4.13 Transportation/Traffic

The analysis in this section is based on the Traffic Impact Study Report for the City of Encinitas Housing Element. This report was prepared by Chen Ryan Associates in January 2016 and is included as Appendix N to this PEIR. The study area utilized in this analysis includes all of the Circulation Element roadways within the limits of the City, as well as certain roadways nearby within the cities of Carlsbad and Solana Beach, and unincorporated San Diego County.

4.13.1 Existing Conditions

4.13.1.1 Local Circulation System

In accordance with San Diego Traffic Engineers' Council and the Institute of Transportation Engineers (SANTEC/ITE) Guidelines (San Diego Regional Traffic Standards Task Force 2000), the study area includes all freeway segments, freeway ramp intersections, roadway segments, and intersections in which the proposed project would add 50 or more peak hour trips in either direction. City staff also requested additional intersections be added based on their knowledge of the current traffic operations throughout the City. The study area is shown in Figure 4.13-1, and includes the City as well as adjacent areas within the cities of Carlsbad and Solana Beach, and unincorporated San Diego County. Below is a brief description of the freeway facilities and each roadway within the study area. Refer to Appendix N for additional roadway characteristic details and intersection configurations.

a. Interstate 5

Interstate 5 (I-5) is a major north-south regional facility and provides access between the coastal cities of Oceanside, Carlsbad, Encinitas, Solana Beach, Del Mar, San Diego, as well as to Orange and Los Angeles counties to the north. Within the study area, I-5 has eight mixed-flow/general purpose lanes (four in each direction).[1] Two auxiliary lanes traverse between Manchester Avenue and Via de la Valle (one in each direction), one carpool lane between Via de la Valle and Manchester Avenue (NB direction) and one carpool lane between Lomas Santa Fe and Via de la Valle (SB direction). Access to Encinitas is provided via interchanges at La Costa Avenue, Leucadia Boulevard, Encinitas Boulevard, Santa Fe Drive, Birmingham Drive, and Manchester Avenue.

[1] Although the segment between Manchester Avenue and Lomas Santa Fe is identified as having seven mixed-flow general purpose lanes, this freeway segment functions as an eight-lane segment due to the carpool lane terminating approximately 800 feet prior to the northbound off-ramp at Manchester Avenue as well as the auxiliary lane not being striped as such for approximately 1,800 feet north of Lomas Santa Fe.

Map Source: Chen Ryan

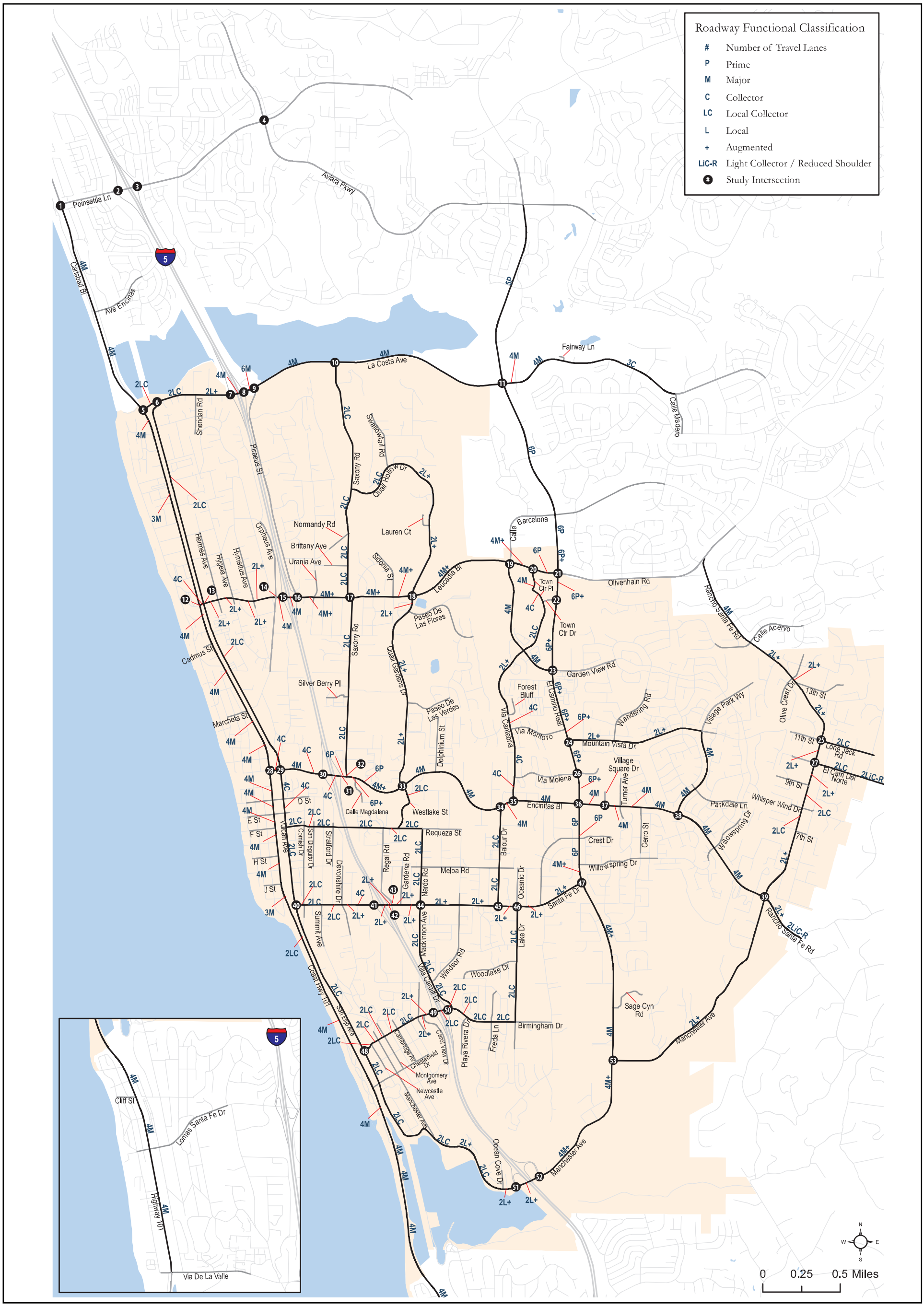

FIGURE 4.13-1

Existing Roadway Network

RECON

M:\jobs4\7722\env\graphics\eir\fig4.13-1.ai 12/18/15 sab

b. North-South Roadways

North Coast Highway 101 extends from La Costa Avenue to Encinitas Boulevard. The majority of this roadway is a four-lane Major Roadway, with a brief three-lane (one northbound, two southbound lanes) Major Roadway segment just south of La Costa Avenue to Leucadia Boulevard. The median is raised from La Costa Avenue south to Leucadia Boulevard, then there is a two-way center left-turn lane from Leucadia Boulevard to Marcheta Street, and it is undivided south of Marcheta Street. The speed limit is 35 miles per hour (mph) and it includes a Class II bike lane and III (shared lane markings).

South Coast Highway 101 is a continuation of North Coast Highway 101, and extends from Encinitas Boulevard south to the City of Solana Beach boundary. This portion of Highway 101 is also primarily a four-lane Major Roadway, with a brief three-lane (two northbound lanes and one southbound lane) Major Roadway segment from West J to Swami's parking lot and a two-lane Collector segment from Swami's to San Elijo State Beach. The median varies, and the speed limit varies from 30 to 45 mph. A Class II bike lane is provided in parts with Class II (shared lanes) in the downtown area. Sidewalks vary from substantial in the downtown core to intermittent to southbound only.

North Highway 101 is a continuation of South Coast Highway 101, and extends from the City of Solana Beach limits south to Via de la Valle, and is a four-lane Major Arterial. This portion of Highway 101 is wholly within the City of Solana Beach. From the City of Solana Beach limit to Ocean Street, North Highway 101 has a painted median, sidewalk, and a 45 mph speed limit. From Ocean Street to Estrella Street, it has a raised median, sidewalks on both sides, and a 35 mph speed limit. A Class II bike lane is provided. Southbound transitions from Class II bike lanes to Class III (shared lanes) at Cliff Street. Sidewalks vary, with segments to include sidewalks on both sides, intermittently, southbound only and no sidewalks.

Vulcan Avenue is a two-lane undivided roadway between La Costa Avenue and Encinitas Boulevard. South of Encinitas Boulevard, Vulcan Avenue becomes a four-lane roadway with a painted median until reaching E Street. South of E Street, Vulcan Avenue transitions back to a two-lane undivided roadway until reaching its southern terminus at Santa Fe Drive. The posted speed limit along this roadway is 40 mph. Pedestrian facilities are intermittently present on both sides of the roadway but bicycle lanes are not present on either side. Parking is permitted intermittently on both sides of the roadway. Informal parking in the NCTD right-of-way exists adjacent to Vulcan Avenue in areas of Cardiff.

San Elijo Avenue is a two-lane undivided roadway with a 35 mph speed limit between Santa Fe Drive and Chesterfield Drive and a posted speed limit of 25 mph between Chesterfield Drive and its southern terminus at Manchester Avenue. Sidewalks are intermittently present on both sides of the roadway but bicycle lanes are not present on either side. Parking along San Elijo Avenue is permitted intermittently.

Saxony Road is a two-lane undivided roadway with a posted speed limit of 45 mph between La Costa Avenue and Quails Hollow Drive, and 30 mph between Quails Hollow Drive and Leucadia Boulevard. South of Leucadia Boulevard, Saxony Road is a two-lane

undivided roadway with a posted speed limit of 40 mph until reaching Silver Berry Place, where the posted speed limit becomes 25 mph until reaching Encinitas Boulevard. Sidewalks are present intermittently on both sides of the roadway but bicycle lanes are not present on either side.

Quail Hollow Drive is a two-lane undivided roadway with a posted speed limit of 35 mph between Saxony Road and Quail Gardens Drive. Sidewalks are present on both sides of the roadway but bicycle lanes are not present on either side. Parking is permitted on both sides of the roadway.

Quail Gardens Drive is a two-lane roadway with a landscaped raised median and posted speed limits of 35 and 40 mph between Quail Hollow Drive and Leucadia Boulevard, and Leucadia Boulevard and Encinitas Boulevard, respectively. Sidewalks are present on both sides of Quail Gardens Drive, between Quail Hollow Drive and Encinitas Boulevard. Parking is prohibited on both sides of the roadway and Class II bicycle lanes are present along both sides of the entire extent of Quail Gardens Drive, between Quail Hollow Drive and Encinitas Boulevard.

Westlake Drive is a two-lane undivided roadway with a posted speed limit of 25 mph along its entire extent between Encinitas Boulevard and Requeza Street. Sidewalks are intermittently present on both sides of the roadway but bicycle lanes are not present on either side. Parking is also intermittently permitted on both sides of the roadway.

Nardo Road is a two-lane undivided roadway with a posted speed limit of 25 mph between Requeza Street and Santa Fe Drive. Sidewalks are continuous on the east side of the roadway but intermittent on the west side. Signs indicating that Nardo Road is a bike route are present along the roadway. There are no bicycle facilities on either side but signs indicating that Nardo Road is a bike route are present along the roadway. Parking is intermittently permitted on both sides of the roadway.

MacKinnon Avenue is a two-lane undivided roadway with a posted speed limit of 35 mph, between Santa Fe Drive and Villa Cardiff Drive. Sidewalks are present on both sides of the roadway but bicycle lanes are not present on either side. Parking is permitted on both sides of the roadway.

Villa Cardiff Drive is a two-lane undivided roadway with a posted speed limit of 35 mph between MacKinnon Avenue and Birmingham Drive. Sidewalks are present only on the east side of the roadway but are not present on the west side roadway. Parking is permitted intermittently on both sides of the roadway, and no bike lanes are present.

Balour Drive is a two-lane undivided roadway with posted speed limits of 30 mph in the study area. Sidewalks are intermittently present on both sides of the roadway but bicycle lanes are not present on either side. Parking is intermittently present on both sides of the roadway.

Lake Drive is a two-lane undivided roadway with a posted speed limit of 35 mph between Santa Fe Drive and Birmingham Drive. Sidewalks are present intermittently on both sides

of the roadway but bicycle lanes are not present on either side. Parking is permitted on both sides of the roadway.

Garden View Road is a four-lane roadway with a landscaped raised median and a posted speed limit of 40 mph between Leucadia Boulevard and El Camino Real. Sidewalks are present on the east side of the roadway but are intermittently present on the west side, between Leucadia Boulevard and Via Cantebria; however, south of Via Cantebria, sidewalks are present on both sides of the roadway. Class II bicycle facilities are present on both sides of the roadway between Leucadia Boulevard and El Camino Real. Parking is prohibited on both sides of the roadway along the entire extent of Garden View Road, between Leucadia Boulevard and El Camino Real.

Via Cantebria is a three-lane roadway (two-lane southbound, one-lane northbound) with a continuous-left-turn-lane median and a posted speed limit of 40 mph from Garden View Road to Forrest Bluff. The roadway transitions into a four-lane roadway with a continuous-left-turn-lane median between Forrest Bluff and Encinitas Boulevard. Sidewalks and Class II bicycle facilities are intermittently present on both sides of the roadway. Parking is prohibited on both sides of the roadway along the entire extent of Via Cantebria, between Garden View Road and Encinitas Boulevard.

El Camino Real is a six-lane roadway with a landscaped raised median between the City of Carlsbad boundary and Leucadia Boulevard. South of Leucadia Boulevard, El Camino Real is an eight-lane roadway with a landscaped raised median and a posted speed limit of 45 mph until reaching Garden View Road. South of Garden View Road, El Camino Real is a six-lane roadway with a landscaped raised median and a posted speed limit of 35 mph until reaching Encinitas Boulevard. South of Encinitas Boulevard, El Camino Real maintains the six-lane configuration, but the posted speed limit increases to 40 mph until reaching Santa Fe Drive. South of Santa Fe Drive, El Camino Real is a five-lane roadway (three-lane northbound, two-lane southbound) with a continuous-left-turn-lane median and a posted speed limit of 55 mph until reaching Sage Canyon Drive. South of Sage Canyon Drive, El Camino Real is a four-lane roadway with a continuous-left-turn-lane median and a posted speed limit of 55 mph until reaching its southern terminus at Manchester Avenue. Sidewalks are present intermittently on both sides of the roadway, within the study area. Class II bicycle lanes are present on both sides of the roadway and parking is prohibited on both sides.

Village Park Way is a four-lane roadway with a landscaped raised median and a posted speed limit of 40 mph between Mountain Vista Drive and Encinitas Boulevard. Sidewalks are present on both sides of the roadway but bicycle lanes are not present on either side. Parking is permitted on both sides of the roadway.

Rancho Santa Fe Road is a two-lane undivided roadway with a posted speed limit of 40 mph between Calle Acervo and Lone Jack Road. South of Lone Jack Road, Rancho Santa Fe Road continues as a two-lane roadway with a posted speed limit of 40 mph, but its median varies between a raised median, a continuous-left-turn-lane median, and an absence of median until reaching its terminus at Encinitas Boulevard. Sidewalks and

Class II bicycle lanes are intermittently present on both sides of the roadway, within the study area. Parking is prohibited on both sides of the roadway.

Manchester Avenue is a two-lane roadway with a continuous-left-turn-lane median and a posted speed limit of 40 mph between Encinitas Boulevard and approximately 160 feet before reaching Denk Lane. South of Denk Lane, Manchester Avenue is a two-lane undivided roadway with a posted speed limit of 40 mph until reaching El Camino Real. South of El Camino Real, Manchester Avenue curves and its orientation becomes east to west. Manchester Avenue, south of El Camino Real is a four-lane roadway with a painted median and a posted speed limit of 45 mph until reaching the I-5 NB on-ramp. West of the I-5 NB on-ramp, Manchester Avenue becomes a three-lane (one-lane eastbound, two-lane westbound) undivided roadway until reaching the I-5 SB off-ramp. West of the I-5 SB off-ramp, Manchester Avenue is a two-lane roadway with an intermittent continuous-left-turn-lane median until reaching its terminus at San Elijo Avenue. Sidewalks and Class II bicycle lanes are present intermittently on both sides of the roadway. Parking is permitted intermittently along Manchester Avenue within the study area.

c. East-West Roadways

La Costa Avenue is a two-lane undivided roadway with a posted speed limit of 40 mph between North Coast Highway 101 and I-5 SB on-off ramps. East of the I-5 SB on-off ramps, La Costa Avenue is a four-lane roadway with a painted median and no posted speed limit signs present until reaching the I-5 NB on-off ramps. East of the I-5 on-off ramps, La Costa Avenue is a four-lane roadway with a raised median and a posted speed limit of 55 mph until reaching El Camino Real. Sidewalks are present intermittently between North Coast Highway 101 and El Camino Real. Class II bicycle lanes are present on both sides of the roadway between North Coast Highway 101 and El Camino Real. Parking is prohibited along the entire extent of La Costa Avenue, within the study area.

Leucadia Boulevard is a two-lane roadway with a raised and continuous-left-turn lane median and a posted speed limit of 30 mph between North Coast Highway 101 and Orpheus Avenue. East of Orpheus Avenue, Leucadia Boulevard is a four-lane roadway until reaching the I-5 NB on-off ramps. East of the I-5 NB on-off ramps, Leucadia Boulevard is a five-lane (two-lane eastbound, three-lane westbound) roadway with a landscaped raised median and a posted speed limit of 40 mph until reaching Urania Avenue. East of Urania Avenue, Leucadia Boulevard changes from a five-lane roadway with a landscaped raised median to a four-lane roadway with a landscaped raised median but it keeps the same posted speed limit of 40 mph until reaching Quail Gardens Drive. East of Quail Gardens Drive, Leucadia Boulevard is a four-lane roadway with a landscaped raised median and a posted speed limit of 45 mph until reaching Town Center Place. East of Town Center Place, Leucadia Boulevard is a six-lane roadway with a raised median and a posted speed limit of 45 mph until reaching its terminus at El Camino Real. Sidewalks are present on both sides of the roadway as well as Class II bicycle lanes. Parking is prohibited on both sides of the roadway along the entire extent of Leucadia Boulevard.

Mountain Vista Drive is a three-lane roadway with a continuous-left-turn-lane and a painted median, as well as a posted speed limit of 45 mph between El Camino Real and Wandering Road. East of Wandering Road, Mountain Vista Drive is a two-lane roadway with a painted median that transitions into a continuous-left-turn-lane median until reaching Village Park Way. Sidewalks and Class II bicycle lanes are present on both sides of the roadway between El Camino Real and Village Park Way. Parking is permitted intermittently along Mountain Vista Drive between El Camino Real and Village Park Way.

Encinitas Boulevard is a four-lane roadway with an intermittent continuous-left-turn-lane and painted median until reaching Saxony Road. East of Saxony Road, Encinitas Boulevard is a six-lane roadway with a raised median until reaching the signalized intersection at Encinitas Town Country Shopping Center driveway. East of the Encinitas Town Country Shopping Center driveway, Encinitas Boulevard is a four-lane roadway with a continuous-left-turn-lane until reaching Quail Gardens Drive, where the roadway keeps the same lane configuration but the median changes intermittently between a continuous-left-turn-lane, a landscaped raised median, and a painted median. The posted speed limit is 40 mph from North Coast Highway 101 to Quail Gardens Drive, 45 mph from Quail Gardens Drive to Village Park Way, and 50 mph from Village Park Way to Rancho Santa Fe Road. This roadway has Class II bike lanes and parking is prohibited. Sidewalks are provided on both sides of the majority of this roadway, but there are intermittent gaps.

F Street is a two-lane undivided roadway with a posted speed limit of 25 mph between Vulcan Avenue and Cornish Drive. East of Cornish Drive, F Street becomes Requeza Street but it keeps the same two-lane undivided roadway configuration as well as the same posted speed limit of 25 mph until reaching Nardo Road. Sidewalks are not present on either side of the roadway along F Street but are intermittently present on both sides of the roadway along Requeza Street. Bicycle lanes are not present on either side of the roadway and parking is permitted intermittently on both sides of the roadway.

Santa Fe Drive is a two-lane undivided roadway with a posted speed limit of 35 mph between Vulcan Avenue and Rubenstein Avenue. East of Rubenstein Avenue, Santa Fe Drive varies between a two-lane and a three-lane (one-lane eastbound, two-lane westbound) roadway with a raised median and a posted speed limit of 35 mph until reaching the I-5 NB on-off ramps. East of the I-5 NB on-off ramps, Santa Fe Drive is a two-lane roadway with a continuous-left-turn-lane median and a posted speed limit of 35 mph until reaching its terminus at El Camino Real. Sidewalks and Class II bicycle lanes are present intermittently on both sides of the roadway. Parking is permitted intermittently on both sides of the roadway.

Birmingham Drive is a two-lane undivided roadway with posted speed limits of 30 and 35 mph between San Elijo Avenue and Playa Riviera, and between Playa Riviera and Lake Drive, respectively. Sidewalks are present intermittently on both sides of the roadway but bicycle lanes are not present on either side. Parking is permitted intermittently along Birmingham Drive within the study area.

Lone Jack Road is a two-lane undivided roadway with a posted speed limit of 40 mph between Rancho Santa Fe Road and its northern terminus at Lone Hill Lane. While

sidewalks and bike lanes are not present, a trail is located along a portion of this roadway. Parking is prohibited on both sides of the roadway.

El Camino Del Norte is a two-lane undivided roadway with a posted speed limit of 40 mph between Rancho Santa Fe Road and the County of San Diego boundary. Sidewalks and bicycle lanes are not present on either side of the roadway. Parking is prohibited on both sides of the roadway.

4.13.1.2 Existing Traffic Volumes and Level of Service

Roadway segment volumes and intersection turning movements were determined based on traffic counts taken in June 2015. To determine the current operations of roadway segments, intersections, freeway segments, freeway intersection capacity, and ramp meter conditions, the standards and thresholds of the overseeing jurisdiction were utilized.

The County of San Diego utilizes the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements - Transportation and Traffic (2011) to analyze traffic operations. The study area only includes roadway segments within the County and does not include intersections. Intersection operations are evaluated based on a Level of Service (LOS) analysis. The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream, and the motorist's perception of operations. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. The segments LOS is based on the average daily traffic (ADT).

The cities of Encinitas, Solana Beach, and Carlsbad as well as Caltrans utilize the SANTEC/ITE Guidelines. This analysis utilizes a LOS analysis to assess roadway segments, intersections, and freeway segments operations. As part of determining the LOS on area roadways, a volume to capacity (v/c) ratio is used that considers the ADT and capacity of each segment within the study area. The capacity is based on the roadway standards set by the jurisdiction. The minimum acceptable operating condition for freeway segments, roadway segments, and intersections is LOS D. For freeway ramp meters, Caltrans has established 15 minutes or less of delay per vehicle as the minimum acceptable operating condition. Below is additional information on the analysis of each type of roadway facility. Signalized freeway ramp intersections Intersecting Lane Volume (ILV) information is required to be completed per Caltrans procedures (Topic 406 of the Caltrans *Highway Design Manual).* The ILV analysis is included below for informational purposes and is not intended to be utilized in determining the significance of project impacts. Additional information regarding operating levels is provided below.

Roadways

The analysis of roadway segment level of service is based on the functional classification of the roadway, maximum capacity, roadway geometrics, and existing or forecasted ADT volumes. Standards for ascertaining roadway level of service vary by jurisdiction. The cities of Carlsbad and Solana Beach utilize the roadway segment LOS standards and thresholds from the SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego

Region. The unincorporated County of San Diego LOS standards are based on the County of San Diego Public Road Standards (County of San Diego 2012) and the City of Encinitas level of service analysis was performed by utilizing the City of Encinitas Public Road Standards (1991). The City aims to achieve LOS C based on the Encinitas Circulation Element Goal 1.2, but LOS D is considered acceptable for Circulation Element roadway segments in all jurisdictions within the project study area (see Appendix M for Circulation Element policy consistency analysis). Typically, the performance and level of service of a roadway segment is heavily influenced by the ability of the arterial intersections to accommodate peak hour volumes.

Intersections

The intersection analysis was completed for the highest traffic-generating housing strategy, which is housing strategy 3 - Modified Mixed Uses Places (MMUP). The intersection analysis was completed for both signalized and unsignalized intersections based on the HCM 2010 methods, which defines intersection level of service as a function of intersection control delay in terms of seconds per vehicle (sec/veh). For signalized intersections, the "average stopped delay per vehicle" is utilized. The stop-controlled unsignalized intersection analysis utilizes "average control delay." The delay for each of these analyses corresponds to a LOS rating. Similar to the roadway analysis, LOS A to LOS D represent acceptable levels and LOS E or LOS F represent unacceptable traffic flow.

Freeway Segments

Freeway level of service analysis is based upon procedures developed by Caltrans. The procedure for calculating freeway level of service involves estimating a peak hour V/C ratio. The V/C ratio corresponds to a LOS rating, again with LOS A to LOS D representing acceptable levels and LOS E to LOS F representing unacceptable traffic flow.

Freeway Ramp Intersection Capacity

Caltrans also requires a ramp intersection capacity analysis utilizing the ILV procedures as described in Topic 406 of the Caltrans *Highway Design Manual* (HDM). This analysis determines if the intersection would be under capacity, at capacity, or over capacity based on lane volume rates alone. This analysis does not consider the adjacent area operations affecting the ramp intersection and is just an additional validation tool. This analysis is just for informational purposes and is not utilized by either the City or Caltrans in determining impact significance (see Caltrans procedures identified in Topic 406 of the Caltrans *Highway Design Manual).*

Ramp Meters

Caltrans utilizes ramp meters to control the volume of traffic entering the freeway. Similar to intersection analysis, the analysis is based on the delay per vehicle at the ramp meter. However, the delay per vehicle is measured in minutes. Ramp metering delay represents how long the peak hour (ramp metering) would need to be extended in order to

accommodate the excess vehicles. A delay above 15 minutes at a ramp is considered unacceptable.

a. Roadway Segment Conditions

Existing roadway segment operations are summarized in Table 4.13-1 and shown in Figure 4.13-1. As summarized in Table 4.13-1, the following 19 roadway segments within the project study area currently operate at substandard level of service E or F, with 11 segments located in Encinitas, 2 located in Carlsbad, and 1 located in the unincorporated County of San Diego:

City of Encinitas

- South Coast Highway 101, between Swami's Parking and San Elijo State Beach – LOS F;
- Rancho Santa Fe Road, between 9th Street and 8th Street – LOS E;
- Rancho Santa Fe Road, between 8th Street and 7th Street – LOS E;
- Manchester Avenue, between I-5 NB Ramps and I-5 SB Ramps – LOS F;
- La Costa Avenue, between Vulcan Avenue and Sheridan Road – LOS F;
- Leucadia Boulevard, between Quail Gardens Drive and Garden View Road – LOS E;
- Encinitas Boulevard, between I-5 SB Ramps and I-5 NB Ramps – LOS F;
- Encinitas Boulevard, between I-5 NB Ramps and Saxony Road – LOS F;
- Encinitas Boulevard, between Balour Drive and Via Cantebria – LOS F;
- South Rancho Santa Fe Road, between Manchester Avenue and City of Encinitas Limits – LOS E; and
- Birmingham Drive, between I-5 SB Ramps and I-5 NB Ramps – LOS F.

City of Carlsbad

- La Costa Avenue, between Piraeus Street and Saxony Road – LOS E; and
- La Costa Avenue, between Saxony Road and El Camino Real – LOS E.

County of San Diego

- South Rancho Santa Fe Road, between City of Encinitas Limits and El Mirlo – LOS F.

