2.15 Transportation and Traffic

This section describes and evaluates the potential impacts to transportation resources and traffic that could result from implementation of the proposed General Plan Update. Potential traffic impacts were evaluated based upon the County of San Diego Guidelines for Determining Significance, Transportation and Traffic (County of San Diego 2007p). This section provides a summary of the more detailed traffic analysis and traffic data provided in the County of San Diego General Plan Update Circulation Element Background Report (County of San Diego 2007a), the County of San Diego General Plan Update Traffic and Circulation Assessment (Wilson and Company 2009a), the County of San Diego General Plan Update Traffic Impacts to Adjacent City Jurisdictions Report (Wilson and Company 2009b), Road Register Reports from the County of San Diego Department of Public Works (DPW 2008b), the 2030 San Diego Regional Transportation Plan: Pathways for the Future (SANDAG 2007), and additional sources as cited throughout the section. The completed County of San Diego General Plan Update Traffic and Circulation Assessment (Wilson and Company 2009a) is located in Appendix G of this EIR while the completed County of San Diego General Plan Update Traffic Impacts to Adjacent City Jurisdictions Report (Wilson and Company 2009b) is included in Appendix H of this EIR.

A summary of the impacts to transportation and traffic identified in Section 2.15.3 is provided below.

Transportation and Traffic Summary of Impacts

Issue Number	Issue Topic	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
1	Unincorporated County Traffic and LOS Standards	Potentially Significant	Potentially Significant	Significant and unavoidable
2	Adjacent Cities Traffic and LOS Standards	Potentially Significant	Potentially Significant	Significant and Unavoidable
3	Rural Road Safety	Potentially Significant	Potentially Significant	Significant and unavoidable
4	Emergency Access	Potentially Significant	Less than Significant	Less than Significant
5	Parking Capacity	Potentially Significant	Less than Significant	Less than Significant
6	Alternative Transportation	Potentially Significant	Less than Significant	Less than Significant

2.15.1 Existing Conditions

This section of the EIR is divided into two subsections of transportation resources. The first subsection pertains to the unincorporated County and contains information on roadways and traffic, parking, bus and rail facilities, bicycle and pedestrian facilities, airport facilities, and transportation hazards. The second subsection pertains to transportation resources in adjacent cities. The adjacent Cities considered in this analysis include Carlsbad, Chula Vista, Del Mar, El Cajon, Encinitas, Escondido, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach, and Vista. Adjacent city facilities were selected based upon two methods: 1) the individual jurisdiction's response to the Notice of Preparation (NOP) published for the proposed General Plan Update EIR; or 2) a compilation of regional arterial facilities in other jurisdictions obtained from the SANDAG 2030 RTP, which was then

refined based upon the location and connectivity to the roadway network within the unincorporated County.

2.15.1.1 Unincorporated County

Roadways and Traffic

The County of San Diego General Plan Update Traffic and Circulation Assessment (Wilson and Company 2009a) was conducted as part of this EIR process for the proposed General Plan Update. The full report is included in Appendix G to the EIR. Conditions on the existing unincorporated County roadway network were evaluated in terms of roadway lane miles, Level of Service (LOS) conditions, and Average Daily Traffic (ADT) trips. In many cases throughout this assessment, roadway lane miles are analyzed, rather than roadway segments. This strategy was used to more directly address the extremely large number of roadway facilities that exist within the unincorporated County.

Level of Service (LOS)

Definition

LOS is a quality of service measure that describes the operational conditions on a transportation facility, such as a roadway or intersection. LOS is established based on the driver's perspective. This service measure is a general overall measurement of several conditions such as speed and travel time, freedom to maneuver, traffic interruption, and comfort and convenience. Safety is an important concern but, typically, is not included in the measures that establish service levels. Six LOS categories have been established using the letters A through F. LOS A represents the best operating condition with free flow with no delays while LOS F represents the worst operating condition with long delays where the volume of traffic exceeds the capacity of the roadway. Each LOS category represents a range of operating conditions and the driver's perception of those conditions. Methods for identifying LOS vary based upon the type of transportation facility. LOS measurement is used primarily to assess how substantial increases in vehicular traffic may affect traffic congestion on specific transportation facilities, such as freeways, arterials, and intersections. Procedures have also been established to adjust the evaluation to account for trucks, buses, roadway gradient, and pedestrian volumes. However, substantial traffic volume increases may also result in other traffic related impacts. Table 2.15-1 describes generalized definitions of the various LOS categories (A through F) as applied to roadway operations.

State Highway Level of Service Standards and Thresholds

State highway LOS and performance is based upon procedures derived from the 2000 Highway Capacity Manual by the Transportation Research Board of the National Academies. The procedure for calculating LOS involves estimating a peak hour volume to capacity (V/C) ratio on state highways. The resulting peak hour V/C ratio is then compared to acceptable ranges of V/C values corresponding to the various Levels of Service, as shown in Table 2.15-2. The corresponding LOS represents an approximation of existing or anticipated future peak hour operating conditions in the peak direction of travel. As stated in the Caltrans Guide for the preparation of Traffic Impact Studies (Caltrans 2002), Caltrans endeavors to maintain a goal of LOS C on State highway facilities. However, Caltrans acknowledges that this may not always be feasible. In these circumstances, Caltrans often accepts lower LOS on facilities that are currently operating below the LOS C objective.

County Roadway Segment LOS Standards and Thresholds

Roadway segment LOS standards and thresholds provide the basis for analysis of the existing Mobility Element (ME) roadway segment performance. The analysis of a County roadway segment is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast ADT volumes. Table 2.15-3 presents the current roadway segment capacity and LOS standards, as derived from the currently adopted County of San Diego Public Road Standards (DPW 1999). These standards were used for the analysis of existing conditions of unincorporated County roadways.

In addition to the expressway, arterial and collector roadway classifications, the County's roadway network includes local public roadways. The roadway design standards do not address roadway capacity or LOS standards for local public roads and, therefore, local public roads have not been included as part of the assessment of roadway network performance. Local public roads are intended to provide low volumes of ADT, property access and emergency evacuation, should the need arise. The capacity of such roadways can vary significantly based upon terrain, surface type, and cross-section.

Roadway Capacity

The capacity of a roadway is the maximum number of vehicles that can be expected to traverse a uniform section of road within a specified time frame under prevailing roadway, traffic and control conditions. For intersections, state highways and other transportation facilities, capacity is often based upon the peak period. Capacity is related to LOS and V/C ratios are calculated based upon the capacity criteria of each LOS level. The highest volume attainable under LOS E defines the capacity of a roadway. Under LOS F conditions, the volume of traffic exceeds the capacity of the roadway. Operating conditions of a roadway at capacity are unstable and difficult to predict. If the roadway capacity is exceeded, operating conditions change dramatically. Average travel speeds are extremely low and stop-and-go traffic as well as excessive queuing may occur.

Existing Roadway Network

The County of San Diego Department of Public Works Road Section is responsible for maintaining nearly 2,000 miles of County Mobility Element roadways and other transportation facilities within the unincorporated County. For level of service analysis purposes, the 2,000 miles of County maintained roads was subdivided into over 3,500 roadway segments. In addition the analysis also assessed over 380 roadway segments within the unincorporated County that are classified as Non-County maintained roads. Non-County maintained roadways include private roads (maintained by adjacent property owners), public roads (maintained by respective municipalities), and State highways (maintained by Caltrans). Table 2.15-4 provides the definitions for the roadway classification of County maintained roads. Figure 2.15-1, Figure 2.15-2, and Figure 2.15-3 identify existing major roadways within the North County, East County, and Backcountry areas of the unincorporated County, as designated under the existing General Plan Circulation Element. Roadways identified on these maps include: Freeways (also known as State highways), expressways, prime arterials, major roads, collector roads, town collector roads, light collector roads, recreational parkways, rural collector roads, rural light collector roads, and rural mountain roads. It should be noted that for analysis purposes, one contiguous roadway was often divided into multiple segments. For example, the Mission

Road/SR-76 roadway located in Bonsall was divided into five segments for the purpose of analysis.

For the purpose of this analysis, northwestern communities include: Bonsall CPA, Fallbrook CPA, North County Metro Subregion, Pala/Pauma Valley Subregion, Pendleton/De Luz CPA, Rainbow CPA, San Dieguito CPA and Valley Center CPA. Southwestern communities include: Alpine CPA, County Islands CPA, Crest/Dehesa Subregion, Jamul/Dulzura Subregion, Lakeside CPA, Otay Subregion, Ramona CPA, Spring Valley CPA, Sweetwater CPA and Valle de Oro CPA. Eastern communities include: Central Mountain Subregion, Desert Subregion, Julian CPA, Mountain Empire Subregion, and North Mountain Subregion. Table 2.15-5 describes the existing roadway network within the unincorporated County in terms of roadway lane miles in the northwestern, southwestern and eastern communities. This table displays lane miles by facility type, which includes State highways, Mobility Element roadways, and local public roads. Mobility Element roadways refer to the existing portion of the County Mobility Element roadway system that has currently been constructed. As shown, the existing roadway network includes 454 lane miles of State highway facilities, 2,190 lane miles of County Mobility Element roads, and 415 lane miles of local public roads, for a total of 3,059 lane miles in the unincorporated County. Lane miles represent the lengths of the roadway (linear miles) multiplied by the number of travel lanes. Planning areas that have the greatest number of roadway lane miles include: Desert Subregion (308 miles), Mountain Empire Subregion (267 miles), North Mountain Subregion (262 miles), Ramona CPA (222 miles), and Central Mountain Subregion (215 miles). In total, the northwestern communities contain 884 roadway lane miles, southwestern communities contain 1,062 roadway lane miles, and eastern communities contain 1,113 roadway lane miles. Approximately half of the State highway lane miles in the unincorporated area are located in the eastern communities, with County Mobility Element roadway lane miles fairly evenly distributed amongst the northwestern, southwestern and eastern communities. The eastern communities have the fewest lane miles of local public roads.

Existing Roadway Network Performance

Existing LOS conditions were estimated based on a base year 2007 traffic forecast. Table 2.15-6 provides a summary of existing roadway performance in the unincorporated County, in terms of operating conditions and LOS. Roadway lane miles by LOS categories are reported for State highways and Mobility Element roads in the northwestern, southwestern, and eastern communities. Lane miles currently operating at LOS E and F are considered deficient facilities by County standards. As shown, a total of 152 lane miles of roadways (including approximately 12 lane miles of State highways and 140 lane miles of Mobility Element roads) are currently operating at LOS E. Planning areas with the greatest number of roadway lane miles operating at LOS E include: Ramona CPA (21 miles), Lakeside CPA (17 miles), Fallbrook CPA (17 miles) and Valley Center CPA (14 miles). The majority of LOS E roadway segments occur in the northwestern and southwestern communities, while practically no LOS E roadway segments occur in the eastern communities.

Table 2.15-6 also identifies a total of 168 lane miles of roadway facilities (66 lane miles of State highways and 102 lane miles of Mobility Element roads) that are currently operating at LOS F. Communities with the greatest number of roadway lane miles currently operating at LOS F include: Lakeside CPA (33 miles), San Dieguito CPA (22 miles), Ramona CPA (19 miles) and Valle de Oro CPA (15 miles). The majority of LOS F roadway segments are located in the northwestern and southwestern communities, while practically no LOS E roadway segments occur in the eastern communities.

Table 2.15-7 displays the existing vehicle miles traveled (VMT) and ADT in the northwestern, southwestern, and eastern communities. VMT refers to the number of vehicle miles that occur daily on the existing roadway system, by area or community, while ADT refers to the average daily traffic volume that occurs on the existing roadway system, by area or community. ADT quantifies the magnitude of trip making as a function of the type and magnitude of the assumed land uses associated with the proposed project. Trip generation rates as applied to the various land use types for this project were consistent with those utilized in the SANDAG regional transportation model, with additional refinements by SANDAG and County staff to reflect the more rural nature and lower densities of typical County land uses. VMT is a measurement of the total miles traveled by all motor vehicles in the area for a specified time period. VMT is an indicator of the overall magnitude of travel associated with each of the land use. In general, a mix of land uses within closer proximity and requiring less driving distance for interaction would result in a lower VMT. Typically more dispersed and segregated (not mixed) land uses result in greater VMT.

As shown in Table 2.15-7, planning areas with the highest existing VMT include: Pendleton/De Luz CPA (2,734,946 VMT), North County Metro Subregion (1,645,889 VMT), Lakeside CPA (1,483,082 VMT), Fallbrook CPA (1,356,481 VMT), and Bonsall CPA (1,179,857 VMT). The VMT associated with the Pendleton/De Luz CPA is attributable to a long stretch of Interstate 5 (I-5) that borders this CPA. As shown in this table, the communities with the highest existing ADT include: Lakeside (436,719 ADT); Valle de Oro (383,205 ADT); Spring Valley (336,273 ADT); and Fallbrook (286,243 ADT).

Traffic Conditions and Trends

Historically, vehicle trips in the unincorporated County have been increasing at a faster rate than that of the population growth. Travel behavior is influenced by many factors, including demographics, land uses, lifestyles, the economy, employment locations, and work practices. The San Diego region has seen a gradual decline in commuting by carpool and transit in favor of driving alone. As projected in the 2030 SANDAG RTP (SANDAG 2007), the San Diego region faces a large increase in VMT during the next two decades. In 1990, daily travel demand was approximately nine million ADT. The region's current population makes an estimated 16.7 million ADT by some form of motorized travel.

Additionally, as a result of the increase in motor vehicle travel and limited financial capacity of jurisdictions to keep pace with demand, many of the region's major transportation facilities are operating at or beyond their capacity. Of all trips taken by transportation modes, the average trip length is more than six miles. Work travel, as measured in VMT, comprises 26 percent of all highway travel, while non-work travel makes up 74 percent of travel on the region's highways. Work trips tend to be longer than non-work trips. In 2007, work trips averaged 11.9 miles in length compared to 5.7 miles for the non-work trips. Work trips make up the largest portion of travel demand during the morning and afternoon peak periods, although there are large shares of other trips, such as shopping and recreation, in the afternoon hours. Morning trips tend to be mostly commuter trips, going directly from home to work. Evening trips involve a greater variety of origins and destinations causing the evening peak period to spread out over a longer period of time. School trips constitute the smallest share of trips throughout the day. It is the peaking of travel demand during short periods of the day that strains the regional transportation system, which has excess capacity during off-peak periods. The average commute time in the region grew by only three minutes between 1990 and 2000, indicating that people make personal adjustments to keep commute times reasonable (SANDAG 2007).

Parking

Generally, the location of parking is designed to ensure a safe environment for drivers and passengers to exit a parked vehicle, provide convenient access to the driver's and passenger's destination, and minimize indirect impacts to adjoining properties including noise, visual and lighting impacts. However, parking conditions have the potential to influence travel patterns, alternative transportation use, land use planning, and pollution. Examples of these influences include: 1) if too much parking is provided, portions of the site are paved unnecessarily, causing excess stormwater run-off along with urban design issues; 2) if an insufficient number of parking spaces are provided, drivers will travel through the site and surrounding environment searching for a space, causing unnecessary congestion on adjacent roads, and often impeding the loading and unloading of goods or the movement of pedestrians; and 3) ample parking supply encourages the use of single-occupancy vehicles, while downplaying transit, pedestrian traffic, and safety.

Current parking conditions across the unincorporated County are based on standards outlined in the County Zoning Ordinance (Sections 6750-6799) and the County's Off-Street Parking Design Manual (June 1985). The regulated number of parking spaces for various developments is addressed in a parking schedule, which categorizes the number of spaces required according to land use type and building size. The dimension of parking spaces varies depending on angle of parking (0°, 30°, 45°, 60°, or 90°), striping of spaces (single or double), and whether the parking is intended for compact, regular, or handicapped vehicles. Regular parking spaces that are not for parallel parking measure 8.6 feet by 18 feet. Handicapped parking spaces that are not for parallel parking measure 14 feet by 19 feet. Different striping plans may further reduce the width of regular and handicapped spaces, as identified in the Off-Street Parking Design Manual. Most land uses, particularly office and retail, also require motorcycle and bicycle spaces, typically at a ratio of 1.5 bicycle spaces for each 10 parking spaces, with no less than three spaces provided.

Current County parking regulations lack sufficient criteria to differentiate between parking space requirements for many types of non-residential land uses. The regulations address retail uses according to building size, but do not address differences in the types of retail uses. For example, under the current regulations, a 35,000 square foot supermarket would require the same number of parking spaces as an appliance store of the same size. However, a supermarket generally has more customers at a given time than an appliance store, and would be expected to generate more traffic.

Exceptions to the parking standards outlined in the Zoning Ordinance, Sections 6750-6799, include three designated special parking districts. The three special districts include areas that are developed or subdivided with more urban characteristics along segments of the following roads: 1) Main Avenue in Fallbrook; 2) Maine Avenue in Lakeside; and 3) Main Street/SR-67 in Ramona. They have been designated as special districts in an effort to encourage economic revitalization. Parking requirements for projects located within these districts are determined on a case-by-case basis. The number of spaces is determined by the parking generation characteristics of the land use and the physical limitations of the site.

Bus and Rail Service

Bus and rail service are the primary modes of public transportation that serve the needs of unincorporated County residents. The two primary agencies that deliver transit services within

the unincorporated County are the MTS and the NCTD. MTS is the region's largest provider of transit services, and has a service area population of 1.93 million (approximately 71 percent of the County's population). MTS serves approximately 86 million passengers or 275,000 passengers each weekday through bus and trolley service. NCTD provides bus and rail service to 1,020 square miles and approximately 870,000 people in the northern region of the County. Figure 2.15-4 shows the service area boundaries for MTS and NCTD. Bus and rail services in the unincorporated area are primarily provided to the more densely populated communities in the western portion of the County, while bus and rail service is severely limited in backcountry areas. Figure 2.15-5 provides an overview of bus and rail lines that serve unincorporated County areas and residents. Public transportation resources for the County are discussed below in terms of bus service and rail service.

Bus Service

Metropolitan Transit Authority (MTS)

MTS offers over 85 bus routes throughout its service area, which primarily cover the southern region of the County. Bus services are provided in the unincorporated County by the San Diego Transit Corporation (SDTC), which is owned by MTS. SDTC serves the cities of San Diego, El Cajon, La Mesa, and National City, in addition to the unincorporated communities of Julian, Desert, Central Mountain, Lakeside, Alpine, Mountain Empire, Crest, Valle de Oro, Spring Valley, Sweetwater, and Otay. SDTC bus service provides connections to light and heavy rail services and offers local service and express service (MTS 2008).

North County Transit District (NCTD)

The NCTD operates a bus system referred to as the BREEZE which serves the unincorporated County. The BREEZE serves eight north County cities, in addition to the unincorporated communities of Pendleton/De Luz, Fallbrook, Ramona, Pala/Pauma Valley, Valley Center, North County Metro, and San Dieguito. The NCTD service area also includes four Native American reservations governed by the Mission Band of Rincon Indians, Mission Band of Pala Indians, Pauma and Yuima Band of Mission Indians, and the San Pasqual Band of Diegueno Indians. The BREEZE operates approximately 40 different bus routes, twenty-six bus routes serve the unincorporated County, many of which provide connections to light rail systems and tourist attractions.

Tribal Government Transportation

In recent years, some tribal gaming facilities have started providing transit (primarily passenger buses) for their employees and patrons at locations throughout San Diego County, and occasionally from Orange and Los Angeles Counties. This transit is often provided in the same areas where NCTD or MTS provide transit services.

Paratransit

Both MTS and NCTD offer transit (also known as paratransit) services to passengers with certified disabilities under the American with Disabilities Act (ADA). The MTS paratransit service is referred to as Access/ADA. NCTD paratransit service is referred to as LIFT. Paratransit provides service to the same areas during the same days and hours that other transit routes operate. Access/ADA serves communities in the MTS service area but users must be within ¾ - mile of a bus or trolley stop. LIFT provides service to accommodate the mobility needs of disabled riders within ¾-mile of the NTCD BREEZE route. Communities in the unincorporated area with significant paratransit coverage include Spring Valley, Valle de Oro, Sweetwater,

Lakeside, Ramona, and North County Metro. Other communities such as Crest/Dehesa, Alpine, Valley Center, Pala/Pauma Valley, Bonsall, and Fallbrook have limited paratransit service, while the backcountry communities of Mountain Empire, Central Mountain, Palomar/North Mountain, and Desert/Borrego Springs are not covered.

Rail Service

There are five railroad providers that operate on two railroad corridors within the San Diego region. Many of these rail lines are located within the incorporated areas of the County; however some unincorporated residents utilize these systems. Railroad providers for San Diego County include: 1) NCTD; 2) MTS; 3) Burlington Northern Santa Fe Railroad (BNSF); 4) Carrizo Gorge Railway (CGR); and 5) San Diego and Imperial Valley Railroad (SD&IV). The two railroad corridors that cross the County include: 1) the San Diego-Los Angles-San Luis Obispo Corridor; and 2) the San Diego & Arizona Eastern (SD&AE) Railway Corridor. These railroad corridors are shown in Figure 2.15-6. Table 2.15-8 provides additional details about the railroad freight and commuter operations on these two corridors.

The San Diego-Los Angles-San Luis Obispo Corridor covers 351 miles, with 82 miles located in San Diego County (62 miles along the coast and 20 miles to the east linking Oceanside to Escondido). The San Diego portions of the corridor are mostly owned by NCTD, with a small southern portion of the line owned by MTS. The majority of the portion of the San Diego-Los Angles-San Luis Obispo Corridor that runs through San Diego County is a single line that is currently operating at maximum capacity. Commuter rail services offered on this corridor include the Sprinter, Coaster, MetroLink, and Amtrak. These commuter rail services are discussed below. BNSF also maintains a freight easement, which allows them to transport freight shipments on the Los Angeles-San Luis Obispo-San Diego Corridor line.

The SD&AE Corridor was constructed from 1907 to 1916 as an alternative route to connect San Diego to national railroad lines. The route traverses through Baja California, Mexico, into the County's Mountain Empire Subregion and Imperial County to a connection with the Union Pacific Railroad. Currently, MTS owns 108 miles of rail that comprises the SD&AE railway. SD&IV operates freight services on this line while MTS operates the San Diego Trolley on this line. CGR uses this line for freight operations and a tourist train that operates from Campo to Tecate, Mexico.

San Diego Trolley

MTS operates the San Diego Trolley which runs along the SD&AE Railroad Corridor. The San Diego Trolley operates over 53 miles on three routes, mostly double-tracked, with 53 stations. Although the entire Trolley line is located within the incorporated County, many unincorporated residents use its service. In 2007, the San Diego Trolley carried 35.1 million riders. Average weekday ridership is 100,000 to 110,000 riders (MTS 2008).

Sprinter

NCTD operates the Sprinter Light Rail system on the San Diego-Los Angeles-San Luis Obispo Corridor. The Buena Creek Sprinter Station, opened in 2007, is the only site in the unincorporated County that is served by high frequency light rail transit. This light rail line transports commuters between Oceanside and Escondido, and runs approximately parallel to SR-78. The Sprinter rail line is 22-miles long, has a 53-minute travel time from end to end, and runs 64 trips daily.

