Mitigation Measures

Because the proposed Project would result in a ***less than significant impact*** regarding transportation-related plans, policies, ordinances, and programs, no mitigation is required.

4.8.5.1.3 Significance of Impact After Mitigation

As indicated above, no mitigation is required to address transportation regarding transportation-related plans, policies, ordinances, and programs. The proposed Project would result in a ***less than significant impact***.

4.8.5.2 Impact 4.8-2

Summary Conclusion for Impact 4.8-2: The proposed Project would generate VMT per employee exceeding 15 percent below the Projected Future Conditions Baseline (2028) VMT per employee (i.e., 20.4). This would be a *significant impact*. With mitigation, the impact would be *less than significant.*

4.8.5.2.1 Project Impacts

The Project Travel Demand Model was used to assess the total trip generation and VMT per employee for all scenarios considered: existing conditions (2019), Projected Future Conditions Baseline (2028), and Proposed Project (2028). The VMT model results are shown earlier in Table 4.8-10, and are repeated below in **Table 4.8-13**.

Table 4.8-13
Summary of Projected VMT for Existing Conditions, Projected Future Conditions Baseline (2028), and Proposed Project (2028)

Measure	Existing Conditions (2019)	Projected Future Conditions Baseline (2028)	Proposed Project (2028)
Total Passenger VMT	6,581,811	8,676,209	8,708,995
VMT per Employee	25.2	24.0	23.9
Short-term Induced VMT	-	-	3,306
Long-term Induced VMT	-	-	18,220

Source: Fehr and Peers, 2020.

As shown in Table 4.8-13, VMT per employee under Projected Future Conditions Baseline (2028) will be more efficient than under existing (2019) conditions. This is primarily due to planned improvements to transit (e.g., opening of the Crenshaw/LAX Line) and improvements associated with Phase 1 of the LAX Landside Access Modernization Program, including new roadways, the APM, ITF West, ITF East, and CONRAC, as well as travel demand management (TDM) measures. These changes will result in an improved efficiency metric of 24 VMT per employee (compared to 25.2 under existing conditions).

The addition of the proposed Project would result in changes to the parking destination for some existing and new Project employees, which would slightly improve the VMT per employee rate. As shown in Table 4.8-13, the Project would result in 23.9 VMT per employee. Although this would be a decrease compared to Projected Future Conditions Baseline (2028), the decrease would not be at least 15 percent

below the baseline (i.e., 20.4), which is the threshold of significance (i.e., the future VMT with the proposed project must be at least 15 percent below the Projected Future Conditions Baseline (2028) in order for the impact to be less than significant). Because the proposed Project would generate VMT per employee that would exceed 15 percent below the Projected Future Conditions Baseline (2028) VMT per employee rate, this would be a ***significant impact***.

4.8.5.2.2 Mitigation Measures

The following presents the VMT Mitigation Program recommended for the proposed Project. Although VMT impacts associated with the proposed Project have been categorized into three types of impacts – employee VMT impacts, passenger VMT impacts, and induced VMT impacts – the VMT Reduction Program is designed to address all three types of impacts through a single comprehensive program.

- **MM-T (ATMP)-1 VMT Reduction Program.**

  Prior to operation of Concourse 0 or Terminal 9, LAWA shall initiate implementation of a VMT Reduction Program. The VMT Reduction Program described below includes a variety of VMT reduction strategies that LAWA will choose from in mitigating the VMT impacts of the proposed Project. As further described below, LAWA will monitor on an annual basis for a defined period the effectiveness of the strategies to determine if the required level of mitigation (i.e., the quantified level of VMT reduction) is being achieved. While a broad array of potential VMT mitigation reduction strategies is identified below, this list is not intended to limit future VMT reduction strategies to only those presented herein. If other feasible VMT reduction strategies are identified in the future and are needed to reduce the VMT impacts below the level of significance, they, too, may be implemented.

  The selection, implementation, and monitoring and reporting of VMT reduction strategies will occur in conjunction with the existing ground transportation management function within LAWA (i.e., in coordination with LAWA's management of employee carpools, vanpools, transit, etc.).

  VMT Reduction Strategies

  The pool of potential VMT reduction strategies currently considered available for reducing VMT impacts associated with the proposed Project are described below. For the first four strategies, there is published research about the effectiveness of each of the strategies, and estimates about the effectiveness of each strategy can be made based on conditions at LAX; therefore, an estimate of the amount of VMT reduction associated with these strategies is provided. Following the descriptions of those first four strategies is a listing of additional VMT reduction strategies whose effectiveness in reducing VMT is more difficult to estimate at this time due to the lack of available research or data; nonetheless, these additional VMT reduction strategies are included because, as a matter of professional judgment, they appear to have the potential to result in decrease in VMT. Regardless, the actual effectiveness of the VMT reduction strategies selected for implementation would be validated through annual monitoring and reporting, as further described below.

  - **Expand LAWA's Rideshare Program** – Currently, LAWA's rideshare program serves LAWA's employees and results in a 13.4 percent commute mode share for the vanpool program and additional participation in carpools.[57] The LAX employee population currently has a 5.5 percent commute mode share for vanpools.[58] Expanding the LAWA program to all LAX employees, with a corresponding expansion of vans in service to meet the increased demand,

[57] Los Angeles World Airports SCAQMD Filing, August 2019, as reported via email from M. Molina, LAWA to P. Adams, LAWA on May 21, 2020.