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Carlsbad Blvd.	Poinsettia Lane to Avenida Encinas	4-Lane Major Arterial	Carlsbad	12,160	40,000	0.304	A
	Avenida Encinas to La Costa Avenue	4-Lane Major Arterial	Carlsbad	16,194	40,000	0.405	B
North Coast Highway 101	La Costa Avenue to 600 feet south of La Costa Avenue	4-Lane Major Roadway	Encinitas	18,070	35,200	0.513	C or better
	600 feet south of La Costa Avenue to Leucadia Blvd	3-Lane Major Roadway (1 NB 2 SB)	Encinitas	17,378	26,400	0.658	C or better
	Leucadia Blvd to Cadmus Street	4-Lane Major Roadway	Encinitas	19,145	35,200	0.544	C or better
	Cadmus Street to Marcheta Street	4-Lane Major Roadway	Encinitas	19,145	35,200	0.544	C or better
	Marcheta Street to 660 feet south of Marcheta Street	4-Lane Major Roadway	Encinitas	19,145	35,200	0.544	C or better
	660 feet south of Marcheta Street to Encinitas Blvd	4-Lane Major Roadway	Encinitas	19,145	35,200	0.544	C or better
South Coast Highway 101	Encinitas Blvd to West D Street	4-Lane Major Roadway	Encinitas	18,746	35,200	0.533	C or better
	West D Street to West E Street	4-Lane Major Roadway	Encinitas	18,746	35,200	0.533	C or better
	West E Street to West F Street	4-Lane Major Roadway	Encinitas	18,746	35,200	0.533	C or better
	West F Street to West H Street	4-Lane Major Roadway	Encinitas	18,746	35,200	0.533	C or better
	West H Street to West J Street	4-Lane Major Roadway	Encinitas	20,337	35,200	0.578	C or better
	West J Street to Swami's Parking	3-Lane Major Roadway (2 NB 1 SB)	Encinitas	20,337	26,400	0.770	C or better
	Swami's Parking to San Elijo State Beach	2-Lane Local Roadway	Encinitas	20,550	14,000	1.468	**F**
	San Elijo State Beach to Chesterfield	4-Lane Major Roadway	Encinitas	20,682	35,200	0.588	C or better
	Chesterfield to Cardiff State Beach traffic signal	4-Lane Major Roadway	Encinitas	20,682	35,200	0.588	C or better
	Cardiff Beach State to Chart House traffic signal	4-Lane Major Roadway	Encinitas	20,682	35,200	0.588	C or better
	Chart House traffic signal to Las Olas Mexican Restaurant traffic signal	4-Lane Major Roadway	Encinitas	20,682	35,200	0.588	C or better
	Las Olas Mexican Restaurant to Solana Beach boundary	4-Lane Major Roadway	Encinitas	20,682	35,200	0.588	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
North Highway 101	Solana Beach boundary to West Cliff Street	4-Lane Major Arterial	Solana Beach	18,611	40,000	0.465	B
	West Cliff to Lomas Santa Fe	4-Lane Major Arterial	Solana Beach	18,611	40,000	0.465	B
	Lomas Santa Fe Drive to Via De La Valle	4-Lane Major Arterial	Solana Beach	17,056	40,000	0.426	B
Vulcan Avenue	La Costa Avenue to Leucadia Boulevard	2-Lane Local Roadway	Encinitas	3,621	14,000	0.259	C or better
	Leucadia Blvd to Encinitas Boulevard	2-Lane Local Roadway	Encinitas	6,221	14,000	0.444	C or better
	Encinitas Boulevard to D Street	4-Lane Collector	Encinitas	10,368	32,400	0.320	C or better
	D Street to E Street	4-Lane Collector	Encinitas	10,368	32,400	0.320	C or better
	E Street to Santa Fe Drive	2-Lane Local Roadway - Augmented	Encinitas	10,486	20,000	0.524	C or better
San Elijo Avenue	Santa Fe Drive to Birmingham Drive	2-Lane Local Roadway	Encinitas	9,332	14,000	0.667	C or better
	Birmingham Drive to Chesterfield Drive	2-Lane Local Roadway - Augmented	Encinitas	9,332	20,000	0.467	C or better
	Chesterfield Drive to Manchester Avenue	2-Lane Local Roadway - Augmented	Encinitas	9,332	20,000	0.467	C or better
Saxony Road	La Costa Avenue to Quail Gardens Drive	2-Lane Local Roadway	Encinitas	3,137	14,000	0.224	C or better
	Quail Hollow Drive to Normtoy Road	2-Lane Local Roadway	Encinitas	2,858	14,000	0.204	C or better
	Normtoy Road to Brittany Avenue	2-Lane Local Roadway	Encinitas	2,858	14,000	0.204	C or better
	Brittany Avenue to Leucadia Boulevard	2-Lane Local Roadway	Encinitas	2,858	14,000	0.204	C or better
	Leucadia Boulevard to Silver Berry Place	2-Lane Local Roadway	Encinitas	8,973	14,000	0.641	C or better
	Silver Berry Place to Encinitas Boulevard	2-Lane Local Roadway - Augmented	Encinitas	8,973	20,000	0.449	C or better
Quail Hollow Drive	Swallow Tail Road to Saxony Road	2-Lane Local Roadway	Encinitas	3,235	14,000	0.231	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Quail Gardens Drive	Swallow Tail Road to Lauren Court	2-Lane Local Roadway - Augmented	Encinitas	3,235	20,000	0.162	C or better
	Lauren Court to Leucadia Boulevard	2-Lane Local Roadway - Augmented	Encinitas	3,235	20,000	0.162	C or better
	Leucadia Boulevard to Paseo De Las Flores	2-Lane Local Roadway - Augmented	Encinitas	7,897	20,000	0.395	C or better
	Paseo De Las Flores to Paseo De Las Verdes	2-Lane Local Roadway - Augmented	Encinitas	7,897	20,000	0.395	C or better
	Paseo De Las Verdes to Encinitas Boulevard	2-Lane Local Roadway - Augmented	Encinitas	7,897	20,000	0.395	C or better
Westlake Street	Encinitas Boulevard to Requeza Street	2-Lane Local Roadway - Augmented	Encinitas	9,688	20,000	0.484	C or better
Nardo Drive	Requeza Street to Melba Road	2-Lane Local Roadway	Encinitas	4,871	14,000	0.348	C or better
	Melba Road to Santa Fe Drive	2-Lane Local Roadway	Encinitas	4,871	14,000	0.348	C or better
MacKinnon Avenue	Santa Fe Drive to Villa Cardiff Drive	2-Lane Local Roadway	Encinitas	5,413	14,000	0.387	C or better
Villa Cardiff Drive	MacKinnon Avenue to Windsor Road	2-Lane Local Roadway	Encinitas	5,413	14,000	0.387	C or better
	Windsor Road to Birmingham Drive	2-Lane Local Roadway	Encinitas	5,413	14,000	0.387	C or better
Garden View Road	Leucadia Boulevard to Via Cantebria	4-Lane Major Roadway	Encinitas	10,722	35,200	0.305	C or better
	Via Cantebria to El Camino Real	4-Lane Major Roadway	Encinitas	9,663	35,200	0.275	C or better
Town Center Place	Leucadia Boulevard to Town Center Place	4-Lane Collector (Not a CE)	Encinitas	14,817	32,400	0.457	C or better
	Town Center Place to Town Center Drive	4-Lane Collector (Not a CE)	Encinitas	14,817	32,400	0.457	C or better
Via Cantebria	Town Center Drive to Garden View Road	2-Lane Local Collector (Not a CE)	Encinitas	8,524	14,000	0.608	C or better
	Garden View Road to Forrest Bluff	3-Lane Collector (1 NB 2 SB)	Encinitas	13,715	24,300	0.564	C or better
	Forrest Bluff to Via Montoro	4-Lane Collector	Encinitas	13,715	32,400	0.423	C or better
	Via Montoro to Via Molena	4-Lane Collector	Encinitas	16,842	32,400	0.520	C or better
	Via Molena to Encinitas Boulevard	4-Lane Collector	Encinitas	16,842	32,400	0.520	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Balour Drive	Encinitas Boulevard to Melba Road	2-Lane Local Roadway	Encinitas	7,988	14,000	0.571	C or better
	Melba Road to Santa Fe Drive	2-Lane Local Roadway	Encinitas	7,988	14,000	0.571	C or better
Lake Drive	Santa Fe Drive to Woodlake Drive	2-Lane Local Roadway	Encinitas	6,565	14,000	0.469	C or better
	Woodlake Drive to Birmingham Drive	2-Lane Local Roadway	Encinitas	6,565	14,000	0.469	C or better
El Camino Real	Aviara Parkway to La Costa Avenue	5-Lane Prime Arterial (3 NB 2 SB)	Carlsbad	43,934	50,000	0.879	D
	La Costa Avenue to Calle Barcelona	6-Lane Prime Arterial	Carlsbad	34,929	60,000	0.582	B
	Calle Barcelona to Carlsbad boundary	6-Lane Prime Arterial	Carlsbad	34,929	60,000	0.582	B
	Carlsbad boundary to Leucadia Boulevard	6-Lane Prime Arterial – Augmented (3 NB 4 SB)	Encinitas	43,939	66,000	0.666	C or better
	Leucadia Boulevard to Town Center Drive	6-Lane Prime Arterial - Augmented	Encinitas	43,939	66,000	0.666	C or better
	Town Center Drive to Garden View Road	6-Lane Prime Arterial - Augmented	Encinitas	43,939	66,000	0.666	C or better
	Garden View Road to 331-339 El Camino Real	6-Lane Prime Arterial - Augmented	Encinitas	39,969	66,000	0.606	C or better
	331-339 El Camino Real to Via Montoro	6-Lane Prime Arterial - Augmented	Encinitas	39,969	66,000	0.606	C or better
	Via Montoro to Mountain Vista	6-Lane Prime Arterial - Augmented	Encinitas	39,969	66,000	0.606	C or better
	Mountain Vista to Via Molena	6-Lane Prime Arterial - Augmented	Encinitas	41,968	66,000	0.636	C or better
	Via Molena to Encinitas Boulevard	6-Lane Prime Arterial - Augmented	Encinitas	41,968	66,000	0.636	C or better
	Encinitas Blvd. to 213 S El Camino Real	6-Lane Prime Arterial	Encinitas	33,151	57,000	0.582	C or better
	213 S El Camino Real to Crest Drive	6-Lane Prime Arterial	Encinitas	33,151	57,000	0.582	C or better
	Crest Drive to Willowspring Drive	6-Lane Prime Arterial	Encinitas	33,151	57,000	0.582	C or better
	Willowspring Drive to Santa Fe Drive	4 Lane Major Roadway-Augmented	Encinitas	33,151	45,400	0.730	C or better
	Santa Fe Drive to Sage Canyon Drive	4 Lane Major Roadway-Augmented (3 NB 2 SB)	Encinitas	23,024	45,400	0.507	C or better
	Sage Canyon Drive to Manchester Avenue	4-Lane Major Roadway	Encinitas	23,024	35,200	0.654	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Village Park Way	Mountain Vista Drive to Parkdale Drive	4-Lane Major Roadway	Encinitas	6,341	35,200	0.180	C or better
	Parkdale Drive to Encinitas Boulevard	4-Lane Major Roadway	Encinitas	6,341	35,200	0.180	C or better
Rancho Santa Fe Road	Olivenhain Road to Calle Acervo	4-Lane Major Arterial	Carlsbad	17,363	40,000	0.434	B
	Calle Acervo/Avenida La Posta to Olive Crest Drive	2-Lane Local Roadway – Augmented	Encinitas	14,901	20,000	0.745	C or better
	Olive Crest Drive to 13th Street	2-Lane Local Roadway – Augmented	Encinitas	14,901	20,000	0.745	C or better
	13th Street to 11th Street	2-Lane Local Roadway - Augmented	Encinitas	14,901	20,000	0.745	C or better
	11th Street to El Camino Del Norte	2-Lane Local Roadway - Augmented	Encinitas	15,146	20,000	0.757	C or better
	El Camino Del Norte to 9th Street	2-Lane Local Roadway - Augmented	Encinitas	13,236	20,000	0.662	C or better
	9th Street to 8th Street	2-Lane Local Roadway	Encinitas	13,236	14,000	0.945	E
	8th Street to 7th Street	2-Lane Local Roadway	Encinitas	13,236	14,000	0.945	E
	7th Street to Encinitas Boulevard	2-Lane Local Roadway	Encinitas	13,236	20,000	0.662	C or better
Manchester Avenue	Manchester Avenue to Mira Costa College	4 Lane Major Roadway- Augmented	Encinitas	19,595	45,400	0.432	C or better
	Mira Costa College to I-5 NB On-Ramp	4 Lane Major Roadway- Augmented	Encinitas	19,595	45,400	0.432	C or better
	I-5 NB Ramps to I-5 SB Ramps	2-Lane Local Roadway - Augmented	Encinitas	26,567	20,000	1.328	F
	I-5 SB Ramps to Ocean Cove Drive	2-Lane Local Roadway - Augmented	Encinitas	7,598	20,000	0.380	C or better
	Ocean Cove Drive to Seaside Cardiff-by-the-sea residential area driveway	2-Lane Local Collector	Encinitas	7,598	14,000	0.543	C or better
	Seaside Cardiff-by-the-sea residential area driveway to San Elijo Water Reclamation Facility Driveway	2-Lane Local Roadway - Augmented	Encinitas	7,598	20,000	0.380	C or better
	San Elijo Water Reclamation Facility Driveway to Manchester Avenue	2-Lane Local Collector	Encinitas	7,598	14,000	0.543	C or better
	Encinitas Boulevard to El Camino Real	2-Lane Local Collector – Augmented	Encinitas	5,989	20,000	0.299	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
La Costa Avenue	North Coast Highway 101 to Vulcan Avenue	2-Lane Local Roadway	Encinitas	11,888	14,000	0.850	D
	Vulcan Avenue to Sheridan Road	2-Lane Local Roadway	Encinitas	14,258	14,000	1.018	F
	Sheridan Road to I-5 SB Ramps	2-Lane Local Roadway	Encinitas	14,258	20,000	0.713	C or better
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Arterial	Carlsbad	25,817	40,000	0.645	C
	I-5 NB Ramps to Piraeus Street	5-Lane Major Arterial (2 EB 3 WB)	Carlsbad	36,550	41,667	0.877	D
	Piraeus Street to Saxony Road	4-Lane Major Arterial	Carlsbad	36,550	40,000	0.914	E
	Saxony Road to El Camino Real	4-Lane Major Arterial	Carlsbad	37,683	40,000	0.942	E
	El Camino Real to La Costa Towne Center traffic signal	4-Lane Major Arterial	Carlsbad	15,999	40,000	0.400	B
	La Costa Towne Center traffic signal to Fairway Lane	4-Lane Major Arterial	Carlsbad	15,999	40,000	0.400	B
	Fairway Lane to Calle Madero	3-Lane Collector6	Carlsbad	15,999	22,500	0.711	D

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Leucadia Blvd	North Coast Highway 101 to Vulcan Avenue	4-Lane Collector	Encinitas	12,188	32,400	0.376	C or better
	Vulcan Avenue to Hermes Avenue	2-Lane Local Roadway - Augmented	Encinitas	14,933	20,000	0.747	C or better
	Hermes Avenue to Hygeia Avenue	2-Lane Local Roadway - Augmented	Encinitas	14,933	20,000	0.747	C or better
	Hygeia Avenue to Hymettus Avenue	2-Lane Local Roadway - Augmented	Encinitas	14,933	20,000	0.747	C or better
	Hymettus Avenue to Orpheus Avenue	2-Lane Local Roadway - Augmented	Encinitas	14,933	20,000	0.747	C or better
	Orpheus Avenue to I-5 SB Ramps	4-Lane Major Roadway	Encinitas	14,933	35,200	0.424	C or better
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Roadway (2 EB 3 WB)	Encinitas	22,721	35,200	0.645	C or better
	Piraeus Street to Urania Avenue	4 Lane Major Roadway-Augmented	Encinitas	38,099	45,400	0.839	D
	Urania Avenue to Saxony Road	4 Lane Major Roadway-Augmented	Encinitas	38,099	45,400	0.839	D
	Saxony Road to Sidonia Street	4 Lane Major Roadway-Augmented	Encinitas	40,117	45,400	0.884	D
	Sidonia Street to Quail Gardens Drive	4 Lane Major Roadway-Augmented	Encinitas	40,117	45,400	0.884	D
	Quail Gardens Drive to Garden View Road	4 Lane Major Roadway-Augmented	Encinitas	43,786	45,400	0.964	E
	Garden View Road to Town Center Place	4 Lane Major Roadway-Augmented (3 EB 2 WB)	Encinitas	31,439	45,400	0.692	C or better
	Town Center Place to El Camino Real	6-Lane Prime Arterial	Encinitas	34,214	57,000	0.600	C or better
Mountain Vista Drive	El Camino Real to Wandering Road	2-Lane Local Roadway - Augmented (2 EB 1 WB)	Encinitas	11,478	20,000	0.574	C or better
	Wandering Road to Village Park Way	2-Lane Local Roadway - Augmented	Encinitas	7,093	20,000	0.355	C or better
Lone Jack Drive	Rancho Santa Fe Road to northern terminus	2-Lane Local Roadway	Encinitas	6,745	14,000	0.482	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
El Camino Del Norte	Rancho Santa Fe Road to San Dieguito CPA boundary	2-Lane Local Roadway	Encinitas	6,915	14,000	0.494	C or better
	San Dieguito CPA boundary to Via De Fortuna	2-Lane Light Collector with Reduced Shoulder	County	6,915	9,700	0.713	C
Encinitas Blvd	North Coast Highway 101 to Vulcan Avenue	4-Lane Collector	Encinitas	21,095	32,400	0.651	C or better
	Vulcan Avenue to I-5 SB Ramps	4-Lane Major Roadway - Augmented	Encinitas	20,790	45,400	0.458	C or better
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Roadway	Encinitas	32,420	35,200	0.921	E
	I-5 NB Ramps to Saxony Road	4-Lane Major Roadway	Encinitas	38,312	35,200	1.088	F
	Saxony Road to Calle Magdalena	6-Lane Prime Arterial - Augmented	Encinitas	31,737	66,000	0.481	C or better
	Calle Magdalena to Encinitas Town Country traffic signal	6-Lane Prime Arterial	Encinitas	31,737	57,000	0.557	C or better
	Encinitas Town Country traffic signal to Quail Gardens Drive	4-Lane Major Roadway- Augmented (3 EB 2 WB)	Encinitas	31,737	45,400	0.699	C or better
	Quails Garden Drive to Delphinium Street	4-Lane Major Roadway	Encinitas	27,446	35,200	0.780	C or better
	Delphinium Street to Balour Drive	4-Lane Major Roadway	Encinitas	27,446	35,200	0.780	C or better
	Balour Drive to Via Cantebria	4-Lane Major Roadway	Encinitas	38,142	35,200	1.084	F
	Via Cantebria to El Camino Real	4-Lane Major Roadway	Encinitas	26,806	35,200	0.762	C or better
	El Camino Real to Village Square Drive	4-Lane Major Roadway	Encinitas	28,841	35,200	0.819	D
	Village Square Drive to Turner Avenue	4-Lane Major Roadway	Encinitas	28,841	35,200	0.819	D
	Turner Avenue to Cerro Street	4-Lane Major Roadway	Encinitas	28,841	35,200	0.819	D
	Cerro Street to Village Park Way	4-Lane Major Roadway	Encinitas	28,841	35,200	0.819	D
	Village Park Way to Willowspring Drive	4-Lane Major Roadway	Encinitas	22,619	35,200	0.643	C or better
	Willowspring Drive to Rancho Santa Fe Road	4-Lane Major Roadway	Encinitas	22,619	35,200	0.643	C or better
South Rancho Santa Fe Road	**Manchester Avenue to Encinitas Limits**	2-Lane Local Roadway - Augmented	Encinitas	18,476	20,000	0.924	E
	Encinitas Limits to El Mirlo	2-Lane Light Collector with Reduced Shoulder	County	18,476	9,700	1.905	F

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
F Street	Vulcan Avenue to Cornish Drive	2-Lane Local Roadway	Encinitas	5,631	14,000	0.402	C or better
Requeza Street	Cornish Drive to San Dieguito Drive	2-Lane Local Roadway	Encinitas	5,631	14,000	0.402	C or better
	San Dieguito Drive to Stratford Drive	2-Lane Local Roadway	Encinitas	5,631	14,000	0.402	C or better
	Stratford Drive to Regal Road	2-Lane Local Roadway	Encinitas	5,631	14,000	0.402	C or better
	Regal Road to West Lake Drive	2-Lane Local Roadway	Encinitas	5,631	14,000	0.402	C or better
	West Lake Drive to Nardo Drive	2-Lane Local Roadway	Encinitas	4,516	14,000	0.323	C or better
Santa Fe Drive	Vulcan Avenue to Cornish Drive	2-Lane Local Roadway	Encinitas	8,554	14,000	0.611	C or better
	Cornish Drive to Summit Avenue	2-Lane Local Roadway	Encinitas	8,554	14,000	0.611	C or better
	Summit Avenue to Devonshire	2-Lane Local Roadway	Encinitas	8,554	14,000	0.611	C or better
	Devonshire Drive to Scripps Memorial Hospital Encinitas traffic signal	2-Lane Local Roadway - Augmented	Encinitas	12,974	20,000	0.649	C or better
	Scripps Memorial Hospital Encinitas traffic signal to I-5 SB Ramps	4-Lane Collector	Encinitas	12,974	32,400	0.400	C or better
	I-5 SB Ramps to I-5 NB Ramps	3-Lane Major Roadway (1 EB 2 WB)	Encinitas	19,070	26,400	0.722	C or better
	I-5 NB Ramps to Regal Road	2-Lane Local Roadway - Augmented	Encinitas	13,743	20,000	0.687	C or better
	Regal Road to Gardena Road	2-Lane Local Roadway - Augmented	Encinitas	13,743	20,000	0.687	C or better
	Gardena Road to Nardo Road	2-Lane Local Roadway - Augmented	Encinitas	13,743	20,000	0.687	C or better
	Nardo Road to Windsor Road/Bonita Drive	2-Lane Local Roadway - Augmented	Encinitas	15,036	20,000	0.752	C or better
	Windsor Road/Bonita Drive to Balour Drive	2-Lane Local Roadway - Augmented	Encinitas	15,036	20,000	0.752	C or better
	Balour Drive to Lake Drive	2-Lane Local Roadway - Augmented	Encinitas	15,817	20,000	0.791	C or better
	Lake Drive to Crest Drive	2-Lane Local Roadway	Encinitas	15,107	20,000	0.755	C or better
	Crest Drive to El Camino Real	2-Lane Local Roadway - Augmented	Encinitas	15,107	20,000	0.755	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Birmingham Drive	**San Elijo Avenue to Newcastle Avenue**	2-Lane Local Roadway - Augmented	Encinitas	14,588	20,000	0.729	C or better
	Newcastle Avenue to Manchester Avenue	2-Lane Local Collector	Encinitas	14,588	14,000	1.042	F
	Manchester Avenue to Montgomery Avenue	2-Lane Local Collector	Encinitas	14,588	14,000	1.042	F
	Montgomery Avenue to Cambridge Avenue	2-Lane Local Collector	Encinitas	14,588	14,000	1.042	F
	Cambridge Avenue to MacKinnon Avenue	2-Lane Local Collector	Encinitas	14,588	14,000	1.042	F
	MacKinnon Avenue to Carol View Drive	2-Lane Local Roadway - Augmented	Encinitas	14,588	20,000	0.729	C or better
	Carol View Drive to I-5 SB Ramps	2-Lane Local Roadway - Augmented	Encinitas	14,588	20,000	0.729	C or better
	I-5 SB Ramps to I-5 NB Ramps	2-Lane Local Local Roadway	Encinitas	16,342	14,000	1.167	F
	I-5 NB Ramps to Villa Cardiff Drive	2-Lane Local Local Roadway	Encinitas	8,248	14,000	0.589	C or better
	Villa Cardiff Drive to Playa Rivera	2-Lane Local Local Roadway	Encinitas	8,248	14,000	0.589	C or better
	Playa Rivera to Freda Lane	2-Lane Local Local Roadway	Encinitas	8,248	14,000	0.589	C or better
	Freda Lane to Lake Drive	2-Lane Local Local Roadway (1 EB 2 WB)	Encinitas	8,248	14,000	0.589	C or better

SOURCE: Appendix N.
Bolding represents a facility operating at substandard LOS E or F.

b. Intersection Conditions

A total of 53 intersections were studied, including nine within the City of Carlsbad. As shown in Table 4.13-2, all intersections in the study area operate at an acceptable LOS D or better with the exception of the following 11 intersections, including 9 in the City of Encinitas and 2 in the City of Carlsbad:

City of Encinitas

- Garden View Road & Leucadia Boulevard – LOS F during PM peak hour;
- Town Center Place & Leucadia Boulevard – LOS E during PM peak hour;
- El Camino Real & Leucadia Boulevard – LOS E during AM peak hour;
- Rancho Santa Fe Road & Lone Jack Road – LOS E during both AM and PM peak hours;
- El Camino Real & Encinitas Boulevard – LOS E during PM peak hour;
- San Elijo Avenue & Santa Fe Drive – LOS E during AM peak hour;
- I-5 SB Ramps & Birmingham Drive (Caltrans) – LOS F during AM peak hour;
- I-5 NB Ramps & Birmingham Drive (Caltrans) – LOS E during both AM and PM peak hours; and
- I-5 SB Ramps & Manchester Avenue (Caltrans) – LOS E during AM peak hour.

City of Carlsbad

- I-5 SB Ramps & La Costa Avenue (Caltrans) – LOS E during AM peak hour;
- El Camino Real & La Costa Avenue – LOS E during both AM and PM peak hour.

Table 4.13-2
Existing Intersection Level of Service

ID	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour		Jurisdiction
			Average Delay (Seconds)	LOS	Average Delay (Seconds)	LOS	
1	Carlsbad Boulevard & Poinsettia Lane	Signalized	7.6	A	20.9	C	Carlsbad
2	I-5 SB Ramps & Poinsettia Lane	Signalized	14.4	B	19.7	B	Caltrans
3	I-5 NB Ramps & Poinsettia Lane	Signalized	21.2	C	23.1	C	Caltrans
4	Aviara Parkway & Poinsettia Lane	Signalized	27.2	C	28.0	C	Carlsbad
5	North Coast Highway 101 & La Costa Avenue	Signalized	15.0	B	14.7	B	Encinitas
6	Vulcan Avenue & La Costa Avenue	SSSC	24.6	C	31.0	D	Encinitas
7	**I-5 SB Ramps & La Costa Avenue**	Signalized	65.3	**E**	36.2	D	Caltrans
8	I-5 NB Ramps & La Costa Avenue	Signalized	32.0	C	53.3	D	Caltrans
9	Piraeus Street & La Costa Avenue	Signalized	13.2	B	7.7	A	Caltrans
10	Saxony Road & La Costa Avenue	Signalized	13.6	B	21.4	C	Carlsbad
11	**El Camino Real & La Costa Avenue**	Signalized	58.6	**E**	59.8	**E**	Carlsbad
12	North Coast Highway 101 & Leucadia Boulevard	Signalized	27.0	C	24.8	C	Encinitas
13	Vulcan Avenue & Leucadia Boulevard	Signalized	10.6	B	9.6	A	Encinitas
14	Orpheus Avenue & Leucadia Boulevard	Signalized	14.8	B	13.8	B	Caltrans
15	I-5 SB Ramps & Leucadia Boulevard	Signalized	12.8	B	14.0	B	Caltrans
16	I-5 NB Ramps & Leucadia Boulevard	Signalized	11.8	B	34.2	C	Caltrans
17	Saxony Road & Leucadia Boulevard	Signalized	34.3	C	40.3	D	Encinitas
18	Quail Gardens Drive & Leucadia Boulevard	Signalized	22.9	C	26.6	C	Encinitas
19	**Garden View Road & Leucadia Boulevard**	Signalized	45.6	D	124.5	**F**	Encinitas
20	**Town Center Place & Leucadia Boulevard**	Signalized	20.9	C	78.9	**E**	Encinitas
21	**El Camino Real & Leucadia Boulevard**	Signalized	57.5	**E**	54.9	D	Encinitas
22	El Camino Real & Town Center Drive	Signalized	12.8	B	21.0	C	Encinitas
23	El Camino Real & Garden View Road	Signalized	22.6	C	36.3	D	Encinitas
24	El Camino Real & Mountain Vista Drive	Signalized	20.8	C	30.0	C	Encinitas
25	**Rancho Santa Fe Road & Lone Jack Road**	AWSC	37.2	**E**	37.6	**E**	Encinitas

Table 4.13-2
Existing Intersection Level of Service

ID	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour		Jurisdiction
			Average Delay (Seconds)	LOS	Average Delay (Seconds)	LOS	
26	El Camino Real & Via Molena	Signalized	15.1	B	26.6	C	Encinitas
27	Rancho Santa Fe Road & El Camino Del Norte	AWSC	33.2	D	29.6	D	Encinitas
28	North Coast Highway 101 & Encinitas Boulevard	Signalized	29.1	C	27.8	C	Encinitas
29	S Vulcan Avenue & Encinitas Boulevard	Signalized	25.7	C	24.4	C	Encinitas
30	I-5 SB Ramps & Encinitas Boulevard	Signalized	32.1	C	29.1	C	Caltrans
31	I-5 NB Ramps & Encinitas Boulevard	Signalized	16.5	B	48.5	D	Caltrans
32	Saxony Road & Encinitas Boulevard	Signalized	19.6	B	26.8	C	Caltrans
33	Quail Gardens Drive & Encinitas Boulevard	Signalized	39.4	D	42.7	D	Encinitas
34	Balour Drive & Encinitas Boulevard	Signalized	9.5	A	16.9	B	Encinitas
35	Via Cantebria & Encinitas Boulevard	Signalized	7.7	A	31.5	C	Encinitas
36	**El Camino Real & Encinitas Boulevard**	Signalized	48.0	D	77.2	**E**	Encinitas
37	Village Square Drive & Encinitas Boulevard	Signalized	13.3	B	40.2	D	Encinitas
38	Village Park Way & Encinitas Boulevard	Signalized	18.1	B	20.7	C	Encinitas
39	Rancho Santa Fe Road & Encinitas Boulevard	Signalized	48.6	D	40.7	D	Encinitas
40	**San Elijo Avenue & Santa Fe Drive**	AWSC	35.9	**E**	14.9	B	Encinitas
41	I-5 SB Ramps & Santa Fe Drive	Signalized	18.2	B	30.9	C	Caltrans
42	I-5 NB On-Ramp & Santa Fe Drive	Signalized	5.3	A	19.2	B	Caltrans
43	I-5 NB Off-Ramp/Regal Road & Santa Fe Drive	Signalized	28.2	C	52.8	D	Caltrans
44	MacKinnon Avenue & Santa Fe Drive	Signalized	18.3	B	13.4	B	Encinitas
45	Balour Drive & Santa Fe Drive	SSSC	28.4	D	18.9	C	Encinitas
46	Lake Drive & Santa Fe Drive	Signalized	6.8	A	7.2	A	Encinitas
47	El Camino Real & Santa Fe Drive	Signalized	13.5	B	12.8	B	Encinitas
48	San Elijo Avenue & Birmingham Drive	Signalized	10.2	B	13.5	B	Encinitas
49	**I-5 SB Ramps & Birmingham Drive**	SSSC	133.3	**F**	34.4	D	Caltrans
50	**I-5 NB Ramps & Birmingham Drive**	AWSC	41.7	**E**	38.7	**E**	Caltrans

Table 4.13-2
Existing Intersection Level of Service

ID	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour		Jurisdiction
			Average Delay (Seconds)	LOS	Average Delay (Seconds)	LOS	
51	**I-5 SB Ramps & Manchester Avenue**	AWSC	40.5	**E**	22.9	C	Caltrans
52	I-5 NB Ramps & Manchester Avenue	Signalized	22.1	C	20.0	C	Caltrans
53	El Camino Real & Manchester Avenue	Signalized	23.2	C	16.9	B	Encinitas

SOURCE: Appendix N.
LOS = level of service
AWSC = all-way stop controlled
SSSC = side street stop controlled
Bolding represents a facility operating at substandard LOS E or F.

c. Freeway Segment Conditions

Table 4.13-3 includes the I-5 LOS analysis. Year 2013 freeway annual average daily traffic (AADT) volumes were obtained from Caltrans' 2013 Traffic Volumes on California State Highways. Refer to Appendix N for additional methodology information. As shown in Table 4.13-3, all freeway segments within the study area currently operate at LOS D or better during the peak hour with the exception of the following two segments:

- I-5, between Leucadia Boulevard and Encinitas Boulevard – LOS E in the NB direction; and
- I-5, between Manchester Avenue and Lomas Santa Fe Drive – LOS E in the NB direction.

