

5. Environmental Analysis

5.17 TRANSPORTATION

This section of the draft environmental impact report (DEIR) evaluates the potential for implementation of the Brea 265 Specific Plan to result in transportation and traffic impacts in the City of Brea and its sphere of influence (SOI). The analysis in this section is based in part on the following technical report(s):

- *Traffic Circulation Analysis, Brea 265 Specific Plan, Brea, California*, Linscott, Law, & Greenspan, February 8, 2022 (Appendix N)
- *Vehicles Miles Traveled (VMT) Analysis for the Brea 265 Specific Plan, Brea*, Linscott, Law, & Greenspan, February 22, 2022 (Appendix O)

Complete copies of these studies are in Appendix N and Appendix O of this Draft EIR.

5.17.1 Environmental Setting

5.17.1.1 REGULATORY BACKGROUND

State Regulations

Senate Bill 743

On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changed transportation impact analysis as part of CEQA compliance. The legislature found that with the adoption of SB 375, the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of GHG emissions, as required by the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32).

SB 743 eliminates auto delay, level of service (LOS), and other similar measures of vehicular capacity of traffic congestion as the sole basis for determining significant impacts under CEQA. Pursuant to the CEQA Guidelines, the new criteria “shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses” (Public Resources Code Section 21099(b)(1)).

Pursuant to SB 743, the Natural Resources Agency adopted revisions to the CEQA Guidelines to implement SB 743 on December 28, 2018. The revised CEQA Guidelines establish new criteria for determining the significance of transportation impacts. Under the new Guidelines, VMT-related metric(s) that evaluate the significance of transportation-related impacts under CEQA for development projects, land use plans, and transportation infrastructure projects are required beginning on July 1, 2020. The legislation does not preclude the application of local general plan policies, zoning codes, conditions of approval, or any other planning requirements that require evaluation of LOS, but these metrics may no longer constitute the sole basis for determining transportation impacts under CEQA.

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Regional Regulations

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

2020 Regional Transportation Plan/Sustainable Community Strategy (Connect SoCal)

Every four years SCAG updates the Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS) for the six-county region that includes Los Angeles, San Bernardino, Riverside, Orange, Ventura, and Imperial counties.

On September 3, 2020, SCAG adopted the 2020-2045 RTP/SCS, *Connect SoCal*, which encompasses four principles that are important to the region's future—mobility, economy, healthy/complete communities, and environment. *Connect SoCal* explicitly lays out goals related to housing, transportation technologies, equity, and resilience in order to adequately reflect the increasing importance of these topics in the region. The RTP/SCS outlines a development pattern for the region which, when integrated with the transportation network and other transportation measures and policies, would reduce greenhouse gas emissions from transportation (excluding good movement). The RTP/SCS is meant to provide growth strategies that would achieve the regional greenhouse gas emissions reduction targets identified by the California Air Resources Board. However, the RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the RTP/SCS; instead, it provides incentives to governments and developers for consistency.

Orange County Transportation Authority Congestion Management Plan

The Orange County Transportation Authority (OCTA) is the subregional planning agency for Orange County. In June 1990, the Proposition 111 gas tax increase required California's urbanized areas (areas with populations of 50,000 or more), to adopt a Congestion Management Plan (CMP). The CMP is intended to link transportation, land use, and air quality decisions and to address the impact of local growth on the regional transportation system. Compliance with CMP requirements ensures a city's eligibility to compete for state gas tax funds for local transportation projects. The Orange County CMP was established in 1991, and the most recent CMP was adopted in 2017. The CMP requires that a traffic impact analysis (TIA) be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System. Per the CMP guidelines, this number is based on the desire to analyze any impacts that comprise 3 percent or more of the existing CMP highway system facilities' capacity. The CMP highway system includes specific roadways—including state highways and super streets (now known as smart streets)—and CMP arterial monitoring locations/intersections. Therefore, the CMP TIA requirements relate only to the designated CMP highway system.

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California Department of Transportation

Intersections

Intersections within the City of Brea associated with freeway on-ramps and off-ramps fall under Caltrans jurisdiction. Caltrans is the primary state agency responsible for transportation issues. Caltrans approves the planning, design, and construction of improvements for all state-controlled facilities, including Imperial Highway and State Route 57 (SR-57). Caltrans has established standards for roadway traffic flow and developed procedures to determine if state-controlled facilities requirement improvements.

Local Regulations

City of Brea General Plan

The Circulation Element of the City of Brea General Plan provides goals and policies for efficient regional transportation facilities, the local circulation system, the public transportation system, pedestrian and bicycle facilities (Brea 2003). Applicable policies from the General Plan include:

Goal CD-10: Maintain an effective regional transportation network.

- **Policy CD-10.1.** Work continually with Caltrans to improve access to and from State Route 57.
- **Policy CD-10.3.** Cooperate with surrounding jurisdictions to ensure the efficient operation of the arterial network system.
- **Policy CD-10.4.** Work with Caltrans, the Orange County Transportation Authority, and surrounding jurisdictions to provide adequate capacity on regional routes for through traffic and to minimize cut-through traffic on the local street system.
- **Policy CD-10.6.** Recognize that Carbon Canyon Road will continue to serve high volumes of regional traffic despite its designation as a Modified Commuter. Thus, examine design solution alternatives that can improve the safety and efficiency of Carbon Canyon Road.

Goal CD-11: Provide a safe and efficient circulation system that meets the needs of the community.

- **Policy CD-11.2.** Establish Level of Service goals for designated City streets, and ensure that new development maintains these service levels.
- **Policy CD-11.3.** Plan neighborhood streets, pedestrian walks, and bicycle paths as a system of fully connected routes throughout the City.

Goal CD-13: Provide for an extensive, integrated, and safe bicycle, hiking, and pedestrian network throughout the community, and make Brea a pedestrian-friendly community.

- **Policy CD-13.4.** Require new developments to provide for the use of alternative modes of transit via internal trails or travel ways—public or private—for pedestrians and vehicles other than cars. New

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developments shall include such features as well-designed sidewalks and parkways, bike lanes and paths, and dedicated bus turn-outs.

City of Brea Municipal Code

The municipal code includes regulations and standards that govern traffic, parking and loading, encroachments on the public right-of-way, and development in the City of Brea. Title 10, Vehicles and Traffic, includes general traffic regulations, traffic-control devices, operation of vehicles and bicycles, pedestrian regulations, and truck routes and terminals regulations.

Any modifications to the roadway networks, which includes driveways, curbs, and sidewalks, would be subject to approval by the City of Brea, and any construction work within the right-of-way of any public roadway would require the issuance of a permit by the City of Brea.

City of Brea Nexus Program

To satisfy the AB 1600 legislative requirement, development impact fees have been established for future traffic impacts in the City of Brea. Ensuring that every development project contributes a fair share of transportation improvements in the community, the City has introduced the “Transportation Improvement Nexus Program.” In 2011, the Nexus Program was updated to reflect transportation needs and incorporate capacity improvements in an orderly fashion. The program ensures all future development in Brea contributes on a fair-share basis.

City of Brea Traffic Impact Fees

In July 1995, the Brea City Council adopted Ordinance 966, which established Traffic Impact Fees for all new development in Brea, and annexed portions of its SOI. Based on a study conducted in 2011, the City Council adopted Resolution 2011-096, which updated the impact fees. The updated fees became effective February 4, 2012. These fees are required, in part, by Orange County’s Measure M, a transportation initiative passed by voters in 1990. More importantly, these fair-share-based fees will serve to offset, or mitigate, the traffic impacts caused by new development. The required Traffic Impact Fees must be paid prior to the issuance of any building permits.

In some cases, a developer may be required to make certain traffic improvements in addition to or in lieu of paying traffic impact fees. In this case, however, the total cost of traffic improvements and/or fees will not exceed the development’s fair share toward mitigating its own impacts.

The City’s current Traffic Impact Fee rate for residential land uses ranges from \$1,203 to \$1,974 per dwelling unit. For commercial, general mixed use, and office/industrial land uses, the City’s rate ranges between \$1.25 and \$2.53 per gross square foot.

With respect to project impacts at intersections under the jurisdiction of the City of Brea and Caltrans, it should also be noted that under CEQA, a fair-share monetary contribution to a mitigation fund is adequate mitigation if the fund is tied to a reasonable plan that the relevant agency is committed to implementing.

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However, the City and Caltrans do not have mitigation fund programs to which a development project in the City of Brea can contribute.

5.17.1.2 EXISTING CONDITIONS

Traffic Study Area

The following 22 study intersections have been identified for evaluation in collaboration with the City of Brea staff. The 22 intersections provide regional and local access to the study area and define the extent of the boundaries for this traffic analysis; the list identifies the applicable jurisdictions and/or City location. Figure 5.17-1, *Traffic Study Area Vicinity Map*, illustrates the traffic study locations and surrounding street system.

Key Study Intersections

1. State College Boulevard at Lambert Road (Brea)
2. State Route-57 (SR-57) Southbound (SB) Ramps at Lambert (Caltrans/Brea)
3. SR-57 Northbound (NB) Ramps at Lambert Road (Caltrans/Brea)
4. Pointe Drive at Lambert Road (Brea)
5. Wildcat Way/N. Associated Road at Lambert Road (Brea)
6. Santa Fe Road/Kraemer Boulevard at Lambert Road (Brea)
7. Sunflower Street at Lambert Road (Brea)
8. Valencia Avenue at Lambert Road/Carbon Canyon Road (Caltrans/Brea)
9. Santa Fe Road at Carbon Canyon Road (Caltrans/Brea)
10. State College Boulevard at Birch Street (Brea)
11. S. Associated Road at Birch Street (Brea)
12. N. Associated Road at Birch Street (Brea)
13. Kraemer Boulevard at Birch Street (Brea)
14. Valenica Avenue at Birch Street/Road Drive (Caltrans/Brea)
15. Rose Drive at Vesuvius Drive (Brea)
16. SR-57 SB Ramps at Imperial Highway (Caltrans/Brea)
17. SR-57 NB Ramps at Imperial Highway (Caltrans/Brea)
18. Associated Road at Imperial Highway (Caltrans/Brea)
19. Castlegate Lane/Placentia Avenue at Imperial Highway (Caltrans/Brea)
20. Kraemer Boulevard at Imperial Highway (Caltrans/Brea)
21. Valencia Avenue at Imperial Highway (Caltrans/Brea)
22. Rose Drive at Imperial Highway (Caltrans/Placentia)