NCTD operates the Coaster rail system on the San Diego-Los Angeles-San Luis Obispo Corridor. The Coaster rail service is a commuter rail line that operates from North County San Diego to Downtown San Diego every weekday and on Saturdays. The Coaster operates 22 daily roundtrips trips and eight stations (NCTD 2008).

MetroLink

MetroLink is a regional commuter train system that operates on the San Diego-Los Angeles-San Luis Obispo Corridor. MetroLink was formed by the Southern California Regional Rail Authority, composed of members from Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. MetroLink operates seven routes and 55 stations over 512 miles of rail. 145 trains are operated on the weekdays with 32-48 trains operating on the weekends. The only MetroLink Station located in the County of San Diego is the Oceanside Station located on the Orange County Line (NCTD 2008).

Amtrak

Intercity rail service is provided on the San Diego-Los Angeles-San Luis Obispo Corridor by Amtrak. Amtrak is a nationwide provider of passenger rail service. Amtrak operates one route that serves San Diego County, called the Pacific Surfliner. The Pacific Surfliner travels on the Southern California coast between San Luis Obispo and San Diego. This line offers 12 daily round-trips between San Diego and Los Angeles, and Santa Barbara and San Diego.

Bicycle and Pedestrian Systems

Bikeways

The San Diego County Bicycle Transportation Plan serves as a guiding document for bicycle facilities development in unincorporated areas. The Plan identifies existing and proposed bikeways for each community. Bikeways can be classified into three types of bicycle facilities: bike path, bike lane, and bike route. Bike paths refer to paths that provide for bicycle travel on a paved right-of-way completely separated from any street or highway. A bike lane provides a striped and stenciled lane for one-way travel on a street or highway. Bike lanes help position cyclists in the roadway, as practicable, but do not preclude vehicular movements such as merging and entering turn lanes. A bike route designates networks for shared use with pedestrian or motor vehicle traffic and is identified only by signage. Bike routes require shared use of road lanes and therefore bicyclists and motorists must interact to safely pass and share lanes. All County roadways (excluding freeways, except where allowed by Caltrans) are open for travel by bicycle, regardless of bikeway treatment.

Existing bikeways, within the unincorporated County are shown by in Figures 2.15-7. Approximately 156 miles of bicycle routes currently exist in the County.

Pathways

The County Trails Program (CTP) serves as the guiding document for multi-use trails and pathways throughout the unincorporated County. The Community Trails Master Plan (CTMP) is the implementing document for the CTP. The CTP encompasses both regional and community facilities. Regional facilities span long linear distances that cross multiple communities and function as a backbone for local trail networks. Community facilities serve local needs and are contained in the CTMP, an independent planning document. Regional and community facilities

are further separated into the classification of trails and pathways. Trails are typically located away from vehicular roads, are primarily recreational in nature but can also serve as an alternative mode of transportation. They are soft-surface facilities for single or multiple uses by pedestrians, equestrians, and mountain bicyclists. Trail characteristics vary depending on location and user type. Pathways are facilities located within a parkway or road right-of-way. A riding and hiking trail located in the road right-of-way is considered a pathway. They are typically soft-surfaced facilities intended to serve both circulation and recreation purposes. Pathways help make critical connections and are an integral part of a functional trail system.

Existing community and regional trails are shown in Figure 2.15-7. Approximately 121 miles of trails exist in the County. Regional pedestrian pathways are primarily located in the Pendleton/De Luz, Jamul/Dulzura, Otay, Central Mountain, Alpine, and North Mountain communities of the unincorporated area. The only existing community pedestrian pathways are located in Jamul/Dulzura, Sweetwater, and Central Mountain. An inventory of existing sidewalk facilities for the unincorporated County is not available.

Rural Road Safety

Large portions of the unincorporated County are rural in nature. The National Center for Injury Prevention and Control (County of San Diego 2007a) has estimated that over 58 percent of motor vehicle crashes that take place in the U.S. occur in rural areas. Additionally, the rural fatality rate per 100 million VMT is more than twice that of urban areas. In the U.S., 79 percent of all crashes on rural roads fall into three categories. These categories include the following: 1) single vehicle crashes (especially running off the road); 2) head-on collisions; and 3) collisions at intersections. Single vehicle crashes constitute 46 percent or more of all fatal rural road crashes. Head-on crashes make up approximately 18 percent of all fatal crashes on rural roads. Collisions at intersections make up approximately 15 percent of all crashes on rural roads.

This higher fatality rate in rural areas could be attributed to many factors including rugged terrain, shortened sightlines, road geometry, faster speeds, functionality, alcohol, enforcement levels, longer response times to accidents, and distance to medical treatment centers. Many older rural roads in the unincorporated County were established under a previous set of design standards. In many instances, these roads have segments with horizontal and vertical curves that are sharper than allowed by existing standards. Approximately 75 percent of drivers involved in fatal crashes on rural roads are rural and small-town residents. Because of this fact, it can be assumed that the drivers in these crashes are generally familiar with the roads on which they are driving. Therefore, rural road safety is a concern for the County.

2.15.1.2 Adjacent Cities

Roadways and Traffic

As part of the EIR process for the proposed General Plan Update, a study identifying the potential for the proposed General Plan Update to result in traffic impacts to adjacent jurisdictions was conducted by Wilson and Company (2009b). As discussed above, this report addresses potential traffic impacts related to the proposed project and the following cities: Carlsbad, Chula Vista, Del Mar, El Cajon, Encinitas, Escondido, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Marcos, San Diego, Santee, Solana Beach, and Vista.

The General Plan Update Traffic Impacts to Adjacent City Jurisdictions report is provided in Appendix H.

LOS Definitions

As described in Section 2.15.1.1, Unincorporated County, Table 2.15-1 describes generalized definitions of the various LOS categories (A through F) as applied to adjacent cities roadway operations.

Roadway Segment Level of Service Standards and Thresholds

Roadway segment LOS standards and thresholds provide the basis for analysis of adjacent cities arterial roadway segment performance. The analysis of roadway segment LOS was based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast ADT volumes. Methodologies for determining roadway LOS vary among the 16 cities included in the Traffic Impacts to Adjacent City Jurisdictions report. The Cities of Carlsbad, Del Mar, El Cajon, La Mesa, Lemon Grove, National City, Poway, San Diego, Santee, and Solana Beach utilize the San Diego Traffic Engineering Council/Institution of Transportation Engineers (SANTEC/ITE) guidelines, as shown in Table 2.15-9, for classification of Mobility Element roadways (respective to each cities' existing general plan) and determination of roadway LOS. Tables 2.15-10 through 2.15-15 identify the roadway segment LOS standards and thresholds for the remaining Cities including Chula Vista, Encinitas, Escondido, Oceanside, San Marcos, and Vista, respectively, as defined by each city.

Roadway Performance

Existing LOS conditions were estimated based on a base year 2007 traffic forecast. Table 2.15-16 provides a summary of existing roadway classifications, roadway capacity at LOS E, daily ADT and existing LOS based upon the respective jurisdictional standard. One hundred and ninety-six (196) segments were evaluated based on requests made by adjacent cities during the NOP process for the General Plan Update and an evaluation of relevant facilities contained in the RTP (SANDAG 2007). In total, the Traffic Impacts to Adjacent City Jurisdictions report evaluated nine roadway segments in Carlsbad, 13 roadway segments in Chula Vista, one roadway segment in Del Mar, 31 roadway segments in El Cajon, 7 roadway segments in Encinitas, 35 roadway segments in Escondido, 14 roadway segments in La Mesa, two roadway segments in Lemon Grove, five roadway segments in National City, five roadway segments in Oceanside, 21 roadway segments in Poway, 11 roadway segments in San Diego, 11 roadway segments in San Marcos, 14 roadway segments in Santee, 13 roadway segments in Solana Beach, and three roadway segments in Vista. These roadway segments are shown in Table 2.15-16. Segment classifications for these roadways were based on the respective jurisdictional standard, as shown in Tables 2.15-9 through 2.15-15 and discussed above. Generally, the roadway segments included in the analysis of adjacent cities ranged in classification from 2-lane collectors to 6-lane prime arterials.

As shown in Table 2.15-16, a total of 56 roadway segments are currently operating at an unacceptable LOS. Under existing conditions, Carlsbad has zero deficient roadway segments, Chula Vista has six deficient roadway segments, Del Mar has zero deficient roadway segments, El Cajon has seven deficient roadway segments, Encinitas has two deficient roadway segments, Escondido has 14 deficient roadway segments, La Mesa has nine deficient roadway segments, Lemon Grove has one deficient roadway segment, National City has zero deficient

roadways, Poway has seven deficient roadway segments, San Diego has three deficient roadway segments, San Marcos has one deficient roadway segment, Santee has three deficient roadway segments, Solana Beach has two deficient roadway segments, and Vista has one deficient roadway segment. Cities with the greatest number of failing roadway segments include Escondido, La Mesa, El Cajon, Poway, and Chula Vista.

Interregional and International Border Crossings

San Diego County is bordered by Orange County, Riverside County, Imperial County, and the Republic of Mexico. Orange County traffic travels along I-5 through USMC Camp Pendleton to the coastal cities. Riverside County traffic travels along the I-15 into the Rainbow CPA. Imperial County traffic travels along the I-8 through the Mountain Empire Subregion. Traffic from the Republic of Mexico to the south utilizes three international border crossings within the County: 1) San Ysidro, south of where I-5 and I-805 merge; 2) Otay Mesa, at SR-905; and 3) Tecate, at SR-188. The Tecate border crossing is the only international border crossing that enters directly into the unincorporated County. Table 2.15-17 shows current and projected average daily trips for interregional and international border crossings in the County. Major interregional and international border crossings that occur in the unincorporated County are shown in Figure 2.15-1, 2.15-2, and 2.15-3.

2.15.2 Regulatory Framework

2.15.2.1 Federal

Americans with Disabilities Act (ADA)

The ADA (1990) is a wide-ranging civil rights law that prohibits, under certain circumstances, discrimination based on disability. Pedestrian facility design must comply with the accessibility standards identified in the ADA, which applies to all projects involving new or altered pedestrian facilities. The scoping and technical provisions for new construction and alterations identified in the ADA Accessibility Guidelines (Sections 4.3, 4.7 and 4.8) can be used to help design pedestrian facilities that are ADA compliant. For example, Title II-6.600 of the Technical Assistance Manual states, “When streets, roads, or highways are newly built or altered, they must have ramps or sloped areas whenever there are curbs or other barriers to entry from a sidewalk or path.” Certain facilities, such as historic buildings, may be exempt from ADA requirements.

Highway Capacity Manual

The Highway Capacity Manual 2000 (HCM 2000), prepared by the federal Transportation Research Board (TRB), is the result of a collaborative multiagency effort between the TRB, FHWA, and American Association of State Highway and Transportation Officials (AASHTO). The HCM 2000 contains concepts, guidelines, and computational procedures for computing the capacity and quality of service of various highway facilities, including freeways, signalized and unsignalized intersections, rural highways, and the effects of transit, pedestrians, and bicycles on the performance of these systems.

Title 23, Code of Federal Regulations

Revised in April 1, 2005, Section 450.220 of Title 23 Highways in the Code of Federal Regulations requires each state to carry out a continuing, comprehensive, and intermodal statewide transportation planning process. This planning process must include the development of a statewide transportation plan and transportation improvement program that facilitates the efficient, economic movement of people and goods in all areas of the state.

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

On August 10, 2005 SAFETEA-LU was signed into law. SAFETEA-LU addresses the many challenges facing transportation systems and sets funding and programs to improve safety, reduce traffic congestion, improve efficiency in freight movement, increase intermodal connectivity, and protect the environment. SAFETEA-LU promotes more efficient and effective federal surface transportation programs by focusing on transportation issues of national significance, while giving state and local transportation decision makes more flexibility for solving transportation problems in their communities.

2.15.2.2 State

California Department of Transportation (Caltrans) Standards

Caltrans is responsible for planning, designing, building, operating, and maintaining California's $300 billion, 50,000-lane-mile State road system. Caltrans sets standards, policies, and strategic plans that aim to do the following: 1) provide the safest transportation system in the nation for users and workers; 2) maximize transportation system performance and accessibility; 3) efficiently deliver quality transportation projects and services; 4) preserve and enhance California's resources and assets; and 5) promote quality service. Caltrans has the discretionary authority to issue special permits for the use of California State highways for other than normal transportation purposes. Caltrans also reviews all requests from utility companies, developers, volunteers, nonprofit organizations, and others desiring to conduct various activities within the California Highway right of way. The Caltrans Highway Design Manual, prepared by the Office of Geometric Design Standards (Caltrans 2008), establishes uniform policies and procedures to carry out the highway design functions of Caltrans. Caltrans has also prepared a Guide for the Preparation of Traffic Impact Studies (Caltrans 2002). Objectives for the preparation of this guide include providing consistency and uniformity in the identification of traffic impacts generated by local land use proposals.

Statewide Transportation Improvement Program (STIP)

The California 2007 STIP, approved by the U.S. Department of Transportation in October 2006, is a multiyear, statewide, intermodal program of transportation projects that is consistent with the statewide transportation plan and planning processes, metropolitan plans, and Title 23 of the Federal Code of Regulations. The STIP is prepared by Caltrans in cooperation with the Metropolitan Planning Organizations (MPOs) and the Regional Transportation Planning Agencies. In San Diego County, the MPO and Regional Transportation Planning Agency is the 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.

Transportation Development Act (TDA)

The TDA provides two major sources of funding for public transportation: the Local Transportation Fund (LTF) and the State Transit Assistance (STA) Fund. These funds are for the development and support of public transportation needs that exist in California and are allocated to areas of each county based on population, taxable sales, and transit performance. Some counties have the option of using LTF for local streets and roads projects, if they can show there are no unmet transit needs. The branch provides oversight of the public hearing process used to identify unmet transit needs. It provides interpretation of and initiates changes or additions to legislation and regulations concerning all aspects of the TDA. It also provides training and documentation regarding TDA statutes and regulations. Caltrans ensures local planning agencies complete performance audits required for participation in the TDA.

2.15.2.3 Local

Community Plans

Some community plans identify pedestrian and bicycle policies that affect future development. In addition, various master plans, design guidelines, and specific plans may require pedestrian or bicycle facilities. For example, the Ramona Road Master Plan identifies specific areas where sidewalks should be provided and safe walking zones within ½-mile of schools. The Ramona Road Master Plan also recommends specific improvements to bicycle facilities providing access to schools.

County Zoning Ordinance, Parking Regulations, Sections 6750- 6799

The County's Zoning Ordinance sets the standards for parking including requirements for new uses and structures; existing uses and structures; conversion, alterations, or expansion of existing uses or structures; computation of vehicle and bicycle space requirements; location of parking to building sites; parking space dimensions; design of bicycle storage; design standards for off-street parking; loading spaces; variances from parking regulations; and parking of commercial vehicles in residential, agricultural, and certain special purpose zones. The County of San Diego Off-Street Parking Design Manual implements Section 6793(c) of the County Zoning Ordinance. This section of the Ordinance relates to the design, dimensions, construction, landscaping, and surfacing of parking and bicycle spaces, and driveways.

San Diego County Public Road Standards

These standards provide design and construction requirements for public road improvement projects located within the unincorporated areas of San Diego County. These standards apply to County initiated public road improvement projects as well as privately initiated public road improvement projects. These standards provide minimum design and construction requirements for public roads.

San Diego County Private Road Standards

These standards provide minimum design and construction requirements for private road improvements required as conditions of land development approval in unincorporated areas of the County. Levels of service are not established for private roads. Minimum design and construction requirements, however, are established based upon the projected ADT volume on the road.

County of San Diego Consolidated Fire Code (CFC)

The County of San Diego, in collaboration with the local fire protection districts, created the CFC in 2001. The CFC contains the County's and fire protection districts' amendments to the California Fire Code. Emergency ingress/egress is established by County's CFC. Ingress/egress is necessary for both citizen evacuation and to provide access for emergency vehicles in the event of a fire or other emergency. Section 902.2 of the CFC dictates minimum design standards for "Fire Apparatus Access Roads" and includes minimum road standards, secondary access requirements, and restrictions for gated communities. Road standard requirements for emergency vehicles specify a minimum 12-foot paved lane or 24-foot travel-way.

County of San Diego Regulatory Ordinances, Sections 77.201 – 77.220, Transportation Impact Fee (TIF)

The San Diego County TIF Ordinance, as amended in February 2008, requires the assessment and collection of fees for roadway impacts as a condition of approval of a subdivision map or prior to issuance of a development permit, including a building permit. The County TIF Ordinance defrays the actual or estimated costs of constructing planned transportation facilities necessary to accommodate increased traffic generated by future development consistent with Section 66000 et seq. of the California Government Code (Mitigation Fee Act). Application of this fee includes, but is not limited to, development for residential, commercial, and industrial land uses. The fees are collected to fund identified transportation facilities, or portions thereof, that provide increased road capacity necessitated by the cumulative impacts of future development.

Regional Transportation Plans and Programs

SANDAG serves as the forum for decision-making on regional issues such as growth, transportation, land use, the economy, the environment, and criminal justice. SANDAG builds consensus, makes strategic plans, obtains and allocates resources, and provides information on a broad range of topics pertinent to the region's quality of life. SANDAG is governed by a Board of Directors composed of mayors, council members, and supervisors from each of the San Diego region's 19 local governments.

As the San Diego County MPO and Regional Transportation Planning Agency, SANDAG has produced the following documents that identify transportation plans and policies in the San Diego area.

2030 Regional Transportation Plan (RTP)

The RTP, also known as MOBILITY 2030, serves as a blueprint to address the mobility challenges created by the San Diego region's growing population and employment. It contains an integrated set of public policies, strategies, and investments to maintain, manage, and improve the transportation system in the region. The 2030 RTP was approved on March 28, 2003. Changes in anticipated cost and revenue have resulted in an update of the RTP that was approved by the SANDAG Board of Directors in 2006. Additional updates and approvals were obtained in late 2007, to incorporate a new regional growth forecast, strategic initiatives and several other white papers on topics not previously covered in the RTP.

2006 Regional Transportation Improvement Program (RTIP)

The RTIP is a multi-year program of proposed major highway, arterial, transit, and bikeway projects. The 2006 RTIP is a prioritized program designed to implement the region's overall strategy for providing mobility and improving the efficiency and safety of efforts to attain federal and State air quality standards for the region. The 2006 RTIP also incrementally implements the latest update to the RTP. The 2006 RTIP covers fiscal years 2007 to 2011. The 2006 RTIP, including an air quality emissions analysis for all regionally significant projects, was adopted on August 4, 2006.

Congestion Management Program (CMP)

State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and regularly update a CMP, which is a part of SANDAG's RTP. The purpose of the CMP is to monitor the performance of the region's transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. SANDAG, as the designated Congestion Management Agency for San Diego region, must develop, adopt, and update the CMP in response to specific legislative requirements. SANDAG, local jurisdictions, and transportation operators such as Caltrans, MTDB, and NCTD, are responsible for implementing and monitoring the CMP.

2.15.3 Analysis of Project Impacts and Determination of Significance

2.15.3.1 Issue 1: Unincorporated County Traffic and LOS Standards

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County of San Diego Guidelines for Determining Significance, Transportation and Traffic, the proposed County General Plan Update would have a significant impact if it would:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); or

b. Exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways.

Impact Analysis

This impact analysis provides a comparative assessment of travel demand, specifically the magnitude in terms of vehicle trip generation and VMT under the land uses and roadway network (ME) identified for the proposed General Plan Update. The following section provides information for unincorporated County traffic, LOS standards, and associated impacts. The discussion is divided into nine sections, including: 1) methodology behind the County of San Diego General Plan Update Traffic and Circulation Assessment (Wilson and Company 2009a); 2) proposed project roadway network; 3) proposed project roadway capacity and LOS standards; 4) proposed project projected trip generation; 5) proposed project projected VMT; 6) proposed project related traffic impacts; 7) existing federal, State and local regulations and existing regulatory processes; 8) proposed General Plan Update goals and policies; and 9) summary. Information on adjacent cities traffic, LOS standards, and associated impacts is discussed below in Section 2.15.3.2, Issue 2: Adjacent Cities Traffic and LOS Standards.

Methodology of Traffic and Circulation Assessment

As part of the EIR process for the proposed General Plan Update, a Traffic and Circulation Assessment (Wilson and Company 2009a), was conducted to provide a program-level assessment of traffic operations throughout the unincorporated County of San Diego. This assessment evaluated projected roadway network performance under implementation of the proposed General Plan Update and was performed in accordance with the requirements of the County of San Diego, the SANDAG Regional CMP, and the CEQA project review process. The complete Traffic and Circulation Assessment is included in Appendix G of this EIR. Additionally, Chapter 4.0, Project Alternatives, compares proposed project traffic and LOS information to the project alternatives, including the No Project Alternative.

The Traffic and Circulation Assessment had an extremely large study area encompassing the unincorporated portions of the County of San Diego. In order to provide a program-level analysis of the project area, traffic operations were evaluated by consideration of daily roadway segment operations rather than peak hour intersection operations. The evaluation of peak hour intersection operations would be appropriate for addressing specific transportation corridors (i.e., intersections) that may be impacted by a proposed project. This approach is not feasible for the proposed project, due to its size. Therefore, daily roadway segment operations were evaluated to provide a comprehensive review of the County's roadway facilities. Two sets of roadway segment LOS standards and thresholds were utilized for the roadway analysis in this study. The existing County of San Diego LOS standards and thresholds were used to evaluate existing conditions while the proposed General Plan Update Mobility Element LOS standards and threshold were used to evaluate future conditions. Compared to existing standards, the proposed General Plan Update includes additional roadway classifications and provides variations to existing road classifications that would result in a change in the overall road capacity of several Mobility Element roads. Therefore, the current roadway segment capacity was used for the analysis of existing conditions, while the proposed General Plan Update roadway segment capacity was used for the analysis of the proposed project under build-out conditions. Within this EIR, the term build-out refers to a scenario in which the proposed General Plan Update land uses and the proposed General Plan Update Mobility Element roadway network have been fully developed within reason while accounting for developable

land and constraints. The scenario is based on the population forecast model, described in Section 1.13, Project Description, and correlates with SANDAG's 2030 forecast for the unincorporated County. Therefore, based on the assumptions programmed within the SANDAG forecast model, it is reasonable to conclude that build-out of the General Plan Update would occur around the 2030 timeframe.

County staff worked with SANDAG staff to prepare traffic forecasts for the Base Year 2007 and the future land use and roadway networks for the proposed General Plan Update. The traffic modeling process utilized the SANDAG Series 10 Regional Forecast model, with the assumption of full build-out of the General Plan Update land use map of the County's unincorporated land by 2030. The larger, more general Series 10 regional Traffic Analysis Zones (TAZs) were subdivided into smaller units/zones in the unincorporated area in order to ensure the accuracy and validity of the traffic forecasts. Detailed information on roadway network and land use assumptions that were incorporated into the traffic forecast model for this assessment are provided in Appendix G, Traffic and Circulation Assessment.