Table 4.13-3
Existing Freeway Segment Level of Service

Freeway	Segment	AADT	Direction	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS
I-5	Palomar Airport Road and Poinsettia Lane	201,000	NB	4M	9,400	8,500	0.90	D
			SB	4M	9,400	8,400	0.89	D
	Poinsettia Lane and La Costa Avenue	204,000	NB	4M	9,400	8,600	0.91	D
			SB	4M	9,400	8,500	0.90	D
	La Costa Avenue and Leucadia Boulevard	208,000	NB	4M	9,400	8,600	0.91	D
			SB	4M	9,400	7,900	0.84	D
	Leucadia Boulevard and Encinitas Boulevard	211,000	**NB**	**4M**	**9,400**	**8,700**	**0.93**	**E**
			SB	4M	9,400	8,000	0.85	D
	Encinitas Boulevard and Santa Fe Drive	210,000	NB	4M	9,400	8,500	0.90	D
			SB	4M	9,400	8,000	0.85	D
	Santa Fe Drive and Birmingham Drive	201,000	NB	4M	9,400	8,100	0.86	D
			SB	4M	9,400	7,700	0.82	D
	Birmingham Drive and Manchester Avenue	203,000	NB	4M	9,400	8,200	0.87	D
			SB	4M	9,400	7,800	0.83	D
	Manchester Avenue and Lomas Santa Fe Drive	215,970*	**NB**	**3M+1A**	**8,460**	**8,200**	**0.97**	**E**
			SB	4M+1A	10,810	8,900	0.82	D
	Lomas Santa Fe Drive and Via De La Valle	208,844*	NB	4M+1A	10,810	8,200	0.76	D
			SB	4M+1A	10,810	8,400	0.78	D

SOURCE: Appendix N.
*Volume was adjusted by subtracting the estimated HOV volume. Bold letter indicates substandard LOS E or F.
AADT = annual average daily traffic.
NB = northbound; SB = southbound.
M = mainline; A = auxiliary lane.
V/C = volume to capacity.
LOS = level of service.

d. Freeway Intersection Capacity Analysis

Ramp meter analysis was conducted at the freeway interchanges in accordance with ILV procedures, and the results are shown in Table 4.13-4. As shown in the table, all of the signalized ramp intersections are currently operating at "Under Capacity" or "At Capacity" conditions during both the AM and PM peak hours. Note that the ILV analysis is provided for informational purposes only per Caltrans procedures and is not utilized to determine impacts.

Table 4.13-4
Existing Ramp Intersection Capacity Analysis

#	Ramp Intersection	Peak Hour	ILV/Hour	Description
2	I-5 SB Ramps / Poinsettia Lane	AM	711	Under Capacity
		PM	963	Under Capacity
3	I-5 NB Ramps / Poinsettia Lane	AM	898	Under Capacity
		PM	931	Under Capacity
7	I-5 SB Ramps / La Costa Avenue	AM	1,062	Under Capacity
		PM	1,015	Under Capacity
8	I-5 NB Ramps / La Costa Avenue	AM	1,080	Under Capacity
		PM	1,003	Under Capacity
15	I-5 SB Ramps / Leucadia Boulevard	AM	712	Under Capacity
		PM	697	Under Capacity
16	I-5 NB Ramps / Leucadia Boulevard	AM	1,051	Under Capacity
		PM	1,353	At Capacity
30	I-5 SB Ramps / Encinitas Boulevard	AM	1,206	At Capacity
		PM	1,414	At Capacity
31	I-5 NB Ramps / Encinitas Boulevard	AM	1,042	Under Capacity
		PM	1,170	Under Capacity
41	I-5 SB Ramps / Santa Fe Drive	AM	1,018	Under Capacity
		PM	1,004	Under Capacity
42	I-5 NB On-Ramp / Santa Fe Drive	AM	641	Under Capacity
		PM	620	Under Capacity
43	I-5 NB Off-Ramp / Regal Road	AM	852	Under Capacity
		PM	924	Under Capacity
52	I-5 NB Ramps / Manchester Avenue	AM	1,091	Under Capacity
		PM	996	Under Capacity

SOURCE: Appendix N.

e. Ramp Meter Conditions

Ramp metering analysis was conducted at the I-5 on-ramps at Poinsettia Lane, La Costa Avenue, Leucadia Boulevard, Encinitas Boulevard, Santa Fe Drive, Birmingham Drive, and Manchester Avenue. As indicated above and described further under Section 4.13.4, Methodology, ramp meter operations analysis is based on the amount of delay experienced per vehicle per hour. Ramp metering delay represents how long the peak hour (ramp metering) would need to be extended in order to accommodate the excess vehicles. Delays of 15 minutes or less are considered acceptable by Caltrans, while delays exceeding

15 minutes are considered unacceptable. As shown in Table 4.13-5, I-5 on-ramps within the study area have an acceptable less than a 15-minute delay except the following two:

- I-5 NB On-Ramp at Leucadia Boulevard – 17.5 minutes during the PM peak hour; and
- I-5 SB On-Ramp at Santa Fe Drive – 20.0 minutes during the AM peak hour.

Table 4.13-5
Existing Ramp Metering Analysis

Location	Peak Hour	Demand[1] (veh/hr)	Estimated SOV Demand[2] (veh/hr)	Demand per Lane (veh/hr/ln)	Meter Rate[3] (veh/hr/ln)	Excess Demand[4] (veh/hr)	Delay Beyond Peak Hour[5] (min)	Queue[6] (ft)
I-5 NB On-Ramp at Poinsettia Lane	AM	568	488	488	Not Metered	0	0	0
	PM	428	330	330	720	0	0	0
I-5 SB On-Ramp at Poinsettia Lane	AM	544	479	239	720	0	0	0
	PM	944	812	406	720	0	0	0
I-5 NB On-Ramp at La Costa Avenue	AM	787	740	740	Not Metered	0	0	0
	PM	573	441	441	720	0	0	0
I-5 SB On-Ramp at La Costa Avenue	AM	708	623	312	720	0	0	0
	PM	870	748	374	720	0	0	0
I-5 NB On-Ramp at Leucadia Boulevard	AM	491	450	450	Not Metered	0	0	0
	PM	652	465	465	360	105	**17.5**	3,050
I-5 SB On-Ramp at Leucadia Boulevard	AM	772	679	340	360	0	0	0
	PM	624	537	268	360	0	0	0
I-5 NB On-Ramp at Encinitas Boulevard	AM	493	468	468	Not Metered	0	0	0
	PM	613	368	368	360	8	1.5	225
I-5 SB On-Ramp at Encinitas Boulevard	AM	713	627	627	720	0	0	0
	PM	617	531	531	720	0	0	0
I-5 NB On-Ramp at Santa Fe Drive	AM	515	515	515	Not Metered	0	0	0
	PM	566	566	566	720	0	0	0
I-5 SB On-Ramp at Santa Fe Drive	**AM**	543	478	478	360	118	**20.0**	3,425
	PM	381	328	328	Not Metered	0	0	0
I-5 NB On-Ramp at Birmingham Drive	AM	391	358	358	Not Metered	0	0	0
	PM	344	245	245	360	0	0	0
I-5 SB On-Ramp at Birmingham Drive	AM	1017	1,017	509	720	0	0	0
	PM	317	317	159	720	0	0	0

Table 4.13-5
Existing Ramp Metering Analysis

Location	Peak Hour	Demand[1] (veh/hr)	Estimated SOV Demand[2] (veh/hr)	Demand per Lane (veh/hr/ln)	Meter Rate[3] (veh/hr/ln)	Excess Demand[4] (veh/hr)	Delay Beyond Peak Hour[5] (min)	Queue[6] (ft)
I-5 NB On-Ramp at Manchester Avenue	AM	45	45	45	Not Metered	0	0	0
	PM	68	68	68	360	0	0	0
I-5 SB On-Ramp at Manchester Avenue	AM	1,606	1,606	803	720	83	7.0	2,400
	PM	796	796	398	720	0	0	0

SOURCE: Appendix N.
Bold number represents a delay above the 15-minute threshold.
Veh/hr/ln = vehicles per hour per lane.
Min. = minutes; ft = feet.
[1]Demand is the peak hour demand expected to use the on-ramp.
[2]HOV volumes was deducted from total demand volumes. SOV = single occupancy vehicle.
[3]Meter rate is the peak hour capacity expected to be processed through the ramp meter. This value was obtained from Caltrans. The lowest rate within range was utilized for a more conservative calculation.
[4]Excess Demand = (Demand) – (Meter Rate) or zero, whichever is greater.
[5]Delay beyond Peak Hour = (Excess Demand / Meter Rate) X 60 min/hr. This delay represents how long the peak hour would need to be extended in order to accommodate the excess demand
[6]Queue = (Excess Demand) X 29 ft/veh.

4.14.1.3 Other Mobility Systems

a. Public Transit

Public transit in the City of Encinitas is provided by the North County Transit District (NCTD) with both commuter train (Coaster) and bus services.

Three bus routes (Routes 101, 304, and 309) provide service for the City of Encinitas with headways that vary between 30 and 60 minutes. These bus routes run through main corridors within the City, such as North Coast Highway 101, South Coast Highway 101, Leucadia Boulevard, Encinitas Boulevard, and El Camino Real.

The COASTER commuter train runs north-south connecting eight stations along the San Diego coast between Oceanside and Downtown San Diego. The COASTER stops at the Encinitas Transit Station, located at East D Street, and operates between 5:13 a.m. and 12:15 p.m. during weekdays, between 6:28 a.m. and 7:37 p.m. during Saturdays, and between 8:36 a.m. and 6:17 p.m. during Sundays and holidays. The COASTER operates with approximately 90-minute headways during weekdays and approximately 3-hour headways during weekends and holidays.

b. Bicycle

The Circulation Element of the adopted City of Encinitas General Plan identifies the following three types of bikeway system facilities:

- Bike Path (Class I) – A bike path provides for exclusive bicycle travel separated from vehicular travel.
- Bike Lane (Class II) – Bike lanes consist of a paved roadway lane marked for bicycle use.
- Shared Route (Class III) – A shared route is a conventional street where bike routes are identified by signage only and bicycles share the roadway with vehicles.

The City includes bicycle facilities along Highway 101 and several major roadways. The Highway 101 corridor is one of the most heavily used bicycle corridors in the county, and includes Class II and Class III facilities. Roadways that include Class II bicycle facilities are Carlsbad Boulevard, Quail Gardens Drive, Nardo Road, Garden View Road, Via Cantebria, El Camino Real, Rancho Santa Fe Road, Manchester Avenue, La Costa Avenue, Leucadia Boulevard, Mountain Vista Drive, Encinitas Boulevard, and Santa Fe Drive. For additional details regarding the existing bike routes, refer to the City's Bikeway Master Plan (2005).

c. Pedestrian

The City's planned pedestrian circulation system consists of connecting sidewalks along roadways as well as recreational trails. These designated pedestrian walkways would provide separation from vehicular traffic. The City recognizes the varying pedestrian needs between the urban and rural areas, safe routes to school, as well as pedestrian access to the coastal zone. As such, the City adopted the Let's Move Encinitas Pedestrian Travel & Safe Routes to School Plan in March 2015 to plan for safe pedestrian routes throughout the City. This plan identifies potential improvement locations based on the need for pedestrian facilities and existing safety issues.

4.13.2 Regulatory Framework

Several existing regulations provide transportation and traffic guidance, including Federal, State, regional, and local programs and regulations. Applicable regulations are discussed below and include the Highway Capacity Manual (HCM), San Diego Forward, State Transportation Improvement Program (STIP), Regional Transportation Improvement Program, the City General Plan/Local Costal Program, and the City Roadway Standards.

4.13.2.1 Federal

2010 Highway Capacity Manual

Prepared by the Transportation Research Board, the 2010 HCM is a joint effort between the Transportation Research Board, Federal Highway Administration (FHWA), and American Association of State Highway and Transportation Officials to provide concepts, guidelines, and computational procedures for calculating capacity and quality of service for highway facilities, including freeways, intersections (signalized and unsignalized), and rural highways. In addition, the 2010 HCM addresses the effects of transit, pedestrians, and bicycles on transportation system performance.

4.13.2.2 State

a. Senate Bill 375 Sustainable Communities and Climate Protection Act

Senate Bill 375 (SB 375) (2008) reduces greenhouse gas (GHG) emissions from passenger vehicles through an integrated approach to regional transportation and land use planning. Local governments have an important role to play in reducing GHG emissions since cities and counties are required to update the housing elements of their general plans to implement their share of their Regional Housing Needs Assessment (RHNA) allocation, which, in areas with Metropolitan Planning Organizations (MPOs), must be consistent with the Sustainable Communities Strategy (SCS) of the regional transportation plans.

There is a strong link between land use, housing location decisions, and strategies to reduce emissions from the transportation sector. Within urbanized areas, residential development accounts for the largest share of land area, constituting a major influence on regional development footprints and travel patterns. As such, integrating transportation and residential land use is one of the most impactful strategies for reducing GHG emissions, as well as other forms of air pollution, for the transportation system. Governmental actions supporting the location, variety and availability of housing are critical to implementing GHG emissions reduction policies. This can support the integration of transportation and housing development, offering more varied and efficient consumer choices. Infill development patterns that emphasizes proximity and connectivity to public transit, walkable areas, employment and service centers and amenities can increase the effectiveness of these relationships.

b. Assembly Bill 1358 Complete Streets Act

Assembly Bill 1358 (AB 1358) (2008) requires all cities and counties, upon the next update of their circulation element, to plan for the development of multimodal transportation networks. AB 1358 places the planning, designing, and building of complete streets into the larger planning framework of the general plan by requiring jurisdictions to amend their circulation elements to plan for multimodal transportation networks. These networks

should allow for all users to effectively travel by motor vehicle, foot, bicycle, and transit to reach key destinations within their community and the larger region.

c. SB 743 Environmental Quality

SB 743 (2013) created a process to change the way projects analyze transportation impacts pursuant to CEQA. Currently, environmental review of transportation impacts focuses on the delay that vehicles experience at intersections and on roadway segments. That delay is often measured using a metric known as "level of service," or LOS. Under SB 743, the focus of transportation analysis will shift from driver delay to reduction of greenhouse gas emissions, creation of multimodal networks and promotion of a mix of land uses. SB 743 requires the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service for evaluating transportation impacts. The alternative criteria must promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses (OPR 2014). 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.

4.13.2.3 Regional

a. San Diego Forward: The Regional Plan (San Diego Forward) October 2015 (Regional Transportation Plan, Regional Comprehensive Plan and Sustainable Communities Strategy)

San Diego Forward was adopted by the SANDAG Board of Directors on October 9, 2015. San Diego Forward combines and updates the region's two regional planning documents: the Regional Comprehensive Plan (2004) and the Regional Transportation Plan/Sustainable Communities Strategy (2011). San Diego Forward provides a vision for the region's growth through the year 2050. The Plan reflects a strategy for a more sustainable future which includes investing in a transportation network that will provide people more travel choices, protects the environment, creates healthy communities, and stimulates economic growth (SANDAG 2015). San Diego Forward includes a detailed blueprint for how we will invest in our transportation system in ways over the next 35 years. The Regional Plan outlines the investment of nearly $204 billion in year-of expenditure dollars in local, State, and Federal dollars to build a comprehensive, interconnected transportation system that provides choices.

San Diego Forward is discussed more in Chapter 4.6, along with the City's compliance with SB 375. As detailed therein, the main goal of the Plan is to develop an overarching plan for future growth in the County based upon the principles of sustainability and smart growth. The intent of SB 375 is to use the RTP/SCS to integrate regional land use, RHNA, environmental, and transportation planning to ensure efficient regional planning in the future that leads to reduced greenhouse gas emissions from land and transportation uses.

The SCS focuses on "housing and job growth in the urbanized areas where there is existing and planned infrastructure, protect sensitive habitat and open space, invest in a network that gives residents and workers transportation options that reduce GHG emissions, promote equity for all, and implement the plan through incentives and collaboration." The SCS includes four building blocks: (1) a land use component that accommodates the RHNA and includes the protection of sensitive resources, including areas protected under habitat conservation plans; (2) transportation networks including highways, transit, and local streets and roads; (3) transportation demand management strategies; and (4) transportation system management programs and policies.

As a result of SB 375, preparation of local RHNA Plans are required to be coordinated and consistent with the RTP and SCS for the length of the housing element cycle. Local governments play a large role in helping to develop the transportation and land use scenarios used in the SCS development process. Land use authority remains within the purview of the local governments.

From land use planning, building codes, and zoning ordinances, to funding and operating regional transit systems, to air quality regulation, regional and local governments and agencies have considerable control and influence over GHG emissions. Many of these local and regional efforts not only benefit climate and air quality outcomes, but also positively impact resource conservation, quality of life, public health measures, economic indicators, and social equity.

b. State Transportation Improvement Program

The California STIP is an intermodal program of transportation projects that is consistent with the statewide transportation plan and planning processes, metropolitan plans, and Title 23 of the Code of Federal Regulations. The STIP was first prepared in 2006, and is added to every two years by the California Department of Transportation (Caltrans) in cooperation with the Metropolitan Planning Organizations (MPOs) and the regional transportation planning agencies. The most recent STIP Guidelines were adopted on August 27, 2015. In San Diego County, the MPO and regional transportation planning agency is SANDAG. The STIP contains all capital and non-capital transportation projects or identified phases of transportation projects for funding under the Federal Transit Act and Title 23 of the U.S. Code, including federally funded projects.

c. Regional Transportation Improvement Program

The Regional Transportation Improvement Program (RTIP) is also a multi-year program that includes all proposed major highway, arterial, transit, and non-motorized projects in the region. The 2014 RTIP was adopted in September 2014 by the SANDAG Board of Directors, received federal approval in December 2014, and eight RTIP amendments have been approved as of December 2, 2015.

4.13.2.4 Local

a. City of Encinitas General Plan/Local Coastal Program

The General Plan Circulation Element contains policies related to transportation/traffic. Pertinent goals and policies related to transportation and traffic are listed below in Table 4.13-6.

Table 4.13-6
General Plan Goals and Policies Related to Transportation/Traffic

Goal/Policy	Description
City of Encinitas Circulation Element	
Goal 1	Encinitas should have a transportation system that is safe, convenient and efficient, and sensitive to and compatible with surrounding community character. (Coastal Act/30252)
1.2	Endeavor to maintain Level of Service C as a basic design guideline for the local system of roadways understanding that the guideline may not be attainable in all cases.
1.3	Prohibit development which results in Level of Service E or F at any intersection unless no alternatives exist and an overriding public need can be demonstrated.
1.6	Minimize freeway, prime arterial, major, collector, and augmented local access to encourage their use as throughways rather than as access to adjacent properties.
1.7	Encourage adjacent properties to use common access points to access prime arterials, major roads, collectors and augmented local streets.
1.9	Minimize private driveway access onto both major and collector roads.
1.10	Encourage the design of roads and traffic controls to optimize safe traffic flow by minimizing turning, curb parking, uncontrolled access, and frequent stops.
1.15	The City will actively support an integrated transportation program that encourages and provides for mass transit, bicycle transportation, pedestrians, equestrians, and carpooling. (Coastal Act/30252)
1.17	Standards shall be established and implemented to provide for adequate levels of street lighting, based on criteria of safety and related to volumes of vehicular, pedestrian and bicycle activity and potential points of conflict. Such standards shall be designed to respect different community and neighborhood needs for lighting, different community standards for design and special attention given to preservation of dark sky.
Goal 2	The City will make every effort to develop a varied transportation system that is capable of serving both the existing population and future residents while preserving community values and character. (Coastal Act/30252/30253)
2.2	Require new residential development to have roadways constructed to City standards before the roads can be dedicated to the City.
2.10	Establish landscaping buffer and building setback requirements along all roads which are local augmented status or larger, except where inappropriate. (Coastal Act 30252)
2.12	Encourage unique characteristic community design standards for traffic signals and intersection signing and other street improvements, structures and furniture.
2.13	Encourage landscaped medians and parkways on all roadways where practical
2.19	Minimize road widths in rural and semi-rural areas. (Rural defined as ½ acre and above; and semi-rural defined as having a feeling of country even if lot sizes are less than ½ acre)

Table 4.13-6 General Plan Goals and Policies Related to Transportation/Traffic	
Goal/Policy	Description
Goal 3	The City of Encinitas will promote the use of other modes of transport to reduce the dependence on the personal automobile. (Coastal Act/30252)
3.1	The needs of the handicapped will be considered in new development plans including handicapped parking, loading, etc.
3.2	Continue to assist in expanding public transportation and emphasize public transportation in future development with preference given to cost effective alternatives. (Coastal Act/30252)
3.3	Create a safe and convenient circulation system for pedestrians. (Coastal Act/30252)
3.4	Cooperate with San Diego County, SANDAG, and other jurisdictions to help plan and implement a regional multi modal transportation system that is accessible to residents in the City. (Coastal Act/30252)
4.14	Where feasible, minimize the dependence on private motor vehicles. (Coastal Act/30252)
Goal 7	Every effort will be made to have new development, both in the City and in the region, provide for all costs of the incremental expansion of the circulation system necessary to accommodate that development. Costs include, but are not limited to, costs of right of way and construction, including costs of moving utilities and structures, and costs for landscaping and intersection improvement.

b. City of Encinitas Roadway Standards

The City of Encinitas has established roadway standards through the *City of Encinitas Public Road Standards, April 1991* (roadway standards). The roadway standards identify roadway classifications, level of service standards, roadway features for each classification, allowed deviations to the roadway classifications, design standards, and drainage improvements. Future roadway improvements within the City are subject to these roadway standards. When a property is being developed adjacent to an existing roadway that is substandard, the adjacent development is required to provide frontage improvements and any associated right-of-way necessary to bring the roadway up to the roadway standards adjacent to the site.

4.13.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to transportation and traffic would be significant if the Housing Element Update (HEU) project would:

1. Result in buildout of land uses, which would generate an increase in projected traffic that is substantial in relation to the capacity of the existing circulation system (with the addition of funded CIP improvements);

2. Conflict with other standards establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant

components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;

3. Conflict with the City's adopted General or Specific Plan policies supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycle racks, etc.);

4. Result in an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians; or

5. Result in inadequate emergency access.

In October 2009, the San Diego region elected to be exempt from the State Congestion Management Plan and, since this decision, SANDAG has been abiding by 23 Code of Federal Regulations 450.320 to ensure the region's continued compliance with the federal congestion management process. Thus, the CEQA Guidelines Appendix G question regarding Congestion Management Plan compliance is not applicable, and further analysis not included herein.

4.13.4 Methodology

4.13.4.1 Impact Analysis

This traffic section analyzes operating levels, alternative transportation policy consistency, traffic hazards, and emergency access to determine potential impacts of the HEU. As the HEU includes three separate housing strategies and each strategy generates different amounts of traffic with differing distribution patterns, each strategy is analyzed separately under the operating levels analysis. However, due to the nature of traffic modeling, future traffic volumes and impacts associated with buildout of the HEU are identified on a strategy-wide basis and not on a housing site-specific basis. In addition, the HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. Therefore, no analysis relative to the impacts associated with individual housing sites is feasible. Since each strategy would include similar alternative transportation, design, and emergency access requirements, the analysis of those issues is completed for just the HEU as a whole and not by each strategy.

As the HEO has a long-term buildout horizon, this traffic analysis considers how traffic increases associated with buildout of each housing strategy would affect the existing circulation network, along with the funded Capital Improvement Projects (CIP) improvements. The Caltrans' I-5 North Coast Corridor project was also included as a CIP project used in this analysis. This freeway widening project will ultimately improve I-5, from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside, to eight all-purpose lanes and four express lanes.

To determine the circulation system capacity and operations traffic impact of each housing strategy, the traffic volumes associated with buildout of each strategy were calculated by identifying the buildout traffic conditions and subtracting ambient growth (growth that would occur without the HEU). This is considered an appropriate method of analyzing the HEU impacts as it takes into consideration the buildout condition with the highest trip generation anticipated over the 20-year horizon of the HEU. However, to determine the impacts specific to the HEU, it is necessary to subtract the planned growth in accordance with the General Plan. These HEU traffic volumes are then related to the existing plus CIP network to determine impacts of the HEU.

In summary, the HEU buildout condition includes:

- Buildout of the proposed land uses for each of the housing sites.
- Forecast land uses for non-housing sites within the City of Encinitas based on land use information provided by City staff.
- Year 2035 land uses outside of the City of Encinitas.
- Existing roadway network plus improvements from reasonably foreseeable improvement projects.

Jurisdictions establish their own standards for ascertaining transportation/traffic impacts. As determined appropriate by the City, the analysis utilizes the thresholds and standards established by the agency with jurisdiction over the roadway facility. The cities within the study area utilize the SANTEC/ITE Guidelines, while the County of San Diego utilizes the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements - Transportation and Traffic (2011). The impact determination methodology utilized in this analysis is described further below.

a. SANTEC/ITE Thresholds (Cities of Encinitas, Solana Beach and Carlsbad)

As indicated under the existing conditions Section 4.13.1.2, the cities of Encinitas, Carlsbad, and Solana Beach utilize the SANTEC/ITE Guidelines for traffic analysis. As detailed in Section 4.13-2.1, roadway segments, freeway segments, and intersection operating from LOS A to LOS D are considered acceptable while operations of LOS E or F are considered unacceptable.

To determine if a project would have a significant impact, the change from the baseline conditions to the baseline plus project conditions is analyzed. The allowable change for facilities under the jurisdiction of the cities of Encinitas, Carlsbad, and Solana Beach as well as Caltrans is identified in Table 4.13-7 below. As shown, a project would have a significant impact if it would add more than 0.01 V/C to a freeway segment operating at unacceptable LOS E or F, add more than 0.02 V/C to a City roadway segment operating at unacceptable LOS E or F, or add more than 2 seconds of delay to a City intersection operating at unacceptable LOS E or F. Project ramp meter delays would be significant if the project would add more than 2 minutes of delay to a ramp meter operating with an

unacceptable delay (i.e., delay exceeding 15 minutes). In addition, a project would result in a significant impact per SANTEC/ITE Guidelines if it caused a roadway segment, freeway segment, intersection or freeway ramp to drop from an acceptable operating level to an unacceptable operating level.

Table 4.13-7
SANTEC/ITE Measure of Significant Project Traffic Impacts

Level of Service with Project	Allowable Change Due to Impact					
E & F (or ramp meter delays above 15 min.)	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min.)
	0.01	1	0.02	1	2	2
SOURCE: Appendix N						

b. County of San Diego

As indicated above, the County of San Diego utilizes the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements - Transportation and Traffic (2011) to analyze traffic impacts. The study area only includes roadway segments within the County and does not include intersections and, therefore, this methodology discussion focuses on the County's roadway segment methodology.

Traffic volume increases from public or private projects that result in one or more of the following criteria will have a significant traffic volume or level of service traffic impact on a road segment, unless specific facts show that there are other circumstances that mitigate or avoid such impacts:

- The additional or redistributed ADT generated by the proposed project will significantly increase congestion on a Mobility Element Road or State Highway currently operating at LOS E or LOS F as identified in Table 4.13-8, or will cause a Mobility Element Road or State Highway to operate at LOS E or LOS F as a result of the proposed project; or

- The additional or redistributed ADT generated by the proposed project will cause a residential street to exceed its design capacity.

Table 4.13-8
County Measures of Significant Project Impacts to Road Segments

Level of Service	Two-Lane Road	Four-Lane Road	Six-Lane Road
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT

SOURCE: Appendix N.
LOS = level of service; ADT = average daily traffic.
NOTE:
By adding proposed project trips to all other trips from a list of projects, this same table must be used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts. The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

4.13.4.2 Future Project Implementation

As noted previously in this chapter, the City has established roadway design standards and roadway operating standards in the City's General Plan and Public Road Standards manual. The City would review all future projects for any necessary roadway frontage improvements and General Plan compliance. Future projects within the HEU floating zone program also would be reviewed for consistency with this PEIR and identified mitigation measures pursuant to CEQA Guidelines Section 15168(c). More specifically, all future projects would need to be screened via a checklist for consistency with the PEIR and relevant measures in the Mitigation Monitoring and Reporting Program. Subsequent "by right" development within the new floating zone district created through the HEU that is consistent with the PEIR and relevant MMRP measures would not be subject to further CEQA review to analyze project-level impacts related to traffic, unless otherwise noted. Consistent with the SANTEC Guidelines, future projects that would generate over 1,000 ADT or 100 peak-hour trips would be required to prepare a traffic impact study regardless of consistency with the HEU to identify their direct project impacts and appropriate mitigation.