[58] City of Los Angeles, Los Angeles World Airports, *Employee Travel Study of Los Angeles International Airport*, prepared by Point C, updated July 2016.

is expected to produce a similar vanpool mode share as is currently seen for LAWA employees. Vanpools are a flexible strategy that accommodate a variety of shift schedules and residential locations, ideal for a large workforce such as that of the LAX campus. Furthermore, vanpools were a frequently-requested program in the 2016 Employee Travel Study of Los Angeles International Airport, which surveyed employees across LAX of all types. When applied to the entire LAX employee pool, this would result in an increase in vanpool mode share for LAX employees of 7.9 percent, representing a shift from employees driving alone to employees driving with others in a vanpool. Additional participation in carpools would also be anticipated as a result of this strategy. Based on the strategy description above, total VMT reduction from this strategy is estimated to be over 60,000 daily employee VMT. This assumes new vanpool riders shift from drive-alone mode share (80 percent of LAX employees) and each van carries six employees (driver plus passengers).

- **Formalize Employee Telecommuting Program** – Eligible employees across all employers on the LAX campus shall be allowed to telecommute through a formalized work-from-home program. Recognizing that LAWA job requirements are not fully representative of all LAX employees, most of whom need to be on-site to fulfill their job duties, a review of job titles across the LAX campus was conducted, resulting in an estimate that four percent of all jobs across LAX could be completed at least partially from home. Based on research related to telecommute programs, a telecommute program that enables an average of 1.5 days per week to be spent working from home, with a four percent eligibility, would result in a 0.88 percent reduction in VMT from the employment site.[59] Based on these assumptions, total VMT reduction from this strategy is estimated to be over 7,000 daily employee VMT.
- **Provide On-demand Micro-Transit Shuttle** – [Relative to employee VMT reduction, LAWA is currently engaged in the development of an employee shuttle in partnership with the City of Inglewood, and a separate pilot program in partnership with Metro. The expansion of these pilot programs into full programs, and the expansion of the service area beyond the City of Inglewood and the Metro service area, would result in additional reduction of single-occupancy commute trips to LAX from the nearby neighborhoods. Based on a review of employee residential locations, nine percent of employees at LAX live within five miles of the airport. Based on research related to private employee shuttles serving employment centers, an estimated 27 percent of the employees within the service area who would have driven alone would switch to a shuttle if it existed.[60] Based on these assumptions, total VMT reduction from this strategy is estimated to be over 4,700 daily employee VMT. If the service area were expanded to a radius of 10 miles or farther, additional employees with longer commute trip lengths would be expected to switch to using the shuttle, resulting in additional VMT reduction. Micro-transit systems can, as an option, be set up as point-to-point shuttles different from van pools by utilizing larger vehicles, some with amenities, having a dedicated driver, with passenger pick-ups and drop-offs at designated hubs (instead of individual homes).

  Long-term, these pilot programs can serve as examples of service options that can be expanded into a full program that is available to both employees and passengers, which would result in reduction of private vehicle trips to LAX from passengers who live in the nearby neighborhoods. Based on a review of originating passenger residential locations, three

[59] Cambridge Systematics, *Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions,* Technical Appendices, prepared for the Urban Land Institute (p. B-54). As reported in the California Air Pollution Control Officers Association, *Quantifying Greenhouse Gas Mitigation Measures*, page 237, 2010. Available: http://capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

[60] Handy, Lovejoy, Boarnet, Spears, *Impacts of Transit Service Strategies on Passenger Vehicle Use and Greenhouse Gas Emissions,* 2013.

percent of passengers live in neighborhoods within five miles of the airport.[61] Based upon research related to private employee shuttles serving employment centers, which is the best available corollary to this type of passenger micro-transit shuttle, an estimated 27 percent of passengers within the service area who would otherwise drive alone would switch to a shuttle if it existed.[62] If the service area were expanded to a radius of 10 miles, additional passengers with longer trip lengths would be expected to switch to using the shuttle.

- **Market and Promote Alternative Transportation Options** – Promotions, marketing, and online trip-planning tools shall be implemented to promote alternative options to get to and from LAX using modes other than a private vehicle. Relative to employee VMT, LAWA currently engages, through its Rideshare program, in marketing and promoting alternative options to get to LAX using modes other than a private vehicle. There is opportunity to increase the frequency and diversify the format of marketing and promotions to LAWA employees, increase the number of LAX employees that receive marketing and promotions communications through the expansion of the Rideshare program, and enhance the relevance of existing sources of information such as online trip-planning tools. Promotions and marketing that encourage employees to change their commute habits, including periodic incentives to participate (such as Earth Day promotions), in conjunction with the increasing number of non-auto options to get to LAX in the future, would be anticipated to further reduce employee VMT. Based on available research, the VMT reduction potential from this strategy is grouped with the expansion of the rideshare program, and no additional VMT reductions are assumed to be produced from this strategy in isolation.[63]

  Relative to passenger VMT reduction, LAX does not currently engage in comprehensive marketing and promotions for alternative options to get to and from LAX using modes other than a private vehicle; therefore, there are certain aspects of marketing and promotion that could, as part of the proposed VMT Reduction Program, be expanded. Online trip-planning tools, such as Google Maps and Metro's trip planner, offer ways for a passenger to get to LAX via public transit or alternative modes. These tools, however, require a passenger to seek out proactively that information. Promotions and marketing that capture passengers' attention at all stages of the trip-making process, in conjunction with the increasing number of non-auto options to get to LAX in the future, would be anticipated to reduce passenger VMT.[64]

Implementation of the four strategies described above would be anticipated to reduce airport-wide employment VMT by more than 16,450 daily VMT, which is equivalent to reducing daily employee commute VMT to an average VMT per employee that is below the performance goal of 20.4 for Concourse 0 and Terminal 9 employees.