Proposed General Plan Update Roadway Network

The Mobility Element within the proposed General Plan Update incorporates road types that are compatible with proposed General Plan Update land uses. This roadway network, referred to as the ME road network, includes County maintained roads as shown on the Mobility Element map. The Mobility Element roadway network for the proposed General Plan Update is the Board of Supervisors endorsed roadway network. Mobility Element roads provide for the movement of people and goods between and within communities in the County. Upon adoption of the General Plan Update, any proposed deviations from the proposed Mobility Element road network would require a general plan amendment.

Table 2.15-18 displays lane miles proposed under the General Plan Update by facility type (State highways, Mobility Element roads, and local public roads), as well as by community. Implementation of the proposed General Plan Update would result in a roadway network that has 614 lane miles of State highway, 2,407 lane miles of County Mobility Element roads, and 703 lane miles of local public roads, for a total of 3,724 roadway lane miles. Roadway lane miles proposed under the General Plan Update would generally be evenly distributed between the northwestern communities (1,169 lane miles) southwestern communities (1,308 lane miles), and eastern communities (1,247 lane miles).

Compared to existing conditions (see Table 2.15-5), the proposed project would increase State highways by 160 lane miles, County Mobility Element roads by 214 lane miles, and local public roads by 288 lane miles, for a total of 662 additional roadway lane miles. When comparing the proposed General Plan Update roadway network to existing conditions, the northwestern communities would experience an increase of 285 lane miles, southwestern communities would experience and increase of 243 lane miles, and eastern communities would experience an increase of 134 lane miles. Planning areas that would experience the greatest increase in number of roadway lane miles from implementation of the proposed General Plan Update, when compared to existing conditions, include: North County Metro Subregion (78 lane miles), Lakeside CPA (68 lane miles), Valley Center CPA (57 lane miles), and Fallbrook CPA (50 lane miles).

Proposed Roadway Segment Capacity and LOS Standards

Implementation of the proposed General Plan Update would implement new standards for determining County roadway capacity and LOS. Table 2.15-19 presents the roadway segment capacity and LOS standards that would occur under implementation of the General Plan Update. Compared to existing standards, these include a wider range of roadway facility types and would allow for more flexibility in providing roadway classifications compatible with local conditions. The standards listed in Table 2.15-19 were used in the analysis of project-related traffic impacts. LOS D was considered the minimum acceptable LOS for County roadway segments per the County of San Diego Guidelines for Determining Significance, Transportation and Traffic (DPLU 2007p).

Projected Trip Generation

Trip generation quantifies the magnitude of vehicle trips as a function of the type and scale of the land uses associated with the proposed General Plan Update. Table 2.15-7 displays forecasted ADT in the unincorporated County under implementation of the General Plan Update. Trip generation is shown for the build-out of the proposed project. The proposed General Plan Update would result in the following ADT generation: northwestern communities (1,843,126 ADT), southwestern communities (2,821,654 ADT) and eastern communities (572,625 ADT). Under the proposed General Plan Update, planning areas that would experience the highest ADT include: Lakeside CPA (583,180 ADT), Fallbrook CPA (459,754 ADT), Ramona CPA (445,737 ADT), Spring Valley CPA (415,986 ADT), and Valle de Oro CPA (406,282 ADT).

The proposed project would generate approximately 2,094,554 additional ADT as compared to the existing condition (see Table 2.15-7). The proposed project would result in a total of 5,237,405 ADT while under the existing condition the ADT is 3,142,851. Implementation of the proposed project would result in a 66 percent increase in ADT as compared to the existing condition of the unincorporated County.

Projected Vehicle Miles of Travel (VMT)

VMT is an indicator of the overall magnitude of travel associated with land uses and the roadway network. VMT is a measurement of the total miles traveled by all motor vehicles in the area for a specified time period. In general, a mix of land uses within close proximity to one another and requiring less driving distance can result in a reduction in VMT. Typically more dispersed and segregated land uses result in greater VMT. VMT data used to evaluate existing conditions and the proposed project was based upon information provided by SANDAG. Table 2.15-7 identifies daily VMT for the proposed General Plan Update. When compared to the existing VMT of 15,922,149, the proposed project would result in 9,448,742 additional VMT, which is approximately a 60 percent increase in VMT as compared to the existing condition. Under implementation of the proposed project, the northwestern communities are projected to result in 13,844,846 VMT, southwestern communities are projected to result in 8,507,893 VMT, and eastern communities would result in 3,018,152 VMT for a total proposed VMT of 25,370,891. The northwestern communities would experience more than half of all total VMT. Planning areas that are projected to have the highest VMT include: Pendleton/De Luz CPA (3,799,101 VMT), North County Metro Subregion (2,815,934 VMT), Fallbrook CPA (2,373,498 VMT), Lakeside CPA (2,183,047 VMT), and Bonsall CPA (2,087,790 VMT).

A discussion regarding the proposed General Plan Update and the potential for greenhouse gases associated with VMTs to contribute to global climate change is provided in Issue 1: Compliance with AB 32, within Section 2.17, Global Climate Change.

Project-Related Traffic Impacts

The following discussion summarizes the project-related traffic impacts as determined in the County of San Diego General Plan Update Traffic and Circulation Assessment (Wilson and Company 2009a). The discussion is divided into three project-related traffic impacts including: 1) projected roadway network performance; 2) comparison of existing conditions to the proposed project; and 3) deficient facilities.

Projected Roadway Network Performance

Table 2.15-20 displays projected performance results for the roadway network proposed under the General Plan Update. Facilities operating at LOS E and F are considered to be deficient facilities and would be subject to mitigation. Implementation of proposed project would result in approximately 253 lane miles within the unincorporated County operating at an unacceptable LOS E or F. A total of 125 roadway lane miles (approximately 23 lane miles of State highways and 102 lane miles of Mobility Element roads) would operate at LOS E. Planning areas that would experience the greatest number of LOS E roadway lane miles include: Fallbrook CPA (23 lane miles), Lakeside CPA (11 lane miles), San Dieguito CPA (11 lane miles), and Valle de Oro CPA (10 lane miles).

A total of 128 roadway lane miles (45 lane miles of State highway and 83 lane miles of Mobility Element roads) are projected to operate at LOS F under the proposed General Plan Update. Communities that would experience the greatest number of LOS F roadway lane miles include: San Dieguito CPA (24 lane miles), Lakeside CPA (20 lane miles), Valley Center CPA (14 lane miles) and Jamul/Dulzura Subregion (14 lane miles). Approximately 50 percent of the total deficient roadway lane miles would be located in the northwestern communities, with less than 10 percent located in the eastern communities.

With implementation of the proposed General Plan Update, a total of approximately 253 lane miles in the unincorporated County would exceed a LOS standard established by the County Congestion Management Agency for designated roads or highways (see Table 2.15-20).

Comparison of Existing Conditions to Proposed Project Impacts

Compared to the existing conditions of the County (see Table 2.15-6), implementation of the proposed General Plan Update would reduce existing deficient lane miles (State highways and Mobility Element roads operating at LOS E and F) in the unincorporated County by 75 miles. Implementation of the proposed General Plan Update would increase roadway lane miles operating at LOS E in some planning areas, such as the Alpine and Fallbrook CPAs, while decreasing roadway lane miles operating at LOS E in other planning areas, such as the North County Metro Subregion and Lakeside CPA. Additionally, under existing conditions, the majority of existing LOS E roadway segments are generally distributed in the northwestern (69 total lane miles) and southwestern (83 total lane miles) communities, while zero LOS E roadway segments occur in the eastern communities. Under implementation of the proposed General Plan Update, the majority of LOS E roadway segments would be distributed in the northwestern communities (66 total lane miles) and southwestern communities (50 total lane miles), with 9 miles of LOS E roadway segments occurring in the eastern communities. Implementation of the

proposed General Plan Update would increase total LOS E roadway lane miles in the eastern communities by 9 total miles while decreasing total LOS E roadway lane miles in the southwestern communities by 33 lane miles and in the northwestern communities by 3 total lane miles. Compared to existing conditions, total roadway miles operating at LOS E would decrease by 27 lane miles under implementation of the proposed General Plan Update.

When compared to existing conditions, implementation of the proposed General Plan Update would increase roadway lane miles operating at LOS F in some planning areas such as the Jamul/Dulzura and Mountain Empire Subregions, while decreasing roadway lane miles in other planning areas such as the Lakeside and Valle de Oro CPA. Under existing conditions, LOS F roadway segments are generally distributed evenly throughout the northwestern (78 total lane miles) and southwestern communities (90 total lane miles), while no LOS F roadway segments occur in the eastern communities. Under implementation of the proposed General Plan Update, the majority of LOS F roadway segments would generally be distributed between the northwestern communities (63 total lane miles) and southwestern communities (55 total lane miles) areas, while 10 total miles of LOS F roadway segments would to occur in the eastern communities. When compared to existing conditions, implementation of the proposed General Plan Update would decrease total LOS F roadway lane miles in the northwestern communities by 15 lane miles and in the southwestern communities by 35 lane miles, while increasing total LOS F roadway lane miles in the eastern communities by 10 lane miles. Compared to existing conditions, total roadway miles operating at LOS F would decrease by 40 lane miles under implementation of the proposed General Plan Update.

Deficient Facilities

Table 2.15-21 identifies the LOS E and F roadway segments that would occur under the proposed General Plan Update. Implementation of the proposed General Plan Update is anticipated to result in a total of 136 deficient roadway segments throughout the unincorporated County (including approximately 31 State highway segments and 105 ME segments). The 136 deficient roadway segments result in a total of 253 deficient lane miles since roadway segments often consist of multiple lanes. This table also identifies the proposed ADT and LOS under the General Plan Update, the roadway classification under which the segment is failing, and an alternate roadway classification under which the segment would operate acceptably. The roadway classification represents the classification proposed in the General Plan Update, and the alternate roadway classification represents the classification which would be required to accommodate the identified deficiency in LOS.

Regional Roadway Facilities

Regional roadway facilities within the unincorporated County are provided in the current regional roadway planning document for SANDAG, the 2030 Regional Transportation Plan: Pathways for the Future (2030 RTP). Within the unincorporated County the major regional roadway facilities include: SR-54, SR-67, SR-76, SR-78, SR-79, SR-94, SR-188, I-8 and I-15. To evaluate the potential impacts of the proposed General Plan Update on regional roadway facilities listed previously, which are not under the jurisdiction of the County but located within the unincorporated County, this document hereby incorporates by reference the Environmental Impact Report for the 2030 San Diego Regional Transportation Plan: Pathways for the Future Environmental Impact Report (2030 RTP EIR), dated November 2007 (SCH No. 2007051145). This document can be found on SANDAG's website at: www.sandag.org and is summarized below.

The 2030 RTP provides the planning foundation for transportation improvements throughout the San Diego region through the year 2030. The 2030 RTP describes plan-level transportation improvements that includes a variety of facilities such as new and widened freeways, new transit features, expanded High Occupancy Vehicle (HOV)/Managed Lanes opportunities, and regional bikeway corridors. Improvements to the region's highway and roadway network are focused on flexible lanes dedicated to carpools and new, high-quality regional bus rapid transit service. The 2030 RTP also includes facilities to improve goods movement throughout the region. The regional highway network in the 2030 RTP includes all roads classified by local jurisdictions in their circulation elements, as well as freeways, expressways, and the Regional Arterial System (RAS). The RAS consists of all state highways, prime arterials, and selected major streets. In addition, some residential streets are included in the networks for connectivity between traffic assignment zones.

The 2030 RTP provides plans for a comprehensively improved and expanded highway, transit, and arterial network, balanced with multiple travel and mode choices for the public. Within Section 4.4 of the 2030 RTP EIR, it was determined that while there would be more people and cars in the future, implementation of the 2030 RTP would result in a less congested roadway system and a more accessible transit system than the one available under existing conditions. This conclusion is based on an increase in capacity of the existing roadway network, as well as transit options. Impacts were evaluated based upon a comparison of peak period freeway congestion, the percent of work/education trips accessible in 30 minutes, and the percent of non-work trips accessible within 15 minutes.

The 2030 RTP EIR analyzed the potential environmental impacts related to the adoption and implementation of the 2030 RTP, which includes the regional roadway facilities listed above. The traffic impact analysis contained in the 2030 RTP EIR evaluated potential impacts associated with these regional roadway facilities, while accounting for the planning efforts of local governments, including the proposed General Plan Update. Section 4.1.3 of the 2030 RTP EIR specifically acknowledges the County of San Diego General Plan Update process as a component in the evaluation of the 2030 RTP. Key characteristics of the proposed General Plan Update are described in the RTP EIR, including the proposed location of approximately 80 percent of future unincorporated County of San Diego population growth in communities located within the San Diego County Water Authority jurisdiction.

The 2030 RTP EIR determined that impacts to regional traffic and circulation patterns under the 2030 RTP, which includes growth projections representative of those proposed in the General Plan Update, would be less than significant. The 2030 RTP EIR determined that upon build-out of the 2030 RTP, there would be a projected two percent decrease in congested peak period travel conditions on freeway facilities. This determination was based upon the comparison of the congested peak period freeway travel conditions in 2006 (32 percent) to congested peak period freeway travel conditions in 2030 (30 percent) under implementation of the 2030 RTP. Additionally, the 2030 RTP EIR compared the existing transportation system LOS to year 2030 RTP LOS and concluded that certain freeway segments would operate at improved levels as compared to existing conditions. Therefore, the 2030 RTP EIR concludes that implementation of the proposed 2030 RTP would not result in a significant impact to freeway facilities and mitigation is not required.

The growth projections used in the 2030 RTP EIR were based on SANDAG's 2030 Regional Growth Forecast Update. SANDAG's 2030 Regional Growth Forecast Update uses long-range forecasts of population, housing, employment, income, and land use. This forecast is similar to

that used for the proposed project. Therefore, the proposed project would result in similar impacts to the regional roadway network in the County as identified in the RTP EIR.

Existing Federal, State, and Local Regulations and Existing Regulatory Processes

Multiple federal regulations exist to ensure transportation facilities are operationally adequate within the County. Future development of roadways under the General Plan Update would be required to comply with the HCM 2000, which contains capacity and quality of service standards for various highway facilities, including freeways, signalized and unsignalized intersections, and rural highways. Additionally, future development of roadways would be required to comply with Title 23, Highways, in the Code of Federal Regulations, which regulates the development of statewide transportation plans.

The proposed General Plan Update would also be required to comply with Caltrans standards, which establish uniform policies and procedures to carry out the highway design functions of Caltrans. Proposed roadways would also be required to be consistent with MOBILITY 2030, the regional planning document that contains an integrated set of public policies, strategies, and investments to maintain, manage, and improve the transportation system in the region. Other regional transportation plans that the proposed General Plan Update would be required to follow include the 2006 RTIP, a prioritized program designed to implement the region's overall strategy for providing mobility and improving the efficiency and safety of efforts to attain federal and State air quality standards for the region, and the CMP, a program required to monitor the performance of the region's transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning.

Any roadways proposed under the General Plan Update would also be required to comply with existing County roadway standards, such as the San Diego County Public Road Standards, which provide design and construction requirements for public road improvement projects located within the unincorporated areas of San Diego County, and the County TIF Program, which requires residential, commercial, and industrial projects to a pay fee that defrays the costs of constructing planned transportation facilities necessary to accommodate increased traffic generated by future development.

In addition, any future discretionary development would be required to conduct environmental review pursuant to CEQA prior to approval. To adhere to CEQA statutes and guidelines, the County's Guidelines for Determining Significance, Transportation and Traffic are used to evaluate and mitigate project-level and cumulative impacts.

Proposed General Plan Update Goals and Policies

The General Plan Update includes goals and policies that would prevent the substantial deterioration of transportation resources within the unincorporated County. Within the Land Use Element, and Mobility Element, various goals include specific policies to prevent the proposed General Plan Update roadway network from increasing in traffic or exceeding LOS standards.

In the Land Use Element, Goal LU-5 pertains to Climate Change and Land Use and encourages a land use plan and associated development techniques and patterns that reduce emissions of local greenhouse gases in accordance with state initiatives, while promoting public health. Policy LU-5.1 supports this goal by encouraging the reduction of vehicle trips within communities, which would reduce project-related traffic impacts. Goal LU-10 focuses on semi-

rural and rural lands that buffer communities, protect natural resources, foster agriculture, and accommodate unique rural communities. LU-10.4 supports this goal by limiting the establishment of commercial and industrial uses in semi-rural and rural areas that are outside of villages (including rural villages) to minimize vehicle trips and environmental impacts. Goal LU-11 encourages commercial, office, and industrial development that is appropriately sited and designed to enhance the unique character of each unincorporated community and to minimize vehicle trip lengths. Policy LU-11.8 supports this goal by encouraging permitted secondary land uses that would reduce the frequency of employee automobile trips. Goal LU-12 would promote sustainable infrastructure, public facilities, and essential services that meet community needs and are provided concurrent with growth and development. Policy LU-12.2 supports this goal by requiring development to mitigate the significant impacts to existing service levels of public facilities or services for existing residents and businesses. This policy would reduce traffic-related impacts associated with deteriorated roadway LOS.

In the Mobility Element, Goal M-1 encourages a safe and efficient road network that balances regional travel needs with the travel requirements and preferences of local communities. Policies M-1.1, M-1.2, and M-1.3 support this goal by prioritizing travel within communities, providing an interconnected public road network, and encouraging flexibility in design. Policies in support of Goal M-1 would reduce proposed project related impacts such as congestion and LOS deterioration. Goal M-2 encourages a road network that provides adequate capacity to reasonably accommodate both planned land uses and regional traffic patterns, while supporting other General Plan goals such as providing environmental protections and enhancing community character. Policies M-2.1, M-2.2, and M-2.3, support this goal by establishing LOS criteria, improving traffic operations, and requiring environmentally sensitive road design. Goal M-3 promotes new or expanded transportation facilities that are phased with and equitably funded by the development that necessitates their construction. Policies M-3.1 and M-3.2 support this goal by requiring development reserve right-of-way for public roads and requiring development contribute its fair share toward financing transportation facilities. Goal M-4 promotes roads designed safe for all users and compatible with their context. Policy M-4.2 support this goal by providing interconnected local roads and reinforcing compact development patterns. Compact development patterns would encourage alternative transportation and reduce vehicle trips and traffic.

Goal M-5 encourages a multi-modal transportation system that provides for the safe, accessible, convenient, and efficient movement of people and goods within the unincorporated County. Policies M-5.1 and M-5.2 support this goal by requiring coordination with regional planning and transit agencies in order to provide a transportation network with sufficient capacity, connectivity and reduced impacts to adjacent communities. Goal M-9 promotes the effective use of the existing transportation network by reducing the need to widen roads through and maximizing the use of alternative modes of travel throughout the County. Policies M-9.1 and M-9.2 support this goal by focusing on transportation systems management and transportation demand management. These policies seek to maximize the efficiency of existing or improved road facilities while promoting alternative transportation methods which would reduce vehicle trips on the proposed roadway network.

Summary

Implementation of the proposed General Plan Update would result in a total of 136 deficient roadway segments throughout the unincorporated County. The 136 deficient roadway segments would result in a total of 253 deficient lane miles since roadway segments often consist of

multiple lanes. Therefore, although it is an improvement over existing conditions, a total of 253 roadway lane miles would exceed the LOS standard established by the County. While existing County policies and regulations and proposed General Plan Update goals and policies are intended to improve unincorporated traffic conditions, specific measures that implement these policies and regulations are proposed to ensure that the intended improvements are achieved. Therefore, the proposed project would result in a potentially significant impact to unincorporated traffic and LOS levels and specific implementation programs are identified as mitigation.

2.15.3.2 Issue 2: Adjacent Cities Traffic and LOS Standards

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County of San Diego Guidelines for Determining Significance, Transportation and Traffic, the proposed County General Plan Update would have a significant impact if it would:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); or

b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.

Impact Analysis

This impact analysis summarizes the results of the County of San Diego General Plan Update Traffic Impacts to Adjacent City Jurisdictions report (Wilson and Company 2009b). This report was conducted in support of the County General Plan Update EIR to document significant traffic impacts on regional arterials located in adjacent cities, as a result of the County of San Diego's General Plan Update. The complete Traffic Impacts to Adjacent Jurisdictions report is included in Appendix H. This report was conducted in response to the County of San Diego's NOP for the Draft EIR of the County of San Diego's General Plan Update and a letter sent by the County to adjacent cities requesting roads of concern from each city jurisdiction. In addition to the roadway segments identified in the above mentioned process, a number of additional regional arterial facilities were selected for analysis to ensure a comprehensive County wide assessment. A total of 16 incorporated cities were included in the adjacent cities report. The 16 incorporated Cities included in this assessment include: Carlsbad, Chula Vista, Del Mar, El Cajon, Encinitas, Escondido, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach and Vista.

The following discussion is divided into six sections, including: 1) consideration of adjacent cities roadway classifications in the General Plan Update; 2) the methodology behind the Traffic Impacts to Adjacent Jurisdictions report for this EIR; 3) project related impacts; 4) existing federal, state and local regulations; and 5) relevant General Plan Update goals and policies; and 6) summary.

Consideration of Adjacent Cities Roadway Classifications in the General Plan Update

A Sphere of Influence (SOI) is a planning tool adopted and used by Local Agency Formation Commission (LAFCO) to designate the probable physical future boundaries and service areas for a city or special district. It is intended to ensure the provision of efficient services while discouraging urban sprawl and the premature conversion of agricultural and open space lands by preventing overlapping jurisdictions and duplication of services. Territory must first be located within a city's or district's SOI in order to be annexed. SOI are required to be updated every five years; however, they may also be periodically amended. Classifications of roadways located within SOI of adjacent cities were considered during the formation of the proposed General Plan Update. Table 2.15-22 identifies 76 unincorporated roadway segments located within adjacent cities SOI and provides a comparison of the proposed Mobility Element roadway classification to the existing city's roadway classification.

As shown in Table 2.15-22, the proposed General Plan Update classifications would be consistent with SOI roadway segment classifications for 35 segments, partially consistent for 10 roadway segments, and inconsistent with 26 roadway segments. Five roadway segments are not currently classified in the SOI. Adjacent cities with the greatest number of unincorporated County roadway segments located within their SOI include Escondido (27 segments), El Cajon (15 segments) and Chula Vista (14 segments). In Escondido, 18 segments would be consistent, 5 roadway segments would be partially consistent, and 4 roadway segments would not be consistent with SOI roadway segment classifications identified in the General Plan Update. In El Cajon, 4 roadway segments would be consistent and 11 roadway segments would not be considered consistent. In Chula Vista, 6 roadway segments would be consistent, 3 roadway segments would be partially consistent, and 5 roadway segments would not be considered consistent.

Methodology of Adjacent Cities Traffic Assessment

Roadway segment LOS standards and thresholds provide the basis for analysis of arterial roadway segment performance within adjacent cities. The analysis of the adjacent cities roadway segment LOS was based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecasted ADT volumes. Methodologies for determining roadway LOS vary amongst the cities. Standards and thresholds for the cities included in this report are discussed above in Section 2.15.1.2, Adjacent Cities, and shown in Tables 2.15-9 through 2.15-15.