Compliance with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to reduce the potential for significant impacts associated with implementation of the HEU. Ultimately, redevelopment of any of the housing sites may occur with or without implementation of the HEU but the process would not be as streamlined and additional traffic analysis of each development may be required at the City's discretion.

4.13.5 Issues 1 and 2: Circulation System Capacity and Operations

Would the project result in buildout of land uses, which would generate an increase in projected traffic that is substantial in relation to the capacity of the existing circulation system (with the addition of funded CIP improvements)?

Would the project conflict with other standards establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

4.13.5.1 Impacts

a. Trip Generation and Vehicle Miles Traveled

In order to develop the existing plus project conditions, the trips generated by each strategy must be determined. These additional trips generated by the HEU are then distributed onto the existing transportation network to determine the change in traffic conditions due to the project at each roadway segment and freeway segment. As noted previously, the intersection analysis and freeway ramp analysis was only done for the highest trip-generating strategy, which is housing strategy 3. This additional traffic due to the HEU is then evaluated against the significance thresholds to determine if the change in traffic is significant.

The trip generation for each housing strategy was calculated based on the land use maps and buildout assumptions provided by the City and trip generation rates from SANDAG's Guide to Vehicular Traffic Generation Rates for the San Diego Region (2002). Figures 4.13-2 to 4.13-4 illustrate the year 2035 roadway ADT and LOS for each of the three housing strategies. Trip generation is shown in Table 4.13-9 for each strategy. As shown, housing strategy 3 (MMUP) would result in the largest increase in ADT (30,149 ADT), followed by housing strategy 2 (Build Your Own [BYO]) (24,566 ADT) and housing strategy 1 (Ready Made [RM]) (16,361 ADT).

Table 4.13-9
Trip Generation and VMT Summary

Housing Strategy	Daily Trip Generation	ADT Change from No Project	Citywide VMT (miles)	VMT Change from No Project
No-Project	696,144	-	1,165,329	-
Housing Strategy 1 (RM)	712,505	16,361	1,185,279	19,950
Housing Strategy 2 (BYO)	720,710	24,566	1,200,486	35,157
Housing Strategy 3 (MMUP)	726,293	30,149	1,199,428	34,099

SOURCE: Appendix N.
VMT = vehicle miles travelled
RM = Ready Mead
BYO = Build Your Own
MMUP = Modified Mixed Use Places

Vehicle miles travelled (VMT) is also identified in Table 4.13-9. SB 743 encourages reducing VMT, as reducing VMT also assists in achieving the statewide goals related to promoting infill development and reduction of greenhouse gas emissions. VMT information provided by SANDAG for the HEU was based upon methods recommended by the SB 375 Regional Targets Advisory Committee. As shown above, housing strategy 3 (MMUP) would result in the largest increase in ADT, followed by housing strategy 2 (BYO) and housing strategy 1 (RM). However, the VMT analysis shows housing strategy 2 (BYO) would result in the highest VMT change (35,157 VMT), followed subsequently by housing strategy 3 (MMUP) 34,099 VMT) and housing strategy 1 (RM) (19,950 VMT). As the amount of growth varies per strategy, an analysis that assesses which strategy has the least VMT generated per the amount of growth was completed. While housing strategy 3 (MMUP) would result in the highest trip generation change (4.33 percent), this strategy would have the most efficient trips because the trips generated per land use growth would be the shortest distance (0.676 VMT/trip), as shown in Table 4.13-10. Housing strategy 1 (RM) (0.728 VMT/trip) would have the next most efficient trip generation, followed by housing strategy 2 (BYO) (0.855 VMT/trip).

Table 4.13-10
VMT to Trip Generation Efficiency – HEU Growth in Land Use Only

Housing Strategy	Change in Daily Trip Generation	Change in VMT	VMT/Trip Generation Ratio (HEU Growth Only)	Efficiency Ranking
No-Project	0.0%	0.0%	1.000	4
Housing Strategy 1 (RM)	2.35%	1.71%	0.728	2
Housing Strategy 2 (BYO)	3.53%	3.02%	0.855	3
Housing Strategy 3 (MMUP)	4.33%	2.93%	0.676	1

SOURCE: Appendix N.
RM = Ready Mead
BYO = Build Your Own
MMUP = Modified Mixed Use Places

Refer to Appendix N for additional trip generation and VMT details.

b. Housing Strategy 1 – Ready Made (RM)

As identified in Table 4.13-9, the buildout of housing strategy 1 (RM) would generate 712,505 trips and would result in 1,185,279 citywide VMT. In addition, Figure 4.13-2 illustrates the year 2035 with housing strategy 1 (RM) conditions.

Map Source: Chen Ryan

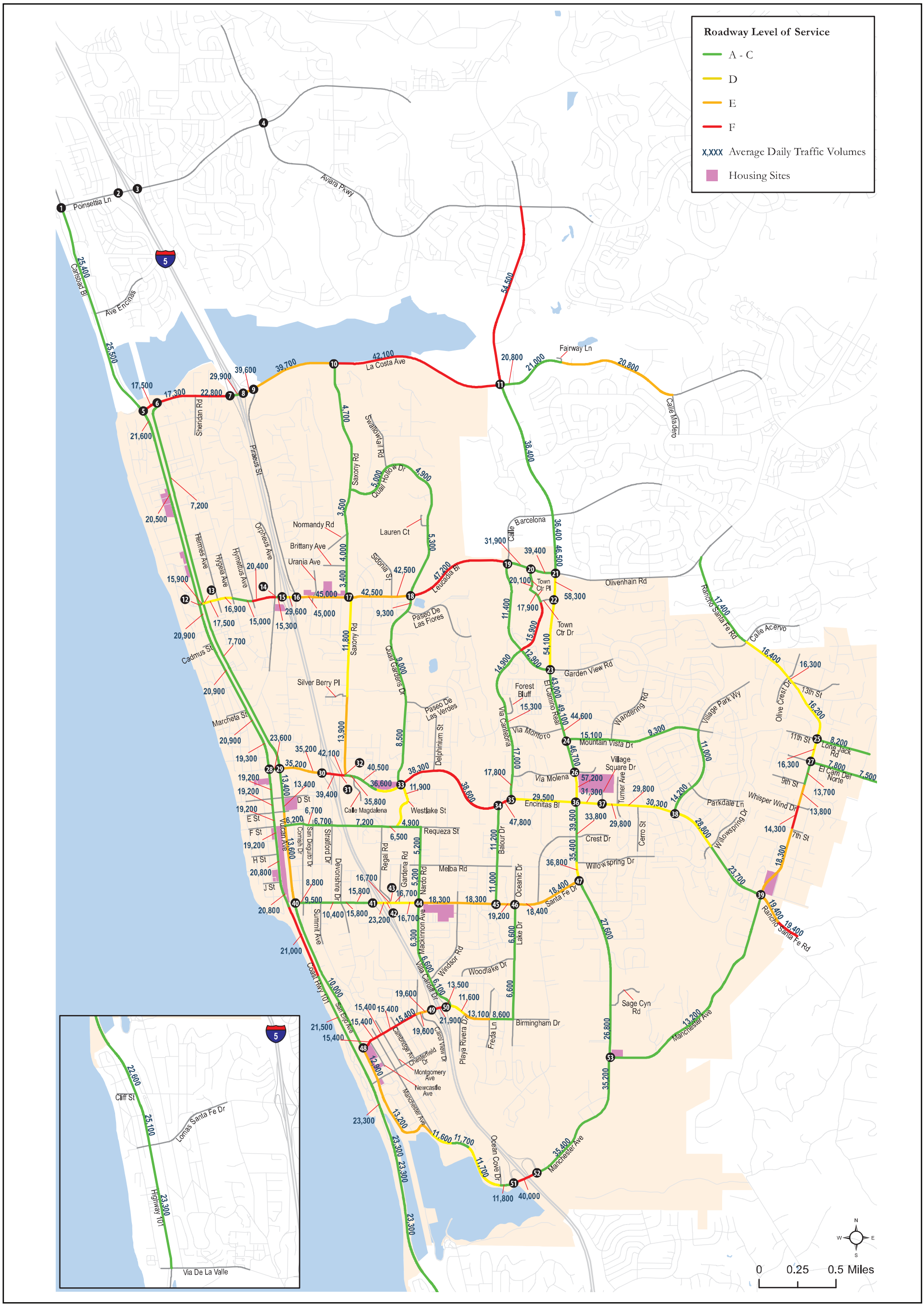

FIGURE 4.13-2

Year 2035 + Housing Strategy 1 (RM) - Roadway LOS

RECON

M:\jobs4\7722\env\graphics\eir\fig4.13-2.ai 12/18/15 sab

Map Source: Chen Ryan

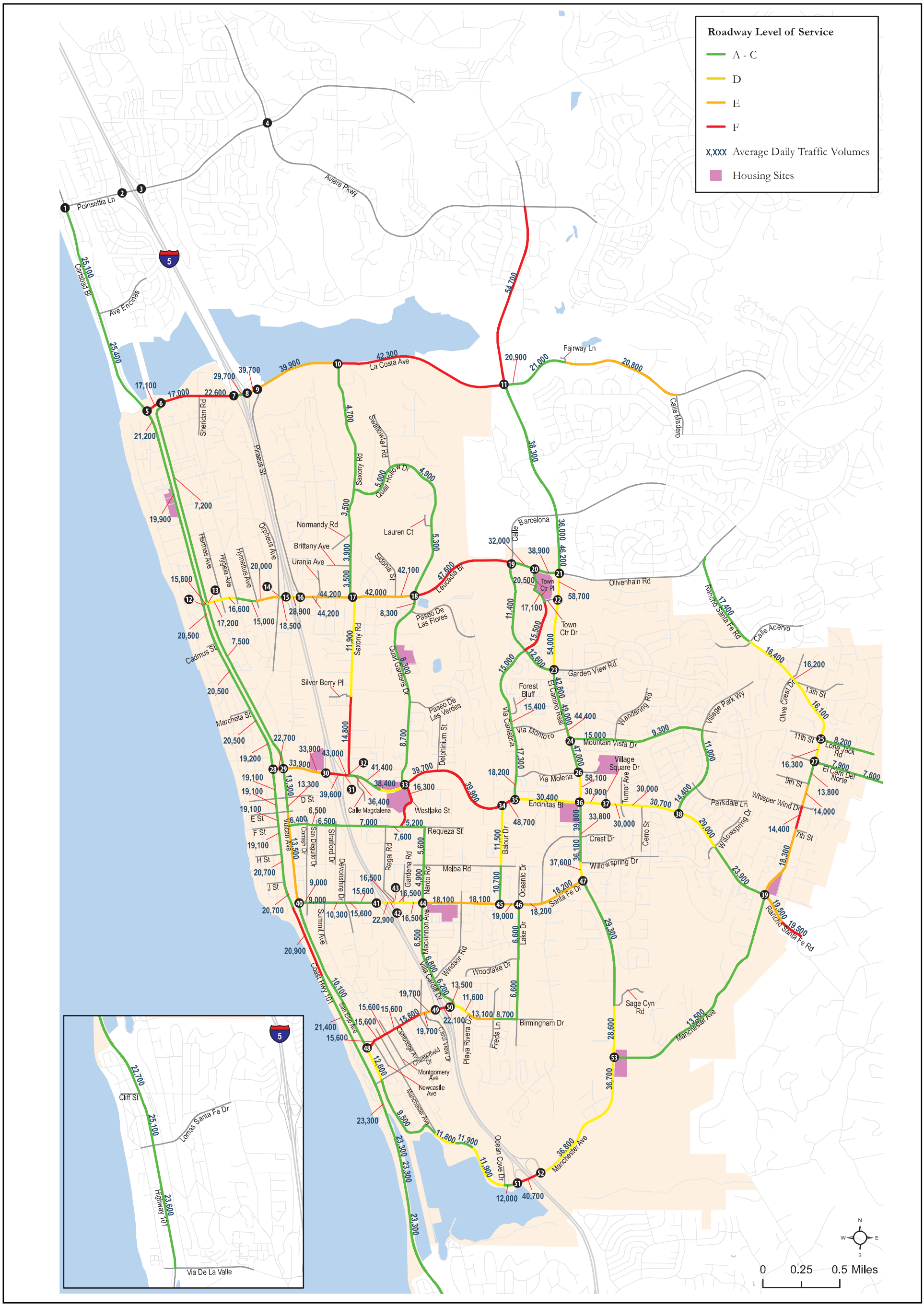

FIGURE 4.13-3

Year 2035 + Housing Strategy 2 (BYO) - Roadway LOS

RECON

M:\jobs4\7722\env\graphics\eir\fig4.13-3.ai 12/18/15 sab

Map Source: Chen Ryan

FIGURE 4.13-4

Year 2035 + Housing Strategy 3 (MMUP) - Roadway LOS

RECON

M:\jobs4\7722\env\graphics\eir\fig4.13-4.ai 12/18/15 sab

Roadway Segment Analysis

As shown in Table 4.13-11, 33 roadway segments within the project study area would operate at substandard LOS E or F under the housing strategy 1 (RM), with 27 located in Encinitas, 5 located in Carlsbad, and 1 located in the County of San Diego (see Figure 4.13-2). Although 33 roadway segments operate unacceptably, the additional traffic generated by housing strategy 1 (RM) would only result in the exceedance of the significance criteria at the following 15 segments.

- Rancho Santa Fe Road, between 9th Street and 8th Street – LOS E (Impact TRF-1);
- Rancho Santa Fe Road, between 8th Street and 7th Street – LOS F (Impact TRF-2);
- Rancho Santa Fe Road, between 7th Street and Encinitas Boulevard – LOS E (Impact TRF-3);
- La Costa Avenue, between North Coast Highway 101 and Vulcan Avenue – LOS F (Impact TRF-4);
- La Costa Avenue, between Vulcan Avenue and Sheridan Road – LOS F (Impact TRF-5);
- La Costa Avenue, between Sheridan Road and I-5 SB Ramps – LOS F (Impact TRF-6);
- Leucadia Boulevard, between Hymettus Avenue and Orpheus Avenue – LOS F (Impact TRF-7);
- Encinitas Boulevard, between I-5 SB Ramps and I-5 NB Ramps – LOS F (Impact TRF-8);
- South Rancho Santa Fe Road, between Manchester Avenue and City Limits– LOS E (Impact TRF-9);
- South Rancho Santa Fe Road, between City of Encinitas Limits and El Mirlo – LOS F (Impact TRF-10);
- Santa Fe Drive, between Nardo Road and Windsor Road/Bonita Drive – LOS E (Impact TRF-11);
- Santa Fe Drive, between Windsor Road/Bonita Drive and Balour Drive – LOS E (Impact TRF-12);
- Santa Fe Drive, between Balour Drive and Lake Drive – LOS E (Impact TRF-13);
- Santa Fe Drive, between Lake Drive and Crest Drive – LOS E (Impact TRF-14); and
- Santa Fe Drive, between Crest Drive and El Camino Real – LOS E (Impact TRF-15).

Freeway Segment Analysis

The I-5 freeway segment mainline analysis for the buildout of housing strategy 1 (RM) is shown in Table 4.13-12. As shown in the table, all freeway segments within the study area would operate at LOS D or better under the future year 2035 housing strategy 1 (RM) conditions. As all freeways would operate acceptably with the addition of housing strategy 1 (RM), impacts would be less than significant.

Table 4.13-11 Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis											
Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Carlsbad Blvd	Poinsettia Lane to Avenida Encinas	40,000	Carlsbad	25,300	0.633	C	25,500	0.638	C	0.004	No
	Avenida Encinas to La Costa Avenue	40,000	Carlsbad	24,700	0.618	C	25,400	0.635	C	0.017	No
North Coast Highway 101	La Costa Avenue to 600 feet south of La Costa Avenue	35,200	Encinitas	19,900	0.565	C ≤	21,600	0.614	C ≤	0.049	No
	600 feet south of La Costa Avenue to Leucadia Blvd	26,400	Encinitas	18,100	0.686	C ≤	20,500	0.777	C ≤	0.091	No
	Leucadia Blvd to Cadmus Street	35,200	Encinitas	19,900	0.565	C ≤	20,900	0.594	C ≤	0.029	No
	Cadmus Street to Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	20,900	0.594	C ≤	0.029	No
	Marcheta Street to 660 feet south of Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	20,900	0.594	C ≤	0.029	No
	660 feet south of Marcheta Street to Encinitas Blvd	35,200	Encinitas	19,900	0.565	C ≤	19,300	0.548	C ≤	-0.017	No
South Coast Highway 101	Encinitas Blvd to West D Street	35,200	Encinitas	19,400	0.551	C ≤	19,200	0.545	C ≤	-0.006	No
	West D Street to West E Street	35,200	Encinitas	19,400	0.551	C ≤	19,200	0.545	C ≤	-0.006	No
	West E Street to West F Street	35,200	Encinitas	19,400	0.551	C ≤	19,200	0.545	C ≤	-0.006	No
	West F Street to West H Street	35,200	Encinitas	19,400	0.551	C ≤	19,200	0.545	C ≤	-0.006	No
	West H Street to West J Street	35,200	Encinitas	21,100	0.599	C ≤	20,800	0.591	C ≤	-0.008	No
	West J Street to Swami's Parking	26,400	Encinitas	21,100	0.799	C ≤	20,800	0.788	C ≤	-0.011	No
	Swami's Parking to San Elijo State Beach	14,000	Encinitas	21,300	1.521	**F**	21,000	1.500	**F**	-0.021	No
	San Elijo State Beach to Chesterfield	35,200	Encinitas	21,300	0.605	C ≤	21,500	0.611	C ≤	0.006	No
	Chesterfield to Cardiff State Beach traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Cardiff Beach State to Chart House traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Chart House traffic signal to Las Olas Mexican Restaurant traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Las Olas Mexican Restaurant to Solana Beach boundary	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
North Highway 101	Solana Beach boundary to West Cliff Street	40,000	Solana Beach	22,500	0.563	C	22,600	0.565	C	0.002	No
	West Cliff to Lomas Santa Fe	40,000	Solana Beach	25,000	0.625	C	25,100	0.628	C	0.002	No
	Lomas Santa Fe Drive to Via De La Valle	40,000	Solana Beach	23,600	0.590	C	23,300	0.583	C	-0.007	No
Vulcan Avenue	La Costa Avenue to Leucadia Boulevard	14,000	Encinitas	7,000	0.500	C ≤	7,200	0.514	C ≤	0.014	No
	Leucadia Blvd to Encinitas Boulevard	14,000	Encinitas	7,500	0.536	C ≤	7,700	0.550	C ≤	0.014	No
	Encinitas Boulevard to D Street	32,400	Encinitas	12,900	0.398	C ≤	13,400	0.414	C ≤	0.016	No
	D Street to E Street	32,400	Encinitas	12,900	0.398	C ≤	13,400	0.414	C ≤	0.016	No
	E Street to Santa Fe Drive	20,000	Encinitas	13,100	0.655	C ≤	13,600	0.680	C ≤	0.025	No

Table 4.13-11 Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis											
Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
San Elijo Avenue	Santa Fe Drive to Birmingham Drive	14,000	Encinitas	10,100	0.721	C ≤	10,000	0.714	C ≤	-0.007	No
	Birmingham Drive to Chesterfield Drive	20,000	Encinitas	12,500	0.625	C ≤	12,900	0.645	C ≤	0.020	No
	Chesterfield Drive to Manchester Avenue	20,000	Encinitas	9,500	0.475	C ≤	13,200	0.660	C ≤	0.185	No
Saxony Road	La Costa Avenue to Quail Gardens Drive	14,000	Encinitas	4,600	0.329	C ≤	4,700	0.336	C ≤	0.007	No
	Quail Hollow Drive to Normtoy Road	14,000	Encinitas	3,400	0.243	C ≤	3,500	0.250	C ≤	0.007	No
	Normtoy Road to Brittany Avenue	14,000	Encinitas	3,900	0.279	C ≤	4,000	0.286	C ≤	0.007	No
	Brittany Avenue to Leucadia Boulevard	14,000	Encinitas	3,500	0.250	C ≤	3,400	0.243	C ≤	-0.007	No
	Leucadia Boulevard to Silver Berry Place	14,000	Encinitas	11,800	0.843	D	11,800	0.843	D	0.000	No
	Silver Berry Place to Encinitas Boulevard	20,000	Encinitas	13,800	0.690	C ≤	13,900	0.695	C ≤	0.005	No
Quail Hollow Drive	Swallow Tail Road to Saxony Road	14,000	Encinitas	5,000	0.357	C ≤	5,000	0.357	C ≤	0.000	No
Quail Gardens Drive	Swallow Tail Road to Lauren Court	20,000	Encinitas	4,900	0.245	C ≤	4,900	0.245	C ≤	0.000	No
	Lauren Court to Leucadia Boulevard	20,000	Encinitas	5,300	0.265	C ≤	5,300	0.265	C ≤	0.000	No
	Leucadia Boulevard to Paseo De Las Flores	20,000	Encinitas	9,100	0.455	C ≤	9,300	0.465	C ≤	0.010	No
	Paseo De Las Flores to Paseo De Las Verdes	20,000	Encinitas	8,900	0.445	C ≤	9,000	0.450	C ≤	0.005	No
	Paseo De Las Verdes to Encinitas Boulevard	20,000	Encinitas	8,200	0.410	C ≤	8,500	0.425	C ≤	0.015	No
Westlake Street	Encinitas Boulevard to Requeza Street	20,000	Encinitas	11,800	0.590	C ≤	11,900	0.595	C ≤	0.005	No
Nardo Drive	Requeza Street to Melba Road	14,000	Encinitas	5,100	0.364	C ≤	5,200	0.371	C ≤	0.007	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	5,100	0.364	C ≤	5,200	0.371	C ≤	0.007	No
MacKinnon Avenue	Santa Fe Drive to Villa Cardiff Drive	14,000	Encinitas	6,200	0.443	C ≤	6,300	0.450	C ≤	0.007	No
	MacKinnon Avenue to Windsor Road	14,000	Encinitas	6,500	0.464	C ≤	6,600	0.471	C ≤	0.007	No
	Windsor Road to Birmingham Drive	14,000	Encinitas	5,700	0.407	C ≤	6,100	0.436	C ≤	0.029	No
Garden View Road	Leucadia Boulevard to Via Cantebria	35,200	Encinitas	11,500	0.327	C ≤	11,400	0.324	C ≤	-0.003	No
	Via Cantebria to El Camino Real	35,200	Encinitas	12,900	0.366	C ≤	12,900	0.366	C ≤	0.000	No
Town Center Place	Leucadia Boulevard to Town Center Place	32,400	Encinitas	20,000	0.617	C ≤	20,100	0.620	C ≤	0.003	No
	Town Center Place to Town Center Drive	32,400	Encinitas	17,800	0.549	C ≤	17,900	0.552	C ≤	0.003	No
Via Cantebria	Town Center Drive to Garden View Road	14,000	Encinitas	15,800	1.129	**F**	15,900	1.136	**F**	0.007	No
	Garden View Road to Forrest Bluff	24,300	Encinitas	14,900	0.613	C ≤	14,900	0.613	C ≤	0.000	No
	Forrest Bluff to Via Montoro	32,400	Encinitas	15,200	0.469	C ≤	15,300	0.472	C ≤	0.003	No
	Via Montoro to Via Molena	32,400	Encinitas	17,900	0.552	C ≤	17,000	0.525	C ≤	-0.027	No
	Via Molena to Encinitas Boulevard	32,400	Encinitas	17,500	0.540	C ≤	17,800	0.549	C ≤	0.009	No
Balour Drive	Encinitas Boulevard to Melba Road	14,000	Encinitas	11,200	0.800	C ≤	11,200	0.800	C ≤	0.000	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	10,700	0.764	C ≤	11,000	0.786	C ≤	0.022	No

Table 4.13-11
Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Lake Drive	Santa Fe Drive to Woodlake Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No
	Woodlake Drive to Birmingham Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No
El Camino Real	Aviara Parkway to La Costa Avenue	50,000	Carlsbad	54,300	1.086	**F**	54,500	1.090	**F**	0.004	No
	La Costa Avenue to Calle Barcelona	60,000	Carlsbad	38,400	0.640	C	38,400	0.640	C	0.000	No
	Calle Barcelona to Carlsbad boundary	60,000	Carlsbad	36,500	0.608	C	36,400	0.607	C	-0.001	No
	Carlsbad boundary to Leucadia Blvd.	66,000	Encinitas	46,700	0.708	C ≤	46,500	0.705	C ≤	-0.003	No
	Leucadia Boulevard to Town Center Dr.	66,000	Encinitas	58,600	0.888	D	58,300	0.883	D	-0.005	No
	Town Center Drive to Garden View Road	66,000	Encinitas	54,200	0.821	D	54,100	0.820	D	-0.001	No
	Garden View Road to 331-339 El Camino Real	66,000	Encinitas	42,900	0.650	C ≤	43,000	0.652	C ≤	0.002	No
	331-339 El Camino Real to Via Montoro	66,000	Encinitas	48,900	0.741	C ≤	49,100	0.744	C ≤	0.003	No
	Via Montoro to Mountain Vista	66,000	Encinitas	44,300	0.671	C ≤	44,600	0.676	C ≤	0.005	No
	Mountain Vista to Via Molena	66,000	Encinitas	47,000	0.712	C ≤	46,700	0.708	C ≤	-0.004	No
	Via Molena to Encinitas Boulevard	66,000	Encinitas	56,900	0.862	D	57,200	0.867	D	0.005	No
	Encinitas Blvd. to 213 S El Camino Real	57,000	Encinitas	39,400	0.691	C ≤	39,500	0.693	C ≤	0.002	No
	213 S El Camino Real to Crest Drive	57,000	Encinitas	33,800	0.593	C ≤	33,800	0.593	C ≤	0.000	No
	Crest Drive to Willowspring Drive	57,000	Encinitas	36,200	0.635	C ≤	35,400	0.621	C ≤	-0.014	No
	Willowspring Drive to Santa Fe Drive	45,400	Encinitas	37,500	0.826	D	36,800	0.811	D	-0.015	No
	Santa Fe Drive to Sage Canyon Drive	45,400	Encinitas	28,400	0.626	C ≤	27,600	0.608	C ≤	-0.018	No
	Sage Canyon Drive to Manchester Avenue	35,200	Encinitas	27,700	0.787	C ≤	26,800	0.761	C ≤	-0.026	No
Village Park Way	Mountain Vista Drive to Parkdale Drive	35,200	Encinitas	10,900	0.310	C ≤	11,000	0.313	C ≤	0.003	No
	Parkdale Drive to Encinitas Boulevard	35,200	Encinitas	14,200	0.403	C ≤	14,200	0.403	C ≤	0.000	No
Rancho Santa Fe Road	Olivenhain Road to Calle Acervo	40,000	Carlsbad	17,400	0.435	B	17,400	0.435	B	0.000	No
	Calle Acervo/Avenida La Posta to Olive Crest Drive	20,000	Encinitas	15,900	0.795	C ≤	16,400	0.820	D	0.025	No
	Olive Crest Drive to 13th Street	20,000	Encinitas	15,800	0.790	C ≤	16,300	0.815	D	0.025	No
	13th Street to 11th Street	20,000	Encinitas	15,700	0.785	C ≤	16,200	0.810	D	0.025	No
	11th Street to El Camino Del Norte	20,000	Encinitas	15,800	0.790	C ≤	16,300	0.815	D	0.025	No
	El Camino Del Norte to 9th Street	20,000	Encinitas	13,300	0.665	C ≤	13,700	0.685	C ≤	0.020	No
	9th Street to 8th Street	14,000	Encinitas	13,500	0.964	**E**	13,800	0.986	**E**	0.022	Yes (TRF-1)
	8th Street to 7th Street	14,000	Encinitas	13,900	0.993	**E**	14,300	1.021	**F**	0.028	Yes (TRF-2)
	7th Street to Encinitas Boulevard	20,000	Encinitas	15,200	0.760	C ≤	18,300	0.915	**E**	0.155	Yes (TRF-3)