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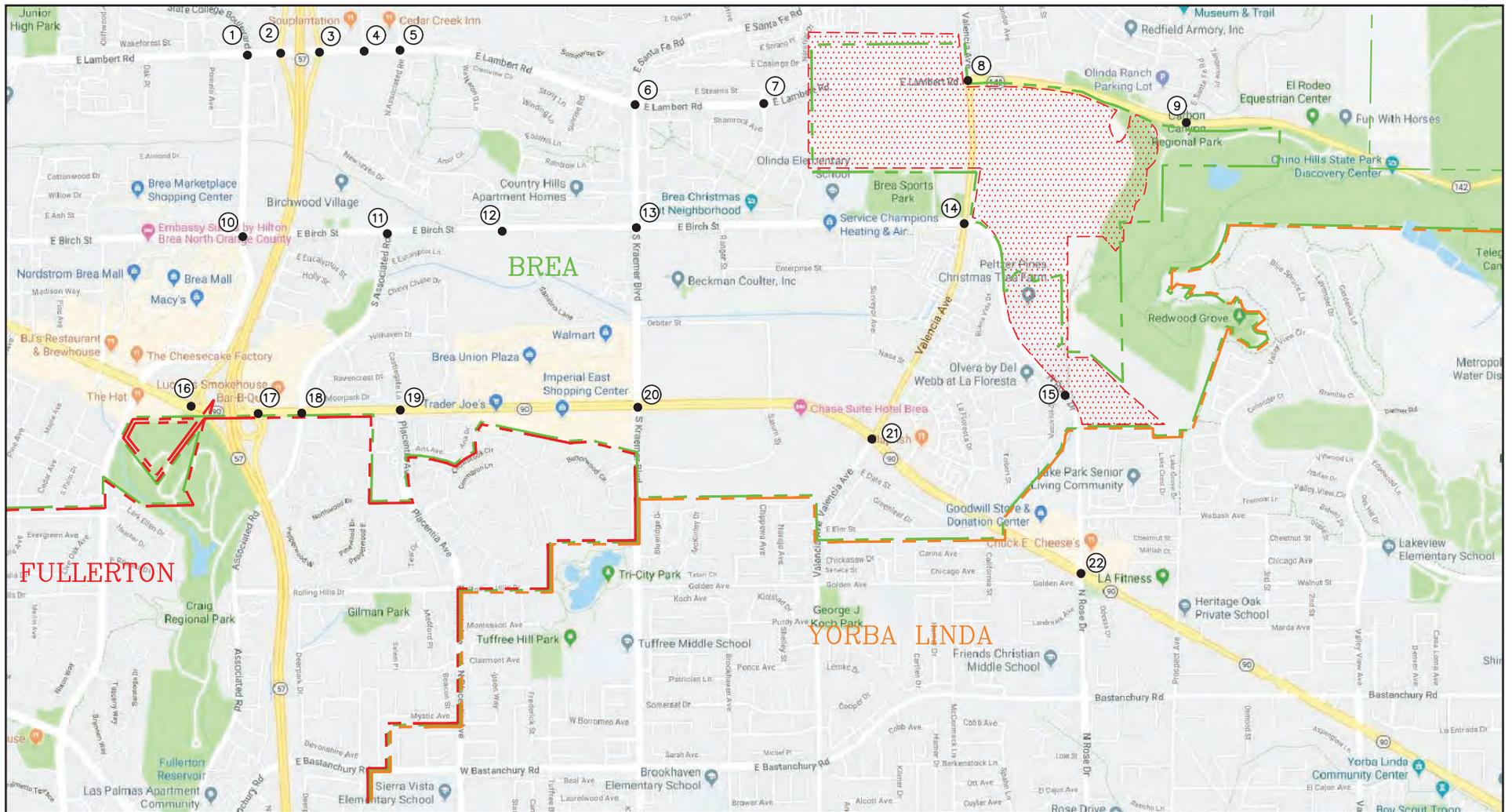
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Existing Street System

The principal local network of streets serving the project site includes Lambert Road, Birch Street, Imperial Highway, Kraemer Boulevard, Valencia Avenue, and Rose Drive. The following discussion provides a brief synopsis of these key streets. The descriptions are based on an inventory of existing roadway conditions. Figure 5.17-2, *Existing Roadway Conditions and Intersection Controls*, presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this traffic analysis. Figure 5.17-2 identifies the number of travel lanes for key arterials as well as intersection configurations and controls for the key study area intersections.

- **Lambert Road** is a six-lane, divided roadway west of Kraemer Boulevard and a four-lane, divided roadway east of Kraemer Boulevard, oriented in the east-west direction. Lambert Road borders the northeast side of the project site. The posted speed limit on Lambert Road is 50 miles per hour (mph). On-street parking is not permitted along this roadway. Traffic signals control the study intersections of Lambert Road at State College Boulevard, SR-57 Ramps, Pointe Drive, Wildcat Way/N Associated Road, Santa Fe Road/Kraemer Boulevard, Sunflower Street, and Valencia Avenue. Project access will be provided via a signalized driveway along Lambert Road.
- **Birch Street** is a four-lane, divided roadway oriented in the east-west direction. The posted speed limit on Birch Street is 50 mph. On-street parking is not permitted along this roadway. Traffic signals control the study intersections of Birch Street at State College Boulevard, S. Associated Road, N. Associated Road, Kraemer Boulevard, and Valencia Avenue.
- **Imperial Highway** is a six-lane, divided roadway generally oriented in the east-west direction. The posted speed limit on Imperial Highway is 45 mph west of the SR-57 freeway and 50 mph east of the SR-57 freeway. On-street parking is not permitted along this roadway. A traffic signal controls the study intersections of Imperial Highway at State College Boulevard, SR-57 Ramps, Associated Road, Placentia Avenue, Kramer Boulevard, Valencia Avenue, and Rose Drive.
- **Kraemer Boulevard** is a six-lane, divided roadway north of Imperial Highway and a four-lane, divided roadway south of Imperial Highway oriented in the north-south direction. The posted speed limit is 50 mph north of Imperial Highway and 45 mph south of Imperial Highway, with no on-street parking permitted. Traffic signals control the study intersections of Kraemer Boulevard at Lambert Road, Birch Street, and Imperial Highway.
- **Valencia Avenue** is a four-lane, divided roadway that borders the project site to the west, generally oriented in the north-south direction. The posted speed limit is 45 mph north of Imperial Highway and 40 mph south of Imperial Highway. Parking is not permitted on either side of the roadway. Traffic signals control the study intersections of Valencia Avenue at Lambert Road, Birch Street/Rose Drive, and Imperial Highway. Project access will be provided via a signalized driveway along Valencia Avenue.
- **Rose Drive** is a two-lane, divided roadway that borders the southern portion of the project site. The posted speed limit is 40 mph. On-street parking is not permitted on either side of the roadway. Traffic signals control the study intersections of Rose Drive at Valencia Avenue, Vesuvius Drive, and Imperial Highway. Project access will be provided at an unsignalized driveway along Rose Drive and at the signalized intersection with Vesuvius Drive.

Figure 5.17-1 - Traffic Study Area Vicinity Map
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⊕ = STUDY INTERSECTION

▨ = PROJECT SITE



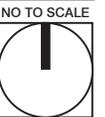
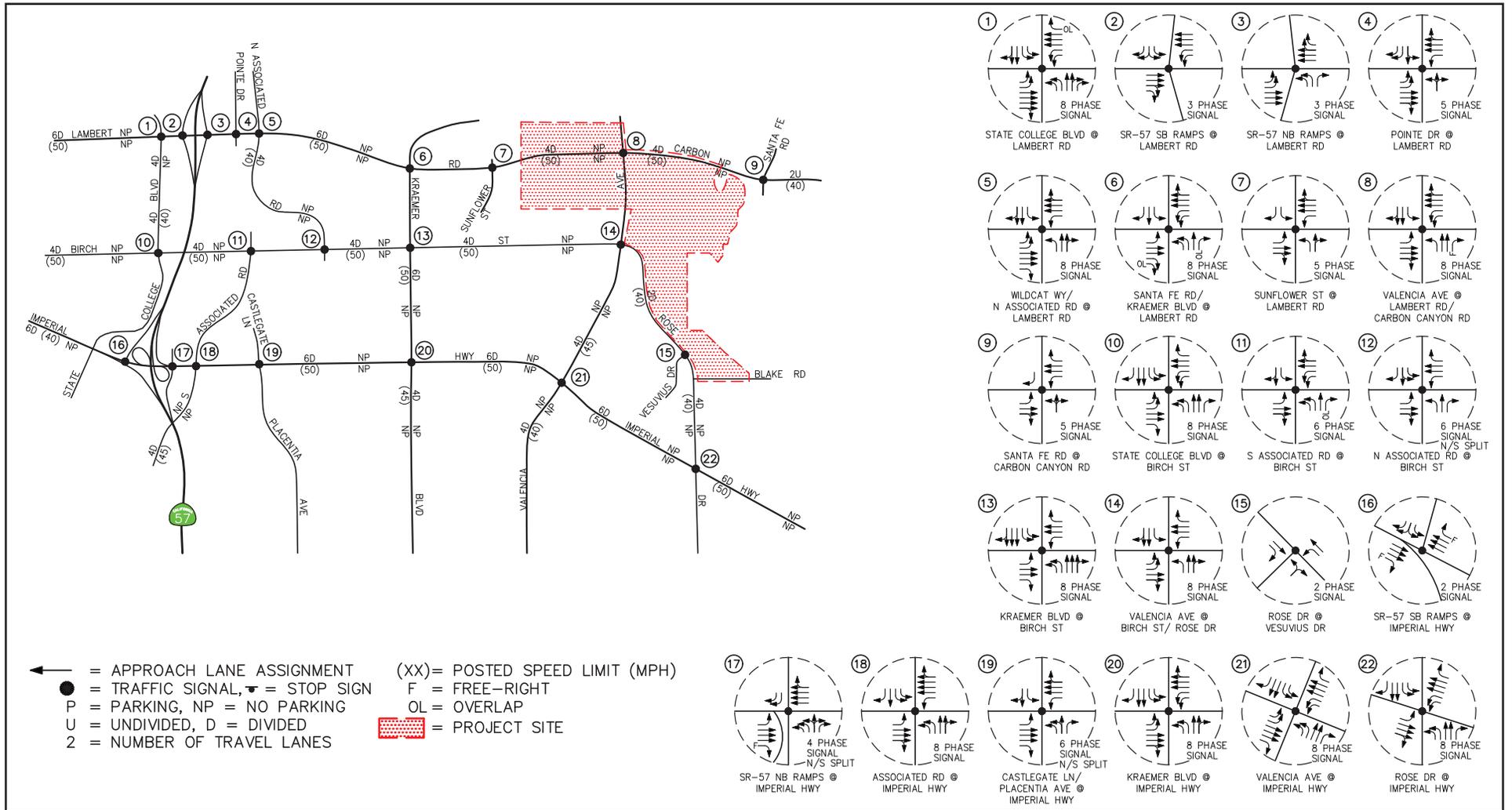
Source: Linscott, Law, & Greenspan Engineers, 2022

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Figure 5.17-2 - Existing Roadway Conditions and Intersection Controls

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Existing Public Transit

Public transit bus service is provided in the project area by the Orange County Transportation Authority. Five OCTA bus routes operate within the vicinity of the project site on Birch Street, Kraemer Boulevard, and Rose Drive:

- **OCTA Route 26 (Fullerton to Yorba Linda).** Route 26 is a local bus route serving Placentia, Fullerton, and Buena Park. The major routes of travel include Yorba Linda Avenue. Nearest to the project site are bus stops at the intersection of Rose Drive at Yorba Linda Boulevard. Route 26 operates on approximate 30-minute headways during weekdays and 45-minute headways on weekends.
- **OCTA Route 57 (Brea to Newport Beach):** Route 57 is a local bus route serving Brea, Fullerton, Anaheim, Orange, Santa Ana, Costa Mesa, and Newport Beach. The major routes of travel include State College Boulevard. Nearest to the project site are bus stops at the intersection of State College Boulevard at Birch Street. Route 57 operates on approximate 15-minute headways during the weekdays and weekends.
- **OCTA Route 71 (Yorba Linda to Newport Beach).** Route 71 is a local bus route serving Yorba Linda, Placentia, Anaheim, Orange, Tustin, Santa Ana, Irvine, Costa Mesa, and Newport Beach. The major routes of travel include Rose Drive and Red Hill Avenue. Nearest to the project site are bus stops at the intersection of Rose Drive at Yorba Linda Boulevard. Route 71 operates on approximate 45-minute headways during weekdays and 60-minute headways on weekends.
- **OCTA Route 129 (La Habra to Anaheim).** Route 129 is a community bus route serving Anaheim, Placentia, Yorba Linda, Brea, and La Habra. The major routes of travel include La Habra Boulevard, Brea Boulevard, Birch Street, and Kraemer Boulevard. Nearest to the project site are bus stops at the intersection of Birch Street at Kraemer Boulevard. Route 129 operates on approximate 55-minute headways during weekdays and 60-minute headways on weekends.
- **OCTA Route 153 (Brea to Anaheim).** Route 153 is a community bus route serving Brea, Placentia, Fullerton, Anaheim, and Orange. The major routes of travel include Placentia Avenue. Nearest to the project site are bus stops at the intersection of Birch Street at S. Associated Road. Route 153 operates on approximate 60-minute headways during weekdays and weekends.