The Cities of Carlsbad, Del Mar, El Cajon, Encinitas, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach and Vista utilize the SANTEC/ITE Guidelines for Traffic Impact Studies (TIS) in the San Diego Region (Amended February 2004) as the basis for defining project impacts. These thresholds are generally based upon an acceptable increase in the V/C ratio for roadway segments**.** Table 2.15-23 summarizes the impact significance thresholds as identified by the SANTEC/ITE Guidelines. The following two jurisdictions have modified requirements from those stated in Table 2.15-23.

The City of Escondido considers LOS Mid D as the acceptable standard for circulation element roadway segments. In addition to the SANTEC Guidelines**,** the City of Escondido considers an increase in the V/C ratio by more than 0.02 on a roadway segment or that operates at a LOS D, E or F to be a significant impact. A proposed project is considered to have a significant impact

on a facility if the additional project traffic causes the LOS to degrade from acceptable LOS Mid D or better to unacceptable LOS D, E, or F.

The City of Chula Vista considers LOS C to be the acceptable standard for circulation element roadway segments. Significant impacts are those impacts for which the addition of project trips results in an identifiable degradation in LOS on freeway segments, roadway segments, or intersections, triggering the need for improvement strategies.

Criteria for determining whether a project in Chula Vista results in significant impacts on roadway segments are as follows:

- LOS is D, E, or F
- Project trips comprise five percent or more of total segment volume
- Project adds greater than 800 ADT to the segment

Project-Related Traffic Impacts to Adjacent Cities

Projected Roadway Segment LOS Levels

Under implementation of the proposed General Plan Update, it is anticipated that a total of 42 roadway segments in adjacent cities will operate at a deficient LOS (see Table 4.3 in Appendix H, Traffic Impacts to Adjacent City Jurisdictions). Cities that are projected to experience deficient roadway segments with implementation of the proposed General Plan Update include: Poway (7 segments), Escondido (7 segments), San Diego (7 segments), Chula Vista (5 segments), San Marcos (4 segments), El Cajon (4 segments), Encinitas (2 segments), Santee (2 segments), La Mesa (2 segments), Solana Beach (1 segment), and Vista (1 segment). Carlsbad, Del Mar, Lemon Grove, National City, and Oceanside are not projected to experience deficient roadway segments with implementation of the proposed General Plan Update. These results indicate that implementation of the proposed General Plan Update may cause an increase in traffic which is substantial in relation to the traffic load and street system capacity. Therefore, this would be considered a significant impact and mitigation would be required.

Comparison of Existing Conditions to Proposed Project

When comparing existing conditions to the proposed condition with implementation of the proposed project, a total of 34 segments would experience deterioration in LOS level that would be considered significant by the respective jurisdiction. Cities that would experience impacted roadway segments as compared to the existing condition include: San Diego (7 segments), Poway (6 segments), Chula Vista (5 segments), Escondido (4 segments), El Cajon (3 segments), San Marcos (3 segments), Santee (2 segments), Solana Beach (1 segment), Vista (1 segment), Encinitas (1 segment), and La Mesa (1 segment). Carlsbad, Del Mar, Lemon Grove, National City and Oceanside would not experience impacted roadway segments from implementation of the proposed project. Table 2.15-24 provides a comparison of existing roadway segment operations of adjacent cities to projected roadway operations of adjacent cities with implementation of the proposed project, for the impacted segments described above.

While 34 roadway segments would experience a significant deterioration in LOS with implementation of the proposed General Plan Update, some roadway segments would experience an improved LOS (see Table 5.3 in Appendix H). For example, the roadway segments of Avocado Boulevard from Washington Avenue to Chase Avenue in El Cajon and Bancroft Drive from Campo Road to the SR-94 westbound ramps in La Mesa would improve

from the current LOS F to LOS B under implementation of the proposed General Plan Update. However, when compared to existing conditions, implementation of the proposed General Plan Update would contribute to 34 roadway segments in adjacent cities that would exceed the LOS standard established by the applicable jurisdiction. This would be considered a significant impact and mitigation would be required.

Existing Federal, State and Local Regulations and Existing Regulatory Processes

The existing federal, State and local regulations (with the exception of County specific regulations) described above in Section 2.15.3.1, Issue 1: Unincorporated County Traffic and LOS Standards, would also be applicable to adjacent cities and are hereby incorporated by reference.

Proposed General Plan Update Goals and Policies

The General Plan Update includes goals and policies that would prevent the substantial deterioration of transportation resources in adjacent cities. Within the Land Use Element and Mobility Element, various goals include specific policies to prevent the proposed General Plan Update roadway network from increasing in traffic or exceeding LOS standards.

In the Land Use Element, Goal LU-4 focuses on Inter-jurisdictional coordination by encouraging coordination with the plans and activities of other agencies that relate to issues such as land use, community character, transportation, energy, other infrastructure, public safety, and resource conservation and management in the unincorporated County and the region. Policy LU-4.3 supports this goal by requiring the invitation of comments and coordination of neighboring agencies, when appropriate. Goal LU-5 pertains to Climate Change and Land Use and encourages a land use plan and associated development techniques and patterns that reduce emissions of local greenhouse gases in accordance with State initiatives, while promoting public health. Policy LU-5.1 supports this goal by encouraging the reduction of vehicle trips within communities, which would reduce General Plan Update related traffic impacts. Goal LU-10 focuses on semi-rural and rural lands that buffer communities, protect natural resources, foster agriculture, and accommodate unique rural communities. Policy LU-10.4 supports this goal by limiting the establishment of commercial and industrial uses in semi-rural and rural areas that are outside of villages (including rural villages) to minimize vehicle trips and environmental impacts. Goal LU-11 encourages commercial, office, and industrial development that is appropriately sited and designed to enhance the unique character of each unincorporated community and to minimize vehicle trip lengths. Policy LU-11.8 supports this goal by encouraging processes that would reduce the frequency of employee related automobile trips. Goal LU-12 would promote sustainable infrastructure, public facilities, and essential services that meet community needs and are provided concurrent with growth and development. Policy LU-12.2 supports this goal by requiring development to mitigate significant impacts to existing service levels of public facilities or services for existing residents and businesses. This policy would reduce traffic related impacts associated with deteriorated LOS levels.

In the Mobility Element, Goal M-1 encourages a safe and efficient road network that balances regional travel needs with the travel requirements and preferences of local communities. Policies M-1.1, M-1.2, and M-1.3 support this goal by prioritizing travel within communities, providing an interconnected public road network, and encouraging flexibility in design. Policies in support of Goal M-1 would reduce proposed project-related impacts such as congestion and

LOS deterioration. Goal M-2 encourages a road network that provides adequate capacity to reasonably accommodate both planned land uses and regional traffic patterns, while supporting other General Plan goals such as providing environmental protections and enhancing community character. Policies M-2.1, M-2.2, and M-2.3 support this goal by establishing LOS criteria, improving traffic operations, and requiring environmentally sensitive road design. Goal M-4 promotes roads designed safe for all users and compatible with their context. Policy M-4.6 support this goal by requiring interjurisdictional coordination. Compact development patterns may encourage alternative transportation and reduce vehicle related trips and traffic. Coordination with adjacent jurisdictions may ensure that roads which cross SOIs are consistent in cross-section and capacity.

Goal M-5 encourages a multi-modal transportation system that provides for the safe, accessible, convenient, and efficient movement of people and goods within the unincorporated County. Policies M-5.1 and M-5.2 support this goal by requiring coordination with regional planning and transit agencies in order to provide a transportation network with sufficient capacity, connectivity and reduced impacts to adjacent communities. Goal M-9 promotes the effective use of the existing transportation network by reducing the need to widen roads through the effective use of the existing transportation network and maximizing the use of alternative modes of travel throughout the County. Policies M-9.1 and M-9.2 support this goal by focusing on transportation systems management and transportation demand management. These policies seek to maximize the efficiency of existing or improved road facilities while promoting alternative transportation methods which may reduce vehicular trips.

Summary

When compared to existing conditions, implementation of the proposed General Plan Update would result in 34 roadway segments in adjacent cities that would exceed the LOS standard established by the respective city. Therefore, this would be considered a significant impact and mitigation would be required. While existing County policies and regulations and proposed General Plan Update goals and policies are intended to reduce traffic impacts to adjacent cities, specific measures that implement these policies and regulations are proposed to ensure that the intended protections are achieved. Therefore, the proposed project is concluded to result in a potentially significant impact to adjacent cities traffic and LOS levels and specific implementation programs are identified as mitigation.

2.15.3.3 Issue 3: Rural Road Safety

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County of San Diego Guidelines for Determining Significance, Transportation and Traffic, the proposed County General Plan Update would have a significant impact if it would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact Analysis

Many County maintained roads in rural areas are two-lane roads that were constructed according to previous road standards. The alignment of many roads is curvilinear with varying horizontal and vertical curves. Drivers are required to constantly adapt their speed to account to

regularly changing situations and circumstances that increase the opportunities for human error. In addition, street lights are not available on many rural roads in the unincorporated area. Adoption of the proposed General Plan Update would result in an increase in trips on many of the rural roadways within the unincorporated County. While reasonable drivers are able to traverse the County rural roads without incident, unreasonable drivers such as those who are inattentive, driving under the influence, drowsy, or those driving at inappropriate or excessive speeds would contribute towards higher crash rates on rural roads in the unincorporated area. Sensitive environmental habitat, steep terrain, and existing development make improvements to many rural roadways to current standards infeasible. The proposed project does not preclude operational improvements to rural roads in the unincorporated area. However, adoption of the proposed project would not guarantee that the provision of operational improvements to County roadways would be constructed concurrently with the anticipated increase in traffic volumes projected under the proposed General Plan Update.

Slow moving agricultural vehicles on roadways may also affect traffic operations on rural roadways in unincorporated County areas. Agricultural operations are a vital component to the economy of the unincorporated County (see Section 2.2, Agricultural Resources) and often during harvest season, slow moving agricultural vehicles operate regularly on County roadways. Generally, agricultural vehicles travel at speeds much slower than other motorists, such as 25 miles per hour on roadways with speed limits of 45 miles per hour. For this reason, agricultural vehicles are often considered slow moving vehicles and considered incompatible with other motorists. Implementation of the proposed General Plan Update would increase the amount of traffic on rural roadways with agricultural vehicles. Additionally, implementation of the proposed General Plan Update may result in the construction of new rural roadways, which would be utilized by agricultural vehicles. Although the majority of proposed roadways would be constructed in northwestern and southwestern communities, implementation of the proposed General Plan Update would allow for the construction of Mobility Element roadways in eastern community rural areas as well.

Another factor that can impact rural road safety is incompatibility of alternative transportation facilities with roadway and highway facilities. For example, the National Highway Transportation Safety Administration (DOT 2008) estimates approximately 70,000 pedestrians and 46,000 cyclists are annually injured in traffic crashes. Many existing roadways and intersections in the County do not have fully dedicated pedestrian or bicycle facilities. Existing roadways and intersections would pose an increased risk of accident through an increase in traffic volumes, pedestrian volumes, or bicycle volumes resulting from the proposed General Plan Update. Implementation of the proposed General Plan Update would increase traffic in the County, thereby potentially creating a hazard to pedestrians or bicyclists. Adoption of the proposed project does not preclude the provision of additional bicycle and/or pedestrian facilities. However, adoption of the proposed project would not guarantee that additional pedestrian and/or bicycle facilities would be constructed concurrently with the anticipated increase in traffic volumes on County roadways. Additionally, many policies within the proposed General Plan Update encourage the use and development of public transportation facilities, thereby increasing the potential for hazards to occur from incompatibilities between cars, bicycles and pedestrians.

Railroad crossings at roadways can also contribute to transportation hazards. According to the FHWA, the U.S. has approximately 139,862 public at-grade rail crossings. Of these crossings, approximately 50,132 have gates, 23,215 have flashing lights, and 1,248 have highway traffic signals, wigwags, and bells. Additionally, FHWA estimates in 2007, incidents at public highway-

rail crossings in the U.S. resulted in 299 deaths and 817 injuries. In 2007, 486 people were killed and 393 were injured nationally while trespassing on railroad rights-of-way and property (FHWA 2008). As shown in Figure 2.15-6, there are two railroad corridors that traverse portions of the unincorporated County of San Diego. Although minimal portions of the County have rail facilities, those which do are susceptible to related safety hazards.

Existing Federal, State and Local Regulations and Existing Regulatory Processes

Multiple federal, State and local regulations exist to prevent transportation hazards from occurring within the County. Federal regulations pertaining to transportation safety include those such as the ADA, which ensures disabled populations are safely and adequately provided with transportation facilities, and the HCM, which provides safety standards for transit throughout the Nation. The General Plan Update would also be required to comply with the existing County Zoning Ordinance Sections 6750-6799, the San Diego County Public Road Standards, and the San Diego County Private Road Standards which provide guidance for roadway and transportation facility development in an effort to ensure a safe roadway system throughout the County.

Proposed General Plan Goals and Policies

The General Plan Update includes goals and policies that would prevent transportation hazards within the unincorporated County. Within the Land Use Element and Mobility Element, various goals include specific policies to prevent the proposed General Plan Update roadway network from increasing transportation hazards.

Within the Land Use Element, Goal LU-2 promotes the conservation and enhancement of the unincorporated County's varied communities, rural setting, and character. Policy LU-2.7 supports this goal by requiring measures that minimizes impacts that are detrimental to human health and safety. Goal LU-6 promotes a built environment in balance with the natural environment, scarce resources, natural hazards, and the unique local character of individual communities. Policy LU-6.9 supports this goal by requiring that development be located and designed to protect property and residents from the risks of natural and man-induced hazards. Within the Mobility Element, Goal M-4 encourages roads designed to be safe for all users and compatible with their context. Policies M-4.3, M-4.4, and M-4.5 support this goal by requiring roads have safe and adequate emergency access. Goal M-9 encourages the effective use of the existing transportation network. Policy M-9.1 supports this goal by encouraging operational improvements that increase the effective vehicular capacity of the public road network.

Summary

Implementation of the proposed General Plan would result in the adoption of a Mobility Element network that includes existing roadways with horizontal and vertical curves that are sharper than existing standards. This would be considered a potential transportation hazard. Additionally, the proposed General Plan Update may pose an increased risk to pedestrians and bicyclists by increasing and/or redistributing traffic patterns. Implementation of the proposed General Plan Update would also have the potential to result in hazards from at-grade rail crossings. While existing County policies and regulations and proposed General Plan Update goals and policies are intended to reduce hazards associated with rural roadways, specific measures that implement these policies and regulations are proposed to ensure that the intended protections are achieved. Therefore, the proposed project is concluded to result in a potentially significant

impact to rural roadway safety and specific implementation programs are identified as mitigation.

2.15.3.4 Issue 4: Emergency Access

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County of San Diego Guidelines for Determining Significance, Transportation and Traffic, the proposed County General Plan Update would have a significant impact if it would result in inadequate emergency access.

Impact Analysis

Inadequate emergency access and egress can occur as a result of an incomplete or not fully interconnected roadway network, such as inadequate roadway widths, turning radii, dead end or gated roads, one-way roads, single ingress and egress routes, or other factors. In addition to Mobility Element roads, a comprehensive network includes regional freeways and highways and local public, private, and fire access roads. This General Plan Update identifies a Mobility Element road network, but all types of roads must be considered to fully address emergency access. While the Regional Transportation Plan addressed the regional freeways and highways, community plans need to consider local public and fire access roads to fully address emergency access requirements.

The lack of a comprehensive network can result in severe traffic congestion or blocked sole routes of ingress that limit the responsiveness of emergency vehicles or trap residents trying to flee during an emergency. In addition, inadequate roadway widths and turning radii can make it difficult for personnel to maneuver rescue equipment in an emergency. Dead end and one-way roads and traffic can impair emergency access and cause delays in response if a wrong turn is taken. Gated communities, which are popular in the unincorporated areas, can also obstruct access for emergency vehicles and obstruct egress routes for residents fleeing in the event of an emergency such as a fire. Under the proposed General Plan Update, existing inadequate roadway widths, dead end roads, one-way roads, and gated communities, all of which have the potential to impair emergency access, would still occur. Therefore, this would be considered a potentially significant impact and mitigation would be required.

Private roads also have the potential to impair emergency access. Private roads are often unpaved and poorly maintained, which poses risks to public safety, especially in high wildfire hazard areas. Dirt roads, or roads with potholes, may cause damage to fire apparatus vehicles and/or impede an emergency vehicle from accessing a site. Dirt roads pose additional safety concerns by having dust obstruct the view of evacuees during a firestorm, which can cause vehicles to drive off the road or into the fire, as demonstrated in the October 2003 wildfires in San Diego County. This problem is compounded in areas with existing populations that have only one point of access. Under the proposed General Plan Update, existing private roadways with the potential to impair emergency access would still occur. Therefore, this would be considered a potentially significant impact and mitigation would be required.

Some existing roadway conditions within the rural areas of the unincorporated County could result in inadequate emergency response for the population anticipated under the General Plan Update. However, roadways that would be constructed as part of the proposed General Plan

Update would be required to meet current State and County standards for adequate emergency access. Additionally, any future roadway construction proposed as part of the General Plan Update Mobility Element would be required to conduct environmental review pursuant to CEQA prior to approval. CEQA requires proposed projects provide detailed information on the potentially significant environmental effects they are likely to have, list ways in which the significant environmental effects would be minimized, and identify alternatives that would reduce or avoid the significant impacts identified for the project. To the extent feasible, significant environmental impacts would be mitigated to below a level of significance. However, some environmental impacts associated with the construction of roadway facilities may be significant and unavoidable, such as impacts associated with transportation hazards such as impaired emergency access. Therefore, this would be considered a potentially significant impact and mitigation would be required.

Existing Federal, State and Local Regulations and Existing Regulatory Processes

Multiple regulations exist to ensure adequate emergency access exists within the County. The development of roadway facilities, consistent with the proposed General Plan Update, would be required to comply with the County's Zoning Ordinance Sections 6750-6799, San Diego County Public Road Standards, and San Diego County Private Road Standards, which provide guidance for roadway and transportation facility development and require sufficient emergency access is provided in new development. Additionally, the proposed project would be required to comply with the San Diego County Consolidated Fire Code, which dictates minimum design standards for "Fire Apparatus Access Roads" and includes minimum road standards, secondary access requirements, and restrictions for gated communities. Development under the General Plan Update would also be required to comply with CEQA, which requires that projects identify any potential emergency access hazards. Mitigation measures would be required for any significant impacts.

Proposed General Plan Update Goals and Policies

The General Plan Update includes goals and policies that would reduce the potential for emergency access to be impaired within the unincorporated County. Within the Land Use Element, Mobility Element, and Safety Element, various goals include specific policies to prevent the proposed General Plan Update roadway network from impairing emergency access.

Within the Land Use Element, Goal LU-2 promotes the conservation and enhancement of the unincorporated County's varied communities, rural setting, and character. Policy LU-2.7 supports this goal by requiring measures that minimizes impacts that are detrimental to human health and safety. Goal LU-6 promotes a built environment in balance with the natural environment, scarce resources, natural hazards, and the unique local character of individual communities. Policy LU-6.9 supports this goal by requiring that development be located and designed to protect property and residents from the risks of natural and man-induced hazards. Goal LU-12 encourages sustainable infrastructure, public facilities, and essential services that meet community needs and are provided concurrent with growth and development. Policy LU-12.2 supports this goal by requiring development to mitigate significant impacts to existing service levels of public facilities or services for existing residents and businesses.

Within the Mobility Element, Goal M-1 promotes a safe and efficient road network that balances regional travel needs with the travel requirements and preferences of local communities. Policy M-1.2 supports this goal by planning transportation facilities that can be adequately served by

emergency services in the case of a transportation hazard. Goal M-3 supports new or expanded transportation facilities that are phased with and equitably funded by the development that necessitates their construction. Policy M-3.3 supports this goal by requiring development provide multiple ingress/egress routes whenever feasible in conformance with State law, the County Fire Code, and the General Plan Update Safety Element. Goal M-4 encourages roads designed to be safe for all users and compatible with their context. Policy M-4.4 supports this goal by requiring the design and construction of public and private roads to allow fire apparatus and emergency vehicles access while accommodate outgoing vehicles from evacuating residents.

Within the Safety Element, Goal S-3 would minimize injury and loss of life resulting from structural and wildland fires. Policy S-3.4 and S-3.5 supports this goal by requiring development to be located near available fire and emergency service and requiring development provide secondary access when necessary to ensure adequate fire safety.

Summary

Under the proposed General Plan Update, existing inadequate roadway widths, dead end roads, one-way roads, and gated communities would continue to occur in the unincorporated County, all of which have the potential to impair emergency access. While existing County policies and regulations and proposed General Plan Update goals and policies are intended to improve emergency access, specific measures that implement these policies and regulations are proposed to ensure that the intended protections are achieved. Therefore, the proposed project is concluded to result in a potentially significant impact to emergency access and specific implementation programs are identified as mitigation.

2.15.3.5 Issue 5: Parking Capacity

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County of San Diego Guidelines for Determining Significance, Transportation and Traffic, the proposed County General Plan Update would have a significant impact if it would result in inadequate parking capacity.

Impact Analysis

Parking requirements in the County are usually addressed on the local level through standards set forth in the County of San Diego Zoning Ordinance, Parking Regulations, Sections 6750-6799 and the County of San Diego Off-Street Parking Design Manual, which implements Section 6793(c) of the County Zoning Ordinance. The regulations are intended to require projects to provide adequate off-street parking and loading, thereby reducing traffic congestion, allowing more efficient utilization of on-street parking, promoting more efficient loading operations, and reducing the use of public streets for loading purposes. Additionally, the regulations are intended to minimize the secondary effects of vehicles, such as vehicular noise or visual impacts from headlights and unscreened parked vehicles.

Almost all land uses proposed under the General Plan Update would require parking facilities when developed. However, limited impact industrial, medium impact industrial, high impact industrial, office professional, rural commercial, general commercial, and neighborhood

commercial land uses would require more parking facilities than other land uses. Generally, when these land uses are developed, employees or consumers would commute from other areas and substantial parking facilities would be required. The development of parking facilities to support these industrial and commercial land uses would be required to follow existing parking standards and requirements. Compliance with existing parking regulations would ensure that adequate parking facilities are provided for development of new land uses consistent with the General Plan Update. However, the land uses proposed under the General Plan Update would have the potential to require modification to existing County parking regulations.

In addition to the above-mentioned land uses, the proposed General Plan Update would allow for the development of high density land uses, such as village core mixed use and village residential. These land uses have development patterns that would be characterized as compact, higher density development which is located within walking distance of commercial services, employment centers, civic uses, and transit. While village land uses are intended to encourage pedestrian and alternative transportation, the high density development of these areas would create a potential land use conflict that would result in inadequate parking facilities being available. For example, the construction of housing or commercial buildings within these land use designations would prevail over the construction of parking lots due to the desirable location of housing or potential revenue associated with commercial establishments. All future development proposed under the above mentioned land uses would be required to comply with existing County parking regulations to ensure that adequate parking facilities. However, the land uses proposed under the General Plan Update would have the potential to require modification to existing County parking regulations, therefore this would be considered a significant impact and mitigation would be required.