Table 4.13-11
Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Manchester Avenue	Manchester Avenue to Mira Costa College	45,400	Encinitas	35,400	0.780	C ≤	35,200	0.775	C ≤	-0.005	No
	Mira Costa College to I-5 NB On-Ramp	45,400	Encinitas	35,700	0.786	C ≤	35,400	0.780	C ≤	-0.006	No
	I-5 NB Ramps to I-5 SB Ramps	20,000	Encinitas	40,200	2.010	**F**	40,000	2.000	**F**	-0.010	No
	I-5 SB Ramps to Ocean Cove Drive	20,000	Encinitas	11,900	0.595	C ≤	11,800	0.590	C ≤	-0.005	No
	Ocean Cove Drive to Seaside Cardiff-by-the-sea residential area driveway	14,000	Encinitas	11,900	0.850	D	11,700	0.836	D	-0.014	No
	Seaside Cardiff-by-the-sea residential area driveway to San Elijo Water Reclamation Facility Driveway	20,000	Encinitas	11,900	0.595	C ≤	11,700	0.585	C ≤	-0.010	No
	San Elijo Water Reclamation Facility Driveway to Manchester Avenue	14,000	Encinitas	11,800	0.843	D	11,600	0.829	D	-0.014	No
	Encinitas Boulevard to El Camino Real	20,000	Encinitas	12,300	0.615	C ≤	13,200	0.660	C ≤	0.045	No
La Costa Avenue	North Coast Highway 101 to Vulcan Avenue	14,000	Encinitas	16,400	1.164	**F**	17,500	1.250	**F**	0.079	Yes (TRF-4)
	Vulcan Avenue to Sheridan Road	14,000	Encinitas	16,300	1.164	**F**	17,300	1.236	**F**	0.072	Yes (TRF-5)
	Sheridan Road to I-5 SB Ramps	20,000	Encinitas	22,000	1.100	**F**	22,800	1.140	**F**	0.040	Yes (TRF-6)
	I-5 SB Ramps to I-5 NB Ramps	40,000	Carlsbad	29,300	0.733	C	29,900	0.748	C	0.015	No
	I-5 NB Ramps to Piraeus Street	41,667	Carlsbad	39,500	0.948	**E**	39,600	0.950	**E**	0.002	No
	Piraeus Street to Saxony Road	40,000	Carlsbad	39,600	0.990	**E**	39,700	0.993	**E**	0.003	No
	Saxony Road to El Camino Real	40,000	Carlsbad	42,000	1.050	**F**	42,100	1.053	**F**	0.002	No
	El Camino Real to La Costa Towne Center traffic signal	40,000	Carlsbad	20,700	0.518	B	20,800	0.520	B	0.002	No
	La Costa Towne Center traffic signal to Fairway Lane	40,000	Carlsbad	20,900	0.523	B	21,000	0.525	B	0.002	No
	Fairway Lane to Calle Madero	22,500	Carlsbad	20,700	0.920	**E**	20,800	0.924	**E**	0.004	No

Table 4.13-11 Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis											
Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Leucadia Blvd	North Coast Highway 101 to Vulcan Avenue	32,400	Encinitas	14,300	0.441	C ≤	15,900	0.491	C ≤	0.050	No
	Vulcan Avenue to Hermes Avenue	20,000	Encinitas	16,300	0.815	D	17,500	0.875	D	0.060	No
	Hermes Avenue to Hygeia Avenue	20,000	Encinitas	15,700	0.785	C ≤	16,900	0.845	D	0.060	No
	Hygeia Avenue to Hymettus Avenue	20,000	Encinitas	17,400	0.870	D	15,000	0.750	C	-0.120	No
	Hymettus Avenue to Orpheus Avenue	20,000	Encinitas	19,200	0.960	**E**	20,400	1.020	**F**	0.060	Yes (TRF-7)
	Orpheus Avenue to I-5 SB Ramps	35,200	Encinitas	17,700	0.503	C ≤	15,300	0.435	C ≤	-0.068	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	28,600	0.813	D	29,600	0.841	D	0.028	No
	Piraeus Street to Urania Avenue	45,400	Encinitas	44,100	0.971	**E**	45,000	0.991	**E**	0.020	No
	Urania Avenue to Saxony Road	45,400	Encinitas	44,100	0.971	**E**	45,000	0.991	**E**	0.020	No
	Saxony Road to Sidonia Street	45,400	Encinitas	42,400	0.934	**E**	42,500	0.936	**E**	0.002	No
	Sidonia Street to Quail Gardens Drive	45,400	Encinitas	42,400	0.934	E	42,500	0.936	E	0.002	No
	Quail Gardens Drive to Garden View Road	45,400	Encinitas	47,100	1.037	F	47,200	1.040	F	0.003	No
	Garden View Road to Town Center Place	45,400	Encinitas	34,700	0.764	C ≤	33,900	0.746	C ≤	0.018	No
	Town Center Place to El Camino Real	57,000	Encinitas	39,000	0.684	C ≤	39,000	0.684	C ≤	0.000	No
Mountain Vista Drive	El Camino Real to Wandering Road	20,000	Encinitas	15,000	0.750	C ≤	15,100	0.755	C ≤	0.005	No
	Wandering Road to Village Park Way	20,000	Encinitas	9,300	0.465	C ≤	9,300	0.465	C ≤	0.000	No
Lone Jack Drive	Rancho Santa Fe Road to northern terminus	14,000	Encinitas	8,400	0.600	C ≤	8,200	0.586	C ≤	-0.014	No
El Camino Del Norte	Rancho Santa Fe Road to San Dieguito CPA boundary	14,000	Encinitas	7,900	0.564	C ≤	7,800	0.557	C ≤	-0.007	No
	San Dieguito CPA boundary to Via De Fortuna	9,700	County	7,800	0.804	D	7,500	0.773	C ≤	-0.031	No

Table 4.13-11
Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Encinitas Blvd	North Coast Highway 101 to Vulcan Ave.	32,400	Encinitas	22,300	0.688	C ≤	23,600	0.728	C ≤	0.040	No
	Vulcan Avenue to I-5 SB Ramps	45,400	Encinitas	34,100	0.751	C ≤	45,400	0.775	C ≤	0.024	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	38,500	1.094	**F**	39,400	1.119	**F**	0.025	Yes (TRF-8)
	I-5 NB Ramps to Saxony Road	35,200	Encinitas	41,400	1.176	**F**	42,100	1.196	**F**	0.020	No
	Saxony Road to Calle Magdalena	66,000	Encinitas	35,400	0.536	C ≤	35,800	0.542	C ≤	0.006	No
	Calle Magdalena to Encinitas Town Country traffic signal	57,000	Encinitas	40,000	0.702	C ≤	40,500	0.711	C ≤	0.009	No
	Encinitas Town Country traffic signal to Quail Gardens Drive	45,400	Encinitas	36,000	0.793	C ≤	36,600	0.806	D	0.013	No
	Quails Garden Drive to Delphinium Street	35,200	Encinitas	37,700	1.071	**F**	38,300	1.088	**F**	0.017	No
	Delphinium Street to Balour Drive	35,200	Encinitas	38,300	1.088	**F**	38,600	1.097	**F**	0.009	No
	Balour Drive to Via Cantebria	35,200	Encinitas	47,500	1.349	**F**	47,800	1.358	**F**	0.009	No
	Via Cantebria to El Camino Real	35,200	Encinitas	29,400	0.835	D	29,500	0.838	D	0.003	No
	El Camino Real to Village Square Drive	35,200	Encinitas	31,000	0.881	D	31,300	0.889	D	0.008	No
	Village Square Drive to Turner Avenue	35,200	Encinitas	29,300	0.832	D	29,800	0.847	D	0.015	No
	Turner Avenue to Cerro Street	35,200	Encinitas	29,300	0.832	D	29,800	0.847	D	0.015	No
	Cerro Street to Village Park Way	35,200	Encinitas	29,700	0.844	D	30,300	0.861	D	0.017	No
	Village Park Way to Willowspring Drive	35,200	Encinitas	27,900	0.793	C ≤	28,800	0.818	D	0.025	No
	Willowspring Drive to Rancho Santa Fe Road	35,200	Encinitas	22,700	0.645	C ≤	23,700	0.673	C ≤	0.028	No
South Rancho Santa Fe Road	**Manchester Avenue to Encinitas Limits**	20,000	Encinitas	18,580	0.930	**E**	19,400	0.970	**E**	0.040	Yes (TRF-9)
	Encinitas Limits to El Mirlo	9,700	County	18,580	1.915	**F**	19,400	2.000	**F**	0.085	Yes (TRF-10)
F Street	Vulcan Avenue to Cornish Drive	14,000	Encinitas	6,200	0.443	C ≤	6,200	0.443	C ≤	0.000	No
Requeza Street	Cornish Drive to San Dieguito Drive	14,000	Encinitas	6,300	0.450	C ≤	6,700	0.479	C ≤	0.029	No
	San Dieguito Drive to Stratford Drive	14,000	Encinitas	6,300	0.450	C ≤	6,700	0.479	C ≤	0.029	No
	Stratford Drive to Regal Road	14,000	Encinitas	6,800	0.486	C ≤	7,200	0.514	C ≤	0.028	No
	Regal Road to West Lake Drive	14,000	Encinitas	6,400	0.457	C ≤	6,500	0.464	C ≤	0.007	No
	West Lake Drive to Nardo Drive	14,000	Encinitas	4,800	0.343	C ≤	4,900	0.350	C ≤	0.007	No

Table 4.13-11
Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Santa Fe Drive	Vulcan Avenue to Cornish Drive	14,000	Encinitas	9,000	0.643	C ≤	8,800	0.629	C ≤	-0.014	No
	Cornish Drive to Summit Avenue	14,000	Encinitas	9,000	0.643	C ≤	9,500	0.679	C ≤	0.036	No
	Summit Avenue to Devonshire	14,000	Encinitas	10,100	0.721	C ≤	10,400	0.743	C ≤	0.022	No
	Devonshire Drive to Scripps Memorial Hospital Encinitas traffic signal	20,000	Encinitas	15,200	0.760	C ≤	15,800	0.790	C ≤	0.030	No
	Scripps Memorial Hospital Encinitas traffic signal to I-5 SB Ramps	32,400	Encinitas	15,200	0.469	C ≤	15,800	0.488	C ≤	0.019	No
	I-5 SB Ramps to I-5 NB Ramps	26,400	Encinitas	22,400	0.848	D	23,200	0.879	D	0.031	No
	I-5 NB Ramps to Regal Road	20,000	Encinitas	16,100	0.805	D	16,700	0.835	D	0.030	No
	Regal Road to Gardena Road	20,000	Encinitas	16,100	0.805	D	16,700	0.835	D	0.030	No
	Gardena Road to Nardo Road	20,000	Encinitas	16,100	0.805	D	16,700	0.835	D	0.030	No
	Nardo Road to Windsor Road/Bonita Drive	20,000	Encinitas	17,700	0.885	D	18,300	0.915	**E**	0.030	Yes (TRF-11)
	Windsor Road/Bonita Drive to Balour Drive	20,000	Encinitas	17,700	0.885	D	18,300	0.915	**E**	0.030	Yes (TRF-12)
	Balour Drive to Lake Drive	20,000	Encinitas	18,600	0.930	**E**	19,200	0.960	**E**	0.030	Yes (TRF-13)
	Lake Drive to Crest Drive	20,000	Encinitas	17,700	0.885	D	18,400	0.920	**E**	0.035	Yes (TRF-14)
	Crest Drive to El Camino Real	20,000	Encinitas	17,700	0.885	D	18,400	0.920	**E**	0.035	Yes (TRF-15)
Birmingham Drive	**San Elijo Avenue to MacKinnon**	20,000	Encinitas	15,500	0.775	C ≤	15,500	0.775	C ≤	0.000	No
	MacKinnon Avenue to Carol View Drive	20,000	Encinitas	19,500	0.775	C ≤	15,500	0.775	C ≤	0.000	No
	Carol View Drive to I-5 SB Ramps	20,000	Encinitas	19,500	0.775	C ≤	15,500	0.775	C ≤	0.000	No
	I-5 SB Ramps to I-5 NB Ramps	14,000	Encinitas	21,800	1.243	**F**	17,400	1.243	**F**	0.000	No
	I-5 NB Ramps to Villa Cardiff Drive	14,000	Encinitas	13,200	0.629	C ≤	8,800	0.629	C ≤	0.000	No
	Villa Cardiff Drive to Playa Rivera	14,000	Encinitas	11,600	0.629	C ≤	8,800	0.629	C ≤	0.000	No
	Playa Rivera to Freda Lane	14,000	Encinitas	13,100	0.629	C ≤	8,800	0.629	C ≤	0.000	No
	Freda Lane to Lake Drive	14,000	Encinitas	8,700	0.629	C ≤	8,800	0.629	C ≤	0.000	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.

Table 4.13-12
Housing Strategy 1 (Ready Made) - Future Year 2035 Freeway Segment Level of Service

Freeway	Segment	Direction	Year 2035					Year 2035 + Housing Strategy 1					Δ V/C	Significant Impact?
			ADT	Capacity	Peak Hour Volume	V/C	LOS	ADT	Peak Hour Volume	Capacity	V/C	LOS		
I-5	Palomar Airport Rd. and Poinsettia Ln.	NB	201,000	10,810	8,500	0.69	C	202,000	7,500	10,810	0.69	C	0.0	No
		SB		10,810	8,400	0.78	C		8,400	10,810	0.78	C	0.0	No
	Poinsettia Ln. and La Costa Ave.	NB	204,000	9,400	8,600	0.81	D	200,200	7,600	9,400	0.81	D	0.0	No
		SB		9,400	8,500	0.88	D		8,300	9,400	0.88	D	0.0	No
	La Costa Ave. and Leucadia Blvd.	NB	208,000	9,400	8,600	0.81	D	196,900	7,600	9,400	0.81	D	0.0	No
		SB		10,810	7,900	0.69	C		7,500	10,810	0.69	C	0.0	No
	Leucadia Blvd. and Encinitas Blvd.	NB	211,000	10,810	8,700	0.71	C	117,600	7,700	10,810	0.71	C	0.0	No
		SB		9,400	8,000	0.47	B		4,500	9,400	0.48	B	0.01	No
	Encinitas Blvd. and Santa Fe Dr.	NB	210,000	9,400	8,500	0.80	D	197,300	7,500	9,400	0.80	D	0.0	No
		SB		10,810	8,000	0.69	C		7,600	10,810	0.70	C	0.01	No
	Santa Fe Dr. and Birmingham Dr.	NB	201,000	10,810	8,100	0.71	C	197,100	7,700	10,810	0.71	C	0.0	No
		SB		10,810	7,700	0.69	C		7,600	10,810	0.70	C	0.01	No
	Birmingham Dr. and Manchester Ave.	NB	203,000	10,810	8,200	0.74	C	198,900	8,000	10,810	0.74	C	0.0	No
		SB		10,810	7,800	0.70	C		7,600	10,810	0.70	C	0.0	No
	Manchester Ave. and Lomas Santa Fe Dr.	NB	215,970*	8,460	8,200	0.860	D	247,300	9,300	10,810	0.860	D	0.0	No
		SB		10,810	8,900	0.880	D		9,500	10,810	0.880	D	0.0	No
	Lomas Santa Fe Dr. and Via De La Valle	NB	208,844*	10,810	8,200	0.870	D	248,600	9,400	10,810	0.870	D	0.0	No
		SB		10,810	8,400	0.89	D		9,500	10,810	0.880	D	-0.01	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F. Shading represents a significant impact.
*Reduction of estimated HOV volume was applied to the ADT.

d. Housing Strategy 2 – Build Your Own (BYO)

The buildout of housing strategy 2 (BYO) would generate 720,710 trips and would result in 1,200,486 citywide VMT, as shown in Tables 4.13-9 and 4.13-10. Also, Figure 4.13-3 illustrates the year 2035 with housing strategy 2 (BYO) roadway segment conditions.

Roadway Segment Analysis

As shown in Table 4.13-13, 33 roadway segments within the project study area would operate at substandard level of service E or F under housing strategy 2 (BYO) buildout conditions, with 27 located in Encinitas, 5 located in Carlsbad, and 1 located in the County of San Diego (see Figure 4.13-3). Although 33 roadway segments operate unacceptably, the additional traffic generated by housing strategy 2 (BYO) would only result in the exceedance of the significance criteria at the following 20 segments (19 in Encinitas and 1 in the County):

- Rancho Santa Fe Road, between 9th Street and 8th Street – LOS F (Impact TRF-1);
- Rancho Santa Fe Road, between 8th Street and 7th Street – LOS F (Impact TRF-2);
- Rancho Santa Fe Road, between 7th Street and Encinitas Boulevard – LOS E (Impact TRF-3);
- Manchester Avenue, between I-5 NB Ramps and I-5 SB Ramps – LOS F (Impact TRF-16);
- La Costa Avenue, between North Coast Highway 101 and Vulcan Avenue – LOS F (Impact TRF-4);
- La Costa Avenue, between Vulcan Avenue and Sheridan Road – LOS F (Impact TRF-5);
- La Costa Avenue, between Sheridan Road and I-5 SB Ramps – LOS F (Impact TRF-6);
- Leucadia Boulevard, between Hymettus Avenue and Orpheus Avenue – LOS E (Impact TRF-7);
- Encinitas Boulevard, between I-5 SB Ramps and I-5 NB Ramps – LOS F (Impact TRF-8);
- Encinitas Boulevard, between I-5 NB Ramps and Saxony Road – LOS F (Impact TRF-17);
- Encinitas Boulevard, between Quails Garden Drive and Delphinium Street – LOS F (Impact TRF-18);
- Encinitas Boulevard, between Delphinium Street and Balour Drive – LOS F (Impact TRF-19);
- Encinitas Boulevard, between Balour Drive and Via Cantebria – LOS F (Impact TRF-20);

- South Rancho Santa Fe Road, between Manchester Avenue and City of Encinitas Limits – LOS E (Impact TRF-9);
- South Rancho Santa Fe Road, between City of Encinitas Limits and El Mirlo – LOS F (Impact TRF-10).
- Santa Fe Drive, between Nardo Road and Windsor Road/Bonita Drive – LOS E (Impact TRF-11);
- Santa Fe Drive, between Windsor Road/Bonita Drive and Balour Drive – LOS E (Impact TRF-12);
- Santa Fe Drive, between Lake Drive and Crest Drive – LOS E (Impact TRF-14);
- Santa Fe Drive, between Crest Drive and El Camino Real – LOS E (Impact TRF-15);
- Birmingham Drive, between I-5 SB Ramps and I-5 NB Ramps – LOS F (Impact TRF-21); and

Freeway Segment Analysis

The I-5 freeway segment mainline analysis for housing strategy 2 (BYO) buildout is shown in Table 4.13-14. As shown in the table, all freeway segments within the study area would operate at LOS D or better under the future year 2035 housing strategy 2 (BYO) buildout conditions. As all freeways would operate acceptably with the addition of housing strategy 2 (BYO), impacts would be less than significant.

Table 4.13-13 Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis											
		Capacity		Year 2035 (No Project)			Year 2035 + Strategy 2				Significant
Roadway	Segment	(LOS E)	Jurisdiction	ADT	V/C	LOS	ADT	V/C	LOS	Δ V/C	Impact?
Carlsbad Blvd.	Poinsettia Lane to Avenida Encinas	40,000	Carlsbad	25,300	0.633	C	25,400	0.635	C	0.002	No
	Avenida Encinas to La Costa Avenue	40,000	Carlsbad	24,700	0.618	C	25,100	0.628	C	0.009	No
North Coast Highway 101	La Costa Avenue to 600 feet south of La Costa Avenue	35,200	Encinitas	19,900	0.565	C ≤	21,200	0.602	C ≤	0.037	No
	600 feet south of La Costa Avenue to Leucadia Blvd	26,400	Encinitas	18,100	0.686	C ≤	19,900	0.754	C ≤	0.068	No
	Leucadia Blvd to Cadmus Street	35,200	Encinitas	19,900	0.565	C ≤	20,500	0.582	C ≤	0.017	No
	Cadmus Street to Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	20,500	0.582	C ≤	0.017	No
	Marcheta Street to 660 feet south of Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	20,500	0.582	C ≤	0.017	No
	660 feet south of Marcheta Street to Encinitas Blvd	35,200	Encinitas	19,900	0.565	C ≤	19,200	0.545	C ≤	-0.020	No
South Coast Highway 101	Encinitas Blvd to West D Street	35,200	Encinitas	19,400	0.551	C ≤	19,100	0.543	C ≤	-0.008	No
	West D Street to West E Street	35,200	Encinitas	19,400	0.551	C ≤	19,100	0.543	C ≤	-0.008	No
	West E Street to West F Street	35,200	Encinitas	19,400	0.551	C ≤	19,100	0.543	C ≤	-0.008	No
	West F Street to West H Street	35,200	Encinitas	19,400	0.551	C ≤	19,100	0.543	C ≤	-0.008	No
	West H Street to West J Street	35,200	Encinitas	21,100	0.599	C ≤	20,700	0.588	C ≤	-0.011	No
	West J Street to Swami's Parking	26,400	Encinitas	21,100	0.799	C ≤	20,700	0.784	C ≤	-0.015	No
	Swami's Parking to San Elijo State Beach	14,000	Encinitas	21,300	1.521	**F**	20,900	1.493	**F**	-0.028	No
	San Elijo State Beach to Chesterfield	35,200	Encinitas	21,300	0.605	C ≤	21,400	0.608	C ≤	0.003	No
	Chesterfield to Cardiff State Beach traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Cardiff Beach State to Chart House traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Chart House traffic signal to Las Olas Mexican Restaurant traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Las Olas Mexican Restaurant to Solana Beach boundary	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
North Highway 101	Solana Beach boundary to West Cliff Street	40,000	Solana Beach	22,500	0.563	C	22,700	0.568	C	0.005	No
	West Cliff to Lomas Santa Fe	40,000	Solana Beach	25,000	0.625	C	25,100	0.628	C	0.002	No
	Lomas Santa Fe Drive to Via De La Valle	40,000	Solana Beach	23,600	0.590	C	23,600	0.590	C	0.000	No
Vulcan Avenue	La Costa Avenue to Leucadia Boulevard	14,000	Encinitas	7,000	0.500	C ≤	7,200	0.514	C ≤	0.014	No
	Leucadia Blvd to Encinitas Boulevard	14,000	Encinitas	7,500	0.536	C ≤	7,500	0.536	C ≤	0.000	No
	Encinitas Boulevard to D Street	32,400	Encinitas	12,900	0.398	C ≤	13,300	0.410	C ≤	0.012	No
	D Street to E Street	32,400	Encinitas	12,900	0.398	C ≤	13,300	0.410	C ≤	0.012	No
	E Street to Santa Fe Drive	20,000	Encinitas	13,100	0.655	C ≤	13,500	0.675	C ≤	0.020	No

Table 4.13-13 Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis											
		Capacity		Year 2035 (No Project)			Year 2035 + Strategy 2				Significant
Roadway	Segment	(LOS E)	Jurisdiction	ADT	V/C	LOS	ADT	V/C	LOS	Δ V/C	Impact?
San Elijo Avenue	Santa Fe Drive to Birmingham Drive	14,000	Encinitas	10,100	0.721	C ≤	10,100	0.721	C ≤	0.000	No
	Birmingham Drive to Chesterfield Drive	20,000	Encinitas	12,500	0.625	C ≤	12,600	0.630	C ≤	0.005	No
	Chesterfield Drive to Manchester Avenue	20,000	Encinitas	9,500	0.475	C ≤	9,500	0.475	C ≤	0.000	No
Saxony Road	La Costa Avenue to Quail Gardens Drive	14,000	Encinitas	4,600	0.329	C ≤	4,700	0.336	C ≤	0.007	No
	Quail Hollow Drive to Normtoy Road	14,000	Encinitas	3,400	0.243	C ≤	3,500	0.250	C ≤	0.007	No
	Normtoy Road to Brittany Avenue	14,000	Encinitas	3,900	0.279	C ≤	3,900	0.279	C ≤	0.000	No
	Brittany Avenue to Leucadia Boulevard	14,000	Encinitas	3,500	0.250	C ≤	3,500	0.250	C ≤	0.000	No
	Leucadia Boulevard to Silver Berry Place	14,000	Encinitas	11,800	0.843	D	11,900	0.850	D	0.007	No
	Silver Berry Place to Encinitas Boulevard	20,000	Encinitas	13,800	0.690	C ≤	14,800	0.740	C ≤	0.050	No
Quail Hollow Drive	Swallow Tail Road to Saxony Road	14,000	Encinitas	5,000	0.357	C ≤	5,000	0.357	C ≤	0.000	No
Quail Gardens Drive	Swallow Tail Road to Lauren Court	20,000	Encinitas	4,900	0.245	C ≤	4,900	0.245	C ≤	0.000	No
	Lauren Court to Leucadia Boulevard	20,000	Encinitas	5,300	0.265	C ≤	5,300	0.265	C ≤	0.000	No
	Leucadia Boulevard to Paseo De Las Flores	20,000	Encinitas	9,100	0.455	C ≤	8,300	0.415	C ≤	-0.040	No
	Paseo De Las Flores to Paseo De Las Verdes	20,000	Encinitas	8,900	0.445	C ≤	8,300	0.415	C ≤	-0.030	No
	Paseo De Las Verdes to Encinitas Boulevard	20,000	Encinitas	8,200	0.410	C ≤	8,700	0.435	C ≤	0.025	No
Westlake Street	Encinitas Boulevard to Requeza Street	20,000	Encinitas	11,800	0.590	C ≤	16,300	0.815	D	0.225	No
Nardo Drive	Requeza Street to Melba Road	14,000	Encinitas	5,100	0.364	C ≤	5,600	0.400	C ≤	0.036	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	5,100	0.364	C ≤	4,900	0.350	C ≤	-0.014	No
MacKinnon Avenue	Santa Fe Drive to Villa Cardiff Drive	14,000	Encinitas	6,200	0.443	C ≤	6,500	0.464	C ≤	0.021	No
Villa Cardiff Drive	MacKinnon Avenue to Windsor Road	14,000	Encinitas	6,500	0.464	C ≤	6,800	0.486	C ≤	0.022	No
	Windsor Road to Birmingham Drive	14,000	Encinitas	5,700	0.407	C ≤	6,200	0.443	C ≤	0.036	No
Garden View Road	Leucadia Boulevard to Via Cantebria	35,200	Encinitas	11,500	0.327	C ≤	11,400	0.324	C ≤	-0.003	No
	Via Cantebria to El Camino Real	35,200	Encinitas	12,900	0.366	C ≤	12,600	0.358	C ≤	-0.008	No
Town Center Place	Leucadia Boulevard to Town Center Place	32,400	Encinitas	20,000	0.617	C ≤	20,500	0.633	C ≤	0.016	No
	Town Center Place to Town Center Drive	32,400	Encinitas	17,800	0.549	C ≤	17,100	0.528	C ≤	-0.021	No
Via Cantebria	Town Center Drive to Garden View Road	14,000	Encinitas	15,800	1.129	**F**	15,500	1.107	**F**	-0.022	No
	Garden View Road to Forrest Bluff	24,300	Encinitas	14,900	0.613	C ≤	15,000	0.617	C ≤	0.004	No
	Forrest Bluff to Via Montoro	32,400	Encinitas	15,200	0.469	C ≤	15,400	0.475	C ≤	0.006	No
	Via Montoro to Via Molena	32,400	Encinitas	17,900	0.552	C ≤	17,300	0.534	C ≤	-0.018	No
	Via Molena to Encinitas Boulevard	32,400	Encinitas	17,500	0.540	C ≤	18,200	0.562	C ≤	0.022	No

Table 4.13-13
Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 2			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Balour Drive	Encinitas Boulevard to Melba Road	14,000	Encinitas	11,200	0.800	C ≤	11,500	0.821	D	0.021	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	10,700	0.764	C ≤	10,700	0.764	C ≤	0.000	No
Lake Drive	Santa Fe Drive to Woodlake Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No
	Woodlake Drive to Birmingham Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No
El Camino Real	Aviara Parkway to La Costa Avenue	50,000	Carlsbad	54,300	1.086	**F**	54,200	1.084	**F**	-0.002	No
	La Costa Avenue to Calle Barcelona	60,000	Carlsbad	38,400	0.640	C	38,300	0.638	C	-0.002	No
	Calle Barcelona to Carlsbad boundary	60,000	Carlsbad	36,500	0.608	C	36,000	0.600	C	-0.008	No
	Carlsbad boundary to Leucadia Boulevard	66,000	Encinitas	46,700	0.708	C ≤	46,200	0.700	C ≤	-0.008	No
	Leucadia Boulevard to Town Center Drive	66,000	Encinitas	58,600	0.888	D	58,700	0.889	D	0.001	No
	Town Center Drive to Garden View Road	66,000	Encinitas	54,200	0.821	D	54,000	0.818	D	-0.003	No
	Garden View Road to 331-339 El Camino Real	66,000	Encinitas	42,900	0.650	C ≤	42,800	0.648	C ≤	-0.002	No
	331-339 El Camino Real to Via Montoro	66,000	Encinitas	48,900	0.741	C ≤	49,000	0.742	C ≤	0.001	No
	Via Montoro to Mountain Vista	66,000	Encinitas	44,300	0.671	C ≤	44,400	0.673	C ≤	0.002	No
	Mountain Vista to Via Molena	66,000	Encinitas	47,000	0.712	C ≤	47,000	0.712	C ≤	0.000	No
	Via Molena to Encinitas Boulevard	66,000	Encinitas	56,900	0.862	D	58,100	0.880	D	0.018	No
	Encinitas Boulevard to 213 S El Camino Real	57,000	Encinitas	39,400	0.691	C ≤	39,800	0.698	C ≤	0.007	No
	213 S El Camino Real to Crest Drive	57,000	Encinitas	33,800	0.593	C ≤	33,800	0.593	C ≤	0.000	No
	Crest Drive to Willowspring Drive	57,000	Encinitas	36,200	0.635	C ≤	36,100	0.633	C ≤	-0.002	No
	Willowspring Drive to Santa Fe Drive	45,400	Encinitas	37,500	0.826	D	37,600	0.828	D	0.002	No
	Santa Fe Drive to Sage Canyon Drive	45,400	Encinitas	28,400	0.626	C ≤	29,300	0.645	C ≤	0.019	No
	Sage Canyon Drive to Manchester Avenue	35,200	Encinitas	27,700	0.787	C ≤	28,600	0.813	D	0.026	No
Village Park Way	Mountain Vista Drive to Parkdale Drive	35,200	Encinitas	10,900	0.310	C ≤	11,000	0.313	C ≤	0.003	No
	Parkdale Drive to Encinitas Boulevard	35,200	Encinitas	14,200	0.403	C ≤	14,400	0.409	C ≤	0.006	No