Additional Strategies

Following are additional strategies that could be implemented:

- **Conduct Parking Study to Price Parking to Reduce VMT** – Conduct a parking study to identify opportunities to price employee parking and passenger parking such that VMT reduction is achieved. Due to the prevalence of a widespread off-campus, competitive parking market, a parking study would need to be conducted in order to determine what on-campus price points

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61 Unison Consulting. *2019 Passenger Survey – Los Angeles International Airport*, October 18, 2019. Available: https://www.lawa.org/-/media/lawa-web/lawa-our-lax/studies-and-reports/lax_survey_final_report_2019.ashx.

62 Handy, Lovejoy, Boarnet, Spears, *Impacts of Transit Service Strategies on Passenger Vehicle Use and Greenhouse Gas Emissions*, 2013.

63 California Air Pollution Control Officers Association, *Quantifying Greenhouse Gas Mitigation Measures,* page 242, 2010. Available: http://capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

64 National Academies of Sciences, Engineering, and Medicine, *Traveler Response to Transportation System Changes Handbook, Third Edition*: Chapter 19, Employer and Institutional TDM Strategies, Table 19-1, 2010. Washington, DC: The National Academies Press. Available: http://www.trb.org/Publications/Blurbs/163781.aspx.

would deter passengers and employees from driving, rather than simply pushing them to use off-campus options.

- **Expand Incentives and Commuter Benefits** – LAWA will provide enhanced commuter incentives, including expanded carpool benefits, transit subsidies, guaranteed ride home, and vanpool support to LAWA employees. LAWA will also coordinate with other LAX employers that have such incentives and benefits to encourage the expansion of those programs.
- **Evaluate Modifications to FlyAway Service** – In conjunction with renewing the contract for the provision of the FlyAway bus service, LAWA shall evaluate the potential to reach new geographical areas where potential ridership would support establishment of a route to such areas and will implement such routes if determined feasible.
- **Explore Incentive Measures from LAWA Mobility Strategic Plan**
  - LAWA will partner with airlines to explore integrated ticketing solutions for airline and transit tickets as a potential means to incentivize the use of transit.
  - LAWA will partner with TSA to explore expedited security screening for FlyAway passengers and other transit customers as a potential means to incentivize the use of transit.
- **Evaluate the Potential for Congestion Pricing in the CTA** – Pricing mechanisms (such as charging for parking or charging for toll lanes) are one of the most effective ways to manage travel demand, encouraging travelers to use high-occupancy alternatives such as transit, shuttles, and off-site intermodal facilities to access the airport, thereby reducing VMT. Pricing can be variable based on time of day to be highest during the periods of highest demand and lowest during periods where demand is lower. An additional benefit to this strategy is congestion reduction in the CTA, thereby improving the experience for vehicles (including both private vehicles and high-occupancy shuttles) that use the CTA.

The discussion of the strategies presented above is based on data, research and conditions at LAX that reflect pre-COVID-19 conditions. There is considerable uncertainty regarding whether or when COVID-19 will no longer affect ground transportation conditions at LAX. In particular, there is uncertainty regarding how ground transportation conditions at LAX will evolve over time in light of COVID-19. There is no way to anticipate how or when this evolution may occur, except by engaging in speculation, which CEQA does not require. That is part of the reason why the implementation of these strategies is accompanied by a robust monitoring and reporting program, as outlined further below.

The following describes the anticipated ability of such VMT reduction strategies to mitigate the three types of VMT impacts.

- Ability of Strategies to Mitigate Employment VMT Impact. There are numerous VMT reduction strategies related to employment VMT. Such strategies can be applied airport-wide and include LAWA employees, as well as non-LAWA airport employees (e.g. airline employees, concessionaire employees, security employees, operations employees). The employment VMT mitigation strategies presented herein for the proposed Project would be over and above the extensive transportation management/reduction programs that are already in place at LAX[65] or are already being developed and implemented independent of the proposed Project, such as those associated with the LAX Landside Access Modernization Program and the 2020 LAWA Mobility Strategic Plan. Meeting the employment VMT mitigation requirement for the proposed Project would require reducing a total of 16,450 daily VMT from airport-wide employment, which is equivalent to a

[65] See LAWA website regarding existing rideshare programs and other employee trip reduction programs, available at: https://www.lawa.org/lawa-environment/environmental-programs-group/lawa-rideshare.

performance goal of 20.4 VMT per employee of the Project, as described above in Section 4.8.5.2. The employment VMT mitigation will be monitored and reported on an annual basis, and will be tied to the number of Concourse 0 and Terminal 9 employees each year up to completion of each facility. The employment VMT mitigation requirement will be considered to be fully satisfied if, at buildout of Concourse 0 and Terminal 9, airport-wide employment VMT is reduced by 16,450 daily VMT, which is equivalent to meeting a performance goal of 20.4 VMT per employee associated with the proposed Project. Based on the strategies that are available for employment VMT and LAWA's ability to control, monitor, and report on the implementation of such strategies, it is anticipated that the employment VMT impacts associated with the proposed Project would be reduced to a level that is less than significant, as concluded in Section 4.8.5.2.3 below.