Figure 3-2 of the Traffic Study, “OCTA Routes” (see Appendix N to the DEIR), graphically illustrates the transit routes of OCTA within the vicinity of the project site. Figure 3-3 of the Traffic Study, “Transit Stop Locations,” identifies the location of the existing bus stops in proximity to the project site.

Existing Bikeway Plan

The City of Brea promotes bicycling as a means of mobility and a way in which to improve the quality of life within its community. The Bikeway Plan recognizes the needs of bicycle users and aims to create a complete and safe bicycle network throughout the city. The City of Brea Bike Plan (existing and proposed) is shown on

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Figure 5.17-3, *City of Brea Bike Plan*. In close proximity to the site, an existing Class II bike lane is provided along Rose Drive. There is a proposed Class I bike path along Carbon Canyon Road and Valencia Avenue.

Existing Traffic Volumes

During the COVID-19 pandemic, a decrease in traffic occurred due to many people staying home, and it was not possible to collect valid traffic counts in 2020 and 2021 to establish baseline conditions that reflect traffic conditions without the pandemic. Therefore, to establish “baseline” traffic conditions, historical data was retrieved from Year 2018-2019 AM and PM peak-hour traffic counts at all 22 study locations, as well as year 2018 daily traffic counts at 25 roadway segments. To establish existing “baseline” traffic conditions, an annual growth factor of 1 percent per year was applied to the Year 2018-2019 conditions to establish Year 2021 pre-COVID-19 baseline traffic conditions.

Figure 3-5 and Figure 3-6 of the Traffic Study (Appendix N) illustrate the existing Year 2021 AM and PM peak hour traffic volumes at the 22 study intersections evaluated in the Traffic Study, respectively. Figure 3-6 also presents the existing average daily traffic volumes for the 25 roadway segments in the vicinity of the proposed project.

5.17.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

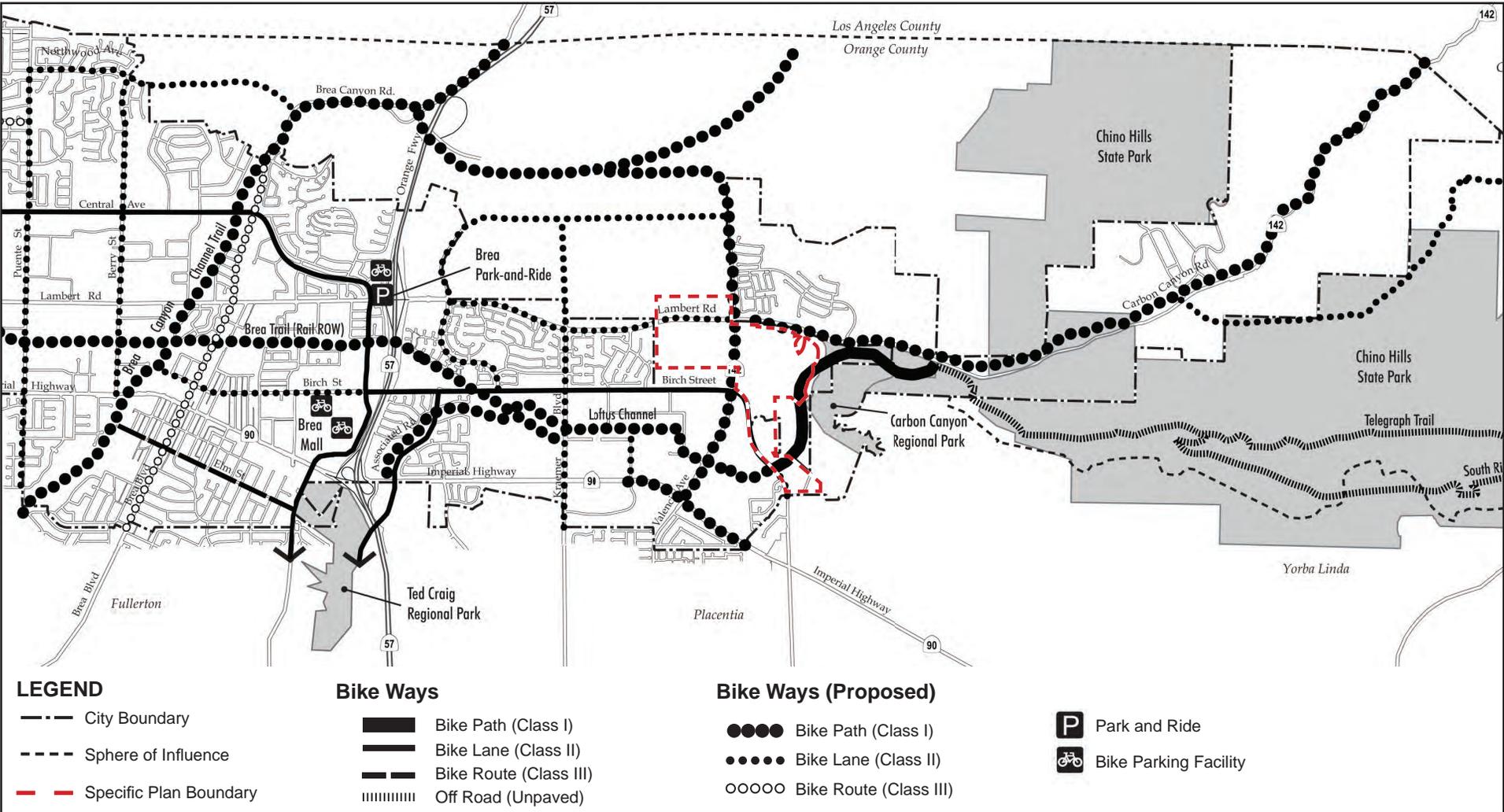
- T-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- T-2 Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).
- T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- T-4 Result in inadequate emergency access.

5.17.3 Plans, Programs, and Policies

Project Design Features

- PPP T-1 As a part of the development of the proposed project, vehicular access to the project site from the public streets bordering the subject property would be provided as shown on Figure 3-14, *Circulation Plan*, via one full-access, signalized driveway on Lambert Road; one full-access, signalized driveway on Valencia Avenue; one full-access, signalized driveway on Rose Drive; and one full-access, signalized driveway at the existing intersection of Rose Drive at Vesuvius Drive. Vehicular circulation internal to the various proposed neighborhoods would be provided by a system of local residential streets.

Figure 5.17-3 - City of Brea Bike Plan
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Scale (Miles)



Source: Linscott, Law, & Greenspan Engineers, 2019

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PPP T-2 In conjunction with the access improvements identified in PPP T-1, inclusive of project-sponsored traffic signals, proposed improvements to be completed as a part of the proposed project along Lambert Road, Carbon Canyon Road, Valencia Avenue, and Rose Drive bordering the subject property include the following Project Design Features:

- Lambert Road from Valencia Avenue west along project frontage to just east of Sunflower Street—Widen and construct Lambert Road along project frontage to Major Arterial Highway Standards per the City’s requirements, providing three 12-foot travel lanes and an 8-foot bike lane in each direction, separated by a 14-foot median within 88 feet of paved width and a right-of-way of 120 feet. Lambert Road currently includes two travel lanes in each direction midblock along the project frontage.
- Carbon Canyon Road (SR-142) from Valencia Avenue east along project frontage—Widen and construct the south side of Carbon Canyon Road along project frontage to ultimate half-section width per the City’s Major Arterial Highway standard and provide three 12-foot travel lanes and an 8-foot bike lane in the eastbound direction, separated by a 14-foot median within 88 feet of paved width and a right-of-way of 120 feet. Carbon Canyon Road currently includes three travel lanes, narrowing to two lanes in the easterly direction along the project frontage.
- Valencia Avenue (SR-142) from Lambert Road/Carbon Canyon Road south to along project frontage—This state route is currently improved to the City’s Primary Arterial standards, and now provides two travel lanes and an 8-foot bike lane in each direction, separated by a 14-foot median within 84 feet of paved width and a right-of-way of 100 feet; no additional travel lanes are proposed with the project.
- Rose Drive from Valencia Avenue south along project frontage to Vesuvius Drive—Widen and construct the east side of Rose Drive along project frontage to Primary Arterial Standards per the City’s requirements, providing two travel lanes and an 8-foot bike lane in the northbound, separated by a median within 42 feet of half-paved width and a 50-foot half right-of-way. To achieve two southbound travel lane along the project’s entire frontage, modifications to the future median and/or lane widths may be needed. Subject to the City’s review/approval, it is expected that the design of the second southbound through-lane will require motorists to merge left to continue through, and the lane will be terminated as a right-turn lane at the intersection of Rose Drive and Vesuvius Drive to align with the existing southbound right-turn lane at this intersection. Rose Drive currently includes one travel lane in each direction and bike lanes, separated by a painted median.

PPP T-3 The project applicant will prepare a sight distance analysis at all project driveways (Lambert Road at Driveway A, Valencia Avenue at Driveway B, Rose Drive at Driveway C, and Rose Drive at Vesuvius Drive/Driveway D) to ensure adequate sight distance is provided, at a minimum, per the Caltrans Highway Design Manual.

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PPP T-4 A site-specific construction worksite staging and traffic control plan will be prepared and submitted to the City of Brea for review and approval prior to the start of any construction work. This plan will include such elements as the location of any potential partial lane closures, hours during which lane closures (if any) would not be allowed, local traffic detours (if any), and protective devices and traffic controls (such as barricades, cones, flag persons, lights, warning beacons, temporary traffic signals, warning signs). The proposed project will be required to comply with the City-approved plan measures.