Table 4.13-13
Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 2			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Rancho Santa Fe Road	Olivenhain Road to Calle Acervo	40,000	Carlsbad	17,400	0.435	B	17,400	0.435	B	0.000	No
	Calle Acervo/Avenida La Posta to Olive Crest Drive	20,000	Encinitas	15,900	0.795	C ≤	16,400	0.820	D	0.025	No
	Olive Crest Drive to 13th Street	20,000	Encinitas	15,800	0.790	C ≤	16,200	0.810	D	0.020	No
	13th Street to 11th Street	20,000	Encinitas	15,700	0.785	C ≤	16,100	0.805	D	0.020	No
	11th Street to El Camino Del Norte	20,000	Encinitas	15,800	0.790	C ≤	16,300	0.815	D	0.025	No
	El Camino Del Norte to 9th Street	20,000	Encinitas	13,300	0.665	C ≤	13,700	0.685	C ≤	0.020	No
	9th Street to 8th Street	14,000	Encinitas	13,500	0.964	**E**	14,000	1.000	**E**	0.036	**Yes (TRF-1)**
	8th Street to 7th Street	14,000	Encinitas	13,900	0.993	**E**	14,400	1.029	**F**	0.036	**Yes (TRF-2)**
	7th Street to Encinitas Boulevard	20,000	Encinitas	15,200	0.760	C ≤	18,300	0.915	**E**	0.155	**Yes (TRF-3)**
Manchester Avenue	Encinitas Boulevard to El Camino Real	20,000	Encinitas	12,300	0.615	C ≤	13,500	0.675	C ≤	0.060	No
	Manchester Avenue to Mira Costa College	45,400	Encinitas	35,400	0.780	C ≤	36,700	0.808	D	0.028	No
	Mira Costa College to I-5 NB On-Ramp	45,400	Encinitas	35,700	0.786	C ≤	36,800	0.811	D	0.025	No
	I-5 NB Ramps to I-5 SB Ramps	20,000	Encinitas	40,200	2.010	**F**	40,700	2.035	**F**	0.025	**Yes (TRF-16)**
	I-5 SB Ramps to Ocean Cove Drive	20,000	Encinitas	11,900	0.595	C ≤	12,000	0.600	C ≤	0.005	No
	Ocean Cove Drive to Seaside Cardiff-by-the-sea residential area driveway	14,000	Encinitas	11,900	0.850	D	11,900	0.850	D	0.000	No
	Seaside Cardiff-by-the-sea residential area driveway to San Elijo Water Reclamation Facility Driveway	20,000	Encinitas	11,900	0.595	C ≤	11,900	0.595	C ≤	0.000	No
	San Elijo Water Reclamation Facility Driveway to Manchester Avenue	14,000	Encinitas	11,800	0.843	D	11,800	0.843	D	0.000	No

Table 4.13-13
Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 2			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
La Costa Avenue	North Coast Highway 101 to Vulcan Avenue	14,000	Encinitas	16,400	1.164	**F**	17,100	1.221	**F**	0.050	**Yes (TRF-4)**
	Vulcan Avenue to Sheridan Road	14,000	Encinitas	16,300	1.164	**F**	17,000	1.214	**F**	0.050	**Yes (TRF-5)**
	Sheridan Road to I-5 SB Ramps	20,000	Encinitas	22,000	1.100	**F**	22,600	1.130	**F**	0.030	**Yes (TRF-6)**
	I-5 SB Ramps to I-5 NB Ramps	40,000	Carlsbad	29,300	0.733	C	29,700	0.743	C	0.010	No
	I-5 NB Ramps to Piraeus Street	41,667	Carlsbad	39,500	0.948	**E**	39,700	0.953	**E**	0.005	No
	Piraeus Street to Saxony Road	40,000	Carlsbad	39,600	0.990	**E**	39,900	0.998	**E**	0.008	No
	Saxony Road to El Camino Real	40,000	Carlsbad	42,000	1.050	**F**	42,000	1.050	**F**	0.000	No
	El Camino Real to La Costa Towne Center traffic signal	40,000	Carlsbad	20,700	0.518	B	20,900	0.523	B	0.004	No
	La Costa Towne Center traffic signal to Fairway Lane	40,000	Carlsbad	20,900	0.523	B	21,000	0.525	B	0.002	No
	Fairway Lane to Calle Madero	22,500	Carlsbad	20,700	0.920	**E**	20,800	0.924	**E**	0.004	No
Leucadia Blvd	North Coast Highway 101 to Vulcan Avenue	32,400	Encinitas	14,300	0.441	C ≤	15,600	0.481	C ≤	0.040	No
	Vulcan Avenue to Hermes Avenue	20,000	Encinitas	16,300	0.815	D	17,200	0.860	D	0.045	No
	Hermes Avenue to Hygeia Avenue	20,000	Encinitas	15,700	0.785	C ≤	16,600	0.830	D	0.045	No
	Hygeia Avenue to Hymettus Avenue	20,000	Encinitas	17,400	0.870	D	15,000	0.750	C ≤	-0.120	No
	Hymettus Avenue to Orpheus Avenue	20,000	Encinitas	19,200	0.960	**E**	20,000	1.000	**E**	0.040	**Yes (TRF-7)**
	Orpheus Avenue to I-5 SB Ramps	35,200	Encinitas	17,700	0.503	C ≤	18,500	0.526	C ≤	0.023	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	28,600	0.813	D	28,900	0.821	D	0.008	No
	Piraeus Street to Urania Avenue	45,400	Encinitas	44,100	0.971	**E**	44,200	0.974	**E**	0.003	No
	Urania Avenue to Saxony Road	45,400	Encinitas	44,100	0.971	**E**	44,000	0.969	**E**	-0.002	No
	Saxony Road to Sidonia Street	45,400	Encinitas	42,400	0.934	**E**	42,000	0.925	**E**	-0.009	No
	Sidonia Street to Quail Gardens Drive	45,400	Encinitas	42,400	0.934	E	42,100	0.927	**E**	-0.007	No
	Quail Gardens Drive to Garden View Road	45,400	Encinitas	47,100	1.037	F	47,100	1.037	**F**	0.000	No
	Garden View Road to Town Center Place	45,400	Encinitas	34,700	0.764	C ≤	32,000	0.705	C ≤	-0.059	No
	Town Center Place to El Camino Real	57,000	Encinitas	39,000	0.684	C ≤	38,900	0.682	C ≤	-0.002	No
Mountain Vista Drive	El Camino Real to Wandering Road	20,000	Encinitas	15,000	0.750	C ≤	15,000	0.750	C ≤	0.000	No
	Wandering Road to Village Park Way	20,000	Encinitas	9,300	0.465	C ≤	9,300	0.465	C ≤	0.000	No
Lone Jack Drive	Rancho Santa Fe Road to northern terminus	14,000	Encinitas	8,400	0.600	C ≤	8,200	0.586	C ≤	-0.014	No
El Camino Del Norte	Rancho Santa Fe Road to San Dieguito CPA boundary	14,000	Encinitas	7,900	0.564	C ≤	7,800	0.557	C ≤	-0.007	No
	San Dieguito CPA boundary to Via De Fortuna	9,700	County	7,800	0.804	D	7,600	0.784	C ≤	-0.020	No

Table 4.13-13 Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis											
		Capacity		Year 2035 (No Project)			Year 2035 + Strategy 2				Significant
Roadway	Segment	(LOS E)	Jurisdiction	ADT	V/C	LOS	ADT	V/C	LOS	Δ V/C	Impact?
Encinitas Blvd.	North Coast Highway 101 to Vulcan Avenue	32,400	Encinitas	22,300	0.688	C ≤	22,700	0.701	C ≤	0.013	No
	Vulcan Avenue to I-5 SB Ramps	45,400	Encinitas	34,100	0.751	C ≤	33,900	0.746	**E**	-0.005	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	38,500	1.094	**F**	39,600	1.125	**F**	0.031	**Yes (TRF-8)**
	I-5 NB Ramps to Saxony Road	35,200	Encinitas	41,400	1.176	**F**	43,000	1.222	**F**	0.046	**Yes (TRF-17)**
	Saxony Road to Calle Magdalena	66,000	Encinitas	35,400	0.536	C ≤	36,400	0.552	C ≤	0.016	No
	Calle Magdalena to Encinitas Town Country traffic signal	57,000	Encinitas	40,000	0.702	C ≤	41,400	0.726	C ≤	0.024	No
	Encinitas Town Country traffic signal to Quail Gardens Drive	45,400	Encinitas	36,000	0.793	C ≤	38,400	0.846	D	0.053	No
	Quails Garden Drive to Delphinium Street	35,200	Encinitas	37,700	1.071	**F**	39,700	1.128	**F**	0.057	**Yes (TRF-18)**
	Delphinium Street to Balour Drive	35,200	Encinitas	38,300	1.088	**F**	39,900	1.134	**F**	0.046	**Yes (TRF-19)**
	Balour Drive to Via Cantebria	35,200	Encinitas	47,500	1.349	**F**	48,700	1.384	**F**	0.035	**Yes (TRF-20)**
	Via Cantebria to El Camino Real	35,200	Encinitas	29,400	0.835	D	30,400	0.864	D	0.029	No
	El Camino Real to Village Square Drive	35,200	Encinitas	31,000	0.881	D	29,900	0.849	D	-0.032	No
	Village Square Drive to Turner Avenue	35,200	Encinitas	29,300	0.832	D	30,000	0.852	D	0.020	No
	Turner Avenue to Cerro Street	35,200	Encinitas	29,300	0.832	D	30,000	0.852	D	0.020	No
	Cerro Street to Village Park Way	35,200	Encinitas	29,700	0.844	D	30,700	0.872	D	0.028	No
	Village Park Way to Willowspring Drive	35,200	Encinitas	27,900	0.793	C ≤	29,000	0.824	D	0.031	No
	Willowspring Drive to Rancho Santa Fe Road	35,200	Encinitas	22,700	0.645	C ≤	23,900	0.679	C ≤	0.034	No
South Rancho Santa Fe Road	**Manchester Avenue to Encinitas Limits**	20,000	Encinitas	18,580	0.930	**E**	19,500	0.975	**E**	0.045	**Yes (TRF-9)**
	Encinitas Limits to El Mirlo	9,700	County	18,580	1.915	**F**	19,500	2.010	**F**	0.095	**Yes (TRF-10)**
F Street	Vulcan Avenue to Cornish Drive	14,000	Encinitas	6,200	0.443	C ≤	6,400	0.457	C ≤	0.014	No
Requeza Street	Cornish Drive to San Dieguito Drive	14,000	Encinitas	6,300	0.450	C ≤	6,500	0.464	C ≤	0.014	No
	San Dieguito Drive to Stratford Drive	14,000	Encinitas	6,300	0.450	C ≤	6,500	0.464	C ≤	0.014	No
	Stratford Drive to Regal Road	14,000	Encinitas	6,800	0.486	C ≤	7,000	0.500	C ≤	0.014	No
	Regal Road to West Lake Drive	14,000	Encinitas	6,400	0.457	C ≤	7,600	0.543	C ≤	0.086	No
	West Lake Drive to Nardo Drive	14,000	Encinitas	4,800	0.343	C ≤	5,200	0.371	C ≤	0.028	No

Table 4.13-13
Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 2			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Santa Fe Drive	Vulcan Avenue to Cornish Drive	14,000	Encinitas	9,000	0.643	C ≤	9,000	0.643	C ≤	0.000	No
	Cornish Drive to Summit Avenue	14,000	Encinitas	9,000	0.643	C ≤	9,000	0.643	C ≤	0.000	No
	Summit Avenue to Devonshire	14,000	Encinitas	10,100	0.721	C ≤	10,300	0.736	C ≤	0.015	No
	Devonshire Drive to Scripps Memorial Hospital Encinitas traffic signal	20,000	Encinitas	15,200	0.760	C ≤	15,600	0.780	C ≤	0.020	No
	Scripps Memorial Hospital Encinitas traffic signal to I-5 SB Ramps	32,400	Encinitas	15,200	0.469	C ≤	15,600	0.481	C ≤	0.012	No
	I-5 SB Ramps to I-5 NB Ramps	26,400	Encinitas	22,400	0.848	D	22,900	0.867	D	0.019	No
	I-5 NB Ramps to Regal Road	20,000	Encinitas	16,100	0.805	D	16,500	0.825	D	0.020	No
	Regal Road to Gardena Road	20,000	Encinitas	16,100	0.805	D	16,500	0.825	D	0.020	No
	Gardena Road to Nardo Road	20,000	Encinitas	16,100	0.805	D	16,500	0.825	D	0.020	No
	Nardo Road to Windsor Road/Bonita Drive	20,000	Encinitas	17,700	0.885	D	18,100	0.905	**E**	0.020	**Yes (TRF-11)**
	Windsor Road/Bonita Drive to Balour Drive	20,000	Encinitas	17,700	0.885	D	18,100	0.905	**E**	0.020	**Yes (TRF-12)**
	Balour Drive to Lake Drive	20,000	Encinitas	18,600	0.930	**E**	19,000	0.950	**E**	0.020	No
	Lake Drive to Crest Drive	20,000	Encinitas	17,700	0.885	D	18,200	0.910	**E**	0.025	**Yes (TRF-14)**
	Crest Drive to El Camino Real	20,000	Encinitas	17,700	0.885	D	18,200	0.910	**E**	0.025	**Yes (TRF-15)**
Birmingham Drive	**San Elijo Avenue to MacKinnon**	20,000	Encinitas	15,500	20,000	C ≤	15,500	0.775	**F**	0.000	No
	MacKinnon Avenue to Carol View Drive	20,000	Encinitas	15,500	20,000	C ≤	15,500	0.775	**E**	0.000	No
	Carol View Drive to I-5 SB Ramps	20,000	Encinitas	15,500	20,000	C ≤	15,500	0.775	**E**	0.000	No
	I-5 SB Ramps to I-5 NB Ramps	14,000	Encinitas	17,400	14,000	**F**	17,400	1.243	**F**	0.000	No
	I-5 NB Ramps to Villa Cardiff Drive	14,000	Encinitas	8,800	14,000	C ≤	8,800	0.629	**E**	0.000	No
	Villa Cardiff Drive to Playa Rivera	14,000	Encinitas	8,800	14,000	C ≤	8,800	0.629	D	0.000	No
	Playa Rivera to Freda Lane	14,000	Encinitas	8,800	14,000	C ≤	8,800	0.629	**E**	0.000	No
	Freda Lane to Lake Drive	14,000	Encinitas	8,800	14,000	C ≤	8,800	0.629	C ≤	0.000	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.

Table 4.13-14
Housing Strategy 2 (Build Your Own) - Future Year 2035 Freeway Segment Level of Service

Freeway	Segment	Direction	Year 2035					Year 2035 + Housing Strategy 2					Δ V/C	Significant Impact?
			ADT	Capacity	Peak Hour Volume	V/C	LOS	ADT	Peak Hour Volume	Capacity	V/C	LOS		
I-5	Palomar Airport Rd. and Poinsettia Ln.	NB	201,000	10,810	8,500	0.69	C	202,000	7,500	10,810	0.69	C	0.0	No
		SB		10,810	8,400	0.78	C		8,400	10,810	0.78	C	0.0	No
	Poinsettia Ln. and La Costa Ave.	NB	204,000	9,400	8,600	0.81	D	200,200	7,600	9,400	0.810	D	0.0	No
		SB		9,400	8,500	0.88	D		8,300	9,400	0.880	D	0.0	No
	La Costa Ave. and Leucadia Blvd.	NB	208,000	9,400	8,600	0.81	D	196,900	7,600	9,400	0.810	D	0.0	No
		SB		10,810	7,900	0.69	C		7,500	10,810	0.69	C	0.0	No
	Leucadia Blvd. and Encinitas Blvd.	NB	211,000	10,810	8,700	0.71	C	117,600	7,600	10,810	0.70	C	-0.01	No
		SB		9,400	8,000	0.47	B		4,400	9,400	0.470	B	0.0	No
	Encinitas Blvd. and Santa Fe Dr.	NB	210,000	9,400	8,500	0.80	D	197,300	7,500	9,400	0.80	D	0.0	No
		SB		10,810	8,000	0.69	C		7,500	10,810	0.69	C	0.0	No
	Santa Fe Dr. and Birmingham Dr.	NB	201,000	10,810	8,100	0.71	C	197,100	7,700	10,810	0.71	C	0.0	No
		SB		10,810	7,700	0.69	C		7,600	10,810	0.70	C	0.01	No
	Birmingham Dr. and Manchester Ave.	NB	203,000	10,810	8,200	0.74	C	198,900	8,000	10,810	0.74	C	0.0	No
		SB		10,810	7,800	0.70	C		7,600	10,810	0.70	C	0.0	No
	Manchester Ave. and Lomas Santa Fe Dr.	NB	215,970*	8,460	8,200	0.860	D	247,300	9,300	10,810	0.860	D	0.0	No
		SB		10,810	8,900	0.880	D		9,600	10,810	0.890	D	0.01	No
	Lomas Santa Fe Dr. and Via De La Valle	NB	208,844*	10,810	8,200	0.870	D	248,600	9,400	10,810	0.870	D	0.0	No
		SB		10,810	8,400	0.89	D		9,500	10,810	0.880	D	-0.01	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.
*Reduction of estimated HOV volume was applied to the ADT.

e. Housing Strategy 3 – Modified Mixed Use Places (MMUP)

As shown in Figure 4.13-4 and identified in Tables 4.13-9 to 4.13-10, the buildout of housing strategy 3 (MMUP) would generate 726,293 trips and would result in 1,199,428 citywide VMT.

Roadway Segment Analysis

As shown in Table 4.13-15 and illustrated on Figure 4.13-4, the 35 roadway segments within the project study area would operate at substandard level of service E or F with the buildout of housing strategy 3 (MMUP), with 27 located in Encinitas, 5 located in Carlsbad, and 1 located in the County of San Diego. Although 35 roadway segments operate unacceptably, the additional traffic generated by housing strategy 2 (MMUP) would only result in the exceedance of the significance criteria at the following 20 segments (19 in Encinitas and 1 in the County):

- Rancho Santa Fe Road, between 9th Street and 8th Street – LOS E (Impact TRF-1);
- Rancho Santa Fe Road, between 8th Street and 7th Street – LOS F (Impact TRF-2);
- Rancho Santa Fe Road, between 7th Street and Encinitas Boulevard – LOS E (Impact TRF-3);
- Manchester Avenue, between I-5 NB Ramps and I-5 SB Ramps – LOS F (Impact TRF-16);
- La Costa Avenue, between North Coast Highway 101 and Vulcan Avenue – LOS F (Impact TRF-4);
- La Costa Avenue, between Vulcan Avenue and Sheridan Road – LOS F (Impact TRF-5);
- La Costa Avenue, between Sheridan Road and I-5 SB Ramps – LOS F (Impact TRF-6);
- Leucadia Boulevard, between Hymettus Avenue and Orpheus Avenue – LOS F (Impact TRF-7);
- Encinitas Boulevard, between I-5 SB Ramps and I-5 NB Ramps – LOS F (Impact TRF-8);
- Encinitas Boulevard, between I-5 NB Ramps and Saxony Road – LOS F (Impact TRF-17);
- Encinitas Boulevard, between Quail Gardens Drive and Delphinium Street – LOS F (Impact TRF-18);
- Encinitas Boulevard, between Delphinium Street and Balour Drive – LOS F (Impact TRF-19);
- Encinitas Boulevard, between Balour Drive and Via Cantebria – LOS F (Impact TRF-20);
- South Rancho Santa Fe Road, between Manchester Avenue and City of Encinitas Limits – LOS E (Impact TRF-9);
- South Rancho Santa Fe Road, between City of Encinitas Limits and El Mirlo – LOS F (Impact TRF-10);

- Santa Fe Drive, between Nardo Road and Windsor Road/Bonita Drive – LOS E (Impact TRF-11);
- Santa Fe Drive, between Windsor Road/Bonita Drive and Balour Drive – LOS E (Impact TRF-12);
- Santa Fe Drive, between Balour Drive and Lake Drive – LOS E (Impact TRF-13);
- Santa Fe Drive, between Lake Drive and Crest Drive – LOS E (Impact TRF-14); and
- Santa Fe Drive, between Crest Drive and El Camino Real – LOS E (Impact TRF-15).

Freeway Segment Analysis

The I-5 freeway segment mainline analysis for the buildout of housing strategy 3 (MMUP) is shown in Table 4.13-16. As shown in the table, all freeway segments within the study area would operate at LOS D or better under the future year 2035 housing strategy 3 (MMUP) conditions. As all freeways would operate acceptably with the addition of housing strategy 3 (MMUP), impacts would be less than significant.

Intersection Analysis

As described above, the housing strategy 3 (MMUP) represents the highest trip-generating strategy and, therefore, an intersection analysis was completed for this strategy. Table 4.13-17 summarizes the level of service analysis results for the 53 key study area intersections under housing strategy 3 (MMUP) buildout conditions. As shown in the table, 14 intersections are projected to operate at an unacceptable LOS E or F, including 13 in the City of Encinitas and 1 in the City of Carlsbad under the year 2035 housing strategy 3 (MMUP) conditions. Although 14 intersections operate unacceptably, the additional traffic generated by housing strategy 3 (MMUP) would only result in the exceedance of the significance criteria at the following 2 intersections (both in the City of Encinitas):

- Vulcan Avenue & La Costa Avenue – LOS F during both AM and PM peak hours (Impact TRF-22); and
- Balour Drive & Santa Fe Drive – LOS F during both AM and PM peak hours (Impact TRF-23).

Ramp Intersection Capacity Analysis

A ramp intersection capacity analysis was completed to satisfy Caltrans requirements. This ramp intersection capacity analysis is for informational purposes only and is not utilized to determine project impacts under CEQA. As shown in Table 4.13-18, all of the signalized ramp intersections are projected to operate at "Under Capacity" or "At Capacity" conditions during both the AM and PM peak hours with the exception of the following:

- I-5 NB Ramps / Leucadia Boulevard – Over Capacity during PM peak hour; or
- I-5 SB Ramps / Encinitas Boulevard – Over Capacity during both AM and PM peak hour.

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Carlsbad Blvd	Poinsettia Lane to Avenida Encinas	40,000	Carlsbad	25,300	0.633	C	25,500	0.638	C	0.004	No
	Avenida Encinas to La Costa Avenue	40,000	Carlsbad	24,700	0.618	C	25,400	0.635	C	0.017	No
North Coast Highway 101	La Costa Avenue to 600 feet south of La Costa Avenue	35,200	Encinitas	19,900	0.565	C ≤	21,800	0.619	C ≤	0.054	No
	600 feet south of La Costa Avenue to Leucadia Blvd	26,400	Encinitas	18,100	0.686	C ≤	20,900	0.792	C ≤	0.106	No
	Leucadia Blvd to Cadmus Street	35,200	Encinitas	19,900	0.565	C ≤	21,300	0.605	C ≤	0.040	No
	Cadmus Street to Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	21,300	0.605	C ≤	0.040	No
	Marcheta Street to 660 feet south of Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	19,300	0.548	C ≤	-0.017	No
	660 feet south of Marcheta Street to Encinitas Blvd	35,200	Encinitas	19,900	0.565	C ≤	19,600	0.557	C ≤	-0.008	No
South Coast Highway 101	Encinitas Blvd to West D Street	35,200	Encinitas	19,400	0.551	C ≤	19,300	0.548	C ≤	-0.003	No
	West D Street to West E Street	35,200	Encinitas	19,400	0.551	C ≤	19,300	0.548	C ≤	-0.003	No
	West E Street to West F Street	35,200	Encinitas	19,400	0.551	C ≤	19,300	0.548	C ≤	-0.003	No
	West F Street to West H Street	35,200	Encinitas	19,400	0.551	C ≤	19,300	0.548	C ≤	-0.003	No
	West H Street to West J Street	35,200	Encinitas	21,100	0.599	C ≤	20,900	0.594	C ≤	-0.005	No
	West J Street to Swami's Parking	26,400	Encinitas	21,100	0.799	C ≤	20,900	0.792	C ≤	-0.007	No
	Swami's Parking to San Elijo State Beach	14,000	Encinitas	21,300	1.521	**F**	21,100	1.507	**F**	-0.014	No
	San Elijo State Beach to Chesterfield	35,200	Encinitas	21,300	0.605	C ≤	21,400	0.608	C ≤	0.003	No
	Chesterfield to Cardiff State Beach traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,200	0.659	C ≤	0.000	No
	Cardiff Beach State to Chart House traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,200	0.659	C ≤	0.000	No
	Chart House traffic signal to Las Olas Mexican Restaurant traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,200	0.659	C ≤	0.000	No
	Las Olas Mexican Restaurant to Solana Beach boundary	35,200	Encinitas	23,200	0.659	C ≤	23,200	0.659	C ≤	0.000	No
North Highway 101	Solana Beach boundary to West Cliff Street	40,000	Solana Beach	22,500	0.563	C	22,600	0.565	C	0.002	No
	West Cliff to Lomas Santa Fe	40,000	Solana Beach	25,000	0.625	C	25,000	0.625	C	0.000	No
	Lomas Santa Fe Drive to Via De La Valle	40,000	Solana Beach	23,600	0.590	C	23,600	0.590	C	0.000	No
Vulcan Avenue	La Costa Avenue to Leucadia Blvd.	14,000	Encinitas	7,000	0.500	C ≤	7,300	0.521	C ≤	0.021	No
	Leucadia Blvd to Encinitas Blvd.	14,000	Encinitas	7,500	0.536	C ≤	7,600	0.543	C ≤	0.007	No
	Encinitas Boulevard to D Street	32,400	Encinitas	12,900	0.398	C ≤	13,300	0.410	C ≤	0.012	No
	D Street to E Street	32,400	Encinitas	12,900	0.398	C ≤	13,700	0.423	C ≤	0.025	No
	E Street to Santa Fe Drive	20,000	Encinitas	13,100	0.655	C ≤	14,200	0.710	C ≤	0.078	No
San Elijo Avenue	Santa Fe Drive to Birmingham Drive	14,000	Encinitas	10,100	0.721	C ≤	10,200	0.729	C ≤	0.008	No
	Birmingham Drive to Chesterfield Drive	20,000	Encinitas	12,500	0.625	C ≤	12,700	0.635	C ≤	0.014	No
	Chesterfield Drive to Manchester Avenue	20,000	Encinitas	9,500	0.475	C ≤	9,600	0.480	C ≤	0.007	No