- Ability of Strategies to Mitigate Passenger VMT Impact. Unlike employment VMT, the available strategies for reducing passenger VMT are more limited, are less within the control of LAWA, and are more difficult to monitor and report. The VMT reduction strategies related to passengers are primarily incentive-based, with no research available for application of these strategies in an airport context, no certainty as to their effectiveness in reducing VMT, and limited opportunity to document or demonstrate their ability to reduce passenger VMT. As explained above, the Project is expected to result in a net increase of passenger-related 32,786 VMT per day, as compared to 2028 baseline conditions. The significance threshold is 'no net increase in passenger-related VMT.' Thus, in order to avoid this impact, LAWA would have to implement programs that would result in a reduction of 32,786 VMT per day. Given the limitations of the research and strategies to reduce passenger VMT, the passenger VMT impact associated with the proposed Project would be significant and unavoidable, as concluded in Section 4.8.5.3.3 below.
- Ability of Strategies to Mitigate Induced VMT Impact. LAWA has not identified any potentially feasible mitigation measures to substantially lessen or avoid induced VMT. Induced VMT would occur on surface roads that are outside of LAWA's control, and involve persons who are not traveling to or from LAX. As previously described, *induced VMT* refers to the VMT that is unrelated to airport operations but rather related to the improved roadway operations on nearby surface streets as a result of the roadway improvements that are part of the proposed Project. LAWA does not have the authority or ability to regulate such travel. In addition, LAWA has not identified a measure that would prevent or discourage such travelers. Induced VMT can be addressed only on a regional scale, through long-term land use changes and major transit investments. As such, the induced VMT impact associated with the proposed Project would be significant and unavoidable, as concluded in Section 4.8.5.4.3 below.

Annual Monitoring and Reporting

In conjunction with the selection and implementation of VMT reduction strategies, LAWA shall implement an annual monitoring and reporting process to validate the level of LAX employee VMT reduction attained each year. The amount of VMT reduction that is attained during each reporting year from implementation of the reduction strategies shall be applied against the number of employees working at Concourse 0 and Terminal 9 during that year in order to calculate the VMT per employee and determine whether the performance goal of 20.4 or VMT equivalent has been met. In the event the resultant VMT per employee or VMT equivalent for the reporting year is greater than 20.4, adjustments to the existing VMT reduction strategies or additional VMT reduction strategies shall be implemented. The annual monitoring shall also report on the amount of reductions associated with passenger VMT, as accomplished through reduction strategies that apply to passenger VMT.

In the event that the amount of employee VMT reduction for the reporting year exceeds the amount required to mitigate the employee VMT impact, the excess mitigation (VMT reduction above and beyond the level of reduction needed to achieve the employee VMT performance goal of 20.4 VMT per

employees) can be credited towards mitigation of the passenger VMT impact. In the event that the total amount of VMT reduction for the reporting year exceeds both the amount of VMT reduction required to mitigate the employee VMT impact and the amount of VMT impact associated with passengers, the excess mitigation can be credited towards the induced VMT impact.

Basis for Determining Mitigation Requirement Has Been Achieved

Monitoring and reporting on the effectiveness of the VMT reduction strategies would occur on an annual basis, beginning upon initial operation of Concourse 0 or Terminal 9. Upon completion and operation of both facilities, the annual monitoring shall be such that, if the VMT per employee performance goal of 20.4 or VMT equivalent is achieved for three consecutive years, the VMT mitigation requirement for the proposed Project will be considered to have been achieved.

4.8.5.2.3 Significance of Impact After Mitigation

With implementation of Mitigation Measure MM-T (ATMP)-1, the significant impact related to employment VMT would be reduced to a ***less than significant impact***.

4.8.5.3 Impact 4.8-3

Summary Conclusion for Impact 4.8-3: The proposed Project would result in a net increase of 32,786 total passenger VMT over the Projected Future Conditions Baseline (2028). This would be a *significant impact*. Even with mitigation, this would remain a *significant and unavoidable impact.*

4.8.5.3.1 Project Impacts

The Project Travel Demand Model was used to assess the total trip generation and total passenger VMT for all scenarios considered: existing conditions (2019), Projected Future Conditions Baseline (2028), and Proposed Project (2028). The model results are shown in Table 4.8-9 (trip generation) and Table 4.8-10 (VMT) above. As shown in Table 4.8-10, the total passenger VMT will increase under the Projected Future Conditions Baseline when compared to 2019 Existing Conditions. This is due to an increase in the passenger activity at LAX by year 2028, when passenger levels are projected to increase to 110.8 million annual passengers (MAP) with or without implementation of the proposed Project. With implementation of the proposed Project, while the passenger activity would be the same as under Projected Future Conditions Baseline in 2028 (i.e., 110.8 MAP), passenger VMT would change slightly due to the addition of 5.8 miles of new Project roadways and trip routing choices resulting in a redistribution of trips to the new Terminal 9 parking facility. These additional miles of roadway and the redistribution of trips to the Terminal 9 parking facility would result in an incrementally small increase in individual passenger VMT. However, as shown in Table 4.8-10, when multiplied by the number of passengers that are expected to arrive at and depart from LAX on a daily basis, total passenger VMT would be 8,708,995 in 2028 with the proposed Project. This would be a positive net change of 32,786 VMT over the Projected Future Conditions Baseline (2028) daily passenger VMT (8,676,209). The increase in total passenger VMT over the Projected Future Conditions Baseline (2028) is considered to be a ***significant impact***.