PPP T-5 The project applicant is required to pay development impact fees to the City of Brea pursuant to the City's AB 1600 Transportation Improvement Nexus Program (Ordinance 996). Based on a transportation improvement nexus program study conducted in 2011, the City Council adopted Resolution 2011-096, which updated the impact fees, effective February 4, 2012. Fair-share fees offset or mitigate the cumulative traffic impacts caused by new development. The program ensures all future development in the City of Brea contributes on a fair-share basis. The recommended improvements subject to fair-share contribution by the proposed project are as follows:

Year 2035 and Year 2045 Conditions

- **No. 8, Valencia Avenue at Lambert Road/Carbon Canyon Road:** Widen and/or restripe the northbound approach to provide a second exclusive northbound left-turn lane. Widen and/or restripe the eastbound approach to provide an exclusive eastbound right-turn lane. Widen and/or restripe the westbound approach to provide a third exclusive westbound left-turn lane. Widen the southbound departure to accommodate three receiving lanes. Modify the existing traffic signal and provide eastbound right-turn overlap phasing. This improvement will require design concurrence from Caltrans, and construction will occur under standard Caltrans permitting process.
- **No. 14, Valencia Avenue at Birch Street/Rose Drive:** Widen and/or restripe the southbound approach to provide a second exclusive southbound left-turn lane. Modify the existing traffic signal and provide westbound right-turn overlap phasing. This improvement will require design concurrence from Caltrans, and construction will occur under standard Caltrans permitting process.
- **No. 15, Rose Drive at Vesuvius Drive/Driveway D:** Restripe the southbound exclusive right-turn as a shared southbound through/right-turn lane. Widen to provide a second southbound departure lane. Modify the existing traffic signal.
- **No. 18, Associated Road at Imperial Highway:** Restripe the southbound exclusive right turn as a shared southbound through/right-turn lane. Modify the existing traffic signal. This improvement will require design concurrence from Caltrans and construction will occur under standard Caltrans permitting process.
- **No. 22, Rose Drive at Imperial Highway:** Restripe the second southbound through lane as a shared southbound left/through lane. Modify the existing traffic signal and

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provide northbound and southbound split phasing and westbound right-turn overlap phasing. Remove crosswalk on the east leg. This improvement will require design concurrence from Caltrans, and construction will occur under standard Caltrans permitting process.

PPP T-6 The gated entryway at the intersection of Valencia Avenue/B Street (B Driveway) will be set back a minimum distance of 40 feet from the project site's property line along Valencia Avenue to the front of the gate. The gated entryway at the intersection of Rose Drive at P Street (C Driveway) will be set back a minimum distance of 60 feet from the project site's property line along Rose Drive to the front of the gate. The design of the gate entry will be submitted to the City of Brea Public Works Department for review and approval.

5.17.4 Environmental Impacts

5.17.4.1 METHODOLOGY

Project Traffic Generation

The trip generation potential of the proposed project was estimated using trip rates in the 11th edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE). Table 5.17-1, *Project Traffic Generation Rates and Forecast*, summarizes the trip generation rates used in forecasting the vehicular trips generated by the proposed project and also presents the project's forecast peak hour and daily traffic volumes.

The proposed project is forecast to generate 9,351 daily trips, with 634 trips (182 inbound, 452 outbound) in the AM peak hour and 893 trips (542 inbound, 351 outbound) in the PM peak hour on a "typical" weekday.

Table 5.17-1 Project Traffic Generation Rates and Forecast

Description	Unit	Daily 2-way	AM Peak			PM Peak		
			Enter	Exit	Total	Enter	Exit	Total
Trip Generation Rates								
210: SF Detached	Trip end per DU	9.43	26%	74%	0.70	63%	37%	0.94
215: SF Attached	Trip end per DU	7.20	31%	69%	0.48	57%	43%	0.57
220: MF Housing (Low-Rise ¹)	Trip end per DU	6.74	24%	76%	0.40	63%	37%	0.51
488: Soccer Complex ²	Trip end per Field	71.33	61%	39%	0.99	66%	34%	16.43
Proposed Zone 1								
SF Homes	105 DU	990	19	55	74	62	37	99
Proposed Zone 2								
MF/SF Attached	507 DU	3,650	75	168	243	165	124	289
Sports Park	6 soccer fields	428	4	2	6	65	34	99
Zone 2 Subtotal	-	4,078	79	170	249	230	158	388
Proposed Zone 3								
SF Homes	345 DU	3,253	63	179	242	204	120	324
MF/SF Attached	143 DU	1,030	21	48	69	46	36	82

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Table 5.17-1 Project Traffic Generation Rates and Forecast

Description	Unit	Daily 2-way	AM Peak			PM Peak		
			Enter	Exit	Total	Enter	Exit	Total
Zone 3 Subtotal	-	4,283	84	227	311	250	156	406
Total Proposed Project	1,100 DU, 6 fields	9,351	182	452	634	542	351	893

Source: LLG 2022a.

¹ Low-Rise Multifamily Housing consists of buildings that are less than 3 levels.

² A soccer complex is an outdoor facility that is used for nonprofessional soccer games. It may consist of multiple fields. The size of each field within the land use may vary to accommodate games for different age groups. Onsite amenities may include stadium seating, a fitness trail, an activities shelter, aquatic center, picnic grounds, basketball and tennis courts, and a playground.

Project Traffic Distribution and Assignment

For the purposes of traffic analysis, the project site was divided into five zones: Zone 1, Zone 2A, Zone 2B, Zone 3A, and Zone 3B, as shown on Figures 5.17-4 through 5.17-6b. Figure 5.17-4, *Project Trip Distribution Pattern – Zone 1*; Figure 5.17-5a, *Project Trip Distribution Pattern – Zone 2A*; Figure 5.17-5b, *Project Trip Distribution Pattern – Zone 2B*; Figure 5.17-6a, *Project Trip Distribution Pattern – Zone 3A*; and Figure 5.17-6b, *Project Trip Distribution Pattern – Zone 3B*; present the traffic distribution pattern for the zones. Project traffic volumes, both entering and exiting the site, have been distributed and assigned to the adjacent street system based on model runs for selected zones and were further refined based on the following considerations:

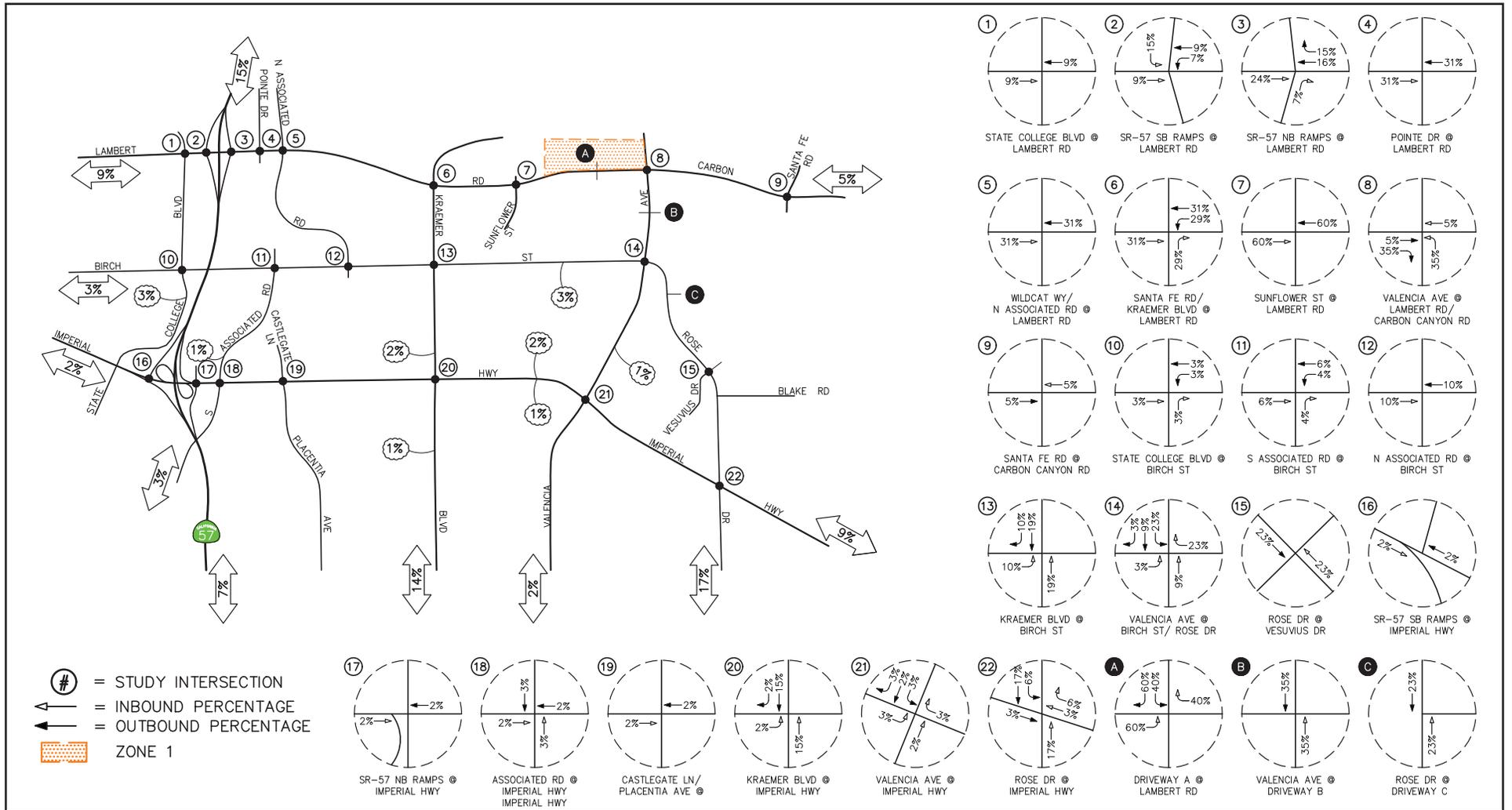
- Location of site access points in relation to the surrounding street system.
- The site's proximity to major traffic carriers and regional access routes.
- Physical characteristics of the circulation system, such as lane channelization and presence of traffic signals that affect travel patterns.
- Presence of traffic congestion in the surrounding vicinity.
- Ingress/egress availability at the project site.
- Discussions with City staff.

The anticipated near-term AM and PM peak hour project traffic volumes associated with the proposed project are presented in Traffic Study Figure 5-6, “AM Peak Hour Project Traffic Volumes,” and Figure 5-7, “PM Peak Hour and Daily Traffic Volumes” (see Appendix N to the DEIR). Figure 5-7 also presents the weekday daily project traffic volumes.

VMT Thresholds

As described in Section 5.17.1.1, *Regulatory Background*, under “Senate Bill 743,” as of July 1, 2020, auto delay (traffic congestion) can no longer be used as the criteria for transportation analysis under CEQA. Automobile traffic impacts have historically been analyzed with LOS methodologies based on roadway capacity metrics (volume/capacity). LOS has been replaced with a new metric—VMT.