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Saxony Road	La Costa Avenue to Quail Gardens Drive	14,000	Encinitas	4,600	0.329	C ≤	4,600	0.329	C ≤	0.000	No
	Quail Hollow Drive to Normtoy Road	14,000	Encinitas	3,400	0.243	C ≤	3,400	0.243	C ≤	0.000	No
	Normtoy Road to Brittany Avenue	14,000	Encinitas	3,900	0.279	C ≤	3,800	0.271	C ≤	-0.008	No
	Brittany Avenue to Leucadia Boulevard	14,000	Encinitas	3,500	0.250	C ≤	3,400	0.243	C ≤	-0.007	No
	Leucadia Boulevard to Silver Berry Place	14,000	Encinitas	11,800	0.843	D	11,900	0.850	D	0.007	No
	Silver Berry Place to Encinitas Boulevard	20,000	Encinitas	13,800	0.690	C ≤	14,000	0.700	C ≤	0.014	No
Quail Hollow Drive	Swallow Tail Road to Saxony Road	14,000	Encinitas	5,000	0.357	C ≤	5,000	0.357	C ≤	0.000	No
Quail Gardens Drive	Swallow Tail Road to Lauren Court	20,000	Encinitas	4,900	0.245	C ≤	4,900	0.245	C ≤	0.000	No
	Lauren Court to Leucadia Boulevard	20,000	Encinitas	5,300	0.265	C ≤	5,300	0.265	C ≤	0.000	No
	Leucadia Boulevard to Paseo De Las Flores	20,000	Encinitas	9,100	0.455	C ≤	9,200	0.460	C ≤	0.005	No
	Paseo De Las Flores to Paseo De Las Verdes	20,000	Encinitas	8,900	0.445	C ≤	9,200	0.460	C ≤	0.015	No
	Paseo De Las Verdes to Encinitas Boulevard	20,000	Encinitas	8,200	0.410	C ≤	8,400	0.420	C ≤	0.010	No
Westlake Street	Encinitas Boulevard to Requeza Street	20,000	Encinitas	11,800	0.590	C ≤	11,800	0.590	D	0.000	No
Nardo Drive	Requeza Street to Melba Road	14,000	Encinitas	5,100	0.364	C ≤	5,200	0.371	C ≤	0.007	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	5,100	0.364	C ≤	5,200	0.371	C ≤	0.007	No
MacKinnon Avenue	Santa Fe Drive to Villa Cardiff Drive	14,000	Encinitas	6,200	0.443	C ≤	6,300	0.450	C ≤	0.007	No
	MacKinnon Avenue to Windsor Road	14,000	Encinitas	6,500	0.464	C ≤	6,600	0.471	C ≤	0.007	No
	Windsor Road to Birmingham Drive	14,000	Encinitas	5,700	0.407	C ≤	5,800	0.414	C ≤	0.007	No
Garden View Road	Leucadia Boulevard to Via Cantebria	35,200	Encinitas	11,500	0.327	C ≤	11,500	0.327	C ≤	0.000	No
	Via Cantebria to El Camino Real	35,200	Encinitas	12,900	0.366	C ≤	12,800	0.364	C ≤	-0.002	No
Town Center Place	Leucadia Boulevard to Town Center Place	32,400	Encinitas	20,000	0.617	C ≤	20,500	0.633	C ≤	0.016	No
	Town Center Place to Town Center Drive	32,400	Encinitas	17,800	0.549	C ≤	17,200	0.531	C ≤	-0.018	No
Via Cantebria	Town Center Drive to Garden View Road	14,000	Encinitas	15,800	1.129	**F**	15,700	1.121	**F**	-0.008	No
	Garden View Road to Forrest Bluff	24,300	Encinitas	14,900	0.613	C ≤	15,100	0.621	C ≤	0.008	No
	Forrest Bluff to Via Montoro	32,400	Encinitas	15,200	0.469	C ≤	15,400	0.475	C ≤	0.006	No
	Via Montoro to Via Molena	32,400	Encinitas	17,900	0.552	C ≤	17,300	0.534	C ≤	-0.018	No
	Via Molena to Encinitas Boulevard	32,400	Encinitas	17,500	0.540	C ≤	18,200	0.562	C ≤	0.022	No
Balour Drive	Encinitas Boulevard to Melba Road	14,000	Encinitas	11,200	0.800	C ≤	11,300	0.807	D	0.007	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	10,700	0.764	C ≤	11,100	0.793	C ≤	0.029	No
Lake Drive	Santa Fe Drive to Woodlake Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No
	Woodlake Drive to Birmingham Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
El Camino Real	Aviara Parkway to La Costa Avenue	50,000	Carlsbad	54,300	1.086	**F**	54,400	1.088	**F**	0.002	No
	La Costa Avenue to Calle Barcelona	60,000	Carlsbad	38,400	0.640	C	38,700	0.645	C	0.005	No
	Calle Barcelona to Carlsbad boundary	60,000	Carlsbad	36,500	0.608	C	36,400	0.607	C	-0.001	No
	Carlsbad boundary to Leucadia Boulevard	66,000	Encinitas	46,700	0.708	C ≤	46,500	0.705	C ≤	-0.003	No
	Leucadia Boulevard to Town Center Drive	66,000	Encinitas	58,600	0.888	D	59,200	0.897	D	0.009	No
	Town Center Drive to Garden View Road	66,000	Encinitas	54,200	0.821	D	54,500	0.826	D	0.005	No
	Garden View Road to 331-339 El Camino Real	66,000	Encinitas	42,900	0.650	C ≤	43,100	0.653	C ≤	0.003	No
	331-339 El Camino Real to Via Montoro	66,000	Encinitas	48,900	0.741	C ≤	49,300	0.747	C ≤	0.006	No
	Via Montoro to Mountain Vista	66,000	Encinitas	44,300	0.671	C ≤	44,900	0.680	C ≤	0.009	No
	Mountain Vista to Via Molena	66,000	Encinitas	47,000	0.712	C ≤	47,400	0.718	C ≤	0.006	No
	Via Molena to Encinitas Boulevard	66,000	Encinitas	56,900	0.862	D	58,800	0.891	D	0.029	No
	Encinitas Boulevard to 213 S El Camino Real	57,000	Encinitas	39,400	0.691	C ≤	40,100	0.704	C ≤	0.013	No
	213 S El Camino Real to Crest Drive	57,000	Encinitas	33,800	0.593	C ≤	33,800	0.593	C ≤	0.000	No
	Crest Drive to Willowspring Drive	57,000	Encinitas	36,200	0.635	C ≤	36,400	0.639	C ≤	0.004	No
	Willowspring Drive to Santa Fe Drive	45,400	Encinitas	37,500	0.826	D	37,800	0.833	D	0.007	No
	Santa Fe Drive to Sage Canyon Drive	45,400	Encinitas	28,400	0.626	C ≤	29,500	0.650	C ≤	0.024	No
	Sage Canyon Drive to Manchester Avenue	35,200	Encinitas	27,700	0.787	C ≤	29,000	0.824	D	0.037	No
Village Park Way	Mountain Vista Drive to Parkdale Drive	35,200	Encinitas	10,900	0.310	C ≤	11,400	0.324	C ≤	0.014	No
	Parkdale Drive to Encinitas Boulevard	35,200	Encinitas	14,200	0.403	C ≤	14,700	0.418	C ≤	0.015	No
Rancho Santa Fe Road	Olivenhain Road to Calle Acervo	40,000	Carlsbad	17,400	0.435	B	17,400	0.435	B	0.000	No
	Calle Acervo/Avenida La Posta to Olive Crest Drive	20,000	Encinitas	15,900	0.795	C ≤	16,500	0.825	D	0.030	No
	Olive Crest Drive to 13th Street	20,000	Encinitas	15,800	0.790	C ≤	16,300	0.815	D	0.025	No
	13th Street to 11th Street	20,000	Encinitas	15,700	0.785	C ≤	16,300	0.815	D	0.030	No
	11th Street to El Camino Del Norte	20,000	Encinitas	15,800	0.790	C ≤	16,400	0.820	D	0.030	No
	El Camino Del Norte to 9th Street	20,000	Encinitas	13,300	0.665	C ≤	13,700	0.685	C ≤	0.020	No
	9th Street to 8th Street	14,000	Encinitas	13,500	0.964	**E**	13,800	0.986	**E**	0.022	**Yes (TRF-1)**
	8th Street to 7th Street	14,000	Encinitas	13,900	0.993	**E**	14,300	1.021	**F**	0.028	**Yes (TRF-2)**
	7th Street to Encinitas Boulevard	20,000	Encinitas	15,200	0.760	C ≤	18,800	0.940	**E**	0.180	**Yes (TRF-3)**

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Manchester Avenue	Manchester Avenue to Mira Costa College	45,400	Encinitas	35,400	0.780	C ≤	37,100	0.700	D	0.037	No
	Mira Costa College to I-5 NB On-Ramp	45,400	Encinitas	35,700	0.786	C ≤	37,400	0.817	D	0.038	No
	I-5 NB Ramps to I-5 SB Ramps	20,000	Encinitas	40,200	2.010	**F**	40,800	0.824	**F**	0.030	**Yes (TRF-16)**
	I-5 SB Ramps to Ocean Cove Drive	20,000	Encinitas	11,900	0.595	C ≤	12,200	2.040	C ≤	0.015	No
	Ocean Cove Drive to Seaside Cardiff-by-the-sea residential area driveway	14,000	Encinitas	11,900	0.850	D	12,100	0.610	D	0.014	No
	Seaside Cardiff-by-the-sea residential area driveway to San Elijo Water Reclamation Facility Driveway	20,000	Encinitas	11,900	0.595	C ≤	12,100	0.864	C ≤	0.010	No
	San Elijo Water Reclamation Facility Driveway to Manchester Avenue	14,000	Encinitas	11,800	0.843	D	12,000	0.605	D	0.014	No
	Encinitas Boulevard to El Camino Real	20,000	Encinitas	12,300	0.615	C ≤	14,000	0.857	C ≤	0.085	No
La Costa Avenue	North Coast Highway 101 to Vulcan Avenue	14,000	Encinitas	16,400	1.164	**F**	17,700	1.264	**F**	0.093	**Yes (TRF-4)**
	Vulcan Avenue to Sheridan Road	14,000	Encinitas	16,300	1.164	**F**	17,300	1.236	**F**	0.072	**Yes (TRF-5)**
	Sheridan Road to I-5 SB Ramps	20,000	Encinitas	22,000	1.100	**F**	22,900	1.145	**F**	0.045	**Yes (TRF-6)**
	I-5 SB Ramps to I-5 NB Ramps	40,000	Carlsbad	29,300	0.733	C	30,000	0.750	C ≤	0.017	No
	I-5 NB Ramps to Piraeus Street	41,667	Carlsbad	39,500	0.948	**E**	39,700	0.953	**E**	0.005	No
	Piraeus Street to Saxony Road	40,000	Carlsbad	39,600	0.990	**E**	39,800	0.995	**E**	0.005	No
	Saxony Road to El Camino Real	40,000	Carlsbad	42,000	1.050	**F**	42,100	1.053	**F**	0.002	No
	El Camino Real to La Costa Towne Center traffic signal	40,000	Carlsbad	20,700	0.518	B	21,000	0.525	B	0.007	No
	La Costa Towne Center traffic signal to Fairway Lane	40,000	Carlsbad	20,900	0.523	B	21,200	0.530	C	0.007	No
	Fairway Lane to Calle Madero	22,500	Carlsbad	20,700	0.920	**E**	20,800	0.924	**E**	0.004	No

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Leucadia Blvd.	North Coast Highway 101 to Vulcan Avenue	32,400	Encinitas	14,300	0.441	C ≤	16,100	0.497	C ≤	0.056	No
	Vulcan Avenue to Hermes Avenue	20,000	Encinitas	16,300	0.815	D	17,700	0.885	D	0.070	No
	Hermes Avenue to Hygeia Avenue	20,000	Encinitas	15,700	0.785	C ≤	17,000	0.850	D	0.065	No
	Hygeia Avenue to Hymettus Avenue	20,000	Encinitas	17,400	0.870	D	15,000	0.750	C ≤	-0.120	No
	Hymettus Avenue to Orpheus Avenue	20,000	Encinitas	19,200	0.960	**E**	20,200	1.010	**F**	0.050	**Yes (TRF-7)**
	Orpheus Avenue to I-5 SB Ramps	35,200	Encinitas	17,700	0.503	C ≤	15,200	0.432	C ≤	-0.071	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	28,600	0.813	D	28,600	0.813	D	0.000	No
	Piraeus Street to Urania Avenue	45,400	Encinitas	44,100	0.971	**E**	43,900	0.967	**E**	-0.004	No
	Urania Avenue to Saxony Road	45,400	Encinitas	44,100	0.971	**E**	43,900	0.967	**E**	-0.004	No
	Saxony Road to Sidonia Street	45,400	Encinitas	42,400	0.934	**E**	42,100	0.927	**E**	-0.007	No
	Sidonia Street to Quail Gardens Drive	45,400	Encinitas	42,400	0.934	E	42,100	0.927	**E**	-0.007	No
	Quail Gardens Drive to Garden View Road	45,400	Encinitas	47,100	1.037	F	47,000	1.035	**F**	-0.002	No
	Garden View Road to Town Center Place	45,400	Encinitas	34,700	0.764	C ≤	31,700	0.698	C ≤	-0.066	No
	Town Center Place to El Camino Real	57,000	Encinitas	39,000	0.684	C ≤	38,700	0.679	C ≤	-0.005	No
Mountain Vista Drive	El Camino Real to Wandering Road	20,000	Encinitas	15,000	0.750	C ≤	15,100	0.755	C ≤	0.005	No
	Wandering Road to Village Park Way	20,000	Encinitas	9,300	0.465	C ≤	9,300	0.465	C ≤	0.000	No
Lone Jack Drive	Rancho Santa Fe Road to northern terminus	14,000	Encinitas	8,400	0.600	C ≤	8,200	0.586	C ≤	-0.014	No
El Camino Del Norte	Rancho Santa Fe Road to San Dieguito CPA boundary	14,000	Encinitas	7,900	0.564	C ≤	7,700	0.550	C ≤	-0.014	No
	San Dieguito CPA boundary to Via De Fortuna	9,700	County	7,800	0.804	D	7,400	0.763	C	-0.041	No

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Encinitas Blvd.	North Coast Highway 101 to Vulcan Avenue	32,400	Encinitas	22,300	0.688	C ≤	24,300	0.750	C ≤	0.062	No
	Vulcan Avenue to I-5 SB Ramps	45,400	Encinitas	34,100	0.751	C ≤	35,800	0.788	C ≤	0.048	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	38,500	1.094	**F**	40,500	1.224	**F**	0.057	**Yes (TRF-8)**
	I-5 NB Ramps to Saxony Road	35,200	Encinitas	41,400	1.176	**F**	43,100	0.558	**F**	0.048	**Yes (TRF-17)**
	Saxony Road to Calle Magdalena	66,000	Encinitas	35,400	0.536	C ≤	36,800	0.730	C ≤	0.022	No
	Calle Magdalena to Encinitas Town Country traffic signal	57,000	Encinitas	40,000	0.702	C ≤	41,600	0.837	C ≤	0.028	No
	Encinitas Town Country traffic signal to Quail Gardens Drive	45,400	Encinitas	36,000	0.793	C ≤	38,000	1.125	D	0.044	No
	Quails Garden Drive to Delphinium Street	35,200	Encinitas	37,700	1.071	**F**	39,600	1.136	**F**	0.054	**Yes (TRF-18)**
	Delphinium Street to Balour Drive	35,200	Encinitas	38,300	1.088	**F**	40,000	1.386	**F**	0.048	**Yes (TRF-19)**
	Balour Drive to Via Cantebria	35,200	Encinitas	47,500	1.349	**F**	48,800	0.866	**F**	0.037	**Yes (TRF-20)**
	Via Cantebria to El Camino Real	35,200	Encinitas	29,400	0.835	D	30,500	0.852	D	0.031	No
	El Camino Real to Village Square Drive	35,200	Encinitas	31,000	0.881	D	30,000	0.864	D	-0.029	No
	Village Square Drive to Turner Avenue	35,200	Encinitas	29,300	0.832	D	30,400	0.864	D	0.032	No
	Turner Avenue to Cerro Street	35,200	Encinitas	29,300	0.832	D	30,400	0.886	D	0.032	No
	Cerro Street to Village Park Way	35,200	Encinitas	29,700	0.844	D	31,200	0.835	D	0.042	No
	Village Park Way to Willowspring Drive	35,200	Encinitas	27,900	0.793	C ≤	29,400	0.693	D	0.042	No
	Willowspring Drive to Rancho Santa Fe Road	35,200	Encinitas	22,700	0.645	C ≤	24,400	0.995	C ≤	0.048	No
South Rancho Santa Fe Road	**Manchester Avenue to Encinitas Limits**	20,000	Encinitas	18,580	0.930	**E**	19,900	2.052	**E**	0.065	**Yes (TRF-9)**
	Encinitas Limits to El Mirlo	9,700	County	18,580	1.915	**F**	19,900	0.457	**F**	0.137	**Yes (TRF-10)**
F Street	Vulcan Avenue to Cornish Drive	14,000	Encinitas	6,200	0.443	C ≤	6,400	0.479	C ≤	0.014	No
Requeza Street	Cornish Drive to San Dieguito Drive	14,000	Encinitas	6,300	0.450	C ≤	6,700	0.479	C ≤	0.029	No
	San Dieguito Drive to Stratford Drive	14,000	Encinitas	6,300	0.450	C ≤	6,700	0.500	C ≤	0.029	No
	Stratford Drive to Regal Road	14,000	Encinitas	6,800	0.486	C ≤	7,000	0.457	C ≤	0.014	No
	Regal Road to West Lake Drive	14,000	Encinitas	6,400	0.457	C ≤	6,400	0.350	C ≤	0.000	No
	West Lake Drive to Nardo Drive	14,000	Encinitas	4,800	0.343	C ≤	4,900	0.636	C ≤	0.007	No

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Santa Fe Drive	Vulcan Avenue to Cornish Drive	14,000	Encinitas	9,000	0.643	C ≤	8,900	0.693	C ≤	-0.007	No
	Cornish Drive to Summit Avenue	14,000	Encinitas	9,000	0.643	C ≤	9,700	0.736	C ≤	0.050	No
	Summit Avenue to Devonshire	14,000	Encinitas	10,100	0.721	C ≤	10,300	0.785	C ≤	0.015	No
	Devonshire Drive to Scripps Memorial Hospital Encinitas traffic signal	20,000	Encinitas	15,200	0.760	C ≤	15,700	0.485	C ≤	0.025	No
	Scripps Memorial Hospital Encinitas traffic signal to I-5 SB Ramps	32,400	Encinitas	15,200	0.469	C ≤	15,700	0.871	C ≤	0.016	No
	I-5 SB Ramps to I-5 NB Ramps	26,400	Encinitas	22,400	0.848	D	23,000	0.830	D	0.023	No
	I-5 NB Ramps to Regal Road	20,000	Encinitas	16,100	0.805	D	16,600	0.830	D	0.025	No
	Regal Road to Gardena Road	20,000	Encinitas	16,100	0.805	D	16,600	0.830	D	0.025	No
	Gardena Road to Nardo Road	20,000	Encinitas	16,100	0.805	D	16,600	0.910	D	0.025	No
	Nardo Road to Windsor Road/Bonita Drive	20,000	Encinitas	17,700	0.885	D	18,200	0.910	**E**	0.025	**Yes (TRF-11)**
	Windsor Road/Bonita Drive to Balour Drive	20,000	Encinitas	17,700	0.885	D	18,200	0.955	**E**	0.025	**Yes (TRF-12)**
	Balour Drive to Lake Drive	20,000	Encinitas	18,600	0.930	**E**	19,100	0.910	**E**	0.025	**Yes (TRF-13)**
	Lake Drive to Crest Drive	20,000	Encinitas	17,700	0.885	D	18,200	0.910	**E**	0.025	**Yes (TRF-14)**
	Crest Drive to El Camino Real	20,000	Encinitas	17,700	0.885	D	18,200	0.775	C ≤	0.025	**Yes (TRF-15)**
Birmingham Drive	**San Elijo Avenue to MacKinnon**	20,000	Encinitas	15,500	0.775	C ≤	15,800	1.129	C ≤	0.022	No
	MacKinnon Avenue to Carol View Drive	20,000	Encinitas	19,500	0.775	C ≤	14,700	0.775	C ≤	-0.240	No
	Carol View Drive to I-5 SB Ramps	20,000	Encinitas	19,500	0.775	C ≤	14,700	1.243	C ≤	-0.240	No
	I-5 SB Ramps to I-5 NB Ramps	14,000	Encinitas	21,800	1.243	**F**	21,400	0.629	C ≤	-0.028	No
	I-5 NB Ramps to Villa Cardiff Drive	14,000	Encinitas	13,200	0.629	C ≤	13,400	0.629	C ≤	0.014	No
	Villa Cardiff Drive to Playa Rivera	14,000	Encinitas	11,600	0.629	C ≤	11,700	0.629	C ≤	0.007	No
	Playa Rivera to Freda Lane	14,000	Encinitas	13,100	0.629	C ≤	13,200	0.629	C ≤	0.007	No
	Freda Lane to Lake Drive	14,000	Encinitas	8,700	0.629	C ≤	8,800	0.629	C ≤	0.008	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.

Table 4.13-16
Housing Strategy 3 (Modified Mixed Use Places) - Future Year 2035 Freeway Segment Level of Service

Freeway	Segment	Direction	Year 2035					Year 2035 + Housing Strategy 1					Δ V/C	Significant Impact?
			ADT	Capacity	Peak Hour Volume	V/C	LOS	ADT	Peak Hour Volume	Capacity	V/C	LOS		
I-5	Palomar Airport Rd. and Poinsettia Ln.	NB	201,000	10,810	8,500	0.69	C	202,200	7,600	10,810	0.70	C	0.01	No
		SB		10,810	8,400	0.78	C		8,400	10,810	0.78	C	0.0	No
	Poinsettia Ln. and La Costa Ave.	NB	204,000	9,400	8,600	0.81	D	199,900	7,600	9,400	0.81	D	0.0	No
		SB		9,400	8,500	0.88	D		8,300	9,400	0.88	D	0.0	No
	La Costa Ave. and Leucadia Blvd.	NB	208,000	9,400	8,600	0.81	D	196,700	7,600	9,400	0.81	D	0.0	No
		SB		10,810	7,900	0.69	C		7,500	10,810	0.69	C	0.0	No
	Leucadia Blvd. and Encinitas Blvd.	NB	211,000	10,810	8,700	0.71	C	117,500	7,700	10,810	0.71	C	0.0	No
		SB		9,400	8,000	0.47	B		4,500	9,400	0.48	B	0.01	No
	Encinitas Blvd. and Santa Fe Dr.	NB	210,000	9,400	8,500	0.80	D	196,200	7,500	9,400	0.80	D	0.0	No
		SB		10,810	8,000	0.69	C		7,500	10,810	0.69	C	0.0	No
	Santa Fe Dr. and Birmingham Dr.	NB	201,000	10,810	8,100	0.71	C	196,100	7,700	10,810	0.71	C	0.0	No
		SB		10,810	7,700	0.69	C		7,500	10,810	0.69	C	0.0	No
	Birmingham Dr. and Manchester Ave.	NB	203,000	10,810	8,200	0.74	C	198,600	8,000	10,810	0.74	C	0.0	No
		SB		10,810	7,800	0.70	C		7,600	10,810	0.70	C	0.0	No
	Manchester Ave. and Lomas Santa Fe Dr.	NB	215,970*	8,460	8,200	0.860	D	247,700	9,300	10,810	0.860	D	0.0	No
		SB		10,810	8,900	0.880	D		9,500	10,810	0.880	D	0.0	No
	Lomas Santa Fe Dr. and Via De La Valle	NB	208,844*	10,810	8,200	0.870	D	247,500	9,300	10,810	0.860	D	-0.01	No
		SB		10,810	8,400	0.89	D		9,500	10,810	0.88	D	-0.01	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.
*Reduction of estimated HOV volume was applied to the ADT.

Table 4.13-17
Housing Strategy 3 (Modified Mixed Use Plan) - Future Year 2035 Intersection Level of Service

Intersection	Jurisdiction	Control	Year 2035 (No Project) AM Avg. Delay (sec)	AM LOS	PM Avg. Delay (sec)	PM LOS	Year 2030 + Strategy 3 AM Avg. Delay (sec)	AM LOS	PM Avg. Delay (sec)	PM LOS	Δ in Delay (sec)	Significant Impact?
Carlsbad Blvd & Poinsettia Lane	Carlsbad	Signalized	11.7	10.6	B	B	11.7	B	10.8	B	0.0 / 0.2	No
I-5 SB Ramps & Poinsettia Lane	Caltrans	Signalized	15.2	21.6	B	C	15.2	B	21.6	C	0.0 / 0.0	No
I-5 NB Ramps & Poinsettia Lane	Caltrans	Signalized	32.4	29.7	C	C	32.4	C	34.8	C	0.0 / 5.1	No
Aviara Parkway & Poinsettia Lane	Carlsbad	Signalized	29.1	30.8	C	C	29.1	C	30.8	C	0.0 / 0.0	No
North Coast Highway 101 & La Costa Ave	Encinitas	Signalized	18.8	16.8	B	B	19.6	B	18.2	B	0.8 / 1.4	No
Vulcan Ave & La Costa Ave	Encinitas	SSSC	45.2	96.4	**E**	**F**	60.2	**F**	161.4	**F**	15.0 / 65.0	**Yes (TRF-22)**
I-5 SB Ramps & La Costa Ave	Caltrans	Signalized	44.3	34.1	D	C	44.8	D	34.7	C	0.5 / 0.6	No
I-5 NB Ramps & La Costa Ave	Caltrans	Signalized	28.2	31.2	C	C	28.5	C	31.8	C	0.3 / 0.6	No
Piraeus Street & La Costa Ave	Caltrans	Signalized	22.4	34.9	C	C	22.4	C	34.9	C	0.0 / 0.0	No
Saxony Road & La Costa Ave	Carlsbad	Signalized	19.2	28.3	B	C	19.2	B	28.7	C	0.0 / 0.4	No
El Camino Real & La Costa Ave	Carlsbad	Signalized	51.7	58.3	D	**E**	51.7	D	58.8	**E**	0.0 / 0.5	No
North Coast Highway 101 & Leucadia Blvd	Encinitas	Signalized	30.1	35.3	C	D	36.0	D	43.8	D	5.9 / 8.5	No
Vulcan Ave & Leucadia Blvd	Encinitas	Signalized	12.5	11.9	B	B	13.5	B	12.5	B	1.0 / 0.6	No
Orpheus Ave & Leucadia Blvd	Caltrans	Signalized	17.1	16.5	B	B	16.8	B	16.7	B	-0.3 / 0.2	No
I-5 SB Ramps & Leucadia Blvd	Caltrans	Signalized	14.5	16.3	B	B	14.1	B	15.7	B	-0.4 / -0.6	No
I-5 NB Ramps & Leucadia Blvd	Caltrans	Signalized	13.3	36.4	B	D	13.3	B	34.2	C	0.0 / -2.2	No
Saxony Road & Leucadia Blvd	Encinitas	Signalized	60.8	79.4	**E**	**E**	55.0	**E**	75.3	**E**	-5.8 / -4.1	No
Quail Gardens Dr & Leucadia Blvd	Encinitas	Signalized	31.8	42.8	C	D	30.4	C	40.7	D	-1.4 / -2.1	No
Garden View Road & Leucadia Blvd	Encinitas	Signalized	47.1	53.7	D	D	43.6	D	52.1	D	-3.5 / -1.6	No
Town Center Place & Leucadia Blvd	Encinitas	Signalized	24.6	43.9	C	D	24.8	C	42.2	D	0.2 / -1.7	No
El Camino Real & Leucadia Blvd	Encinitas	Signalized	48.7	67.3	D	**E**	47.8	D	61.9	**E**	-0.9 / -5.4	No
El Camino Real & Town Center Dr	Encinitas	Signalized	11.6	23.5	B	C	11.7	B	23.5	C	0.1 / 0.0	No
El Camino Real & Garden View Road	Encinitas	Signalized	27.7	49.6	C	D	27.8	C	49.7	D	0.1 / 0.1	No
El Camino Real & Mountain Vista Dr	Encinitas	Signalized	49.4	30.9	D	C	53.5	D	31.0	C	4.1 / 0.1	No
Rancho Santa Fe Road & Lone Jack Road	Encinitas	AWSC	40.1	41.1	**E**	**E**	41.2	**E**	42.7	**E**	1.1 / 1.6	No
El Camino Real & Via Molena	Encinitas	Signalized	27.0	35.1	C	D	27.3	C	36.0	D	0.3 / 0.9	No
Rancho Santa Fe Road & El Camino Del Norte	Encinitas	AWSC	34.6	41.9	D	**E**	34.9	D	43.8	**E**	0.3 / 1.9	No

Table 4.13-17
Housing Strategy 3 (Modified Mixed Use Plan) - Future Year 2035 Intersection Level of Service

Intersection	Jurisdiction	Control	Year 2035 (No Project) AM Avg. Delay (sec)	AM LOS	Year 2035 (No Project) PM Avg. Delay (sec)	PM LOS	Year 2030 + Strategy 3 AM Avg. Delay (sec)	AM LOS	Year 2030 + Strategy 3 PM Avg. Delay (sec)	PM LOS	Δ in Delay (sec)	Significant Impact?
North Coast Highway 101 & Encinitas Blvd	Encinitas	Signalized	35.3	34	D	C	35.8	D	34.4	C	0.5 / 0.4	No
S Vulcan Ave & Encinitas Blvd	Encinitas	Signalized	39.1	32.3	D	C	44.2	D	34.6	C	5.1 / 2.3	No
I-5 SB Ramps & Encinitas Blvd	Caltrans	Signalized	29.1	47.8	C	D	30.7	C	51.5	D	1.6 / 3.7	No
I-5 NB Ramps & Encinitas Blvd	Caltrans	Signalized	20.9	27.5	C	C	21.2	C	29.6	C	0.3 / 2.1	No
Saxony Road & Encinitas Blvd	Caltrans	Signalized	32.0	17.3	C	B	31.6	C	17.9	B	-0.4 / 0.6	No
Quail Gardens Dr & Encinitas Blvd	Encinitas	Signalized	32.2	53.9	C	D	32.3	C	54.1	D	0.1 / 0.2	No
Balour Dr & Encinitas Blvd	Encinitas	Signalized	12.1	17.7	B	B	12.5	B	21.1	C	0.4 / 3.4	No
Via Cantebria & Encinitas Blvd	Encinitas	Signalized	21.5	20.7	C	C	18.9	B	25.2	C	-2.6 / 4.5	No
El Camino Real & Encinitas Blvd	Encinitas	Signalized	50.7	70.4	D	**E**	48.6	D	71.3	**E**	-2.1 / 0.9	No
Village Square Dr & Encinitas Blvd	Encinitas	Signalized	18.4	44.5	B	D	17.8	B	42.8	D	-0.6 / -1.7	No
Village Park Way & Encinitas Blvd	Encinitas	Signalized	26.0	44.8	C	D	29.0	C	53.9	D	3.0 / 9.1	No
Rancho Santa Fe Road & Encinitas Blvd	Encinitas	Signalized	77.1	48	**E**	D	77.9	**E**	54.7	D	0.8 / 6.7	No
San Elijo Ave & Santa Fe Dr	Encinitas	AWSC	37.0	18.8	**E**	C	36.7	**E**	18.7	C	-0.3 / -0.1	No
I-5 SB Ramps & Santa Fe Dr	Caltrans	Signalized	24.3	30.7	C	C	25.7	C	29.9	C	1.4 / -0.8	No
I-5 NB On-Ramp & Santa Fe Dr	Caltrans	Signalized	5.5	4.1	A	A	5.6	A	4.1	A	0.1 / 0.0	No
I-5 NB Off-Ramp/Regal Road & Santa Fe Dr	Caltrans	Signalized	38.5	42.9	D	D	39.2	D	42.6	D	0.7 / -0.3	No
MacKinnon Ave & Santa Fe Dr	Encinitas	Signalized	28.5	20.1	C	C	30.7	C	21.0	C	2.2 / 0.9	No
Balour Dr & Santa Fe Dr	Encinitas	SSSC	84.7	51.7	**F**	**F**	108.6	**F**	56.9	**F**	23.9 / 5.2	**Yes (TRF-23)**
Lake Dr & Santa Fe Dr	Encinitas	Signalized	9.3	8.9	A	A	9.6	A	8.7	A	0.3 / -0.2	No
El Camino Real & Santa Fe Dr	Encinitas	Signalized	20.0	23.4	B	C	21.0	C	28.5	C	1.0 / 5.1	No
San Elijo Ave & Birmingham Dr	Encinitas	Signalized	13.0	24.2	B	C	13.4	B	25.0	C	0.4 / 0.8	No
I-5 SB Ramps & Birmingham Dr	Caltrans	SSSC	250.6	47.5	**F**	**E**	250.6	**F**	47.5	**E**	0.0 / -0.0	No
I-5 NB Ramps & Birmingham Dr	Caltrans	AWSC	45.5	41.1	**E**	**E**	45.5	**E**	41.1	**E**	0.0 / 0.0	No
I-5 SB Ramps & Manchester Ave	Caltrans	AWSC	54.5	35.5	**F**	**E**	54.5	**F**	35.7	**E**	0.0 / 0.2	No
I-5 NB Ramps & Manchester Ave	Caltrans	Signalized	57.5	45	**E**	D	58.8	**E**	45.6	D	1.3 / 0.6	No
El Camino Real & Manchester Ave	Encinitas	Signalized	36.2	38.8	D	D	40.4	D	42.7	D	4.2 / 3.9	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.
sec = seconds

Table 4.13-18
Housing Strategy 3 (Modified Mixed Use Plan) –
Future Year 2035 Ramp Intersection Capacity Analysis

#	Ramp Intersection	Peak Hour	Year 2035 (No Project)		Modified Mixed Use Plan	
			ILV/Hour	Description	ILV/Hour	Description
2	I-5 SB Ramps / Poinsettia Lane	AM	740	Under Capacity	740	Under Capacity
		PM	1,030	Under Capacity	1,030	Under Capacity
3	I-5 NB Ramps / Poinsettia Lane	AM	1,000	Under Capacity	1,000	Under Capacity
		PM	1,044	Under Capacity	1,034	Under Capacity
7	I-5 SB Ramps / La Costa Avenue	AM	1,275	At Capacity	1,350	At Capacity
		PM	1,220	At Capacity	1,240	At Capacity
8	I-5 NB Ramps / La Costa Avenue	AM	1,205	At Capacity	1,205	At Capacity
		PM	1,125	Under Capacity	1,135	Under Capacity
15	I-5 SB Ramps / Leucadia Boulevard	AM	805	Under Capacity	780	Under Capacity
		PM	850	Under Capacity	830	Under Capacity
16	**I-5 NB Ramps / Leucadia Boulevard**	AM	1,225	At Capacity	1,212	At Capacity
		PM	1,531	**Over Capacity**	1,497	At Capacity
30	**I-5 SB Ramps / Encinitas Boulevard**	AM	1,595	**Over Capacity**	1,640	**Over Capacity**
		PM	1,900	**Over Capacity**	1,950	**Over Capacity**
31	I-5 NB Ramps / Encinitas Boulevard	AM	1,240	At Capacity	1,260	At Capacity
		PM	1,425	At Capacity	1,455	At Capacity
41	I-5 SB Ramps / Santa Fe Drive	AM	1,140	Under Capacity	1,160	Under Capacity
		PM	1,135	Under Capacity	1,150	Under Capacity
42	I-5 NB On-Ramp / Santa Fe Drive	AM	715	Under Capacity	735	Under Capacity
		PM	710	Under Capacity	725	Under Capacity
43	I-5 NB Off-Ramp / Regal Road	AM	1062	Under Capacity	1075	Under Capacity
		PM	1,150	Under Capacity	1155	Under Capacity
52	I-5 NB Ramps / Manchester Avenue	AM	1,460	At Capacity	1,475	At Capacity
		PM	1,340	At Capacity	1,345	At Capacity

SOURCE: Appendix N.
Bolding represents intersection is over capacity.