4.8.5.3.2 Mitigation Measures

Mitigation Measure MM-TR (ATMP)-1, presented above in Section 4.8.5.2.2, includes strategies for reducing passenger VMT. As also noted in that section, any excess VMT reduction associated with employee VMT reduction strategies could be credited to the mitigation of the passenger VMT impact.

4.8.5.3.3 Significance of Impact After Mitigation

As described above, uncertainties regarding the control and effectiveness of passenger VMT reduction strategies and regarding the ability to document how much passenger VMT reduction was actually achieved inhibits the ability to conclude that the passenger VMT impact would be fully mitigated. Even

with the potential for excess VMT reduction from employee VMT reduction strategies to be credited against the passenger VMT impact, it is still uncertain whether that would be sufficient to fully mitigate the impact. As such, this would remain a ***significant and unavoidable impact***.

4.8.5.4 Impact 4.8-4

Summary Conclusion for Impact 4.8-4: The proposed Project would induce an additional 18,220 VMT compared to the Projected Future Conditions Baseline (2028). This would be a *significant impact*. There are no feasible mitigation measures for this impact. As such, it would be a *significant and unavoidable impact.*

4.8.5.4.1 Project Impacts

Short-Term Induced VMT

Short-term induced VMT related to the proposed Project was assessed using the Project Travel Demand Model. The aim of measuring short-term induced VMT is to determine the direct effect of additional transportation roadway capacity on VMT, thus isolating the network effect. This was achieved by running the model with and without the new Project roadways but holding all other parameters constant.

The proposed Project would increase the capacity of the roadway network. By adding additional lanes and associated queuing space for vehicles entering the CTA, the new roadways would reduce congestion on Sepulveda Boulevard which, in turn, is projected to result in more people using the local roadway network, thereby increasing non-airport-related travel and hence VMT. The model results related to short-term induced VMT were presented earlier in Table 4.8-10 and are repeated here in **Table 4.8-14**.

Table 4.8-14
Summary of Projected VMT for Existing Conditions, Projected Future Conditions Baseline (2028), and Proposed Project (2028)

Measure	Existing Conditions (2019)	Projected Future Conditions Baseline (2028)	Proposed Project (2028)
Total Passenger VMT	6,581,811	8,676,209	8,708,995
VMT per Employee	25.2	24.0	23.9
Short-term Induced VMT	-	-	3,306
Long-term Induced VMT	-	-	18,220
Source: Fehr and Peers, 2020.			

As shown in the table, the additional roadway capacity that would be provided as part of the proposed Project would result in short-term induced VMT of 3,306. This is considered to be a substantial, short-term increase and would be a ***significant impact***.

Long-Term Induced VMT

As discussed in Section 4.8.5.1, the proposed Project roadway improvements are not yet included in the SCAG 2020-2045 RTP/SCS. The proposed Project improvements would add 5.8 lane miles to the roadway network, and the effect of these new roadways result in additional vehicle capacity between the tunnel and 98th Street (0.5 mile) on Sepulveda Boulevard, equivalent to a 0.0062 percent increase in lane miles relative to the Projected Future Conditions Baseline (2028) roadways. Total regional VMT for the Projected Future Conditions Baseline (2028) is forecast to be 283,543,722 VMT across the full extent of the travel model. As discussed in Section 4.8.2.3.2, based on the body of research on long-term induced travel, every percent increase in lane miles would result in a 1.03 percent increase in vehicle travel (the elasticity factor). In order to calculate the Long-Term induced VMT, the total VMT from the travel model for the

Project scenario (283,543,722 VMT) was multiplied by the percent change in lane miles, which was then multiplied by the elasticity. Therefore, the total long-term, cumulative induced VMT impact of the non-airport trips related to the proposed Project roadway network would be 18,220 VMT. This is considered to be substantial additional VMT. Therefore, this would be a ***significant impact***.

4.8.5.4.2 Mitigation Measures

There are no feasible mitigation measures to directly address the induced VMT impact. Similar to above mitigation of passenger VMT, any excess VMT reduction associated with employee VMT reduction strategies could be credited to the mitigation of the induced VMT impact.

4.8.5.4.3 Significance of Impact After Mitigation

Even with the potential for excess VMT reduction from employee VMT reduction strategies to be credited against the induced VMT impact, it is uncertain whether that would be sufficient to fully mitigate the impact. As such, induced VMT would be a ***significant and unavoidable impact.***

4.8.5.5 Impact 4.8-5

Summary Conclusion for Impact 4.8-5: The proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. This would be a *less than significant impact*.