Figure 5.17-4 - Project Trip Distribution Pattern - Zone 1
5. Environmental Analysis



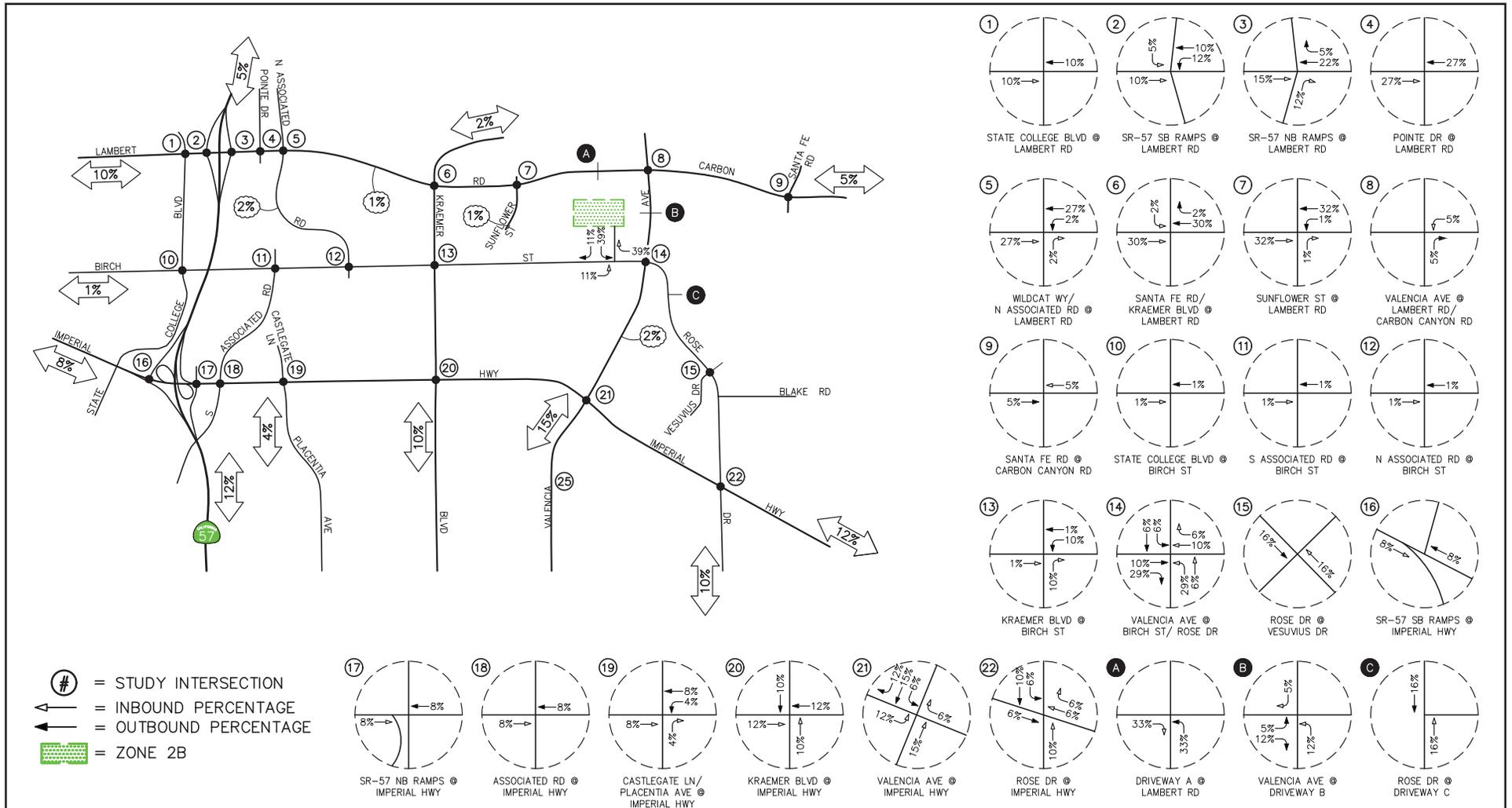
5. Environmental Analysis TRANSPORTATION

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5. Environmental Analysis TRANSPORTATION

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Figure 5.17-5b - Project Trip Distribution Pattern - Zone 2B
5. Environmental Analysis

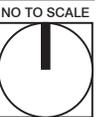
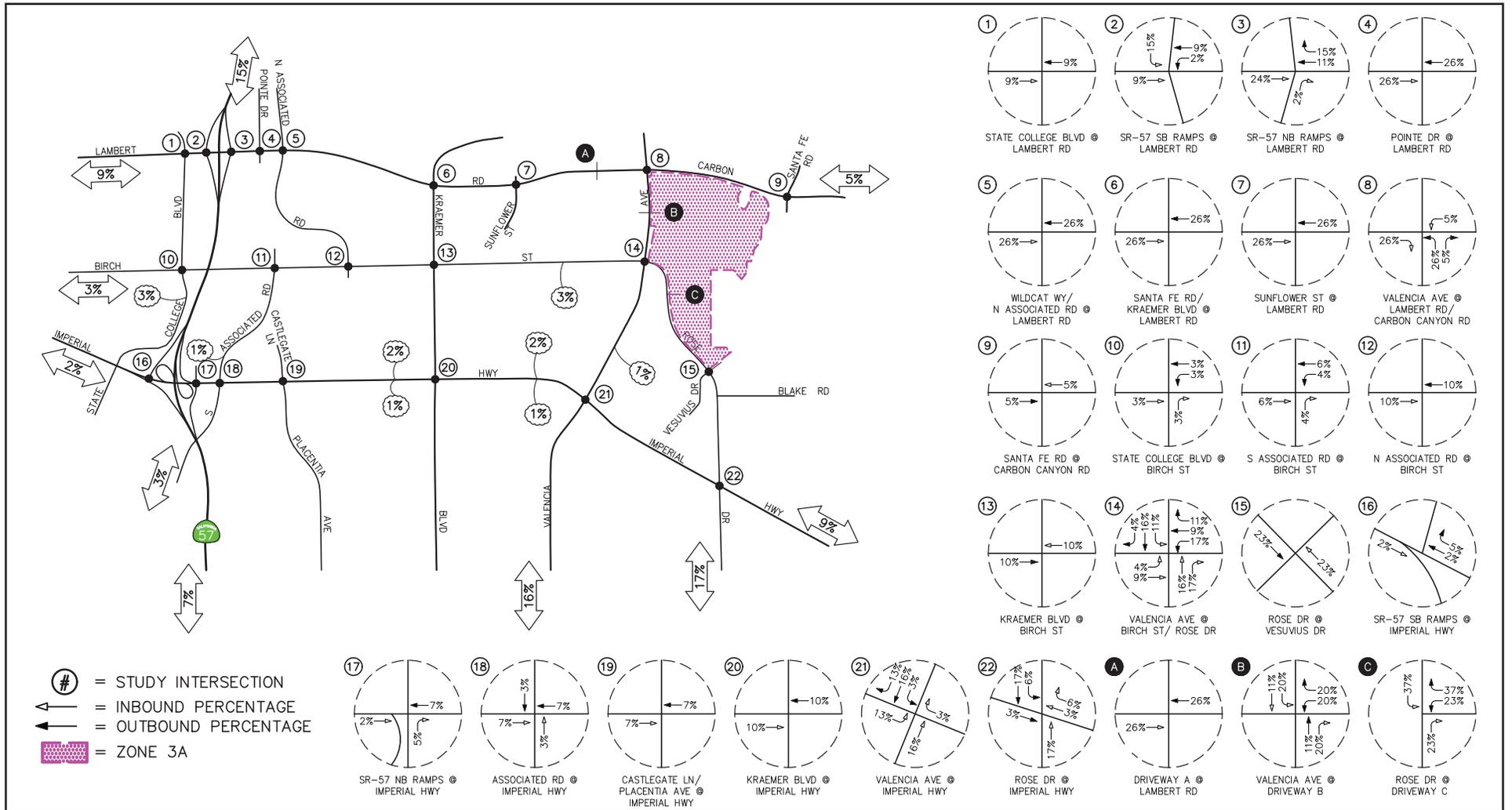


NO TO SCALE

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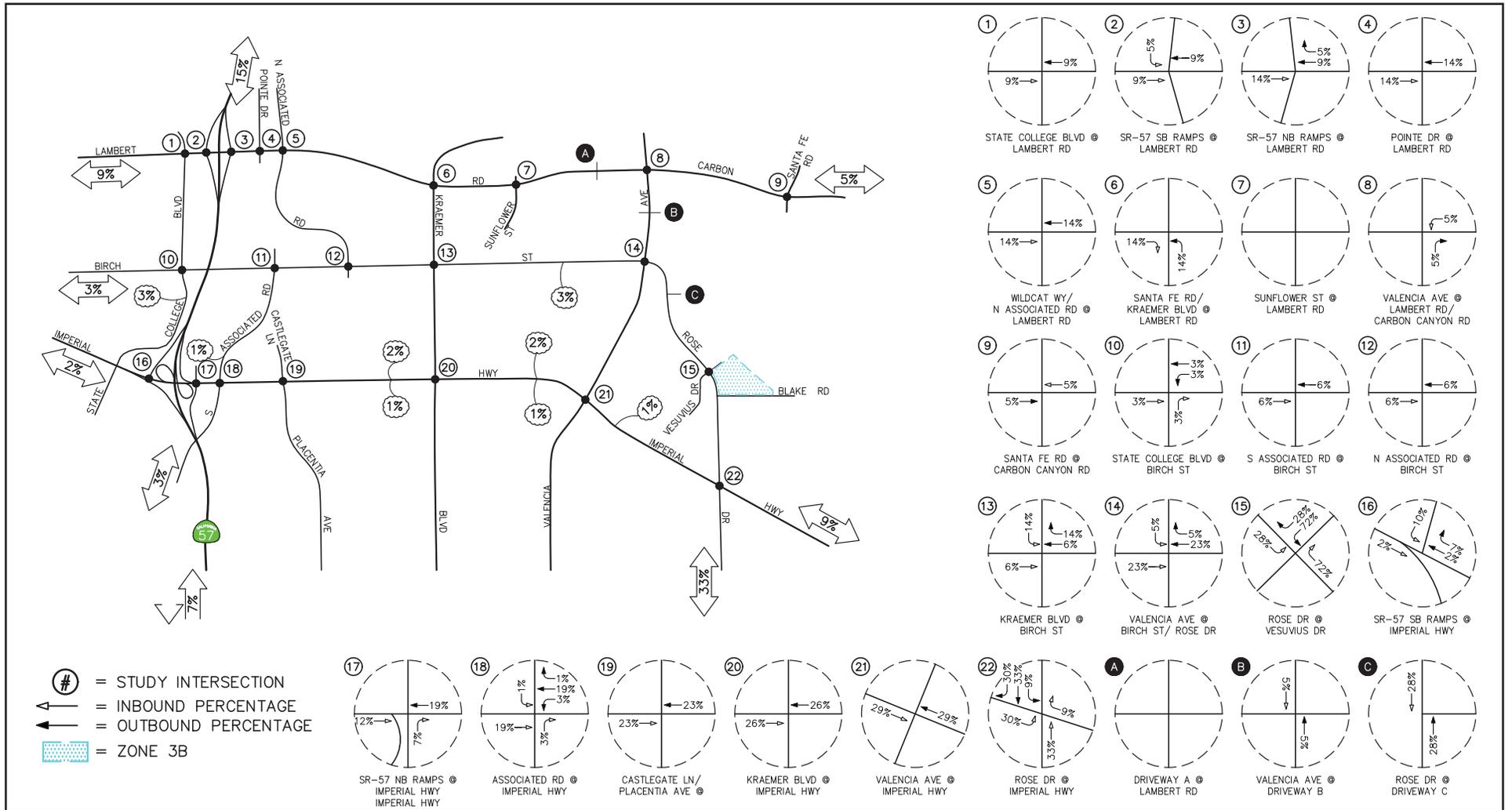
Figure 5.17-6a - Project Trip Distribution Pattern - Zone 3A
5. Environmental Analysis



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Figure 5.17-6b - Project Trip Distribution Pattern - Zone 3B
5. Environmental Analysis



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The City of Brea adopted significance thresholds and methodology to comply with SB 743 on October 6, 2020. The following lists the various screening methods outlined in the City's adopted Transportation Impact Analysis Guidelines:

- **Transit Priority Area (TPA) Screening.** Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may not be appropriate if the project:
 1. Has a Floor Area Ratio (FAR) of less than 0.75.
 2. Includes more parking for use by residents, customers, or employees of the project than required by the City.
 3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the City of Brea, with input from the Southern California Association of Governments [SCAG]).
 4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Based on currently available transit service in Brea, there are no identified TPAs in the city.