Existing Federal, State and Local Regulations and Existing Regulatory Processes

Future development under the proposed General Plan Update would be required to comply with the standards set forth in the County of San Diego Zoning Ordinance, Parking Regulations, Sections 6750-6799. The County Zoning Ordinance establishes parking regulations for the unincorporated County and includes specific parking requirements for existing and proposed development. The proposed General Plan Update would also be required to comply with the County of San Diego Off-Street Parking Design Manual, which implements Section 6793(c) of the County Zoning Ordinance.

Proposed General Plan Update Goals and Policies

The General Plan Update includes goals and policies that would promote the supply of adequate parking facilities within the unincorporated County. Within the Mobility Element, various goals include specific policies to ensure that the proposed General Plan Update would provide adequate parking facilities.

Within the Mobility Element, Goal M-8 supports a public transit system that reduces automobile dependence and serves all segments of the population. Policy M-8.6 supports this goal by improving regional opportunities for park-and-ride facilities. Goal M-9 encourages the effective use of the existing transportation network by reducing the need to widen roads. Policies M-9.3 and M-9.4 support this goal by encouraging preferred parking and requiring park-and-ride facilities in certain land uses and development. Goal M-10 encourages parking regulations that serve community needs and enhance community character. Policies M-10.1, M-10.2, M-10.3, M-10.4, M-10.5, and M-10.6 support this goal by setting standards for parking capacity and

design such as providing sufficient parking capacity for motor vehicles consistent with a project's location, use, and intensity; requiring development to maximize on-street parking; and minimizing parking where it is not needed.

Summary

Development of parking facilities associated with the land uses proposed under the General Plan Update would be required to follow existing parking standards and requirements. Implementation of the proposed General Plan Update would result in high density land uses, such as village residential or village core mixed use, which would experience area constraints and other factors described above. While existing County policies and regulations and proposed General Plan Update goals and policies are intended to provide adequate parking facilities, specific measures that implement these policies and regulations are proposed to ensure that the intended protections are achieved. Therefore, the proposed project is concluded to result in a potentially significant impact to parking capacity and specific implementation programs are identified as mitigation.

2.15.3.6 Issue 6: Alternative Transportation

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County of San Diego Guidelines for Determining Significance, Transportation and Traffic, the proposed County General Plan Update would have a significant impact if it would conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Impact Analysis

Implementation of the proposed General Plan Update would create provisions for alternative modes of transportation, including bike lanes, bus stops, trails, and sidewalks. Many policies proposed in the General Plan Update would require coordination between the County and the agencies responsible for public transportation planning, including SANDAG, Caltrans, transit agencies, adjacent jurisdictions, and the California High-Speed Rail Authority. Increased coordination between these agencies and the County would reduce the potential for the proposed General Plan Update to conflict with adopted policies, plans, or programs supporting alternative transportation. Implementation of the proposed General Plan Update would also result in a number of new County goals, policies, and land uses encouraging the increased use and development of public transportation facilities. Village residential and village core mixed use land uses would allow for the development of high density development while fostering increased light rail, bus, bicycle, and pedestrian use.

Although multiple goals and policies are proposed under the General Plan Update, the potential exists for the goals and policies to conflict with existing adopted plans or policies that pertain to alternative transportation. For example, the existing adopted policies, plans and programs which support alternative transportation within the County were based on the existing County of San Diego General Plan, rather than the proposed General Plan Update. Therefore, it is possible these policies and programs do not account for proposed high density land uses such as village residential and village core mixed use. Additionally, the reallocation of population and concentration of high density land uses into the western portion of the unincorporated County,

as proposed under the General Plan Update, would have the potential to require modification to existing public transportation policies, plans, and programs.

Existing Federal, State and Local Regulations and Existing Regulatory Processes

Multiple federal, State, and local regulations exist to support alternative transportation programs within the County. SANDAG has created the 2030 RTP and 2006 RTIP, which guides and encourages alternative transportation development within the region. County Public Road Standards identify when and how roads should be improved to accommodate bicycle and pedestrian facilities. The County Subdivision Ordinance requires subdivisions containing 200 or more lots to dedicate rights-of-way for streets, along with pedestrian and bicycle facilities. The County Trails Programs manages and develops recreational trails used by pedestrians throughout the County. Some community plans identify pedestrian and bicycle policies that affect future development. In addition, various master plans, design guidelines, and specific plans would require pedestrian or bicycle facilities. For example, the Ramona Road Master Plan identifies specific areas where sidewalks should be provided and it identifies safe walking zones within 0.5-mile of schools. The Ramona Road Master Plan also recommends specific improvements to bicycle facilities that provide access to schools.

Additional policies and regulations pertaining to alternative transportation include the following: the ADA, which requires pedestrian facility design to comply with ADA accessibility standards; the HCM 2000, which contains concepts, guidelines, and computational procedures for computing the capacity and quality of service of various roadway facilities, and the effects of transit, pedestrians, and bicycles on the performance of these systems; TDA funds, which are used for the development and support of public transportation in California and are allocated to areas of each county based on population, taxable sales, and transit performance; and the County's Zoning Ordinance which provides standards for bicycle parking and sidewalks.

Proposed General Plan Update Goals and Policies

The General Plan Update includes goals and policies that would promote alternative transportation within the unincorporated County. Within the Land Use Element and Mobility Element, various goals and policies would encourage the development of public transportation in the unincorporated County.

In the Land Use Element, Goal LU-5 promotes a land use plan and associated development techniques and patterns that reduce emissions of greenhouse gases while promoting public health. Policies LU-5.1, LU-5.4 and LU-5.5 support this goal by reducing vehicle trips within communities, promoting infill and redevelopment and prohibiting projects that impede bicycle or walking access. Goal LU-9 promotes well-defined, planned, and developed community cores, such as villages and town centers, which contribute to a community's identity and character. Policy LU-9.8 supports this goal by requiring new development within villages to include road networks, pedestrian routes, and amenities to maintain connectivity. Goal LU-11 supports commercial, office, and industrial development that is appropriately sited and designed to enhance the unique character of each unincorporated community and to minimize vehicle trip lengths. Policy LU-11.6 supports this goal by locating new office development in areas where public transit and vehicular linkages exist.

Within the Mobility Element, Goal M-3 supports new or expanded transportation facilities that are phased with and equitably funded by the development that necessitates their construction.

Policies M-3.1 and M-3.2 support this goal by requiring development projects to contribute their fair share toward financing transportation facilities and encouraging development that accommodates alternative transportation. Goal M-4 encourages roads designed to be safe for all users and compatible with their context. Policy M-4.3 support this goal by encouraging rural roads that safely accommodate transit, pedestrians, bicyclists, and equestrians. Goal M-8 encourages a public transit system that reduces automobile dependence and serves all segments of the population. Policies M-8.1, M-8.2, M-8.3, M-8.4, M-8.5, M-8.6, M-8.7, and M-8.8 support this goal by promoting transit service for transit-dependent populations, providing transit service to key community facilities and services, providing transit stops that facilitate ridership, requiring transit stops to provide amenities, improving transit and park-and-ride facilities, improving inter-regional travel modes, and coordinating with large employers to provide shuttles and other means of transportation. Goal M-9 promotes the effective use of the existing transportation network by reducing the need to widen roads through and maximizing the use of alternative modes of travel throughout the County. Policies M-9.2 and M-9.4 support this goal by promoting transportation demand management and requiring park-and-ride facilities. These policies seek to maximize the efficiency of existing or improved road facilities while promoting alternative transportation methods which would reduce vehicle trips on the proposed roadway network.

Goal M-11 promotes bicycle and pedestrian networks and facilities that provide safe, efficient, and attractive mobility options as well as recreational opportunities for County residents. Policies M-11.1, M-11.2, M-11.3, M-11.4, M-11.5, M-11.6 and M-11.7 support this goal by planning and expanding pedestrian and bicycle networks, requiring incorporation of alternative modes of transportation in new development, and improving funding and coordination for bicycle and pedestrian facilities.

Summary

Implementation of the proposed General Plan Update would create provisions for alternative modes of transportation, including bike lanes, bus stops, trails, and sidewalks. Many policies proposed in the General Plan Update would require coordination between the County and the agencies responsible for public transportation planning; however, existing alternative transportation plans and policies would require modification to be consistent with the goals and policies contained in the General Plan Update. This would be considered a potentially significant impact. While existing County policies and regulations and proposed General Plan Update goals and policies are intended to promote alternative transportation plans and policies, specific measures that implement these policies and regulations are proposed to ensure that the intended protections are achieved. Therefore, the proposed project is concluded to result in a potentially significant impact to alternative transportation plans and policies and specific implementation programs are identified as mitigation.

2.15.4 Cumulative Impacts

2.15.4.1 Issue 1: Unincorporated County Traffic and LOS Levels

The area of analysis for unincorporated County traffic and LOS levels is represented by the cumulative traffic map, as included in the Traffic and Circulation Assessment prepared for the proposed General Plan Update by Wilson and Company (2009a). The cumulative traffic map provides a worst-case, maximum build-out scenario of the unincorporated County by combining

the most intensive land uses from the proposed project and all the project alternatives identified in Chapter 4.0, Project Alternatives, of this EIR. The cumulative traffic map also includes traffic from cumulative projects that would be inconsistent with the General Plan Update, tribal projects, and the conversion of FCI land to other uses. Table 2.15-25 displays projected lane miles by facility type (State highways, Mobility Element roads and local public roads) and community under the cumulative traffic map scenario. As shown in Table 2.15-25, the cumulative traffic map roadway network includes 614 lane miles of State highway, 2,407 lane miles of County ME roads, and 703 roadway lane miles of local public roads, for a total of 3,724 roadway lane miles. When compared to the proposed project, the cumulative traffic map scenario has the same number of State highway, ME road, and local public road lane miles. The extent of the cumulative traffic map roadway system was determined by combining the most intensive land uses from the proposed project and all alternatives proposed under the General Plan Update. Therefore, the cumulative map includes an identical roadway network to the proposed project because the proposed project contains the most intensive land uses of all project alternatives.

Table 2.15-26 shows roadway network performance under the cumulative traffic map scenario. Performance is reported by facility type (State highways and Mobility Element roads) and community. LOS E and F are considered to be deficient facilities and subject to mitigation. As shown in Table 2.15-26, a total of 163 lane miles of facilities (approximately 32 lane miles of State highway and 131 lane miles of Mobility Element roads) would operate at unacceptable LOS E. A total of 138 lane miles of facilities (49 lane miles of State highway and 88 lane miles of Mobility Element roads) would operate at unacceptable LOS F under the cumulative traffic map. When compared to existing conditions (see Table 2.15-6), the cumulative traffic map would result in fewer total LOS F segments (138 lane miles compared to 168 lane miles existing) and greater total LOS E segments (163 lane miles compared to 152 lane miles existing). Therefore, cumulative projects would result in additional LOS E roadway segments and this would be considered a significant cumulative impact. As shown in table 2.15-20, the proposed General Plan Update is projected to result in 125 total roadway lane miles at LOS E and 128 total roadway lane miles at LOS F. Therefore, the proposed project would result in a cumulatively considerable contribution to a significant cumulative traffic impact.

Under the cumulative traffic scenario, 34 State highways and 124 Mobility Element roads (for a total of 158 roadway segments) would operate at a deficient LOS. This would be considered a significant cumulative impact. Deficient roadway segments under the cumulative map are shown in Table 5-23 in the Traffic and Circulation Assessment, located in Appendix G of this document. The proposed General Plan Update would result in a total of 136 deficient roadway segments. Therefore, the proposed project would result in a cumulatively considerable contribution to a significant cumulative traffic impact.

2.15.4.2 Issue 2: Adjacent Cities Traffic and LOS Levels

The area of analysis for cumulative project impacts to adjacent cities is the County of San Diego and adjacent cities, as discussed in Section 2.15.1.2, Adjacent Cities. Cumulative projects, such as those proposed in the general plans of surrounding jurisdictions, when combined would significantly impact a number of roadway segments, as shown in Table 2.15-27. This table shows that cumulative projects, without the proposed project, would result in 33 roadway segments being significantly impacted upon build-out of respective adjacent cities' general plans and build-out of the existing County of San Diego General Plan. Cities that would experience

impacted roadway segments under cumulative conditions include: City of San Diego (8 segments), Poway (7 segments); Chula Vista (5 segments); San Marcos (3 segments); Escondido (3 segments); Santee (2 segments); El Cajon (2 segments), Solana Beach (2 segments) and Vista (1 segment). This table indicates that cumulative projects would result in a significant cumulative impact to adjacent cities' traffic and LOS levels. Additionally, the proposed General Plan Update is projected to result in 34 adjacent city roadway segments being significantly impacted upon build-out (see Table 2.15-24). When compared to cumulative project impacts, the proposed project would result in impacts to one additional roadway segment. Therefore, the proposed project would result in a cumulatively considerable contribution to a significant cumulative traffic impact.

2.15.4.3 Issue 3: Rural Road Safety

The area of analysis for cumulative transportation operation includes the County of San Diego and immediately surrounding jurisdictions. Cumulative projects in these areas include projects consistent with surrounding jurisdictions' general plans and regional roadway plans such as the SANDAG RTP and SCAG RTP. Similar to the proposed project, cumulative projects in surrounding jurisdictions would face similar potential transportation operational issues as those in the unincorporated County. Older roadways in incorporated jurisdictions that surround the County would not be adequate by existing roadway standards. Additionally, many unincorporated areas that surround the County, including areas within the Counties of Riverside and Imperial have rural roadway conditions similar to the unincorporated County. Therefore, cumulative projects in these areas would face the same traffic operational concerns including: roadway networks that include existing roadways with horizontal and vertical curves sharper than existing standards; increased traffic on rural roads with slow moving agricultural vehicles; increased risk to pedestrians and bicyclists by increasing and/or redistributing traffic patterns; or hazards from at-grade rail crossings. While cumulative projects would not preclude improvements to roadways with potential hazards, there is no guarantee that these improvements would be constructed concurrently with the anticipated increase in vehicle trips on these roadways. Therefore, cumulative projects would result in a significant cumulative impact to rural road safety. Additionally, the proposed project would result in a cumulatively considerable contribution to a significant cumulative roadway safety impact.

2.15.4.4 Issue 4: Emergency Access

The area of analysis for cumulative emergency access impacts includes the County of San Diego and surrounding jurisdictions. Cumulative projects in this area would encounter similar emergency access impairment issues as the proposed project. Existing conditions in these jurisdictions could result in existing inadequate roadway widths, dead end roads, one-way roads, and gated communities, all of which have the potential to impair emergency access, would still occur. However, cumulative emergency access impacts would be limited to the immediate vicinity of the impact, such as multiple obstructions to emergency access along the same route to an emergency care facility hospital. In addition, most cumulative projects, such as those identified in the SANDAG RTP, SCAG RTP, and applicable general plans, which propose the construction of new roadways, would be required to meet current State and applicable jurisdictional standards, in addition to CEQA requirements. Community plans would also be required to consider local public and fire access roads to fully address emergency access requirements. The exception to this would be projects in Baja California, Mexico and projects on tribal land; however it would be unlikely for cumulative projects on tribal lands or

within Mexico to occur simultaneously and in close enough proximity to one another to create a potentially significant cumulative emergency access impact on roadways in the County. Therefore, cumulative project impacts would be considered less than significant because emergency access impacts would be limited to the immediate vicinity of a project area and associated impacts would be considered direct, not cumulative. The proposed project would not contribute to a significant cumulative impact associated with emergency access.

2.15.4.5 Issue 5: Parking Capacity

The area of analysis for cumulative parking capacity includes the County of San Diego and the immediate vicinity of land uses requiring parking, including those located in surrounding jurisdictions. Cumulative projects in this area would face similar parking capacity issues as the proposed project. Many jurisdictions surrounding the unincorporated County are densely populated, especially in the western portion of the unincorporated County. Therefore, the potential exists that existing and proposed high density land uses, designated under surrounding jurisdictions general plans, would not be able to supply adequate parking facilities, due to area constraints. However, cumulative parking impacts would be limited to the immediate vicinity of the impact, such as a specific urban development project. In addition, most future cumulative projects would be required to comply with existing regulations pertaining to parking facilities, such as jurisdictional parking, zoning and road standards. The exception to this would be projects in Baja California, Mexico, and projects on tribal land; however it would be unlikely for cumulative projects on tribal lands or within Mexico to occur simultaneously and in close enough proximity to one another to create a potentially significant cumulative parking impact on County facilities. Therefore, cumulative projects would not result in a significant cumulative impact because impacts associated with parking would be limited to the immediate vicinity of a project area and associated impacts would be considered direct, not cumulative. The proposed project would not contribute to a significant cumulative impact associated with parking capacity.

2.15.4.6 Issue 6: Alternative Transportation

The area of analysis for cumulative alternative transportation impacts includes the County of San Diego and immediately surrounding jurisdictions. Cumulative projects in these areas include projects consistent with surrounding jurisdictions' general plans and regional roadway plans such as the SANDAG RTP and SCAG RTP. Similar to the proposed project, cumulative projects would potentially impair existing alternative transportation plans, policies, or programs. Future development projects, consistent with applicable general plans, would locate land uses that are dependent on alternative transportation in areas that were not planned for in existing public transportation, plans and programs, such as SANDAG RTP and SCAG RTP. Additionally, if cumulative projects in surrounding jurisdictions are not effectively communicated and planned with agencies managing alternative transportation in region, conflicts would occur. However, most cumulative projects would be required to comply with existing federal, State, and local regulations, such as: ADA, HCM 2000, TDA funds, MOBILITY 2030, 2006 RTIP, and any applicable Community plans or jurisdictional standards, such as a zoning ordinance. The exception to this would be projects in Baja California, Mexico, and projects on tribal land. However, since the majority of cumulative projects would be required to comply with existing regulations, cumulative project impacts would be considered less than significant. Therefore, the proposed project would not contribute to a significant cumulative impact associated with alternative transportation.

2.15.5 Significance of Impact Prior to Mitigation

Prior to mitigation, the proposed project would have a potentially significant impact to unincorporated County traffic and LOS standards; adjacent cities traffic and LOS standards; transportation hazards; emergency access; parking capacity; and alternative transportation. The proposed project would have a potentially significant cumulative impact to unincorporated County traffic and LOS standards, adjacent cities traffic and LOS standards, and rural roadway hazards.

2.15.6 Mitigation

2.15.6.1 Issue 1: Unincorporated County Traffic and LOS Standards

Implementation of the proposed General Plan Update would result in a total of 136 deficient roadway segments throughout the unincorporated County (approximately 31 State highway segments and 105 Mobility Element segments) which would result in a significant impact. Appendix I of this EIR provides a detailed table and maps identifying the deficient roadways and describing the rationale behind the infeasibility for improving these deficient roadway segments. General Plan Update policies and mitigation measures (described further below) have been identified that would minimize the significant impacts related to traffic and LOS standards in the unincorporated area. However, the General Plan Update policies and mitigation measures would not fully reduce impacts to below a level of significance due to the magnitude of the traffic impacts. Therefore, other measures that would further reduce the project's significant traffic impacts were considered and are discussed below.

Infeasible Mitigation Measures

The majority of measures that were considered in attempting to further reduce the 136 deficient roadway segments identified for the proposed project included new or expanded road and/or intersection construction to alleviate other projected failing segments. However, based on criteria developed in the draft General Plan Update, these measures were rejected as infeasible for the reasons discussed below. Additionally, Appendix I of this EIR provides a detailed table and map identifying the deficient roadways and describing the rationale behind the infeasibility for improving these deficient roadway segments. The Board of Supervisors must ultimately decide that these measures are infeasible and would not be implemented. Therefore, it is possible that some of these measures would be included as part of the project prior to adoption.

State law requires jurisdictions to develop a circulation (mobility) network that correlates with the land uses proposed in the General Plan. Therefore, a lower LOS should be accepted only in special circumstances. The standard adopted by the Board of Supervisors for the LOS on Mobility Element roads is LOS D. The General Plan Update is tasked with planning for growth while preserving the County's environmental, cultural, and historical resources. The recommended road network is based on realistic expectations and provides predictability for future development. It seeks to balance benefits of an acceptable LOS with constraints that limit the County's ability to provide improvements. In some cases**,** the constraints are so substantial that they render future road construction infeasible or impractical. To address such cases, the County established the following LOS E/F criteria to define the conditions where a failing LOS is acceptable, because mitigation to fully reduce the impact would be infeasible for one or more of the reasons described in the following sections. Appendix I of this EIR provides a detailed table

identifying the deficient roadways and describing the rationale for accepting deficient roadway segments.

Substantial Constraints Affecting New or Expanded Road Construction

Environmental Impacts

Construction of some roads would significantly impact important habitats, destroy archaeological sites, impact waterways, or require the demolition of historic landmarks. The preservation of valuable resources may outweigh the benefits of road improvements. Thus, a lower LOS may be acceptable as a tradeoff for avoiding environmental impacts. In addition, the effort to avoid or mitigate undesired impacts may have a major effect on construction costs.

Established Land Development

Existing businesses, historic buildings, established neighborhoods, and a pedestrian-friendly environment are essential components of a healthy town center. Road improvements that negatively affect these components can be undesirable. Wider roads may divide a town and change its character. Costs to widen a road are substantially increased by the acquisition of right-of-way and the relocation of existing land uses. If costly construction or widening of roads substantially disrupts the vitality of a town center, a lower LOS may be preferable. In some instances, road improvements may also increase dangers to pedestrians, in which case a lower LOS may be preferable.

Conditions Under Which a Road May be Exempted from County LOS Standards

Town Centers

Town centers further a number of project objectives such as improving housing affordability, accommodating growth, and helping to define the character of a community. Therefore, the road may be exempted from County LOS standards when widening the road would obstruct pedestrian movements, impede the economic vitality of existing/planned businesses, require the demolition of historic structures, or negatively alter the overall character of the area.

Marginal Deficiencies

Exempting a road from County LOS standards may be the more preferable choice when a road failure results from only a marginal deficiency in performance. Traffic congestion on a small portion of a road may produce a failing LOS for only that short segment while the remainder of the road is acceptable. Due to the short segment length, overall delays may be small in comparison to the travel time along the length of the entire road corridor. In many cases, operational improvements such as synchronized signals and additional turn lanes can alleviate the problem and are more cost effective than adding new travel lanes.

Some failing roads are projected to carry a traffic volume that is not significantly higher than the acceptable threshold (LOS D). If the projected volume is not anticipated to affect overall traffic operation, planning for a wider road to accommodate the additional traffic may not be required. Acceptance of a lower LOS is particularly appropriate when underutilized, alternate routes are available.

Environmental Constraints

Major physical and environmental constraints can severely hinder construction of needed improvements for some failing roads. The proposed General Plan Update policies seek to

minimize environmental impacts and minimize road construction costs. In addition, the planned road network must be consistent with the County's Multiple Species Conservation Plan. The nature of the constraints, the impact of needed improvements, potential effects on sensitive habitat/species, the availability of alternate routes, the cost of construction, and the need for better traffic circulation are carefully considered by staff before making a recommendation to accept a failing LOS.