Ramp Metering Analysis

Ramp metering analysis is shown in Table 4.13-19. As shown, all ramp meters would operate acceptably in the year 2035 housing strategy 3 (MMUP) buildout conditions except the five ramp locations where delays would exceed the 15-minute threshold. Out of those five ramps operating unacceptably, the project would result in a delay increase over the allowable 2-minute increase at the following three:

- I-5 NB On-Ramp at Encinitas Boulevard (Impact TRF-24) – 20.0 minutes during PM peak hour;
- I-5 SB On-Ramp at Encinitas Boulevard (Impact TRF-25) – 17.0 minutes during AM peak hour; or
- I-5 SB On-Ramp at Santa Fe Drive(Impact TRF-26) – 34.0 minutes during AM peak hour.

Table 4.13-19
Ramp Metering Analysis – Future Year 2035 Strategy 3 (Modified Mixed Use Plan)

Location	Peak Hour	Demand[1] (veh/hr)	SOV Demand[2] (veh/hr)	Demand per Lane (veh/hr/ln)	Meter Rate[3] (veh/hr/ln)	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ in Delay (min)	Significant Impact?
						Excess Demand[4] (veh/hr)	Delay[5] (min)	Queue[6] (ft)	Excess Demand[4] (veh/hr)	Delay Beyond Peak Hour[5] (min)	Queue[6] (ft)		
I-5 NB On-Ramp at Poinsettia Lane	AM	615	529	529	NA	0	0	0	0	0	0	-	No
	PM	485	373	373	720	0	0	0	0	0	0	-	No
I-5 SB On-Ramp at Poinsettia Lane	AM	585	515	257	720	0	0	0	0	0	0	-	No
	PM	1005	864	432	720	0	0	0	0	0	0	-	No
I-5 NB On-Ramp at La Costa Avenue	AM	905	851	851	NA	0	0	0	0	0	0	-	No
	PM	685	527	527	720	0	0	0	0	0	0	-	No
I-5 SB On-Ramp at La Costa Avenue	AM	905	796	398	720	0	0	0	0	0	0	-	No
	PM	1035	890	445	720	0	0	0	0	0	0	-	No
I-5 NB On-Ramp at Leucadia Boulevard	AM	418	383	383	NA	0	0	0	0	0	0	-	No
	PM	664	474	474	360	114	**19.0**	3,300	114	**19.0**	3,300	-	No
I-5 SB On-Ramp at Leucadia Boulevard	AM	825	726	363	360	25	4.5	725	3	0.5	75	-	No
	PM	720	619	310	360	0	0	0	0	0	0	-	No
I-5 NB On-Ramp at Encinitas Boulevard	AM	640	608	608	NA	0	0	0	0	0	0		No
	PM	800	480	480	360	96	**16.0**	2,775	120	**20.0**	3,475	4	Yes (TRF-24)
I-5 SB On-Ramp at Encinitas Boulevard	AM	1045	920	920	720	164	14.0	4,750	200	**17.0**	5,800	3	Yes (TRF-25)
	PM	1000	860	860	720	106	9.0	3,075	140	12.0	4,050	3	No
I-5 NB On-Ramp at Santa Fe Drive	AM	560	560	560	NA	0	0	0	0	0	0	-	No
	PM	710	710	710	720	0	0	0	0	0	0	-	No
I-5 SB On-Ramp at Santa Fe Drive	AM	640	563	563	360	177	**30.0**	5,125	203	34.0	5,875	4	Yes (TRF-26)
	PM	515	443	443	NA	0	0	0	0	0	0	-	No
I-5 NB On-Ramp at Birmingham Drive	AM	570	523	523	NA	0	0	0	0	0	0	-	No
	PM	485	346	346	360	0	0	0	0	0	0	-	No
I-5 SB On-Ramp at Birmingham Drive	AM	1080	1,080	540	720	0	0	0	0	0	0	-	No
	PM	395	395	198	720	0	0	0	0	0	0	-	No
I-5 NB On-Ramp at Manchester Ave.	AM	420	420	420	NA	0	0	0	0	0	0	-	No
	PM	280	280	280	360	0	0	0	0	0	0	-	No
I-5 SB On-Ramp at Manchester Ave.	AM	2040	2,040	1020	720	295	**25.0**	8,550	300	25.0	8,700	-	No
	PM	1070	1,070	535	720	0	0	0	0	0	0	-	No

Table 4.13-19
Ramp Metering Analysis – Future Year 2035 Strategy 3 (Modified Mixed Use Plan)

Location	Peak Hour	Demand[1] (veh/hr)	SOV Demand[2] (veh/hr)	Demand per Lane (veh/hr/ln)	Meter Rate[3] (veh/hr/ln)	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ in Delay (min)	Significant Impact?
						Excess Demand[4] (veh/hr)	Delay[5] (min)	Queue[6] (ft)	Excess Demand[4] (veh/hr)	Delay Beyond Peak Hour[5] (min)	Queue[6] (ft)		

SOURCE: Appendix N.
Bold indicated a ramp meter delay above the 15-minute threshold
Shading represents a significant impact.
NA= not applicable
[1]Demand is the peak hour demand expected to use the on-ramp.
[2]HOV volumes was deducted from total demand volumes. SOV = Single Occupancy Vehicle.
[3]Meter Rate is the peak hour capacity expected to be processed through the ramp meter. This value was obtained from Caltrans. The lowest rate within range was utilized for a more conservative calculation.
[4]Excess Demand = (Demand) – (Meter Rate) or zero, whichever is greater.
[5]Delay beyond Peak Hour = (Excess Demand / Meter Rate) X 60 min/hr. This delay represents how long the peak hour would need to be extended in order to accommodate the excess demand
[6]Queue = (Excess Demand) X 29 ft/veh.

4.13.5.2 Significance of Impacts

As indicated above, there are several transportation facilities that operate at unacceptable levels under the Year 2035 + Project conditions. However, the project would only result in significant impacts at these locations if the addition of project traffic would cause the significance thresholds identified in Section 4.13.4.1 to be exceeded. The significant HEU operational traffic impacts are identified in Table 4.13-20 below. As shown, housing strategy 1 (RM) would result in 15 significant roadway segment impacts, housing strategy 2 (BYO) would result in 20 significant roadway segment impacts, and housing strategy 3 (MMUP) would result in 20 significant roadway segment impacts. All three housing strategies would result in less than significant freeway segment impacts. Housing strategy 3 (MMUP) was utilized to determine the intersection and ramp metering impacts as housing strategy 3 (MMUP) would result in the highest number of trips generated. Based on housing strategy 3 (MMUP), the project would result in two significant intersection impacts and three significant ramp metering impacts.

Table 4.13-20
Operational Traffic Significant Impact Summary

Impact #	Location	Housing Strategy		
		1	2	3
TRF-1	Rancho Santa Fe Road - Between 9th Street and 8th Street	ü	ü	ü
TRF-2	Rancho Santa Fe Road - Between 8th Street and 7th Street	ü	ü	ü
TRF-3	Rancho Santa Fe Road - Between 7th Street and Encinitas Boulevard	ü	ü	ü
TRF-4	La Costa Avenue - Between North Coast Highway 101 and Vulcan Avenue	ü	ü	ü
TRF-5	La Costa Avenue - Between Vulcan Avenue and Sheridan Road	ü	ü	ü
TRF-6	La Costa Avenue - Between Sheridan Road and I-5 SB Ramps	ü	ü	ü
TRF-7	Leucadia Blvd - Between Hymettus Avenue and Orpheus Avenue	ü	ü	ü
TRF-8	Encinitas Blvd - Between I-5 SB Ramps and I-5 NB Ramps	ü	ü	ü
TRF-9	South Rancho Santa Fe Road - Between Manchester Avenue and Encinitas Limits	ü	ü	ü
TRF-10	South Rancho Santa Fe Road - Between Encinitas Limits and El Mirlo (County of San Diego)	ü	ü	ü
TRF-11	Santa Fe Drive - Between Nardo Road and Windsor Road/Bonita Drive	ü	ü	ü
TRF-12	Santa Fe Drive - Between Windsor Road/Bonita Drive and Balour Drive	ü	ü	ü
TRF-13	Santa Fe Drive - Between Balour Drive and Lake Drive	ü		ü
TRF-14	Santa Fe Drive - Between Lake Drive and Crest Drive	ü	ü	ü
TRF-15	Santa Fe Drive - Between Crest Drive and El Camino Real	ü	ü	ü
TRF-16	Manchester Avenue - Between I-5 NB Ramps and I-5 SB Ramps		ü	ü
TRF-17	Encinitas Blvd - Between I-5 NB Ramps and Saxony Road		ü	ü
TRF-18	Encinitas Blvd - Between Quails Garden Drive and Delphinium Street		ü	ü
TRF-19	Encinitas Blvd - Delphinium Street and Balour Drive		ü	ü
TRF-20	Encinitas Blvd - Between Balour Drive and Via Cantebria		ü	ü
TRF-21	Birmingham Drive - Between I-5 SB Ramps and I-5 NB Ramps		ü	
TRF-22	Vulcan Avenue at La Costa Avenue (AM and PM)			ü
TRF-23	Balour Drive at Santa Fe Drive (AM and PM)			ü
TRF-24	I-5 NB On-Ramp at Encinitas Boulevard (PM) (Caltrans)			ü

Table 4.13-20 Operational Traffic Significant Impact Summary				
Impact #	Location	Housing Strategy		
		1	2	3
TRF-25	I-5 SB On-Ramp at Encinitas Boulevard (AM) (Caltrans)			ü
TRF-26	I-5 SB On-Ramp at Santa Fe Drive (AM) (Caltrans)			ü
SOURCE: Appendix N. Shading represents where analysis was only completed for the highest trip-generating strategy, which is housing strategy 3 (MMUP).				

a. Housing Strategy 1 (RM)

Housing strategy 1 would result in 15 significant roadway segment impacts. As indicated in Table 4.13-20, these impacts are identified as Impacts TRF-1 to TRF-15. Impacts to freeway segments would be less than significant.

b. Housing Strategy 2 (BYO)

Housing strategy 2 would result in 20 significant roadway segment impacts. As indicated in Table 4.13-20, these impacts are identified as Impacts TRF-1 to TRF-12, and TRF-14 to TRF-21. Impacts to freeway segments would be less than significant.

c. Housing Strategy 3 (MMUP)

Housing strategy 3 would result in 20 significant roadway segment impacts. As indicated in Table 4.13-20, these impacts are identified as Impacts TRF-1 to TRF-20. Impacts to freeway segments would be less than significant. Housing strategy 3 (MMUP) would have two significant intersection impacts (TRF-22 and TRF-23), as well as three ramp intersection impacts (TRF-24 to TRF-26).

4.13.5.3 Mitigation Framework

As demonstrated in the traffic analysis above, buildout of the HEU would result in significant impacts (Impacts TRF-1 through TRF-26) to roadway segments (all three strategies and intersections (as demonstrated by intersection analysis for Housing Strategy 3 (MMUP)). These are cumulative impacts of the HEU buildout that would potentially occur when buildout of the HEU is added to future growth in the surrounding area for the horizon year 2035. To reduce the potentially significant impacts, improvements to roadway segments and intersections would be required. Table 4.13-21 identifies the measures (TRF-1 through TRF-26) that would be required for each impacted roadway/intersection.

Table 4.13-21 Traffic Mitigation Improvements							
Impact #	Location*	Housing Strategy			Improvement	LOS After Mitigation	Feasibility
		1	2	3			
TRF-1	Rancho Santa Fe Road - Between 9th Street and 8th Street	✓	✓	✓	Provide intersection improvements and additional right-of-way as necessary and widen Rancho Santa Fe Road, between 9th Street and 8th Street, to a 2-Lane Local Roadway Augmented.	C or better	Feasible
TRF-2	Rancho Santa Fe Road - Between 8th Street and 7th Street	✓	✓	✓	Provide intersection improvements and additional right-of-way and widen Rancho Santa Fe Road, between 8th Street and 7th Street, to a 2-Lane Local Roadway Augmented.	C or better	Feasible
TRF-3	Rancho Santa Fe Road - Between 7th Street and Encinitas Boulevard	✓	✓	✓	Provide additional right-of-way and widen Rancho Santa Fe Road, between 7th Street and Encinitas Blvd., to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-4	La Costa Avenue - Between North Coast Highway 101 and Vulcan Avenue	✓	✓	✓	Provide additional right-of-way and widen La Costa Avenue, between North Coast Highway 101 and Vulcan Avenue, to a 4-Lane Collector.	C or better	Insufficient rights-of-way
TRF-5	La Costa Avenue - Between Vulcan Avenue and Sheridan Road	✓	✓	✓	Provide additional right-of-way and widen La Costa Avenue, between Vulcan Avenue and Sheridan Road, to a 4-Lane Collector.	C or better	Feasible
TRF-6	La Costa Avenue - Between Sheridan Road and I-5 SB Ramps	✓	✓	✓	Provide additional right-of-way and widen La Costa Avenue, between Sheridan Road and I-5 SB Ramps, to a 4-Lane Collector.	C or better	Feasible
TRF-7	Leucadia Blvd - Between Hymettus Avenue and Orpheus Avenue	✓	✓	✓	Provide additional right-of-way and widen Leucadia Boulevard, between Hymettus Avenue and Orpheus Avenue, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-8	Encinitas Blvd - Between I-5 SB Ramps and I-5 NB Ramps	✓	✓	✓	Provide additional right-of-way and widen Encinitas Boulevard, between I-5 SB Ramps and I-5 NB Ramps to a 4-Lane Major Roadway Augmented.	C or better	Feasible
TRF-9	South Rancho Santa Fe Road - Between Manchester Avenue and Encinitas Limits	✓	✓	✓	Strategy 1/3: Provide additional right-of-way and widen South Rancho Santa Fe Road, between Manchester Avenue and 770 feet east of Manchester Avenue, to a 4-Lane Major Roadway. Strategy 2: Provide additional right-of-way and widen South Rancho Santa Fe Road, between Manchester Avenue and 770 feet east of Manchester Avenue, to a 4-Lane Collector, which is consistent with the currently adopted Circulation Element.	C or Better	Feasible
TRF-10	South Rancho Santa Fe Road - Between Encinitas Limits and El Mirlo (County of San Diego)	✓	✓	✓	Provide additional right-of-way and widen South Rancho Santa Fe Road, City of Encinitas Limits and El Mirlo, to a 2-Lane Community Collector with Improvement Options.	D	**Infeasible** – exceeds County classification and is located within another jurisdiction

Table 4.13-21 Traffic Mitigation Improvements							
Impact #	Location*	Housing Strategy			Improvement	LOS After Mitigation	Feasibility
		1	2	3			
TRF-11	Santa Fe Drive - Between Nardo Road and Windsor Road/Bonita Drive	✓	✓	✓	Provide additional right-of-way and widen Santa Fe Drive, between Nardo Road and Windsor Road/Bonita Drive, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-12	Santa Fe Drive - Between Windsor Road/Bonita Drive and Balour Drive	✓	✓	✓	Provide additional right-of-way and widen Santa Fe Drive, between Windsor Road/Bonita Drive and Balour Drive, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-13	Santa Fe Drive - Between Balour Drive and Lake Drive	✓		✓	Provide additional right-of-way and widen Santa Fe Drive, between Balour Drive and Lake Drive, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-14	Santa Fe Drive - Between Lake Drive and Crest Drive	✓	✓	✓	Provide additional right-of-way and widen Santa Fe Drive, between Lake Drive and Crest Drive, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-15	Santa Fe Drive - Between Crest Drive and El Camino Real	✓	✓	✓	Provide additional right-of-way and widen Santa Fe Drive, between Crest Drive and El Camino Real, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-16	Manchester Avenue - Between I-5 NB Ramps and I-5 SB Ramps		✓	✓	Provide additional right-of-way and widen Manchester Avenue, between I-5 NB Ramps and I-5 SB Ramps, to a 4-Lane Major Roadway Augmented.	Strategy 2: D Strategy 3: C or better	Feasible
TRF-17	Encinitas Blvd - Between I-5 NB Ramps and Saxony Road		✓	✓	Provide additional right-of-way and widen Encinitas Boulevard, between I-5 NB Ramps and Saxony Road, to a 6-Lane Prime Arterial.	Strategy 2: D Strategy 3: C or better	Feasible
TRF-18	Encinitas Blvd - Between Quails Garden Drive and Delphinium Street		✓	✓	Provide additional right-of-way and widen Encinitas Boulevard, between Quail Gardens Drive and Delphinium Street, to a 6-Lane Prime Arterial.	C or better	Feasible
TRF-19	Encinitas Blvd - Delphinium Street and Balour Drive		✓	✓	Provide additional right-of-way and widen Encinitas Boulevard, between Delphinium Street and Balour Drive, to a 6-Lane Prime Arterial.	C or better	Feasible
TRF-20	Encinitas Blvd - Between Balour Drive and Via Cantebria		✓	✓	Provide additional right-of-way and widen Encinitas Boulevard, between Balour Drive and Via Cantebria, to a 6-Lane Prime Arterial.	D	Feasible
TRF-21	Birmingham Drive - Between I-5 SB Ramps and I-5 NB Ramps		✓		Provide additional right-of-way and widen Birmingham Drive, between I-5 SB Ramps and I-5 NB Ramps, to a 4-Lane Collector.	C or better	Feasible

Table 4.13-21 Traffic Mitigation Improvements							
Impact #	Location*	Housing Strategy			Improvement	LOS After Mitigation	Feasibility
		1	2	3			
TRF-22	Vulcan Avenue at La Costa Avenue (AM and PM)			✓	Signalize the Vulcan Avenue & La Costa Avenue intersection; or add roundabout or left turn lane as an alternative.	C/C	Feasible
TRF-23	Balour Drive at Santa Fe Drive (AM and PM)			✓	Signalization (CIP Project)	D/C	Feasible
TRF-24	I-5 NB On-Ramp at Encinitas Boulevard (PM) (Caltrans)			✓	The City of Encinitas shall work with Caltrans to adjust the ramp meter rate.	-	**Infeasible** - is located within another jurisdiction
TRF-25	I-5 SB On-Ramp at Encinitas Boulevard (AM) (Caltrans)			✓	The City of Encinitas shall work with Caltrans to adjust the ramp meter rate.	-	**Infeasible** - is located within another jurisdiction
TRF-26	I-5 SB On-Ramp at Santa Fe Drive (AM) (Caltrans)			✓	The City of Encinitas shall work with Caltrans to adjust the ramp meter rate.	-	**Infeasible** - is located within another jurisdiction

SOURCE: Appendix N.
Shading represents where analysis for only the highest-trip generating strategy was completed, which was Strategy 3 (MMUP).
*Jurisdiction is the City of Encinitas unless otherwise identified under Location.

The City already has a citywide capital improvement program in place to address traffic improvements needed for future buildout under the adopted General Plan. Since the HEU would result in additional impacts beyond buildout of the General Plan, a program specifically related to the future development consistent with the HEU floating zone program is required to fund improvements described in Table 4.13-21. Such a program would be applied as future projects are processed. Mitigation measure TRF-27 is designed to establish a program for funding improvements needed to address traffic impacts of the HEU. This program requires actions to be taken by both the City (establishment and implementation) as well as future projects.

TRF-27: Within 12 months of the public vote on the housing plan, the City shall complete a nexus study and adopt a floating zone fee mitigation program, as follows:

a. To establish this mitigation program, the City shall identify the costs associated with feasible traffic improvements identified in Table 4.13-21. Once the costs are established, the City shall undertake a nexus study to identify how the funds will be collected on a per project basis (e.g., by trip generated, unit, etc.). Costs funded may include program administration, project administration and management, design and engineering, regulatory compliance, and construction.

b. Once the HEU traffic mitigation program is established, each project shall contribute its fair share of the traffic improvements as identified in the program prior to Certificate of Occupancy Permit.

c. The City shall deposit the funds in a specific account dedicated for the use of completing the improvements identified in the HEU traffic mitigation program.

d. The City shall complete an annual public report on the HEU traffic mitigation program within 180 days of the completion of the fiscal year pursuant to the Mitigation Fee Act (California Government Code Section 66000 et seq.).

As identified in TRF-27, this program would provide the City of Encinitas with a mechanism for financing the implementation of the identified improvements required to mitigate cumulative impacts of the HEU through future year 2035. The program would assign a fair-share transportation impact fee to development projects based on a nexus between the cost to implement all proposed circulation improvements and the number of net new trips. Such a program would be consistent with the City's General Plan Goal 2 to "make every effort to develop a varied transportation system that is capable of serving both the existing population and future residents while preserving community values and character" as well as Goal 7 that requires development to "provide for all costs of the incremental expansion of the circulation system necessary to accommodate that development."

4.13.5.4 Significance After Mitigation

Mitigation measures which are determined to be feasible improvements as indicated in Table 4.13-21, would reduce traffic impacts of the HEU to below a level of significance if these improvements can be assured at the time of future development. However, as the City has not yet approved a mitigation fee program for the HEU as identified in TRF-27, there is no assurance that funding will be available to construct these improvements at the time future development is proposed. Until such time as this program is implemented, impacts would remain significant and unmitigated.

In addition, the City has determined that certain mitigation measures/improvements as listed in Table 4.13-21 are infeasible for one or more of the following reasons: (1) the improvement would result in the roadway exceeding the General Plan classification; (2) insufficient right-of-way exists and the City/Community prefer to retain existing adjacent uses instead of exercising eminent domain and (3) the improvement conflicts with existing or planned multi-modal facilities or adopted City policies or program relative to the provision of multi-modal facilities (pedestrian, bicycle or transit). As such, these impacts would also remain significant and unmitigated.

4.13.6 Issue 3: Alternative Transportation Modes

Would the project conflict with the City's adopted General or Specific Plan policies supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycle racks, etc.)?

4.13.6.1 Impacts

The City's adopted alternative transportation policies are identified in Table 4.13-6, and include Policy 1.15, Goal 3, and Policies 3.1 to 3.4. The future development consistent with the HEU floating zone program would be subject to these General Plan goals and policies. Thus, the HEU would not conflict with the City's implementing adopted General Plan goals related to alternative transportation, such as Goal 3 that states the City will promote the use of other modes of transport to reduce the dependence on the personal automobile. Future development would not conflict with the City's policies to encourage mass transit, bicycle transportation, pedestrians, equestrians, and carpooling. New infill development opportunities are located to both capitalize on existing infrastructure as well as to provide enhanced and/or convenient access to local serving uses by residents and visitors. Each of the three mapping strategies seek to combine, in general, a better mixture of land uses and activities dispersed in different areas of the City to encourage a variety of products types that appeal to all segments of the market and allows for more walkable residential, commercial, and mixed use districts. Also the project promotes the principle that streets have multiple users and encourages nodes of mixed use communities that maximize mobility and provide multiple opportunities for living, working and recreation, within safe and comfortable walking distances. In addition, the proposed Design Guidelines would encourage connectivity and accessibility (see Section 3.4.2.3).

As indicated in EIR Section 3.2.2, transit access was specifically considered as a criterion in the identification of housing sites. Most housing sites also were selected based on their proximity to transit and other alternative transportation (refer to EIR Section 3.2.2.3 and Appendix N). Overall, there would be no inherent differences in impacts among the housing strategies, as future development under each strategy would comply with the same alternative transportation policies. Impacts resulting from all three housing strategies would be less than significant.

4.13.6.2 Significance of Impacts

The future development allowed under the HEU floating zone program would be subject to the General Plan goals and policies regarding alternative transportation. Additionally, the Design Guidelines encourage access and connectivity be considered in the design of future projects. Thus, the HEU would not result in a conflict with the City's adopted General supporting alternative transportation modes. Impacts would be less than significant.

4.13.7 Issues 4 and 5: Traffic Hazards and Emergency Access

Would the project result in an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians?

Would the project result in inadequate emergency access?

4.13.7.1 Impacts

The future development consistent with the HEU floating zone program would be subject to the City's roadway design standards, City Municipal Code, and California Fire Code emergency access requirements, as well as the City General Plan goals and policies related to traffic safety.

The City of Encinitas Public Road Standards (1991) identifies design specifications for curves, sight distance, slopes, and other roadway features. The City's roadway standards are intended to provide for "service, health, welfare and safety of the public" (City of Encinitas 1991). Thus, compliance with the City's roadway standards would preclude traffic hazards.

The City of Encinitas has adopted the California Fire Code emergency access requirements as a part of their Municipal Code. This includes emergency access road dimensions, design, grades, gates, and other fire safety features. Additionally, the more stringent California Building Code (CBC) access standards also have been adopted by the City to address potential emergency access issues associated with earthquakes, flooding, climate/strong winds, topography, and water shortages. Future development consistent with the HEU would be required to comply with these regulations when designing emergency access relative to the future housing sites. Thus, compliance with the City Municipal Code would preclude inadequate emergency access issues.

The General Plan also includes several goals and policies regarding traffic safety. Goal 1 of the Circulation Element portion of the General Plan states "Encinitas should have a transportation system that is safe, convenient and efficient, and sensitive to and compatible with surrounding community character." Policies 1.6, 1.7, and 1.9 encourage safe roadways and driveways by limiting direct access on major roadways and encouraging properties to use common driveways to reduce access points. Policy 1.17 identifies the need to provide adequate street lighting for safety of all roadway users. Landscaped medians and buffers are recommended by City Policies 2.10 and 2.13 and would improve safety by separating directional traffic as well as separating traffic from buildings. Future development consistent with the HEU would be required to be in accordance with the General Plan goals and policies, including these goals and policies related to traffic safety; therefore, there would be no inherent differences in impacts among the housing strategies. Impacts resulting from all three housing strategies would be less than significant.

4.13.7.2 Significance of Impacts

Adherence to the City's roadway design standards, City Municipal Code and California Fire Code emergency access requirements, as well as the City General Plan Goals and policies related to traffic would avoid or reduce potentially significant traffic hazard or emergency access impacts to below a level of significance.