- **Low VMT Area Screening.** Residential and office projects within a low-VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary.
- **Project Type Screening.** The following uses can be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:
 - Local parks
 - Local-serving retail uses less than 50,000 square feet
 - Community institutions (public libraries, fire stations, local government)
 - Affordable, supportive, or transitional housing
 - Project generating less than 110 daily vehicle trips

For projects that exceed the screening criteria:

- **Project-Level Impacts** would result in a significant project-generated VMT impact if the baseline, or cumulative, project-generated VMT per service population exceeds the City of Brea General Plan Buildout VMT per service population.
- **Cumulative Impacts** under the no-project condition shall reflect the adopted RTP/SCS, so if a project is consistent with the SCAG RTP/SCS, its cumulative impacts on VMT shall be considered less than significant.

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Multimodal Facility Impacts

A significant impact would occur to transit, bicycle, and/or pedestrian facilities if the project would conflict with a project, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Orange County Transportation Authority Significance Thresholds

Most local agencies in Orange County and Caltrans have adopted LOS standards of 'C' or 'D' in an effort to maintain a desired LOS for the local circulation system. To address CMP legislative requirements and establish a minimum LOS along the regional system of roadways and highways in the county, OCTA has approved the following threshold:

- The CMP requires that a traffic analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System.

Future Traffic Conditions

Ambient Traffic Growth

Horizon-year background traffic growth estimates have been calculated using an ambient traffic growth factor, which is intended to include unknown and future related projects in the study area as well as account for regular growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at 1 percent per year. Applied to the Year 2021 existing traffic volumes, this factor results in a 14 percent growth in existing volumes to the near-term horizon Year 2035.

Related Projects Traffic Characteristics

In order to make a realistic estimate of future on-street conditions prior to implementation of the proposed project, the status of other known development projects (related projects) within the area of the project site has been researched at the City of Brea, City of Fullerton, City of Placentia, City of Yorba Linda, and City of Chino Hills. With this information, the proposed project can be evaluated within the context of the cumulative setting.

There are 23 related projects in the city, two related projects in Fullerton, and eight related projects in Chino Hills that are being processed for approval. These 33 related projects have been included as part of the cumulative background setting. Table 5.17-2, *Cumulative Projects Summary and Traffic Generation Forecast*, summarizes the trip generation potential for all 33 related projects on a daily and peak hour basis for a typical weekday. Figure 6-1 of the Traffic Study (see Appendix N) shows the locations of these cumulative projects. As shown in Table 5.17-2, the related projects are expected to generate 38,572 daily trips, with 3,006 trips (1,547 inbound, 1,459 outbound) anticipated during the AM peak hour and 3,517 trips (1,792 inbound, 1,725 outbound) during the PM peak hour.

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Table 5.17-2 Cumulative Projects Summary and Traffic Generation Forecast

Name	Location	Description	Daily 2-way	AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
City of Brea									
1. CVS	390 N. Brea Boulevard	13,000 SF Pharmacy w/ Drive-Through 1,700 SF Coffee Shop w/ Drive-Through	1,948	59	58	117	59	58	117
2. Brea Place	State College Boulevard at Birch Street	653 DU Apartments, 5,000 SF Office, 150 Room Hotel	6,364	122	271	393	300	199	499
3. Downtown Hotel	220 S. Brea Boulevard	116 Room Hotel, 4,000 SF High Turnover Sit-Down Restaurant	1,201	45	34	79	44	37	81
4. Mercury Apartments	Southeast corner of Berry Street at Mercury Lane	120 DU Apartments	653	11	32	43	32	21	53
5. Brea Mall Mixed-Use Project	1065 Brea Mall	Demolish existing 161,990 SF Sears department store, and construct 119,415 SF additional retail space, a 128,000 SF health club, and 383 DU medium density residential units	4,487	176	172	348	303	158	461
6. Brea Plaza	409-477 S. Associated Rd, and 1555, 1609, 1623, 1643 E. Imperial Highway	Demolition of an existing 18,450 SF movie theater and the construction of a mixed-use development w/ 21,355 SF of office space and 229 apartment units	-1,680	39	61	100	-33	-27	-60
7. Central Park Village	340-420 W. Central Avenue	62 DU townhomes and 20 DU apartments	553	8	25	33	26	16	42
8. New Industrial Building	201 N. Berry Street	109,125 SF warehouse	247	22	5	27	9	22	31
9. Alvero Assisted Living	251 S. Randolph Avenue	80 rooms with 82 beds residential care facility	213	9	6	15	8	12	20
10. Extra Space Self Storage	2700 E. Imperial Highway	126,546 self-storage facility	183	6	5	11	9	10	19
11. Brea Imperial Center	391 S. State College Boulevard	5,000 SF restaurant, 2,300 SF bagel/coffee shop, 1,600 SF café, 3,867 SF In-N-Out, 28,145 SF retail, and 4,400 SF bank to replace existing land uses which include 4,050 SF food uses, 24,481 SF retail, 4,400 SF bank, 2,325 SF medical office, 10,074 SF health studio spa.	1,315	58	60	118	56	37	93
12. Transwestern	285 S. Berry Street and 711 W. Imperial Highway	126,797 SF warehouse	288	24	7	31	10	26	36
13. The Phoenix Club	375 W. Central Avenue	8,350 SF restaurant with banquet hall	805	40	32	72	26	17	43

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Table 5.17-2 Cumulative Projects Summary and Traffic Generation Forecast

Name	Location	Description	Daily 2-way	AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
14. Aldi Grocery Store	2395 E. Imperial Highway	21,106 SF grocery store	1,783	31	23	54	72	72	144
15. Starbucks with Drive-Thru	2 Pointe Drive	2,400 SF coffee shop with drive-thru	961	52	51	103	35	35	70
16. Lambert Road Condos	700-800 W. Lambert Road	24 DU condominiums	162	2	8	10	8	4	12
17. Brea Metro Office Condos	330 E. Lambert Road	33 DU condominiums	222	3	10	13	11	6	17
18. Father's House	245 W. Birch Street	299 seat religious assembly	269	13	8	21	14	16	30
19. Cha Cha's Expansion	110 W. Birch Street	Existing restaurant expansion of 2,710 SF	262	13	10	23	9	5	14
20. Western Realco	2929 E. Imperial Highway	131,500 SF industrial building	299	25	8	33	10	27	37
21. CAMP Transformation	910 E. Birch Street, Suite 250	4,100 SF Fitness Center	140	3	2	5	8	6	14
22. Brea Express Wash	300 S. Brea Boulevard	4,254 SF express car wash	600	16	16	32	30	30	60
23. Raising Cane's	255 E. Imperial Highway	Demolish existing 9,588 SF office building and construction of a 4,047 SF fast food restaurant with drive-through	1,727	0	0	0	61	48	109
City of Fullerton									
24. 3105 Yorba Linda Boulevard	3105 Yorba Linda Boulevard	4,840 SF drive-through car wash	690	18	18	36	35	34	69
25. Beckman Business Center	4300 North Harbor Boulevard	522,250 SF Warehousing, 166,185 SF General Light Industrial, 105,880 SF Manufacturing, 42,000 SF Office, and 142,350 SF fulfillment center	7,564	583	172	755	253	599	852
City of Chino Hills									
26. Woodbridge Pacific Group (Canyon Hills/Hillcrest)	Northwest of Carbon Canyon Road and west of Canyon Hills Road	38 DU single family detached	358	7	20	27	23	13	36
27. Stonefield Development	Northwest of Carbon Canyon Road and east of Fairway Drive	28 DU single-family	264	5	15	20	16	10	26
28. Morningfield Estates and Loving Savior of the Hills Lutheran Church and School Master Plan Addendum	South of Morningfield Drive, west of Peyton Drive, north of Chino Hills Parkway, adjacent to San Bernardino County Flood Channel	7-Lot Subdivision with semi-custom single-family homes, plus 3 classrooms/71 student addition to the Lutheran school	264	36	33	69	54	26	50

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Table 5.17-2 Cumulative Projects Summary and Traffic Generation Forecast

Name	Location	Description	Daily 2-way	AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
29. Coptic Orthodox Church	East side of Peyton Drive, north of the Chino Creek Drainage Channel and south of the Chino Valley Community Church property	14,695 SF multipurpose room, 8,645 SF Sanctuary and 555 SF Bookstore	494	20	11	31	19	23	42
30. Buddhist Temple of Chino Hills	Northeast of Chino Hills Parkway and Rustic Drive	23,400 SF Buddhist temple expansion	200	7	5	12	6	6	12
31. Hidden Oaks	East of Carbon Canyon Road at Canyon Hills Road	53 DU Single Family	500	10	27	37	32	18	50
32. Greening Los Serranos Golf Course Project	15656 Yorba Avenue	124 DU single family, 532 DU multifamily	4,755	74	226	300	245	143	388
33. Paradise Ranch	East of Canyon Hills Road and south of Esquilme Drive	51 DU single-family	481	10	28	38	32	18	50
Cumulative Projects Total Trip Generation Potential			38,572	1,547	1,459	3,006	1,792	1,725	3,517

Source: LLG 2022a.

Year 2045 Traffic Conditions

The Year 2045 General Plan Buildout traffic forecasts for this traffic study were developed using the Orange County Traffic Analysis Model (OCTAM) 5.0 Year 2045 traffic model. Specific model assumptions are described in the Traffic Study in Appendix N. It should be noted that the OCTAM model includes future development entitlements allowed for the project site under the existing General Plan designations. However, to provide a conservative assessment, Year 2045 traffic conditions exclude these entitlements, resulting in the proposed project being compared to a vacant site as it now currently exists.

Year 2035 and Year 2045 Traffic Volumes

Year 2035 Traffic Volumes

Year 2035 cumulative traffic volumes include existing traffic plus ambient growth plus related projects as described above. Figures 6-4 and 6-5 of the Traffic Study (Appendix N) present, respectively, the AM and PM peak hour cumulative traffic volumes without project at the 22 key study intersections for the Year 2035. Figure 6-5 also presents the Year 2035 daily cumulative traffic volumes along the roadway segments without project. Figures 6-6 and 6-7 of the Traffic Study (Appendix N) illustrate the Year 2035 forecast AM and PM peak hour traffic volumes with the proposed project. Figure 6-7 also presents the Year 2035 daily Cumulative Plus Project traffic volumes along the roadway segment with project.