Because the measures listed above and in Appendix I have been found to be infeasible by the County and would not be implemented, impacts would be significant and unavoidable. Chapter 4.0, Project Alternatives, provides a discussion of several land use alternatives to the proposed project that would result in some reduced impacts to unincorporated County traffic and LOS levels. However, without significant reductions in the overall growth of the County, impacts would still remain significant and unavoidable.

General Plan Update Policies

The following General Plan Update policies would reduce impacts associated with unincorporated County traffic and LOS standards, but not to below a significant level.

Policy LU-5.1: Reduction of Vehicle Trips within Communities. Incorporate a mixture of uses within villages and rural villages and plan residential densities at a level that support multi-modal transportation, including walking, bicycling, and the use public transit when appropriate.

Policy LU-10.4: Commercial and Industrial Development. Limit the establishment of commercial and industrial uses in Semi-Rural and Rural areas that are outside of Villages (including Rural Villages) to minimize vehicle trips and environmental impacts.

Policy LU-11.8: Permitted Secondary Uses. Provide a process where secondary land uses may be permitted when appropriate and compatible with the primary commercial, office, and light industrial uses, in order to better serve the daily needs of employees and to reduce the frequency of related automobile trips. This policy is not intended for high impact industrial uses.

Policy LU-12.2: Maintenance of Adequate Services. Require development to mitigate significant impacts to existing service levels of public facilities or services for existing residents and businesses. Provide improvements for Mobility Element roads in accordance with the Mobility Element Network Appendix matrices, which may result in ultimate build-out conditions that achieve a higher LOS but do not achieve a LOS of D or better.

Policy M-1.1: Prioritized Travel within Community Planning Areas. Provide a public road network that accommodates travel between and within community planning areas rather than accommodating overflow traffic from State highways and freeways that are unable to meet regional travel demands.

Policy M-1.2: Interconnected Road Network. Provide an interconnected public road network with multiple connections that improve efficiency by incorporating shorter routes between trip origin and destination, disperse traffic, reduce traffic congestion in specific areas, and provide both primary and secondary access/egress routes that support emergency services during fire and other emergencies.

Policy M-1.3: Treatment of High-Volume Roadways. To avoid bisecting communities or town centers, consider narrower rights-of-way, flexibility in design standards, and lower design speeds in areas planned for substantial development. Reduce noise, air, and visual impacts of new freeways, regional arterials, and Mobility Element roads through landscaping, design, and/or careful location of facilities.

Policy M-2.1: Level of Service Criteria. Require development projects to provide associated road improvements necessary to achieve a LOS of D or higher on all Mobility Element roads except for those where a failing level of service has been accepted by the County pursuant to the criteria specifically identified in Appendix I.

Policy M-2.2: Access to Mobility Element Designated Roads. Minimize direct access points to Mobility Element roads from driveways and other non-through roads to maintain the capacity and improve traffic operations.

Policy M-2.3: Environmentally Sensitive Road Design. Locate and design public and private roads to minimize impacts to significant biological and other environmental and visual resources. Avoid road alignments through floodplains to minimize impacts on floodplain habitats and limit the need for constructing flood control measures. Design new roads to maintain wildlife movement and retrofit existing roads for that purpose. Utilize fencing to reduce road kill and to direct animals to under crossings.

Policy M-3.1: Public Road Rights-of-Way. Require development to dedicate right-of-way for public roads and other transportation routes identified in the Mobility Element roadway network, Community Plans or Road Master Plans. Require the provision of sufficient right-of-way width, as specified in the County Public Road Standards and Community Trails Master Plan, to adequately accommodate all users, including transit riders, pedestrians, bicyclists, and equestrians.

Policy M-3.2: Traffic Impact Mitigation. Require development to contribute its fair share toward financing transportation facilities, including mitigating the associated direct and cumulative traffic impacts caused by their project on both the local and regional road networks. Transportation facilities include road networks and related transit, and pedestrian, bicycle and equestrian facilities.

Policy M-4.2: Interconnected Local Roads. Provide an interconnected and appropriately scaled local public road network in Village and Rural Villages that reinforces the compact development patterns promoted by the Land Use Element and individual community plans.

Policy M-5.1: Regional Coordination. Coordinate with regional planning agencies, transit agencies, and adjacent jurisdictions to provide a transportation system with the following:

- Sufficient capacity consistent with the County General Plan Land Use Map
- Travel choices, including multiple routes and modes of travel to provide the opportunity for reducing vehicle miles traveled
- Facilities sited and designed to be compatible with the differing scales, intensities, and characteristics of the unincorporated communities while still accommodating regional, community, and neighborhood travel demands

- Maximized efficiency to enhance connectivity between different modes of travel

Policy M-5.2: Impact Mitigation for New Roadways and Improvements. Coordinate with Caltrans to mitigate negative impacts from existing, expanded, or new State freeways or highways and to reduce impacts of road improvements and/or design modifications to State facilities on adjacent communities.

Policy M-9.1: Transportation Systems Management. Explore the provision of operational improvements (i.e., adding turn lanes, acceleration lanes, intersection improvements, etc.) that increase the effective vehicular capacity of the public road network prior to increasing the number of road lanes. Ensure operational improvements do not adversely impact the transit, bicycle, and pedestrian networks.

Policy M-9.2: Transportation Demand Management. Require large commercial and office development to use TDM programs to reduce single-occupant vehicle traffic generation, particularly during peak periods to maximize the capacity of existing or improved road facilities.

Mitigation Measures

The following mitigation measures would reduce impacts associated with unincorporated County traffic and LOS standards, but not to below a significant level.

Tra-1.1 Coordinate with SANDAG and adjacent cities during updates to the RTP to identify a transportation network that maximizes efficiency, enhances connectivity between different modes of travel, and minimizes impacts when locating new freeways and State highways.

Tra-1.2 Coordinate with Caltrans and adjacent jurisdictions during planning and design for improvements to the freeway and State highway network.

Tra-1.3 Implement the County Public Road Standards during review of new development projects. Also revise the Public Road Standards to include a range of road types according to Regional Category context.

Tra-1.4 Implement and revise as necessary the County Guidelines for Determining Significance for Transportation and Traffic to evaluate adverse environmental effects of projects and require mitigation when significant impacts are identified.

Tra-1.5 Revise the Public Road Standards to include standards for the provision of parallel and diagonal on-street parking, according to Regional Category.

Tra-1.6 Revise the Zoning Ordinance to establish parking requirements according to regional category, land use, building size, proximity to transit, and availability of Transportation Demand Management programs. Also consider revising the Zoning Ordinance to reduce off-street parking requirements when on-street parking is provided, especially in villages to encourage pedestrian-oriented design. Also revise the Off-Street Parking Design Manual to include parking placement concepts that encourage pedestrian activity and concepts for providing shared parking facilities.

Tra-1.7 Implement the SANDAG CMP and require large projects to mitigate impacts to the CMP network, including State highways and freeways.

Tra-1.8 Implement the San Diego County TIF Ordinance, which defrays the costs of constructing planned transportation facilities necessary to accommodate increased traffic generated by future development.

2.15.6.2 Issue 2: Adjacent Cities Traffic and LOS Standards

The following General Plan Update policies and mitigation measures (described further below) would reduce proposed project impacts related to adjacent cities traffic and LOS standards. However, the General Plan Update policies and mitigation measures would not fully reduce impacts to below a level of significance due to the magnitude of the traffic impacts. Therefore, other measures that would further reduce the proposed project's significant traffic impacts were considered and are discussed below.

Infeasible Mitigation Measures

The General Plan Update proposes a roadway system that would cause roadway segments in adjacent cities to operate at a LOS lower than acceptable levels established for their respective jurisdictions. Mitigation measures, such as requiring that all significantly impacted roadway segments undergo construction or expansion in order to increase the roadway LOS level, would have the potential to minimize significant impacts to adjacent cities. However, mitigation measures to improve adjacent jurisdictions roadways would infeasible because such improvements are outside the jurisdiction of the County. In some cases, such roadway improvements would be consistent with the plans of the affected cities. However, in many cases they have not been planned, either because the city does not desire that the road be improved or the plans have not yet been updated to reflect the level of future growth included in this analysis. In cases where a city desires that the impacts be mitigated, the County would coordinate with the city when significant traffic impacts to roads in adjacent cities are attributed to specific projects being processed in the County. These projects would be required to undertake mitigation, such as a fair share contribution, pursuant to city direction. Chapter 4.0, Project Alternatives, provides a discussion of several land use alternatives to the proposed project that would result in some reduced impacts to unincorporated adjacent cities traffic and LOS standards. However, without significant reductions in the overall growth of the County, impacts would still remain significant and unavoidable.

General Plan Update Policies

In addition to the policies identified above in Section 2.15.6.1, Issue 1: Unincorporated County Traffic and LOS Standards, the following General Plan Update policies would reduce impacts associated with adjacent cities traffic and LOS standards, but not to below a significant level.

Policy LU-4.3: Relationship of Plans in Adjoining Jurisdictions. Consider the plans and projects of overlapping or neighboring agencies in the planning of unincorporated lands, and invite comments and coordination when appropriate.

Policy M-4.6: Interjurisdictional Coordination. Coordinate with adjacent jurisdictions so that roads within Spheres of Influence (SOIs) or that cross jurisdictional boundaries are

designed to provide a consistent cross-section and capacity. To the extent practical, coordinate with adjacent jurisdictions to construct road improvements concurrently or sequentially to optimize and maintain road capacity.

Mitigation Measures

Mitigation measures Tra-1.1, Tra-1.2, Tra-1.3, Tra-1.4, Tra-1.7, and Tra-1.8 as described above are applicable to this issue and are incorporated here by reference. In addition, the following mitigation measures would further reduce impacts associated with adjacent cities traffic and LOS standards, although not to below a level of significance.

Tra-2.1 Establish coordination efforts with other jurisdictions when development projects will result in a significant impact on city roads. When available, use the applicable jurisdiction's significance thresholds and recommended mitigation measures to evaluate and alleviate impacts.

2.15.6.3 Issue 3: Rural Road Safety

The proposed General Plan Update would allow increased land use densities in some areas of the unincorporated County that would have the potential to conflict with or alter the character of existing communities. General Plan Update policies and mitigation measures (described below), have been identified that would minimize potentially significant impacts to rural road safety. Some mitigation measures have been identified that would reduce impacts to below a level of significance; however, the County has determined that their implementation would be infeasible. A discussion of infeasible mitigation measures, as well as General Plan Update policies and feasible mitigation measures is provided below.

Infeasible Mitigation Measures

The following measures were considered in attempting to reduce impacts to rural road safety to below a level of significance. However, the County has determined that these measures would be infeasible as described below; therefore, because they have been determined to be infeasible, these mitigation measures would not be implemented.

- Require all roadway facilities with horizontal and vertical curves that are sharper than existing standards to undergo construction improvements so that facilities would be compliant with existing safety standards. This measure would be considered infeasible due to related construction improvement costs and the fact that while some roadways may not be compliant with existing safety standards, they may be operating at acceptable LOS standards. In addition, some of the transportation facilities in the unincorporated County are within the jurisdiction of another agency, such as Caltrans. Additionally, implementation of this measure would require construction improvements to many roadways in the unincorporated backcountry area, where the majority of development would not be located under implementation of the proposed General Plan Update. Therefore, this mitigation measure would conflict with the proposed project's objective to provide and support a multi-modal transportation network that enhances connectivity and supports community development patterns.

- All transportation facilities within the unincorporated County shall be retrofitted to provide safe bicycle and pedestrian movement corridors. This measure would conflict with the proposed project's objective to minimize public costs of infrastructure and services and correlate their timing with development. Additionally, this measure would be considered infeasible due to related construction improvement costs and the fact that improvements required by this mitigation measure may reduce the existing and future service level standards of the facilities. In addition, some of the transportation facilities in the unincorporated County are within the jurisdiction of another agency, such as Caltrans.

Because the measure listed above has been found to be infeasible, impacts would remain significant and unavoidable. Section 4.0, Alternatives, provides a discussion of several land use alternatives to the proposed project that would result in some reduced impacts associated with rural road safety as compared to the proposed project.

General Plan Update Policies

The following policies would reduce impacts associated rural road safety, but not to below a significant level.

Policy LU-2.7: Mitigation of Development Impacts. Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.

Policy LU-6.9: Protection from Hazards. Require that development be located and designed to protect property and residents from the risks of natural and man-induced hazards.

Policy M-4.3: Rural Roads Compatible with Rural Character. Design and construct public roads to meet travel demands in Semi-Rural and Rural Lands that are consistent with rural character while safely accommodating transit stops when deemed necessary, along with bicyclists, pedestrians, and equestrians. Where feasible, utilize rural road design features (e.g., no curb and gutter improvements) to maintain community character consistent with community plans.

Policy M-4.4: Accommodate Emergency Vehicles. Design and construct public and private roads to allow for necessary access for appropriately sized fire apparatus and emergency vehicles while accommodating outgoing vehicles from evacuating residents.

Policy M-4.5: Context Sensitive Road Design. Design and construct roads that are compatible with the local terrain and the uses, scale and pattern of the surrounding development. Provide wildlife crossings in road design and construction where it would minimize impacts in wildlife corridors.

Policy M-9.1: Transportation Systems Management. Explore the provision of operational improvements (i.e., adding turn lanes, acceleration lanes, intersection improvements, etc.) that increase the effective vehicular capacity of the public road network prior to increasing the number of road lanes. Ensure operational improvements do not adversely impact the transit, bicycle, and pedestrian networks.

Mitigation Measures

Mitigation measures Tra-1.3, Tra-1.4, and 1.8 as described above are applicable to this issue and are incorporated here by reference. In addition, the following mitigation measure would further reduce impacts associated with rural road safety, although not to below a significant level.

Tra-3.1 Coordinate with SANDAG to obtain funding for operational improvements to State highways and freeways in the unincorporated area.

2.15.6.4 Issue 4: Emergency Access

The following General Plan Update policies and mitigation measures would mitigate proposed project impacts related to emergency access to below a level of significance.

General Plan Update Policies

Policy LU-2.7: Mitigation of Development Impacts. Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.

Policy LU-6.9: Protection from Hazards. Require that development be located and designed to protect property and residents from the risks of natural and man-induced hazards.

Policy LU-12.2: Maintenance of Adequate Services. Require development to mitigate significant impacts to existing service levels of public facilities or services for existing residents and businesses. Provide improvements for Mobility Element roads in accordance with the Mobility Element Network Appendix matrices, which may result in ultimate build-out conditions that achieve a higher LOS but do not achieve a LOS of D or better.

Policy M-1.2: Interconnected Road Network. Provide an interconnected public road network with multiple connections that improve efficiency by incorporating shorter routes between trip origin and destination, disperse traffic, reduce traffic congestion in specific areas, and provide both primary and secondary access/egress routes that support emergency services during fire and other emergencies.

Policy M-3.3: Multiple Ingress and Egress. Require development to provide multiple ingress/egress routes in conformance with State law, and local regulations.

Policy M-4.4: Accommodate Emergency Vehicles. Design and construct public and private roads to allow for necessary access for appropriately sized fire apparatus and emergency vehicles while accommodating outgoing vehicles from evacuating residents.

Policy S-3.4: Service Availability. Plan for development where fire and emergency services are available or planned.

Policy S-3.5: Access Roads. Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.

Policy S-14.1: Vehicular Access to Development. Require development to provide vehicular connections that reduce response times and facilitate access for law enforcement personnel, whenever feasible.

Mitigation Measures

Mitigation measures Tra-1.3, Tra-1.4, and Tra-1.8 as described above are applicable to this issue and are incorporated here by reference. In addition, the following mitigation measures would further reduce impacts associated with emergency access.

Tra-4.1 Update Community Plans to identify local public road and fire access road networks and pedestrian routes as appropriate.

Tra-4.2 Implement the Building and Fire Codes to ensure there are adequate service levels in place associated with the construction of structures and their accessibility and egress.

Tra-4.3 Implement and revise as necessary the County Guidelines for Determining Significance for Wildland Fire and Fire Protection to evaluate adverse environmental effects of projects. Require fire protection plans to ensure the requirements of the County Fire Code and other applicable regulations are being met.

Tra-4.4 Implement and revise as necessary the Subdivision Ordinance to ensure that proposed subdivisions meet current design and accessibility standards.

2.15.6.5 Issue 5: Parking Capacity

The following General Plan Update policies and mitigation measures would mitigate proposed project impacts related to parking capacity to below a level of significance.

General Plan Update Policies

Policy M-8.6: Park and Ride Facilities. Coordinate with SANDAG and tribal governments to study transit connectivity and address improving regional opportunities for park-and-ride facilities and transit service to gaming facilities and surrounding rural areas to reduce congestion on rural roads.

Policy M-9.3: Preferred Parking. Encourage and provide incentives for commercial, office, and industrial development to provide preferred parking for carpools, vanpools, electric vehicles and flex cars. Encourage parking cash out programs to reimburse employees for the cost of "free" on-site parking to provide incentives to use alternate modes of travel and to reduce parking requirements.

Policy M-9.4: Park-and-Ride Facilities. Require developers of large projects to provide, or to contribute to, park-and-ride facilities near freeway interchanges and other appropriate locations that provide convenient access to congested regional arterials. Require park-and-ride facilities that are accessible to pedestrians and bicyclists, and include bicycle lockers and transit stops whenever feasible.

Policy M-10.1: Parking Capacity. Require new development to:

- Provide sufficient parking capacity for motor vehicles consistent with the project's location, use, and intensity
- Provide parking facilities for motorcycles and bicycles
- Provide staging areas for regional and community trails

Policy M-10.2: Parking for Pedestrian Activity. Require the design and placement of on-site automobile, motorcycle, and bicycle parking in Villages and Rural Villages that encourages pedestrian activity by providing a clear separation between vehicle and pedestrian areas and prohibit parking areas from restricting pedestrian circulation patterns.

Policy M-10.3: Maximize On-street Parking. Encourage the use of on-street parking in commercial and/or high-density residential town center areas to calm traffic and improve pedestrian interaction. Traffic operations and pedestrian safety must not be compromised.

Policy M-10.4: Shared Parking. Support town center plans when desired by the community that incorporate on-street and/or shared vehicular parking facilities to reduce on-site parking requirements.

Mitigation Measures

Mitigation measures Tra-1.4, Tra-1.5, and Tra-1.6 as described above are applicable to this issue and are incorporated here by reference. In addition, the following mitigation measures would further reduce impacts associated with parking capacity.

Tra-5.1 When updating the Zoning Ordinance, review and revise parking regulations for senior housing and affordable housing, utilizing data from studies conducted for these groups.

Tra-5.2 Prepare town center plans for village areas that incorporate shared parking facilities and include in Community Plans or other appropriate documents.

2.15.6.6 Issue 6: Alternative Transportation

The following General Plan Update policies and mitigation measures would mitigate proposed project impacts related to alternative transportation to below a level of significance.

General Plan Update Policies

Policy LU-5.1: Reduction of Vehicle Trips within Communities. Incorporate a mixture of uses within villages and rural villages and plan residential densities at a level that support multi-modal transportation, including walking, bicycling, and the use public transit when appropriate.

Policy LU-5.4: Planning Support. Undertake planning efforts that promote infill and redevelopment of uses that accommodate walking and biking within communities.

Policy LU-5.5: Projects that Impede Non-Motorized Travel. Ensure that development projects and road improvements do not impede bicycle and pedestrian access. Where impacts to existing planned routes would occur, ensure that impacts are mitigated and acceptable alternative routes are implemented. Examples include large parking areas that cannot be crossed by non-motorized vehicles, and new developments that block through access on existing or potential bicycle and pedestrian routes.

Policy LU-9.8: Village Connectivity and Compatibility with Adjoining Areas. Require new development within Villages to include road networks, pedestrian routes, and amenities that create or maintain connectivity; and site, building, and landscape design that is compatible with the Community Plan and surrounding areas.

Policy LU-11.6: Office Development. Locate new office development complexes within village areas where services are available, in proximity to housing, and along primary vehicular arterials (ideally with transit access) with internal vehicular and pedestrian linkages that integrate the new development into the multi-modal transportation network where feasible.

Policy M-3.1: Public Road Rights-of-Way. Require development to dedicate right-of-way for public roads and other transportation routes identified in the Mobility Element roadway network, Community Plans or Road Master Plans. Require the provision of sufficient right-of-way width, as specified in the County Public Road Standards and Community Trails Master Plan, to adequately accommodate all users, including transit riders, pedestrians, bicyclists, and equestrians.

Policy M-3.2: Traffic Impact Mitigation. Require development to contribute its fair share toward financing transportation facilities, including mitigating the associated direct and cumulative traffic impacts caused by their project on both the local and regional road networks. Transportation facilities include road networks and related transit, pedestrian, bicycle, and equestrian facilities.

Policy M-4.3: Rural Roads Compatible with Rural Character. Design and construct public roads to meet travel demands in Semi-Rural and Rural Lands that are consistent with rural character while safely accommodating transit stops when deemed necessary, along with bicyclists, pedestrians, and equestrians. Where feasible, utilize rural road design features (e.g., no curb and gutter improvements) to maintain community character consistent with community plans.

Policy M-8.1: Transit Service for Transit-Dependent Populations. Coordinate with SANDAG, the CTSA, NCTD, and MTS to provide capital facilities and funding, where appropriate, to:

- Maximize opportunities for transit services in unincorporated communities
- Provide for transit-dependent segments of the population, such as the disabled, seniors, low income, and children, where possible
- Reserve adequate rights-of-way to accommodate existing and planned transit facilities including bus stops

Policy M-8.2: Transit Service to Key Community Facilities and Services. Locate key county facilities, healthcare services, educational institutions, and other civic facilities so that they are accessible by transit in areas where transit is available.

Policy M-8.3: Transit Stops That Facilitate Ridership. Coordinate with SANDAG, NCTD, and MTS to locate transit stops and facilities in areas that facilitate transit ridership, and designate such locations as part of planning efforts for town centers, transit nodes, and large-scale commercial or residential development projects. Ensure that the planning of town centers and village cores incorporates uses that support the use of transit, including multi-family residential and mixed-use transit–oriented development, when appropriate.

Policy M-8.4: Transit Amenities. Require transit stops that are accessible to pedestrians and bicyclists; and provide amenities for these users' convenience.

Policy M-8.5: Improved Transit Facilities. Require development projects, when appropriate, to improve existing nearby transit and/or park and ride facilities, including the provision of bicycle and pedestrian facilities, provisions for bus transit in coordination with NCTD and MTS as appropriate including, but not limited to, shelters, benches, boarding pads, and/or trash cans, and to provide safe, convenient, and attractive pedestrian connections.

Policy M-8.6: Park and Ride Facilities. Coordinate with SANDAG and tribal governments to study transit connectivity and address improving regional opportunities for park-and-ride facilities and transit service to gaming facilities and surrounding rural areas to reduce congestion on rural roads.

Policy M-8.7: Inter-Regional Travel Modes. Coordinate with SANDAG and the California High-Speed Rail Authority, where appropriate, to identify alternative methods for inter-regional travel to serve the unincorporated County residents.

Policy M-9.2: Transportation Demand Management. Require large commercial and office development to use TDM programs to reduce single-occupant vehicle traffic generation, particularly during peak periods to maximize the capacity of existing or improved road facilities.