4.8.5.5.1 Project Impacts

Per the City of Los Angeles guidance for vehicle, bicycle, and pedestrian safety impacts, and based on the available information, proposed Project access points, internal circulation, and parking access were reviewed from an operational and safety perspective. Where Project driveways would cross pedestrian facilities or bicycle facilities (bike lanes or bike paths), operational and safety issues were considered related to the potential for vehicle/pedestrian and vehicle/bicycle conflicts and the severity of consequences that could result. Full details of the analysis for this impact threshold are provided in **Appendix G.10**, *Assessment of Hazards*.

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 be in compliance with City design standards. Moreover, the land uses associated with the proposed Project (i.e., roadway improvements and passenger terminals) 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

Per the LADOT interim guidance for freeway safety analysis, a total of seven freeway off-ramps were evaluated to determine whether the Project would add 25 or more net new trips during the morning or afternoon peak hour. The seven freeway off-ramps evaluated include:

- I-405 Northbound Off-Ramp & Century Boulevard
- I-405 Southbound Off-Ramp & 98th Street
- I-405 Southbound Off-Ramp & Howard Hughes Parkway
- I-405 Southbound Off-Ramp & Florence Avenue
- I-405 Southbound Off-Ramp & La Tijera Boulevard
- I-105 Westbound Off-Ramp & Sepulveda Boulevard
- I-105 Westbound Off-Ramp & Imperial Highway/Nash Street

Of the freeway off-ramps listed above, only the I-405 Northbound off-ramp at Century Boulevard is expected to experience an increase of 25 or more trips during the morning or afternoon peak hour as a result of the Project. As such, a freeway off-ramp queuing analysis was conducted for this location. Queue lengths were estimated using the Synchro traffic analysis software package. Intersection counts were collected at the ramp location and a signal timing chart was used to accurately analyze operations. The focus of the queuing analysis was to specifically determine if there is adequate storage capacity at the off-ramp.

Geometric data and volume data for the ramp locations can be found in **Appendix G.2**, *Existing Roadway System*, for the existing conditions (2019), Projected Future Conditions Baseline (2028), and Proposed Project (2028). **Table 4.8-15** presents a summary of the ramp queuing analysis for Existing conditions and the LAMP and ATMP scenarios. The 95th percentile queues were reported for purposes of this analysis. As shown in the table, the freeway ramp queue does not exceed the storage length in any scenario or time period. As a result, the Project is not considered to have a substantial effect at the analyzed location, and is therefore also not considered to have a negative effect on traffic safety.

Table 4.8-15
Summary of Freeway Ramp Queueing Analysis for Existing Conditions, Projected Future Conditions Baseline (2028), and Proposed Project (2028)

Location	Ramp Storage Length (feet)	Time Period	Existing Conditions (2019)		Projected Future Conditions Baseline (2028)		Proposed Project (2028)	
			95th Percentile Queue Length (ft)	Substantial Effect?	95th Percentile Queue Length (ft)	Substantial Effect?	95th Percentile Queue Length (ft)	Substantial Effect?
I-405 Northbound Century Boulevard Off-Ramp	1,260	AM	325	No	375	No	400	No
		PM	275	No	425	No	425	No
Source: Fehr and Peers, 2020.								

4.8.5.5.2 Mitigation Measures

Because the proposed Project would result in a ***less than significant impact*** regarding transportation hazards, no mitigation is required.

4.8.5.5.3 Significance of Impact After Mitigation

As indicated above, no mitigation is required to address transportation hazards. The proposed Project would result in a ***less than significant impact***.

4.8.6 Cumulative Impacts

In accordance with CEQA, a project's cumulative impacts are based on an assessment of whether the "incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (Public Resources Code, § 21083, subd. (b)(2)). As described earlier in Section 4.8.1.1, a Projected Future Conditions Baseline (2028) was used to evaluate the transportation-related impacts of the proposed Project. As described therein, and also noted in the Analytical Framework discussion at the beginning of Chapter 4, the 2028 Projected Future Conditions Baseline (2028) reflects the fact that the ground transportation system improvements associated with the LAX Landside Access Modernization Program will have been completed by 2028, the horizon year of the proposed Project. Also included in the Projected Future Conditions Baseline (2028) is the Airport Metro Connector 96th Street Transit Station. Those improvements will substantially alter the current ground transportation system characteristics around LAX. As such, the baseline used for the transportation analysis already accounts for other transportation improvement projects, and the identification of impacts associated with the currently proposed Project provides the basis to measure and evaluate cumulative impacts and assess whether the proposed Project has a cumulatively considerable contribution to the combined impacts. The following describes cumulative impacts associated with the three main topics addressed above relative to project-specific impacts: impacts associated with plans, programs, ordinances, and policies; the generation or inducement of VMT; and, increased hazards.

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

Table 4.8-11 and 4.8-12, presented earlier in this section, address the proposed Project's consistency with applicable city and regional transportation-related plans, programs, ordinances, and policies. As detailed in those tables, the proposed Project would not conflict with those plans, programs, ordinances, and policies such that it would result in a significant impact to the environment.

To evaluate the potential for cumulative impacts related to a conflict with a plan, program, ordinance, or policy addressing the circulation system, plans that were considered to be cumulative in scope and which were considered in context of the other ongoing and planned development projects were identified. The SCAG 2020-2045 RTP/SCS and RTIP, Mobility Plan 2035, and the Century Boulevard Streetscape Plan were considered for cumulative consistency as they have jurisdiction over areas affected by the proposed Project, have long-term planning horizons, are broad in scope, and contain plans, programs, ordinances, and policies addressing the circulation system.