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Year 2045 Traffic Volumes

Year 2045 cumulative traffic volumes are based on the OCTAM model. Figures 6-8 and 6-9 of the Traffic Study (Appendix N) present the Year 2045 AM and PM peak hour cumulative traffic volumes at the 22 key study intersections without project. Figure 6-9 also presents the Year 2045 daily cumulative traffic volumes along the roadway segments without project. Figures 6-10 and 6-11 of the Traffic Study (Appendix N) illustrate the Year 2045 forecast AM and PM peak hour traffic volumes with the proposed project, respectively. Figure 6-11 also presents the Year 2045 daily buildout plus project traffic volumes along the roadway segments with project.

Planned Improvements

The following improvements are part of the SR-57 Lambert Interchange improvement project, now under construction, and have been included in the Year 2035 and Year 2045 background traffic conditions:

- **SR-57 SB Ramps at Lambert Road (#2).** Widen the off-ramp to provide a second exclusive southbound left-turn lane. Restripe the shared southbound left-turn/through/right-turn lane to a second exclusive right-turn lane. Widen to provide a second exclusive eastbound right-turn lane. Modify the existing traffic signal.
- **SR-57 NB Ramps at Lambert Road (#3).** Construct a loop on-ramp on the south leg. Remove dual eastbound exclusive left-turn lanes. Widen and restripe to provide a shared eastbound through/right-turn lane and an exclusive eastbound right-turn lane. Reconstruct the existing on-ramp for a free westbound right-turn lane. Modify the existing traffic signal.

5.17.4.2 IMPACT ANALYSIS

The following impact analysis addresses the thresholds of significance; the applicable thresholds are identified in brackets after the impact statement

Impact 5.17-1: The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. [Threshold T-1]

General Plan

The City's transportation network includes roadways and pedestrian, bicycle, and public transit facilities to allow for the movement of persons and goods in the City. The policies of the City of Brea General Plan Circulation Element that are applicable to the proposed project are:

- **Policy CD-10.1.** Work continually with Caltrans to improve access to and from State Route 57.
- **Policy CD-10.3.** Cooperate with surrounding jurisdictions to ensure the efficient operation of the arterial network system.

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- **Policy CD-10.4.** Work with Caltrans, the Orange County Transportation Authority, and surrounding jurisdictions to provide adequate capacity on regional routes for through traffic and to minimize cut-through traffic on the local street system.
- **Policy CD-10.6.** Recognize that Carbon Canyon Road will continue to serve high volumes of regional traffic despite its designation as a Modified Commuter. Thus, examine design solution alternatives that can improve the safety and efficiency of Carbon Canyon Road.
- **Policy CD-11.2.** Establish Level of Service goals for designated City streets, and ensure that new development maintains these service levels.
- **Policy CD-11.3.** Plan neighborhood streets, pedestrian walks, and bicycle paths as a system of fully connected routes throughout the City.
- **Policy CD-13.4.** Require new developments to provide for the use of alternative modes of transit via internal trails or travel ways—public or private—for pedestrians and vehicles other than cars. New developments shall include such features as well-designed sidewalks and parkways, bike lanes and paths, and dedicated bus turn-outs.

Pedestrian circulation would be provided via the existing and proposed sidewalk system. It should be noted that the existing public sidewalk currently terminates on Lambert Road at the western boundary of the project site and on Carbon Canyon Road at the northeastern boundary of the project site. The proposed project would construct sidewalks along the frontage on Lambert Road, Carbon Canyon Road, and Rose Drive. The existing sidewalk system in the project vicinity provides direct connectivity to the existing development along major thoroughfares. Pedestrian access to the project site would be provided via the proposed project driveways. The proposed project is required to implement PPP T-1 through T6, so that roadway system in the vicinity of the project site operate effectively with adequate capacity.

Existing pedestrian facilities within the project area are adequate. Sidewalks are generally provided throughout the city, with crosswalks at most major intersections. In close proximity to the site, Valencia Avenue, Lambert Road, and Imperial Highway provide pedestrians connectivity via the existing sidewalks, linking the project site to the surrounding community. Figure 3-6, *Non-vehicular Circulation Plan*, identifies the existing trails/sidewalks adjacent to the project site and the proposed trails within the project site as presented in the Brea 265 Specific Plan.

In addition to the trail and pedestrian connectivity proposed by the Specific Plan, a planned bikeway system would facilitate continuous bicycle access throughout the project site, linking the project site to the current bicycle facilities in the immediate area. The proposed project would provide on-street bike lane on both sides of Lambert Road, Valencia Avenue, and Rose Drive, and on the south side of Carbon Canyon Road.

The proposed project's consistency with the City's General Plan goals and policies are discussed in Table 5.11-2, Consistency with General Plan Goals and Policies. Therefore, the proposed project would comply with the policies of the General Plan's Circulation Element and impacts would be less than significant.

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SCAG Connect SoCal Consistency

The proposed project's consistency with the 2020 SCAG RTP/SCS, *Connect SoCal*, is detailed in Table 5.11-3, *SCAG's Connect SoCal Consistency Analysis*, of Section 5.11, *Land Use and Planning*. The goals of Connect SoCal are related to housing, transportation, technologies, equity, and resilience. As mentioned in Section 5.11, *Land Use and Planning*, the proposed project would result in a walkable community within walking distance to commercial, office, education, and recreational opportunities, and is therefore consistent with *Connect SoCal*. Impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant impact.

Impact 5.17-2: The proposed project would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b). [Threshold T-2]

CEQA Guidelines Section 15064.3 (b) has the following criteria for analyzing transportation impacts.

- (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- (2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
- (3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
- (4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

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The City of Brea adopted significance thresholds and methodology to comply with SB 743 on October 6, 2020. The City’s VMT thresholds are described in Section 5.17.4.1 under “VMT Thresholds.” The proposed project does not meet any of the screening criteria and further VMT was prepared. However, it should be noted that the 13-acre sports park component of the proposed project does screen out of further VMT analysis under the “Project Type Screening” as it falls under the “local park” category, thus, the sports park is assumed to have no significant impact on transportation. This component was excluded in the model input for the VMT analysis.

A full VMT analysis utilizing OCTAM was prepared and is included in Appendix O to this DEIR. The OCTAM was developed, validated and adopted by OCTA. According to OCTAM, the project site is located in Traffic Analysis Zones (TAZ) 43, 52, and 53. Figure 4 of the VMT Analysis (Appendix O to the DEIR) shows the TAZ Map from OCTAM. As shown in Table 5.17-3, *Project-Generated VMT per Service Population*, the baseline project-generated VMT per service population is 26.1 (TAZ 43), 20.0 (TAZ 52), and 28.4 (TAZ 53), which is 13.11 percent (TAZ 43), 33.62 percent (TAZ 52), and 5.37 percent (TAZ 53) below the City of Brea General Plan Buildout per service population threshold of 30.1. And the cumulative project-generated VMT per service population is 26.6 (TAZ 43), 18.1 (TAZ 52), and 28.7 (TAZ 53), which is 11.33 percent (TAZ 43), 39.77 percent (TAZ 52), and 4.49 percent (TAZ 53) below the City average General Plan Buildout VMT per service population threshold of 30.1. Therefore, the proposed project would not exceed the City of Brea General Plan Buildout VMT per service population and therefore would not have a significant impact.

Table 5.17-3 Project-Generated VMT per Service Population

Baseline Project-Generated VMT Per Service Population			
Description	Project	City of Brea General Plan Buildout	Compared to Threshold (City of Brea)
TAZ 43	26.1	30.1	13.11% Lower
TAZ 52	20.0	30.1	33.62% Lower
TAZ 53	28.4	30.1	5.37% Lower
Cumulative Project-Generated VMT Per Service Population			
Description	Project	City of Brea General Plan Buildout	Compared to Threshold (City of Brea)
TAZ 43	26.6	30.1	11.33% Lower
TAZ 52	18.1	30.1	39.77% Lower
TAZ 53	28.7	30.1	4.49% Lower

Source: LLG 2022b.

It should be noted that the VMT per service population for TAZs 43, 52, and 53 in the base model (without the addition of the project) are below the average city VMT per population, and the project VMT per service population characteristics are similar to the base model TAZs. Because the VMT is analyzed per service population per the City’s TIA Guidelines and not total VMT, the driving per day for service population with the addition of the proposed project is nominal.

As shown in Table 5.17-4, *Link-Level Boundary Citywide VMT per Service Population*, the proposed project baseline link-level Citywide VMT per Service Population is 6.36 percent below the “No Project” condition link-level Citywide VMT per Service Population threshold, and cumulative link-level Citywide boundary VMT

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per Service Population is 5.36 percent below the “No Project” condition link-level Citywide VMT per Service Population threshold. Therefore, the proposed project link-level VMT per Service Population will not increase under the “Plus Project” condition when compared to the “No Project” condition and therefore the proposed project’s effect on VMT will be less than significant.

Table 5.17-4 Link-Level Boundary Citywide VMT per Service Population

Description	No Project Scenario	Plus Project Scenario	Compared to Thresholds (No Project Scenario)
Baseline	15.42	14.44	6.36 % Lower
Cumulative	14.55	13.77	5.36% Lower

Source: LLG 2022b.

Level of Significance Before Mitigation: Less than significant impact.

Impact 5.17-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). [Threshold T-3]

Intersection Vehicle Queuing Evaluation

The traffic study includes a queuing evaluation for the two SR-57 ramps on Lambert Road and the seven study intersections along Imperial Highway to assess if the stacking requirements within the proposed project are adequate. The queuing evaluation includes the following intersections:

- #2 – SR-57 SB Ramps at Lambert Road (Brea/Caltrans)
- #3 – SR-57 NB Ramps at Lambert Road (Brea/Caltrans)
- #16 – SR-57 SB Ramps at Imperial Highway (Brea/Caltrans)
- #17 – SR-57 NB Ramps at Imperial Highway (Brea/Caltrans)
- #18 – Associated Road at Imperial Highway (Brea/Caltrans)
- #19 – Castlegate Lane/Placentia Avenue at Imperial Highway (Brea/Caltrans)
- #20 – Kraemer Boulevard at Imperial Highway (Brea Caltrans)
- #21 – Valencia Avenue at Imperial Highway (Brea/Caltrans)
- #22 – Rose Drive at Imperial Highway (Placentia/Caltrans)

The queuing evaluation was conducted for Year 2035 cumulative and Year 2045 buildout traffic conditions based on the Average Queue methodology, which calculates the average queue value in terms of number of vehicles per lane. The queuing analysis determined the following.

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Year 2035 Cumulative Traffic Conditions

Table 9-1, Year 2035 Peak Hour Intersection Queuing Analysis, of the Traffic Study (Appendix N) presents the AM and PM peak hour queuing analyses results for the nine study intersections for Year 2035. The first column of Table 9-1 presents the resultant queues for Year 2035 cumulative traffic conditions. The second column presents the resultant queues for Year 2035 cumulative traffic conditions with the addition of Project traffic. The third column presents the resultant queues with the inclusion of recommended traffic improvements, where needed.