Policy M-9.4: Park-and-Ride Facilities. Require developers of large projects to provide, or to contribute to, park-and-ride facilities near freeway interchanges and other appropriate locations that provide convenient access to congested regional arterials. Require park-and-ride facilities that are accessible to pedestrians and bicyclists, and include bicycle lockers and transit stops whenever feasible.

Policy M-11.1: Bicycle Facility Design. Support regional and community-scaled planning of pedestrian and bicycle networks.

Policy M-11.2: Bicycle and Pedestrian Facilities in Development. Require development and town center plans in villages and rural villages to incorporate site design and on-site amenities for alternate modes of transportation, such as comprehensive bicycle and pedestrian networks and facilities. This will include both on-street facilities as well as off-street bikeways, to safely serve the full range of intended users. Also designate areas for transit facilities, where appropriate and coordinated with the transit service provider.

Policy M-11.3: Bicycle Facilities on Roads Designated in the Mobility Element. Maximize the provision of bicycle facilities on County Mobility Element roads in semi-rural and rural lands to provide a safe and continuous bicycle network in rural areas that can be used for recreation or transportation purposes, while retaining rural character.

Policy M-11.4: Bicycle Network Connectivity. Require development in villages and rural villages to provide comprehensive internal pedestrian and bicycle networks that connect to existing or planned adjacent community and countywide networks and ensure that village development incorporates these networks where applicable.

Policy M-11.5: Funding for Bicycle Network Improvements. Seek outside funding opportunities for bicycle and pedestrian network improvement projects, particularly those that provide safe and continuous pedestrian and bicycle routes to schools, town centers, parks, park-and-ride facilities, and major transit stops.

Policy M-11.6: Coordination for Bicycle and Pedestrian Facility Connectivity. Coordinate with Caltrans to provide alternate connections for past, existing, or planned bicycle and pedestrian routes that were or would be severed by State freeway and highway projects that intersect pathways or divide communities. Caltrans endeavors to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists appropriate to the function and context of the facility. Caltrans is committed to working with the County to complete bicycle and pedestrian

Policy M-11.7: Bicycle and Pedestrian Facility Design. Promote pedestrian and bicycle facility standards for facility design that are tailored to a variety of urban and rural contexts according to their location within or outside a village or rural village.

Mitigation Measures

Mitigation measures Tra-1.6, Tra-5.1, and Tra-5.2 as described above are applicable to this issue and are incorporated here by reference. In addition, the following mitigation measures would further reduce impacts associated with alternative transportation.

Tra-6.1 During Community Plan updates, establish policies and design guidelines that: encourage commercial centers in compact walkable configurations and discourage “strip” commercial development.

Tra-6.2 Establish comprehensive planning principles for transit nodes such as the Sprinter Station located in North County Metro.

Tra-6.3 Locate County facilities near transit facilities, whenever feasible.

Tra-6.4 Coordinate with SANDAG, Caltrans, and tribal governments to maximize opportunities to locate park and ride facilities.

Tra-6.5 Coordinate with SANDAG, Caltrans, and transit agencies to expand the mass transit opportunities in the unincorporated county and to review the location and design of transit stops. Establish a DPLU transit coordinator to ensure land use issues are being addressed.

Tra-6.6 Review the improvement plans for railroad facilities in the unincorporated County.

Tra-6.7 Implement and revise every five years, or as necessary, to identify a long range County bicycle network and qualify for State or other funding sources. Coordinate revisions to the County Bicycle Transportation Plan with the County Trails Program.

Tra-6.8 Coordinate with SANDAG in the development of a Regional Bicycle Plan to ensure consistency with County transportation plans. Coordinate revisions to the SANDAG Regional Bicycle Plan with the County Trails Program.

Tra-6.9 Implement and revise as necessary the County Trails Program for trail development and management. Implement and revise as necessary the Community Trails Master Plan, which incorporates adopted individual community trail and pathway plans, based on community goals, policies, and implementation criteria.

2.15.7 Conclusion

The discussion below provides a synopsis of the conclusion reached in each of the above impact analyses, and the level of impact that would occur after mitigation measures are implemented.

2.15.7.1 Issue 1: Unincorporated County Traffic and Level of Service Standards

Implementation of the proposed General Plan Update would result in a total of 136 deficient roadway segments throughout the unincorporated County (approximately 31 State highway segments and 105 Mobility Element segments). This would be considered a significant impact. Cumulative projects would also have a significant cumulative impact to deficient roadway segments and the proposed project's contribution would be cumulatively considerable.

The proposed General Plan Update policies and mitigation measures, in addition to compliance with applicable regulations, would reduce proposed project traffic impacts in the unincorporated County; however, not to below a level of significance. Therefore, direct and cumulative impacts would be significant and unavoidable.

2.15.7.2 Issue 2: Adjacent Cities Traffic and Level of Service Standards

Implementation of the proposed General Plan Update would result in 34 roadway segments in adjacent cities that would exceed the LOS standard established by the applicable jurisdiction. Therefore, this would be considered a significant impact. Cumulative projects would also result in a significant cumulative impact to adjacent cities traffic and LOS levels and the proposed project's contribution would be cumulatively considerable.

The proposed General Plan Update policies and mitigation measures, in addition to compliance with applicable regulations, would reduce proposed project impacts related to adjacent cities traffic and LOS standards; however, not to below a level of significance. Therefore, direct and cumulative project impacts would be significant and unavoidable.

2.15.7.3 Issue 3: Rural Road Safety

Implementation of the proposed General Plan would result in the adoption of a Mobility Element network that includes existing roadways with horizontal and vertical curves that are sharper than existing standards. Additionally, the proposed General Plan Update would pose an increased risk to pedestrians and bicyclists by increasing and/or redistributing traffic patterns. Implementation of the proposed General Plan Update would also have the potential to result in hazards from at-grade rail crossings. Therefore, this would be considered a potentially significant impact. Cumulative projects would also result in a significant cumulative impact to road safety and the proposed project's contribution would be cumulatively considerable. The proposed General Plan Update policies and mitigation measures, in addition to compliance with applicable regulations, would reduce proposed project impacts related to rural road safety; however, not to below a level of significance. Therefore, direct and cumulative project impacts would be significant and unavoidable.

2.15.7.4 Issue 4: Emergency Access

Under the proposed General Plan Update, existing inadequate roadway widths, dead end roads, one-way roads, and gated communities would continue to occur in the unincorporated County, all of which have the potential to impair emergency access. Therefore, a potentially significant impact would occur. The proposed General Plan Update policies and mitigation measures, in addition to compliance with applicable regulations, would mitigate direct project impacts related to emergency access to below a level of significance. Additionally, cumulative project impacts would be less than significant.

2.15.7.5 Issue 5: Parking Capacity

Implementation of the proposed General Plan Update would designate land uses throughout the unincorporated County that would require the development of parking facilities. All future development of parking facilities associated with these land uses would be required to follow existing parking standards and requirements, such as the County's Zoning Ordinance and roadway standards. However, the land uses proposed under the General Plan Update would require modifications to existing County parking regulations. This is considered to be potentially significant impact. The proposed General Plan Update policies and mitigation measures, in addition to compliance with existing County parking regulations, would mitigate proposed project impacts related to parking capacity to below a level of significance. Additionally, cumulative impacts would be less than significant.

2.15.7.6 Issue 6: Alternative Transportation

Implementation of the proposed General Plan Update would create provisions for alternative modes of transportation, including bike lanes, bus stops, trails, and sidewalks. Many policies proposed in the General Plan Update would require coordination between the County and the agencies responsible for public transportation planning; however, existing alternative

transportation plans and policies would require modification to be consistent with the goals and policies contained in the General Plan Update. This is considered to be potentially significant impact. The proposed General Plan Update policies and mitigation measures, in addition to compliance with applicable regulations, would mitigate proposed project impacts related to alternative transportation to below a level of significance. Additionally, cumulative impacts would be less than significant.

Table 2.15-1. Level of Service (LOS) Definitions

LOS Category	Definition of Operation
A	This LOS represents a completely free-flow conditions, where the operation of vehicles is virtually unaffected by the presence of other vehicles and only constrained by the geometric features of the highway and by driver preferences.
B	This LOS represents a relatively free-flow condition, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.
C	At this LOS the influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles.
D	At this LOS, the ability to maneuver is notably restricted due to traffic congestion, and only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.
E	This LOS represents operations at or near capacity. LOS E is an unstable level, with vehicles operating with minimum spacing for maintaining uniform flow. At LOS E, disruptions can not be dissipated readily thus causing deterioration down to LOS F.
F	At this LOS, forced or breakdown of traffic flow occurs, although operations appear to be at capacity, queues forms behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.

Source: Wilson and Company 2009a

Table 2.15-2. Caltrans District 11 State Highway Segment LOS Definitions

LOS Category	V/C	Congestion/Delay	Traffic Description
A	<0.30	None	Free flow.
B	0.30-0.49	None	Free to stable flow, light to moderate volumes.
C	0.50-0.70	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
D	0.71-0.88[(1)]	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
E	0.89-0.99	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
F	≥1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.

(1) SANDAG modified the V/C threshold at LOS D from 0.88 to 0.84 for the County General Plan Update model forecast.
Source: Wilson and Company 2009a

Table 2.15-3. County of San Diego Current Roadway Segment Daily Capacity and LOS Standards

Circulation Element Roadway Classification	Level of Service (in ADT)				
	A	B	C	D	E
Expressway (6–Lane)	36,000	54,000	70,000	86,000	108,000
Prime Arterial (6-Lane)	22,200	37,000	44,600	50,000	57,000
Major Road (4-Lane)	14,800	24,700	29,600	33,400	37,000
Collector (4-Lane)	13,700	22,800	27,400	30,800	34,200
Town Collector (3–Lane)	3,000	6,000	9,500	13,500	19,000
Light Collector (2-Lane)	1,900	4,100	7,100	10,900	16,200
Rural Collector (2-Lane)	1,900	4,100	7,100	10,900	16,200
Rural Light Collector (2-Lane)	1,900	4,100	7,100	10,900	16,200
Rural Mountain Road (2-Lane)	1,900	4,100	7,100	10,900	16,200
Recreation Parkway (2-Lane)	1,900	4,100	7,100	10,900	16,200

Source: Wilson and Company 2009a

Table 2.15-4. Current County Public Roadway Classifications

Circulation Element Roadway Classification	Number of Travel Lanes (Median Width)	Right of Way Width (feet)[2]	Design Speed (mph)	Threshold Capacity (ADT)	Parkway Width (feet)
Expressway[1]: Expressways have grade-separated intersections and provide inter-regional travel.	6 (34 feet)	146	65	86,000	10
Prime Arterial: Prime Arterials are six-lane roads with at-grade intersections and they provide intraregional travel.	6 (14 feet)	122	65	50,000	10
Major Road: Major Roads are four-lane roads that accommodate shorter trips at intermediate speeds and serve as feeders to arterials.	4 (14 feet)	98	55	33,400	10
Collector: Collector Roads are four-lane undivided roads that serve as feeders to Major Roads and Prime Arterials.	4 (none)	84	55	30,800	10
Town Collector: Town Collector Roads provide access to adjacent properties with a center turn lane.	2 (12 feet)	74	40	13,500	10
Light Collector: Light Collector Roads are two-lane collector roads where access is generally controlled.	2 (none)	60	45	10,900	10
Rural Collector: Rural Collector Road access in controlled by requiring new development to provide common driveways, access roads and, on occasion, signalized intersections. Residential lots are required to be served from interior residential roads.	2 (none)	84	40	10,900	22
Rural Light Collector: Similar to Light Collector Roads, Rural Light Collector Roads are two-lane collector roads where access is generally controlled.	2 (none)	60	40	10,900	10
Recreational Parkway: Recreational Parkways provide for recreational travel through an area of scenic of recreational interest. There are no mapped recreational parkways in the County.	2 (none)	100	25	10,900	30
Rural Mountain: Similar to Light Collector Roads, Rural Mountain Roads are two-lane collector roads where access is generally controlled.	2 (none)	100	40	10,900	30

(1) Allows for both at-grade and grade-separated intersections
(2) Does not include allowances for bicycle lanes or additional turn lanes
Source: DPW 1999

Table 2.15-5. Existing Conditions Roadway Lane Miles by Subregion and Community Planning Area

CPA/Subregion	Lane Miles			
	State Highway	ME Roads	Local Public Roads	Total
Northwestern Communities				
Bonsall	9	70	9	88
Fallbrook	13	133	31	177
North County Metro	11	156	6	173
Pala/Pauma Valley	48	39	3	91
Pendleton/De Luz	-	29	2	31
Rainbow	-	18	-	18
San Dieguito	-	103	40	143
Valley Center	-	124	40	164
Northwestern Subtotal	**81**	**672**	**131**	**884**
Southwestern Communities				
Alpine	-	100	27	127
County Islands	-	5	-	5
Crest/Dehesa	-	51	4	55
Jamul/Dulzura	40	118	30	188
Lakeside	22	141	35	198
Otay	-	17	2	19
Ramona	56	131	35	222
Spring Valley	-	60	30	90
Sweetwater	-	29	6	35
Valle de Oro	11	79	33	123
Southwestern Subtotal	**129**	**731**	**202**	**1,062**
Eastern Communities				
Central Mountain	35	134	46	215
Desert	51	245	12	308
Julian	-	54	7	61
Mountain Empire	60	195	12	267
North Mountain	98	159	5	262
Eastern Subtotal	**244**	**787**	**82**	**1,113**
Total	**454**	**2,190**	**415**	**3,059**

Note: Due to rounding, numbers may not exactly match those in Appendix G.
Source: Wilson and Company 2009a

Table 2.15-6. Existing Conditions Roadway Lane Miles by LOS

CPA/Subregion	Lane Miles											
	LOS A-C			LOS D			LOS E			LOS F		
	State Hwy	ME Roads	Total	State Hwy	ME Roads	Total	State Hwy	ME Roads	Total	State Hwy	ME Roads	Total
Northwestern Communities												
Bonsall	-	53	53	-	5	5	-	11	11	9	1	10
Fallbrook	-	103	103	5	10	15	4	13	17	4	8	12
North County Metro	1	114	115	10	20	30	-	14	14	-	8	8
Pala/Pauma Valley	40	35	75	-	2	2	-	2	2	8	-	8
Pendleton/De Luz	-	17	17	-	0	0	-	1	1	-	11	11
Rainbow	-	18	18	-	-	-	-	-	-	-	-	-
San Dieguito	-	60	60	-	10	10	-	10	10	-	22	22
Valley Center	-	83	83	-	20	20	-	14	14	-	7	7
Northwestern Subtotal	**41**	**483**	**524**	**15**	**67**	**82**	**4**	**65**	**69**	**21**	**57**	**78**
Southwestern Communities												
Alpine	-	81	81	-	7	7	-	5	5	-	7	7
County Islands	-	3	3	-	1	1	-	-	-	-	1	1
Crest/Dehesa	-	30	30	-	9	9	-	10	10	-	1	1
Jamul/Dulzura	23	114	137	10	1	11	-	3	3	6	-	6
Lakeside	-	103	103	-	10	10	4	13	17	18	15	33
Otay	-	17	17	-	-	-	-	-	-	-	-	-
Ramona	33	104	137	7	3	10	4	17	21	12	7	19
Spring Valley	-	47	47	-	6	6	-	6	6	-	2	2
Sweetwater	-	8	8	-	5	5	-	9	9	-	6	6
Valle de Oro	2	49	51	-	12	12	-	12	12	9	6	15
Southwestern Subtotal	**58**	**556**	**614**	**17**	**54**	**71**	**8**	**75**	**83**	**45**	**45**	**90**
Eastern Communities												
Central Mountain	35	133	168	-	1	1	-	-	-	-	-	-
Desert	51	245	296	-	0	0	-	0	0	-	-	-
Julian	-	54	54	-	-	-	-	-	-	-	-	-
Mountain Empire	60	195	255	-	-	-	-	-	-	-	-	-
North Mountain	98	159	257	-	-	-	-	-	-	-	-	-
Eastern Subtotal	**244**	**786**	**1,030**	**-**	**1**	**1**	**-**	**0**	**0**	**-**	**-**	**-**
Total	**343**	**1,825**	**2,168**	**32**	**122**	**154**	**12**	**140**	**152**	**66**	**102**	**168**

Note: Due to rounding, numbers may not exactly match those in Appendix G.
Source: Wilson and Company 2009a

Table 2.15-7. Vehicle Miles Traveled (VMT) and Average Daily Traffic (ADT) Existing Conditions (2007) vs. Proposed Project (2030)

CPA/Subregion	Existing Conditions VMT	Proposed Project VMT	Existing Conditions ADT	Proposed Project ADT
Northwestern Communities				
Bonsall	1,179,857	2,087,790	63,438	115,560
Fallbrook	1,356,481	2,373,498	286,243	459,754
North County Metro	1,645,889	2,815,934	203,177	396,980
Pala/Pauma Valley	270,007	420,730	61,484	107,264
Pendleton/De Luz	2,734,946	3,799,101	153,761	155,076
Rainbow	422,169	811,618	10,128	49,016
San Dieguito	503,845	721,692	149,828	234,306
Valley Center	402,685	814,483	104,633	325,170
Northwestern Subtotal	**8,515,879**	**13,844,846**	**1,032,692**	**1,843,126**
Southwestern Communities				
Alpine	745,350	1,150,694	214,643	361,102
County Islands	320,638	388,723	13,443	15,842
Crest/Dehesa	151,969	205,005	48,729	55,946
Jamul/Dulzura	315,670	584,604	56,987	102,875
Lakeside	1,483,082	2,183,047	436,719	583,180
Otay	24,779	461,039	7,496	364,897
Ramona	685,606	868,316	304,668	445,737
Spring Valley	870,515	1,168,540	336,273	415,986
Sweetwater	571,218	860,577	59,150	69,807
Valle de Oro	568,211	637,346	383,205	406,282
Southwestern Subtotal	**5,737,038**	**8,507,893**	**1,861,313**	**2,821,654**
Eastern Communities				
Central Mountain	559,722	852,064	36,942	43,403
Desert	161,005	323,572	72,198	205,656
Julian	66,945	95,203	30,945	42,737
Mountain Empire	623,737	1,305,685	77,193	236,005
North Mountain	257,823	441,628	31,568	44,824
Eastern Subtotal	**1,669,232**	**3,018,152**	**248,846**	**572,625**
Total	**15,922,149**	**25,370,891**	**3,142,851**	**5,237,405**

Source: Wilson and Company 2009a

Table 2.15-8. Rail Lines in San Diego County

Rail Line	Length (miles)	Extent in San Diego County	Freight Operator	Other Operations	Right of Way Owner
Los Angeles - San Luis Obispo- San Diego Corridor (San Diego County Portions)					
Oceanside - San Diego	62	Orange County line - Downtown San Diego	BNSF	AmTrack, Coaster & MetroLink	NCTD & MTS
Oceanside - Escondido	21	Oceanside - Escondido	BNSF	Sprinter	NCTD
San Diego & Arizona Eastern Railway					
Main Line	16	Downtown San Diego - International Border (San Ysidro)	SDIV	San Diego Trolley	MTS
La Mesa Branch	16	Downtown San Diego - El Cajon	SDIV	San Diego Trolley	MTS
Coronado Branch	7	National City - Otay Mesa	SDIV	San Diego Trolley	MTS
Desert Line	70	Tecate USA - Imperial County line	Carrizo Gorge Railway	Pacific Southwest Railway Museum	MTS

Sources: County of San Diego 2007a

Table 2.15-9. SANTEC/ITE Guidelines Circulation Element Roadway Classifications, Capacity and LOS Standards

Roadway Functional Classification	LOS (in ADT)				
	A	B	C	D	E
Expressway (6-lane)	< 30,000	< 42,000	< 60,000	**< 70,000**	< 80,000
Prime Arterial (6-lane)	< 25,000	< 35,000	< 50,000	**< 55,000**	< 60,000
Major Arterial (6-lane, divided)	< 20,000	< 28,000	< 40,000	**< 45,000**	< 50,000
Major Arterial (4-lane, divided)	< 15,000	< 21,000	< 30,000	**< 35,000**	< 40,000
Secondary Arterial / Collector (4-lane with center lane)	< 10,000	< 14,000	< 20,000	**< 25,000**	< 30,000
Collector (4-lane w/o center lane)	< 5,000	< 7,000	< 10,000	**< 13,000**	< 15,000
Collector (2-lane w/ continuous left-turn lane)					
Collector (2-lane no fronting property)	< 4,000	< 5,500	< 7,500	**< 9,000**	< 10,000
Collector (2-lane w/ commercial fronting)	< 2,500	< 3,500	< 5,000	**< 6,500**	< 8,000
Collector (2-lane multi-family)					
Sub-Collector (2-lane single-family)	-	-	< 2,200	-	-

Note: **Bold** numbers indicate the ADT thresholds for acceptable LOS.
Source: Wilson and Company 2009b

Table 2.15-10. City of Chula Vista Circulation Element Roadway Classifications Capacity and LOS Standards

Roadway Functional Classification	LOS (in ADT)				
	A	B	C	D	E
Expressway (7 or 8-lane)	52,500	61,300	**70,000**	78,800	87,500
Prime Arterial (6-lane)	37,500	43,800	**50,000**	56,300	62,500
Major Street (6-lane)	30,000	35,000	**40,000**	45,000	50,000
Major Street (4-lane)	22,500	26,300	**30,000**	33,800	37,500
Town Center Arterial	37,500	43,800	**50,000**	56,300	62,500
Class I Collector (4-lane)	16,500	19,300	**22,000**	24,800	27,500
Class II Collector (3-lane)	9,000	10,500	**12,000**	13,500	15,000
Class III Collector (2-lane)	5,600	6,600	**7,500**	8,400	9,400

Note: **Bold** numbers indicate the ADT thresholds for acceptable LOS.
Source: Wilson and Company 2009b

Table 2.15-11. City of Encinitas Circulation Element Roadway Classifications Capacity and LOS Standards

Roadway Functional Classification	LOS (in ADT)		
	A - C	D	E
Prime Arterial (6-lane)	< 46,000	**< 51,200**	< 57,000
Prime Arterial (6-lane) - Augmented	< 53,000	**< 60,000**	< 66,000
Major Roadway (4-lane)	< 28,200	**< 31,600**	< 35,200
Major Roadway (4-lane) - Augmented	< 36,300	**< 41,000**	< 45,400
Collector Roadway (4-lane)	< 26,000	**< 29,200**	< 32,400
Local Roadway (2-lane)	< 11,200	**< 12,600**	< 14,000
Local Roadway (2-lane) - Augmented	< 16,000	**< 18,000**	< 20,000

Note: **Bold** numbers indicate the ADT thresholds for acceptable LOS.
Source: Wilson and Company 2009b

Table 2.15-12. City of Escondido Circulation Element Roadway Classifications Capacity and LOS Standards