4.8.6.1.1 RTP/SCS

As described in Section 4.8.3.1, *Regulatory Setting*, the SCAG 2020-2045 RTP/SCS is a planning document required under state and federal statutes that encompasses six counties in the SCAG region: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The RTP/SCS forecasts long-term transportation demands and identifies policies, actions, and funding sources to accommodate these demands. The RTP/SCS identifies proposed new regional transportation facilities, regional transportation systems management strategies, regional transportation demand management, and regional land use strategies. The RTP/SCS also takes into account the RTIP, which lists all of the regional funded/programmed improvements over a six-year period. Metro provides input to SCAG regarding new proposed transportation system improvements to add to the RTP/SCS, which are also incorporated in the RTIP.

The related development projects identified in Table 3-1 are consistent with the SCAG 2020-2045 RTP/SCS and RTIP. The LAX Northside project is a long-standing approved project, and has been incorporated into regional models. The LAX Landside Access Modernization Program is specifically identified in the RTIP and

accounted for in the RTP/SCS. The only non-airport project identified in Table 3-1, the Airport Metro Connector 96th Street Transit Station, is included in the RTP/SCS as a transit station.

It should be noted that in conjunction with planning for future ground transportation improvements, the RTP/SCS takes into consideration future passenger levels at LAX. As discussed in Chapter 2, *Description of the Proposed Project*, the passenger activity level of 110.8 MAP projected for LAX in 2028 is within the growth level forecast of the 2020-2045 RTP/SCS. That forecast encompasses all of the passenger activity levels projected for LAX, which not only includes the currently proposed Project, but other terminal improvement projects such as those identified in Table 3-1; the Terminals 2 and 3 Modernization Program, the Terminal 4 Modernization Project, the MSC South Project, and the Terminal 6 Renovation. Therefore, the cumulative passenger levels associated with terminal improvement projects would not conflict with the forecast in the 2020-2045 RTP/SCS; no significant cumulative impact would occur.

4.8.6.1.2 Mobility Plan 2035

Mobility Plan 2035 establishes long-range, aspirational transportation goals and policies, with the overall intent to improve mobility. The projects identified in Table 3-1 are almost all airport-facility improvements or focused on improving the surrounding area. Specifically, the LAX Landside Access Modernization Program closely aligns with the Mobility Plan 2035 goals by establishing alternative access to and from the LAX CTA. The Airport Metro Connector 96th Street Transit Station, similar to the LAX Landside Access Modernization Program, is consistent with local and regional mobility goals and with other transportation plans, policies, and regulations.[66] Implementation of the proposed Project, combined with transportation improvements associated with the LAX Landside Access Modernization Program and the Airport Metro Connector 96th Street Transit Station, would provide enhanced accessibility for non-vehicular modes of transportation and would increase accessibility to the airport. Implementation of these projects would be consistent with the goals and objectives of the City's Mobility Plan 2035. These projects would not contribute to cumulative impacts to transit in the Project area. Considered cumulatively, the proposed Project, in combination with ongoing and future projects at LAX and in the immediate vicinity, would not conflict with the Mobility Plan 2035; no significant cumulative impact would occur.

4.8.6.1.3 Century Boulevard Streetscape Plan

As described in Section 4.8.3.1, *Regulatory Setting*, the Century Boulevard Streetscape Plan[67] provides guidelines and standards for streetscape improvements in the public right-of-way and the Pedestrian Amenity Area on private properties along Century Boulevard within the City of Los Angeles. The Century Boulevard Streetscape Plan governs an approximately 1.5-mile segment of Century Boulevard between Sepulveda Boulevard to the west and La Cienega Boulevard to the east (excluding the two end streets). The only project identified in Table 3-1 that relates to the area under the jurisdiction of the Century Boulevard Streetscape Plan is the LAX Landside Access Modernization Program. This project was designed to be consistent with the Century Boulevard Streetscape Plan. The project includes a multi-use bicycle and pedestrian path to facilitate mobility along the Century corridor. Considered cumulatively with the proposed Project, the two projects would not result in an inconsistency with the plan's programs, ordinances, and policies addressing the circulation system; no significant cumulative impact would occur.

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66 Los Angeles County Metropolitan Transportation Authority, *Airport Metro Connector 96th Street Transit Station Draft Environmental Impact Report*, (SCH 2015021009), June 2016. Available: https://media.metro.net/projects_studies/crenshaw/images/AMC_96th_St_Station_Draft_EIR_2016-6.pdf.

67 City of Los Angeles, *Century Boulevard Streetscape Plan*, May 21, 2018. Available: https://planning.lacity.org/plans-policies/overlays/century-boulevard.