Year 2035 Without Project

As shown in Table 9-1, two of the nine study intersections would have queues which exceed the provided storage capacity for one or more intersection approach without addition of project-related traffic. The remaining study intersections have queues that are adequately accommodated by the provided storage space. The intersections/approaches with storage deficiencies are:

- #18: Associated Road at Imperial Highway
 - Eastbound Left-Turn: PM Peak Hour
 - Westbound Left-Turn: PM Peak Hour
- #22: Rose Drive at Imperial Highway
 - Southbound Left-Turn: AM Peak Hour and PM Peak Hour
 - Westbound Right-Turn: PM Peak Hour

Year 2035 With Project

As shown in Table 9-1 of the Traffic Study (Appendix N), the same two study intersections (#18 and #22) under the Year 2035 without project conditions would have queues that exceed the provided storage capacity for one or more intersection approaches without addition of project-related traffic.

The addition of project traffic would not contribute to the eastbound left-turn movement at the intersection of Associated Road at Imperial Highway (#18). Also, the addition of project traffic would add less than one vehicle to the westbound left-turn queue, which is considered a nominal impact. Therefore, project-related improvements at the intersection of Associated Road at Imperial Highway (#18) are not required to improve the queues.

The addition of project traffic would contribute to two approaches—southbound left-turn during AM and PM peak hours and westbound right-turn during PM peak hour—at the intersection of Rose Drive at Imperial Highway intersection (#22), which would already have queues that exceed the provided storage capacity without the proposed project. However, the following improvements would be provided as required by PPP T-5, and after implementation of the recommended improvements, the southbound left-turn and westbound right-turn queues would operate better than preproject conditions.

- **#22, Rose Drive at Imperial Highway:** Restripe the second southbound through lane as a shared southbound left/through lane. Modify the existing traffic signal and provide northbound and

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southbound split phasing and westbound right-turn overlap phasing. Remove crosswalk on the east leg. This improvement will require design concurrence from Caltrans, and construction will occur under standard Caltrans permitting process. (PPP T-5)

It should be noted that the SR-57 Ramps at Lambert Road (#2 and #3) include planned improvements as part of the Year 2035 background traffic conditions.

Year 2045 Buildout Traffic Conditions

Year 2045 Buildout Without Project

Table 9-2, Year 2045 Peak Hour Intersection Queuing Analysis, of the Traffic Study (Appendix N) presents the AM and PM peak hour queuing analyses results for the nine study intersections for Year 2045. As shown, without the proposed project, three of the nine study intersections would have queues that exceed the provided storage capacity for one or more intersection approach. The remaining study intersections have queues that are adequately accommodated by the provided storage space. The intersections/approaches with storage deficiencies without the proposed project are:

- **Intersection No. 18:** Associated Road at Imperial Highway
 - Eastbound Left-Turn: PM Peak Hour
 - Westbound Left-Turn: PM Peak Hour
- **Intersection No. 19:** Castlegate Lane/Placentia Avenue at Imperial Highway
 - Westbound Left-Turn: PM Peak Hour
- **Intersection No. 22:** Rose Drive at Imperial Highway
 - Southbound Left-Turn: AM Peak Hour and PM Peak Hour
 - Westbound Right-Turn: PM Peak Hour

Year 2045 Buildout With Project

As shown in Table 9-2 of the Traffic Study (Appendix N), with the addition of proposed project traffic to Year 2045 buildout traffic conditions, one additional intersection would have a deficient queuing condition compared to the without project conditions. Therefore, four of the nine study intersections have queues that exceed the provided storage capacity for one or more intersection approach. The remaining study intersections have queues that are adequately accommodated by the provided storage space. The intersections/approaches with storage deficiencies are:

- **Intersection No. 2:** SR-57 SB Ramps at Lambert Road
 - Westbound Left-Turn: AM Peak Hour
- **Intersection No. 18:** Associated Road at Imperial Highway
 - Eastbound Left-Turn: PM Peak Hour
 - Westbound Left-Turn: PM Peak Hour

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- **Intersection No. 19:** Castlegate Lane/Placentia Avenue at Imperial Highway
 - Westbound Left-Turn: PM Peak Hour
- **Intersection No. 22:** Rose Drive at Imperial Highway
 - Southbound Left-Turn: AM Peak Hour and PM Peak Hour
 - Westbound Right-Turn: PM Peak Hour

The addition of project traffic would add less than one vehicle to the westbound left-turn queue at the intersection of SR-57 SB Ramps at Lambert Road (#2); therefore, impacts would be considered less than significant. No project-related improvements at the intersection are required to improve the queues.

The addition of project traffic would not contribute to the eastbound left-turn movement at the intersection of Associated Road at Imperial Highway (#18). Also, the addition of project traffic would add less than one vehicle to the westbound left-turn queue, which is considered nominal. Therefore, project-related improvements at the intersection of Associated Road at Imperial Highway (#18) are not required to improve the queues.

The addition of project traffic would add less than one vehicle to the westbound left-turn queue at the intersection of Castlegate Lane/Placentia Avenue at Imperial Highway (#19), which is considered nominal. Therefore, project-related improvements at the intersection are not required to improve the queues.

As shown in Table 9-2 of the Traffic Study (Appendix N), implementation of recommended improvements at the intersection of Rose Drive at Imperial Highway (#22) as outlined in PPP T-5 (same as under the 2035 cumulative traffic conditions) would improve queues for the southbound left-turn and westbound right-turn lanes. After implementation of the recommended improvements, the southbound left-turn and westbound right-turn queues operate better than without project conditions.

Gate Queuing Analysis

The proposed project includes gated entries at Driveway B and Driveway C. Therefore, a gate queuing assessment has been prepared to identify the minimum distance the gate should be placed from the intersection to ensure that the queues do not affect the signal operations along Valencia Avenue and Rose Drive. For the purposes of this analysis, it was assumed that residents of Brea 265 would enter using an electronic gate opener/transponder, similar to that used to access garages, and exit via a vehicle-actuated loop process or similar type technology. And it was also assumed that visitors would use a phone-actuated process (call box) to enter.

The analysis determined that the gated entries at Valencia Avenue at Driveway B and Rose Drive at Driveway C would require a storage reservoir length of 20 feet and 40 feet, respectively, between the front of the gate to the proposed project's right-of-way/property line to satisfy both the AM and PM peak hour traffic. And the gated exits at Valencia Avenue at Driveway B and Rose Drive at Driveway C would require a storage reservoir length of 36 feet and 59 feet, respectively, between the front of the gate to the crosswalk in order for the outbound vehicles to not queue past the gate. Implementation of PPP T-6 would set back the gated entry for Driveway B to provide a minimum storage reservoir length of 40 feet between the front of

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the gate to the project site's property line on Valencia Avenue and set back the gated entry for Driveway C to provide a minimum storage reservoir length of 60 feet between the front of the gate to the project site's property line on Rose Drive. Therefore, adequate entry and exit stacking length would be provided, and gate queuing impacts would be less than significant.

Site Access

Table 10-1 and Table 10-2 of the Traffic Study (Appendix N) indicate that Rose Drive at Vesuvius Drive/Driveway D (#15) and Rose Drive and Driveway C would operate at acceptable levels with the implementation of the following driveway improvements required by PPP T-5. Therefore, site access impacts would be less than significant.

- **No. 15, Rose Drive at Vesuvius Drive/Driveway D:** Restripe the southbound exclusive right-turn as a shared southbound through/right-turn lane. Widen to provide a second southbound departure lane. Modify the existing traffic signal.

Internal Circulation Evaluation

The traffic study evaluated the onsite circulation for vehicle-pedestrian conflicts, and it was determined that the overall layout does not create any unsafe vehicle-pedestrian conflict points and that driveway throating is sufficient such that access to parking spaces is not impacted by internal vehicle queuing/stacking. The Traffic Study determined that the proposed project would provide very good internal circulation and adequate alignment, spacing, and throating of the project driveways. Impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant impact.

Impact 5.17-4: The proposed project would not result in inadequate emergency access. [Threshold T-4]

The project site fronts Lambert Road and Valencia Avenue, providing at least two access points in and out of these streets to provide emergency access. The nearest fire station to the project area is Fire Station #3 at 2600 E. Santa Fe Road, approximately 0.4 mile to the west; Fire Station #4 at 198 N Olinda Place, approximately 2 miles east of the project site, is also anticipated to serve the project site. The existing average response time for Brea Fire ranges from 4 minutes 47 seconds to 5 minutes 4 seconds, and the City's goal is to respond within 4 minutes for the first fire apparatus to arrive on scene, and 8 minutes for a multiunit response team to arrive on scene.

The surrounding roadways would continue to offer emergency access to the project site and surrounding properties during and after construction. Moreover, the proposed project would not result in emergency access, and impacts to adopted emergency response and evacuation plans are less than significant. During the development review and permitting process, Brea Fire Department would review and approve a fire master plan(s) for each planning area to ensure that emergency access, water, and accessibility to each residential building and lot are provided to serve the needs of the fire department. The required building plan check for site plan and emergency access would ensure that the proposed project incorporates appropriate fire safety

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features to reduce project impacts. All internal streets serving the proposed project would be designed and improved to meet emergency vehicle turning radii. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant impact.

5.17.5 Cumulative Impacts

The Traffic Study evaluated cumulative traffic impacts from related projects in the cities of Brea, Fullerton, and Chino Hills as described in Section 5.17.4.1 under “Future Traffic Conditions” and determined that the proposed project, when combined with other related projects, would not result in queuing impacts or other circulation impacts provided that recommended improvements are provided as required project design features. The proposed project would be consistent with adopted policies, plans, and programs regarding circulation, including public transit, bicycle, and pedestrian facilities. As discussed in Impact 5.17-2, the cumulative project-generated VMT per service population with the project would be below the City average General Plan Buildout VMT per service population threshold; therefore, cumulative VMT impacts would be less than significant. Furthermore, the City of Brea TIA Guidelines (September 2020) indicates that if a project is consistent with the RTP/SCS, then the cumulative impacts shall be considered less than significant. The proposed project is consistent with the RTP/SCS (see Table 5.11-3, *SCAG’s Connect SoCal Consistency Analysis*), and the cumulative impacts are considered less than significant. Site access is adequately designed and would not combine with other area traffic impacts to result in a significant cumulative impact on area circulation systems or create hazardous conditions. The proposed project would not result in cumulative transportation impacts.

5.17.6 Level of Significance Before Mitigation

Upon implementation of the plans, programs, and policies, the following impacts would be less than significant: 5.17-1 through 5.17-4.

5.17.7 Mitigation Measures

No mitigation measures are required.

5.17.8 Level of Significance After Mitigation

Impacts would be less than significant.

5.17.9 References

Institute of Transportation Engineers. 2021. Trip Generation Manual. 11th edition.

Linscott, Law, & Greenspan (LLG). 2022a, February 8. Traffic Circulation Analysis, Brea 265 Specific Plan. DEIR Appendix N.

———. 2022b, February 22. Vehicles Miles Traveled (VMT) Analysis for the Brea 265 Specific Plan. DEIR Appendix O.

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