4.8.6.2 Cumulative Impacts Associated with VMT

Relative to cumulative employment VMT impacts, the evaluation of the proposed Project's employment VMT impact is based on an efficiency metric (i.e., VMT per employee). As recognized in the *Technical Advisory on Evaluating Transportation Impacts in CEQA,* the combined impacts for a cumulative impacts analysis cannot be added together because the VMT metric employs a denominator.[68] As indicated in the *Technical Advisory*: "A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact." The threshold applied to the employment VMT impacts analysis is based on a 15 percent reduction in VMT from baseline levels, which is consistent with the threshold set forth in the TAG and is also recognized in the *Technical Advisory*. As indicated in Section 4.8.5.2.3, implementation of the VMT reduction strategies presented in Section 4.8.5.2.2 would reduce the project-related VMT per employee for the proposed Project to a level that is 15 percent or more below the Projected Future Conditions Baseline (2028) VMT; specifically, mitigation would reduce the per capita VMT 20.4 VMT, or less, per employee. Based on the above, no cumulative impact would occur relative to employment VMT. It should be noted that further declines in this VMT rate may occur after 2028 consistent with regional efforts to reduce driving and increase the use of transit and active transportation. However, increases are also possible due to the influence that economic activity and other factors have on vehicle travel as documented in 2018 Progress Report, California's Sustainable Communities and Climate Protection Act, California Air Resources Board, November 2018.[69]

For passenger VMT, the Projected Future Conditions Baseline (2028) includes all the passenger activity projected to occur at that time. As noted above in Section 4.8.6.1, the passenger activity associated with other development projects at LAX, such as the various terminal projects indicated in Table 3-1, are already accounted for in the Projected Future Conditions Baseline (2028). 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 Project in 2028. As explained in Section 4.8.5.3, the increase in passenger VMT associated with the proposed Project, as compared to passenger VMT in the Projected Future Conditions Baseline (2028), is primarily attributable to the 5.8 additional lane miles that would occur with the Project's proposed 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.) do 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 baseline conditions, that increase would represent a significant cumulative impact for passenger VMT. As described above 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.

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[68] State of California, Governor's Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA,* December 2018. Available: https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

[69] California Air Resources Board, *2018 Progress Report, California's Sustainable Communities and Climate Protection Act,* November 2018. Available: https://ww2.arb.ca.gov/sites/default/files/2018-11/Final2018Report_SB150_112618_02_Report.pdf.

Cumulative induced VMT impacts would be very similar to those described above for passenger VMT impacts. The proposed roadway system improvements would result in short-term and long-term induced VMT increases. Such increases on a cumulative basis in 2028 are already accounted for in the analysis presented above in Section 4.8.5.4, and the total induced VMT increases beyond 2028 would likely rise in conjunction with continued growth in traffic around LAX and in the region. As indicated in Section 4.8.5.4.2, there are no feasible mitigation measures available for induced VMT impacts. As such, the cumulative impact related to induced VMT would be significant and unavoidable.

Overall, it is anticipated that there would be significant cumulative impacts related to passenger VMT and that the proposed Project would have a cumulatively considerable contribution to that impact. The significant cumulative impact is being driven primarily by the proposed Project and no other mitigation beyond that presented above in MM-T (ATMP)-1 is feasible.

4.8.6.3 Cumulative Impacts Associated with Hazards

As described above in Section 4.8.5.5, the impact pertains to whether there would be a substantial increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. From a design standpoint, the only other notable project nearby is the LAX Landside Access Modernization Program, which includes roadway improvements, an APM, ITFs, and a CONRAC, all of which have undergone the necessary design review and approval relative to meeting applicable safety standards. Such would also be the case for the proposed Project. As such, there would be no cumulative safety hazard impacts related to geometric design.

Relative to freeway safety considerations, Section 4.8.5.5.1 above presents a freeway safety analysis that is based on 2028 conditions and includes future projects and future traffic growth, which represents future cumulative conditions. The analysis identified one freeway ramp, specifically the offramp from northbound I-405 at Century Boulevard, that met the screening criterion for conducting a freeway ramp safety analysis. The analysis concluded that there would be no significant impact on traffic safety at that ramp.

4.8.7 Summary of Impacts

Table 4.8-16 summarizes the impact determinations of the proposed Project related to transportation, as described above in Sections 4.8.5 and 4.8.6. Impact determinations are based on the significance criteria presented in Section 4.8.4, and the information and data sources cited throughout Section 4.8.

Table 4.8-16
Summary of Impacts and Mitigation Measures Associated with the Proposed Project Related to Transportation

Environmental Impacts	Impact Determination	Mitigation Measures	Level of Significance After Mitigation
Impact 4.8-1: The proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system such that it would result in a significant impact to the environment. This would be a ***less than significant impact.***	Less than Significant	No mitigation is required	Less than Significant
Impact 4.8-2: The proposed Project would generate VMT per employee exceeding 15 percent below the Projected Future Conditions Baseline (2028) VMT per employee (i.e., 20.4). This would be a ***significant impact***.	Significant	MM-T (ATMP)-1. VMT Reduction Program.	Less than Significant
Impact 4.8-3: The proposed Project would increase total passenger VMT over the Projected Future Conditions Baseline (2028). This would be a ***significant impact***.	Significant	MM-T (ATMP)-1. VMT Reduction Program.	Significant and Unavoidable
Impact 4.8-4: The proposed Project would induce substantial additional VMT compared to the Projected Future Conditions Baseline (2028). This would be a ***significant impact***.	Significant	No feasible mitigation available	Significant and Unavoidable
Impact 4.8-5: The proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. This would be a ***less than significant impact***.	Less than Significant	No mitigation is required	Less than Significant

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