Roadway Functional Classification	LOS (in ADT)					
	A	B	C	Mid D	D-	E
Prime Arterial (6-Lane, no parking)	15,000	30,000	42,000	**46,500**	51,000	60,000
Prime Arterial (8-Lane, no parking)	17,500	35,000	49,000	**54,250**	59,500	70,000
Major Road (4-Lane, no parking)	14,800	24,700	29,600	**31,500**	33,400	37,000
Major Road (6-Lane, no parking)	12,500	25,000	35,000	**38,750**	42,500	50,000
Collector (4-Lane, no parking)	13,700	22,800	27,400	**29,100**	30,800	34,200
Collector (4-Lane, w/ parking)	5,500	10,000	14,000	**15,500**	17,000	20,000
Local Collector (2 Lane, no parking)	4,000	7,500	10,000	**11,250**	12,500	15,000
Rural Collector (2-Lane, w/ parking)	2,500	5,000	7,000	**7,750**	8,500	10,000

Note: **Bold** numbers indicate the ADT thresholds for acceptable LOS.
Source: Wilson and Company 2009b

Table 2.15-13. City of Oceanside Circulation Element Roadway Classifications Capacity and LOS Standards

Functional Classification	LOS (in ADT)				
	A	B	C	D	E
Prime Arterial (6-lane)	< 36,000	< 42,000	< 48,000	**< 54,000**	< 60,000
Major Arterial (6-lane, divided)	< 30,000	< 35,000	< 40,000	**< 45,000**	< 50,000
Major Arterial (5-lane, divided)	< 27,000	< 31,500	< 36,000	**< 40,500**	< 45,000
Major Arterial (4-lane, divided)	< 24,000	< 28,000	< 32,000	**< 36,000**	< 40,000
Secondary Arterial (4-lane, undivided)	< 13,700	< 22,800	< 27,400	**< 30,800**	< 34,200
Collector Industrial (2-lane)	< 6,000	< 7,000	< 8,000	**< 9,000**	< 10,000
Collector (2-lane)	< 5,250	< 6,125	< 7,000	**< 7,875**	< 8,750

Note: **Bold** numbers indicate the ADT thresholds for acceptable LOS.
Source: Wilson and Company 2009b

Table 2.15-14. City of San Marcos Circulation Element Roadway Classifications Capacity and LOS Standards

Roadway Functional Classification	LOS (in ADT)				
	A	B	C	D	E
Prime Arterial (6-lane)	<25,000	<35,000	<42,000	**<51,000**	<60,000
Major Arterial (6-lane, divided)	<20,000	<28,000	<35,000	**<41,000**	<50,000
Major Arterial (4-lane, divided)	< 15,000	< 21,000	<28,000	**<35,000**	<40,000
Secondary Arterial (4-lane, undivided)	< 10,000	< 14,000	<21,000	**<24,500**	<30,000
Collector (2-lane)	<5,000	<7,000	<10,000	**<12,500**	<15,000

Note: **Bold** numbers indicate the ADT thresholds for acceptable LOS.
Source: Wilson and Company 2009b

Table 2.15-15. City of Vista Circulation Element Roadway Classifications Capacity and LOS Standards

Roadway Functional Classification	LOS (in ADT)				
	A	B	C	D	E
Prime Arterial (6-lane)	< 36,000	< 42,000	< 48,000	**< 54,000**	< 60,000
Major Arterial (4-lane, divided)	< 24,000	< 28,000	< 32,000	**< 36,000**	< 40,000
Secondary Arterial (4-lane, undivided)	< 15,000	<17,500	< 20,000	**< 22,500**	< 25,000
Minor Arterial (2-lane, undivided)	< 9,000	< 10,500	< 12,500	**< 15,000**	< 17,000
Collector (4-lane w/no center lane)	< 5,500	< 7,000	< 10,000	**< 13,000**	< 15,000
Collector (2-lane w/ continuous left-turn lane)	< 5,500	< 7,000	< 10,000	**< 13,000**	< 15,000
Light Collector (2-lane)	< 5,300	< 6,200	< 7,000	**< 7,900**	< 8,800

Note: **Bold** numbers indicate the ADT thresholds for acceptable LOS.
Source: Wilson and Company 2009b

Table 2.15-16. Existing Conditions Roadway LOS by Jurisdiction

Roadway	Segment	Cross-Section	Capacity (LOS E)	ADT	LOS
Carlsbad					
Cannon Rd	I-5 NB Ramps to Paseo Del Norte	4-lane Major Arterial	40,000	22,200	C
	Paseo Del Norte to Car Country Dr	4-lane Major Arterial	40,000	8,100	A
	Car Country Dr to Faraday Ave	4-lane Major Arterial	40,000	14,200	A
	Faraday Ave to El Camino Real	4-lane Major Arterial	40,000	9,100	A
	El Camino Real to College Blvd	2-lane Collector w/ CLTL	15,000	9,100	C
	Leisure Village Dr to Shadowridge Dr	4-lane Major Arterial	40,000	4,100	A
	Shadowridge Dr to Lake Blvd	4-lane Major Arterial	40,000	9,700	A
	Lake Blvd to Melrose Dr	4-lane Major Arterial	40,000	15,700	B
	Melrose Dr to Mar Vista Dr	4-lane Major Arterial	40,000	400	A
Chula Vista					
Heritage Rd	Main Street to Chula Vista City Limit	6-lane Prime Arterial	62,500	14,800	A
La Media Rd	Telegraph Canyon Rd to Palomar St	6-lane Prime Arterial	62,500	19,200	A
	Palomar St to Olympic Pkwy	6-lane Prime Arterial	62,500	3,900	A
	Olympic Pkwy to Santa Venetia St	6-lane Prime Arterial	62,500	1,200	A
	Santa Venetia St to Birch Rd	6-lane Prime Arterial	62,500	1,900	A
Proctor Valley Rd	Northwoods Dr to Chula Vista City Limit	2-lane Class III Collector	9,400	700	A
Otay Lakes Rd	Wueste Rd to Chula Vista City Limit	2-lane Class III Collector	9,400	3,200	A
Willow St	Sweetwater Rd to Bonita Rd	2-lane Class III Collector	9,400	17,000	**F**
Bonita Rd	Bonita Glen Dr to I-805 SB Ramps	4-lane Major Street	37,500	34,300	**E**
	I-805 SB Ramps to I-805 NB Ramps	4-lane Major Street	37,500	54,000	**F**
	I-805 NB Ramps to Plaza Bonita Rd	4-lane Major Street	37,500	42,400	**F**
	Plaza Bonita Rd to Willow St	4-lane Major Street	37,500	30,300	**D**
	Willow St to Chula Vista City Limit	4-lane Major Street	37,500	32,500	**D**
Del Mar					
Via de la Valle	Highway 101 to Jimmy Durante Blvd	4-lane Major Arterial	40,000	24,300	C
El Cajon					
Jamacha Rd	Main St to Granite Hill Dr	4-lane Major Arterial	40,000	35,000	**E**
	Granite Hill Dr to Grove Rd	4-lane Major Arterial	40,000	28,000	C
Washington Ave	El Cajon Blvd to 1st St	4-lane Major Arterial	40,000	24,500	C
	1st St to Jamacha Rd	4-lane Major Arterial	40,000	22,000	C
	Jamacha Rd to 3rd St	4-lane Major Arterial	40,000	14,000	A
	3rd St to Wichita Ave	4-lane Major Arterial	40,000	16,400	B
	Wichita Ave to Granite Hill Dr	4-lane Major Arterial	40,000	12,400	A
Main St	Magnolia Ave to Ballantyne St	4-lane Major Arterial	40,000	14,600	A
	Ballantyne St to Mollison Ave	4-lane Major Arterial	40,000	15,500	B
	Mollison Ave to 1st St	4-lane Major Arterial	40,000	19,600	B
	1st St to Orlando St	4-lane Major Arterial	40,000	16,500	B
	Orlando St to Madison Ave	4-lane Major Arterial	40,000	20,400	B
	Madison Ave to I-8 EB Ramps	4-lane Major Arterial	40,000	11,700	A

Table 2.15-16 (Continued)

Roadway	Segment	Cross-Section	Capacity (LOS E)	ADT	LOS
Avocado Blvd	Main St to Washington Ave	4-lane Collector (no center lane)	15,000	10,600	D
	Washington Ave to Chase Ave	4-lane Collector (no center lane)	15,000	17,300	**F**
Bradley Ave	Cuyamaca St to Marshall Ave	4-lane Major Arterial	40,000	9,300	A
	Marshall Ave to Johnson Ave	4-lane Major Arterial	40,000	20,800	B
	Johnson Ave to Magnolia Ave	4-lane Major Arterial	40,000	15,900	B
	Magnolia Ave to Graves Ave	2-lane Collector	10,000	19,000	**F**
	Graves Ave to 1st St	2-lane Collector	10,000	12,600	**F**
2nd St	Pepper Dr to Persimmon Ave	4-lane Major Arterial	40,000	24,300	C
	Persimmon Ave to Broadway	4-lane Major Arterial	40,000	32,000	D
	Broadway to I-8 WB Ramps	4-lane Major Arterial	40,000	33,500	D
	I-8 WB Ramps to Main St	6-lane Major Arterial	50,000	40,500	D
Chase Ave	El Cajon Blvd to Mollison Ave	4-lane Major Arterial	40,000	24,400	C
	Mollison Ave to Rancho Valle Ct	4-lane Major Arterial	40,000	18,400	B
Greenfield Dr	I-8 EB Ramps to Bermuda Ln	2-lane Collector	10,000	24,500	**F**
	Bermuda Ln to La Cresta Rd	2-lane Collector	10,000	21,000	**F**
	La Cresta Rd to Madison Ave	2-lane Collector	10,000	10,400	**F**
	Madison Ave to Vista Del Escuela	2-lane Collector w/ CLTL	15,000	2,600	A
	Vista Del Escuela to Orchard Ave	2-lane Collector w/ CLTL	15,000	500	A
Encinitas					
El Camino Real	Encinitas Blvd to Santa Fe Dr	6-lane Prime Arterial	57,000	37,100	A - C
	Santa Fe Dr to Manchester Ave	4-lane Major Arterial - Augmented	45,400	26,500	A - C
El Camino Del Norte	Rancho Santa Fe Rd to Eastern City Limit	2-lane Local Roadway	14,000	7,300	A - C
Encinitas Blvd	El Camino Real to Manchester Ave	4-lane Major Roadway	35,200	36,200	**F**
Manchester Ave	I-5 NB Ramps to El Camino Real	4-lane Major Roadway - Augmented	45,400	31,600	A - C
	El Camino Real to Encinitas Blvd	2-lane Local Roadway	14,000	8,300	A - C
Rancho Santa Fe Rd	Manchester Ave to Eastern City Limit	2-lane Local Roadway - Augmented	20,000	22,700	**F**
Escondido					
Centre City Pkwy	Country Club Ln to El Norte Pkwy	4-lane Major Road	37,000	15,400	B
	El Norte Pkwy to SR-78 WB Ramps	4-lane Major Road	37,000	29,200	C
	SR-78 WB Ramps to Mission Ave	4-lane Major Road	37,000	34,500	**E**
	Mission Ave to Washington Ave	4-lane Major Road	37,000	24,900	C
	Washington Ave to 5th Ave	4-lane Major Road	37,000	23,800	B
	5th Ave to 13th Ave	4-lane Major Road	37,000	26,100	C
	13th Ave to Felicita Ave	4-lane Major Road	37,000	23,900	B
	Felicita Ave to Centre City Rd	4-lane Major Road	37,000	30,000	Mid D
	Centre City Rd to Brotherton Rd	4-lane Major Road	37,000	39,400	**F**
	Brotherton Rd to Citracado Pkwy	4-lane Major Road	37,000	32,600	**D-**

Table 2.15-16 (Continued)

Roadway	Segment	Cross-Section	Capacity (LOS E)	ADT	LOS
Felicita Ave/17th Ave	San Pasqual Valley Rd to Juniper St	2-lane Local Collector	15,000	13,900	**E**
	Juniper St to Escondido Blvd	2-lane Local Collector	15,000	18,200	**F**
	Escondido Blvd to Centre City Pkwy	4-lane Collector	34,200	27,000	C
	Centre City Pkwy to Quince St	2-lane Local Collector	15,000	23,600	**F**
	Quince St to Citracado Pkwy	2-lane Local Collector	15,000	14,500	**E**
Via Rancho Pkwy	Felicita Ave to Quiet Hills Dr	4-lane Major Road	37,000	15,900	B
	Quiet Hills Dr to I-15 SB Ramps	6-lane Major Road	50,000	16,800	B
	I-15 SB Ramps to I-15 NB Ramps	6-lane Prime Arterial	60,000	34,100	C
	I-15 NB Ramps to San Pasqual Rd	6-lane Prime Arterial	60,000	32,800	C
Bear Valley Pkwy	San Pasqual Rd to Mary Ln	4-lane Major Road	37,000	27,900	C
	Mary Ln to Las Palmas Ave	4-lane Major Road	37,000	23,000	B
	Las Palmas Ave to Sunset Dr	2-lane Local Collector	15,000	23,200	**F**
	Sunset Dr to El Dorado Dr	2-lane Local Collector	15,000	18,800	**F**
	El Dorado Dr to San Pasqual Valley Rd	2-lane Local Collector	15,000	27,300	**F**
	San Pasqual Valley Rd to Boyle Ave	2-lane Local Collector	15,000	22,600	**F**
	Boyle Ave to Hayden Dr	4-lane Major Road	37,000	18,000	B
	Hayden Dr to Valley Pkwy	2-lane Local Collector	15,000	17,300	**F**
Valley Pkwy	Bear Valley Pkwy to Wanek Rd	4-lane Major Road	37,000	29,800	Mid D
	Wanek Rd to Washington Ave	4-lane Major Road	37,000	26,000	C
	Washington Ave to Lake Wohlford Rd	2-lane Local Collector	15,000	34,200	**F**
San Pasqual Valley Rd	Washington Ave to Birch Ave	2-lane Local Collector	15,000	21,200	**F**
San Pasqual Rd	Bear Valley Pkwy to Ryan Dr	4-lane Major Road	37,000	11,300	A
Broadway	North Ave to Country Club Ln	4-lane Collector	34,200	6,100	A
	Country Club Ln to Bahia Ln	2-lane Local Collector	15,000	9,000	C
	Bahia Ln to El Norte Pkwy	4-lane Collector	34,200	15,900	B
La Mesa					
Bancroft Dr	Grossmont Blvd to Campo Rd	2-lane Collector	10,000	7,800	D
	Campo Rd to SR-94 WB Ramps	2-lane Collector	10,000	11,600	**F**
Lemon Ave	La Mesa Blvd to Jackson Dr	2-lane Collector	10,000	1,700	A
	Jackson Dr to Marguerita Ln	2-lane Collector	10,000	12,400	**F**
	Marguerita Ln to Alto Dr	2-lane Collector	10,000	7,700	D
	Alto Dr to Lake Helix Dr	2-lane Collector	10,000	4,500	B
	Lake Helix Dr to Fuerte Dr	2-lane Collector	10,000	1,500	A
Fuerte Dr	Grossmont Dr to Avocado Blvd	2-lane Collector	10,000	15,700	**F**
Campo Rd	SR-125 to Bancroft Dr	2-lane Collector	10,000	10,000	**F**
	Bancroft Dr to Camino Paz	2-lane Collector	10,000	17,000	**F**
	Camino Paz to Kenwood Rd	2-lane Collector	10,000	12,000	**F**
	Kenwood Rd to Conrad Dr	4-lane Collector (no center lane)	15,000	42,500	**F**
	Conrad Dr to Granada Ave	4-lane Collector (no center lane)	15,000	20,300	**F**
	Granada Ave to Sweetwater Spring Blvd	4-lane Collector (no center lane)	15,000	13,100	**E**

Table 2.15-16 (Continued)

Roadway	Segment	Cross-Section	Capacity (LOS E)	ADT	LOS
Lemon Grove					
Troy St	Palm St to Sweetwater Rd	4-lane Collector	30,000	9,000	A
Sweetwater Rd	Broadway to Tyler St	4-lane Collector (no center lane)	15,000	18,000	**F**
	Tyler St to Jamacha Rd	4-lane Collector	30,000	17,000	C
National City					
30th St	National City Blvd to Highland Ave	4-lane Major Arterial	40,000	7,000	A
	Highland Ave to N 2nd Ave	4-lane Major Arterial	40,000	29,000	C
Euclid Ave	Plaza Blvd to Sweetwater Rd	4-lane Collector (no center lane)	15,000	8,500	C
Plaza Blvd	National City Blvd to Highland Ave	4-lane Collector (no center lane)	15,000	11,300	D
	Highland Ave to Euclid Ave	4-lane Major Arterial	40,000	23,600	C
Oceanside					
Melrose Dr	SR-76 to Old Ranch Rd	6-lane Major Arterial	50,000	9,500	A
	Old Ranch Rd to Spur Ave	4-lane Major Arterial	40,000	2,300	A
	Santa Fe Ave to Sagewood Rd	4-lane Major Arterial	40,000	11,700	A
	Sagewood Rd to Oceanside Blvd	4-lane Major Arterial	40,000	13,300	A
North Santa Fe Ave	SR-76 to Melrose Dr	4-lane Major Arterial	40,000	23,100	A
Poway					
Poway Rd	Spring Hurst Dr to Iola Way	6-lane Major Arterial	50,000	36,900	C
	Iola Way to Oak Knoll Rd	4-lane Major Arterial	40,000	27,300	C
	Oak Knoll Rd to Pomerado Rd	4-lane Major Arterial	40,000	36,000	**E**
	Pomerado Rd to Carriage Rd	4-lane Major Arterial	40,000	33,500	D
	Carriage Rd to Community Rd	4-lane Major Arterial	40,000	36,500	**E**
	Community Rd to Midland Rd	5-lane Major Arterial	45,000	35,400	D
	Midland Rd to Ann O Reno Ln	4-lane Major Arterial	40,000	24,500	C
	Ann O Reno Ln to Garden Rd	4-lane Major Arterial	40,000	12,500	A
	Garden Rd to Silver Ridge Rd	2-lane Collector w/ CLTL	15,000	17,000	**F**
	Silver Ridge Rd to Espola Rd	2-lane Collector w/ CLTL	15,000	12,900	D
	Espola Rd to SR-67	2-lane Collector	10,000	18,800	**F**
Scripps Poway Pkwy	Springbrook Dr to Community Rd	6-lane Prime Arterial	60,000	49,400	C
	Community Rd to Danielson St	6-lane Prime Arterial	60,000	19,600	A
	Danielson St to SR-67	4-lane Major Arterial	40,000	19,200	B
Twin Peaks Rd	Pomerado Rd to Ted William Pkwy	4-lane Major Arterial	40,000	37,700	**E**
	Ted William Pkwy to Community Rd	4-lane Major Arterial	40,000	44,000	**F**
	Community Rd to Tierra Bonita Rd	4-lane Major Arterial	40,000	29,000	C
	Tierra Bonita Rd to Espola Rd	4-lane Major Arterial	40,000	24,200	C
Espola Rd	Twin Peaks to Poway Rd	2-lane Collector	10,000	18,000	**F**
Ted Williams Pkwy	Highland Ranch Rd to Pomerado Rd	6-lane Prime Arterial	60,000	31,200	B
	Pomerado Rd to Twin Peaks Rd	4-lane Major Arterial	40,000	18,800	B
San Diego					
Camino del Norte	Camino San Bernardo to I-15	6-lane Prime Arterial	60,000	35,900	C
Rancho Bernardo Rd	Via Del Campo to W. Bernardo Dr	4-lane Major Arterial	40,000	23,700	C
	W. Bernardo Dr to I-15	4-lane Major Arterial	40,000	47,400	**F**

Table 2.15-16 (Continued)

Roadway	Segment	Cross-Section	Capacity (LOS E)	ADT	LOS
Scripps Poway Pkwy	I-15 to Spring Canyon Rd	6-lane Prime Arterial	60,000	52,900	D
	Spring Canyon Rd to Springbrook Dr	4-lane Major Arterial	40,000	25,900	C
Via de la Valle	Jimmy Durante Blvd to I-15 NB Ramps	4-lane Major Arterial	40,000	31,200	D
	I-15 NB Ramps to San Andres Dr	4-lane Major Arterial	40,000	37,700	**E**
	San Andres Dr to El Camino Real	2-lane Collector	10,000	22,500	**F**
Airway Rd	Michael Faraday Dr to SR-905	2-lane Collector	10,000	6,600	C
Siempre Viva Rd	La Media Rd to SR-125	6-lane Major Arterial	50,000	10,900	A
	SR-125 to Enrico Fermi Dr	6-lane Major Arterial	50,000	19,400	A
San Marcos					
Las Posas Rd	Borden Rd to Avenida Azul	4-lane Major Arterial	40,000	6,300	A
	Avenida Azul to Mission Rd	6-lane Major Arterial	50,000	8,900	A
	Mission Rd to SR-78 WB Ramps	6-lane Major Arterial	50,000	24,300	B
	SR-78 WB Ramps to Grand Ave	6-lane Major Arterial	50,000	37,700	D
	Grand Ave to Vista Dr	4-lane Secondary Arterial	30,000	15,900	C
	Vista Dr to Stone Dr	4-lane Secondary Arterial	30,000	12,100	B
	Stone Dr to San Marcos Blvd	4-lane Secondary Arterial	30,000	9,900	A
Twin Oaks Valley Rd	Deer Springs Rd to Buena Creek Rd	2-lane Collector	15,000	16,800	**F**
	Buena Creek Rd to Olive St	2-lane Collector	15,000	11,800	D
La Cieniega Rd	Twin Oak Valley Rd to Mulberry Dr	2-lane Collector	15,000	5,100	B
Mulberry Dr	Olive St to La Cieniega Rd	2-lane Collector	15,000	1,800	A
Santee					
Mast Blvd	Medina Dr to Halberns Blvd	4-lane Major Arterial	40,000	21,000	C
	Halberns Blvd to Shirley Garden	4-lane Major Arterial	40,000	22,000	C
	Shirley Garden to Magnolia Ave	4-lane Secondary Arterial	30,000	21,700	D
	Magnolia Ave to Los Ranchitos Rd	2-lane Collector	10,000	7,300	C
	west of Pine Grove	4-lane Major Arterial	40,000	5,000	A
	Pine Grove to Riverford Rd	4-lane Major Arterial	40,000	7,000	A
El Nopal	Cuyamaca St to Magnolia Ave	2-lane Collector	10,000	4,500	B
	Magnolia Ave to Aquila Dr	2-lane Collector w/ CLTL	15,000	8,900	C
Woodside Ave	Magnolia Ave to SR-67	4-lane Major Arterial	40,000	32,000	D
	SR-67 to Shadow Hill Rd	2-lane Collector w/ CLTL	15,000	16,000	**F**
	Shadow Hill Rd to Northcode Rd	2-lane Collector w/ CLTL	15,000	7,000	C
	Northcode Rd to Security Way	2-lane Collector	10,000	5,000	B
	Security Way to SR-67	2-lane Collector	10,000	10,000	**F**
	SR-67 to Riverford Rd	2-lane Collector	10,000	21,800	**F**
Solana Beach					
Highway 101	Ocean St to Lomas Santa Fe Dr	4-lane Major Arterial	40,000	29,900	C
	Lomas Santa Fe Dr to Via De la Valle	4-lane Major Arterial	40,000	19,900	B
Lomas Santa Fe Dr	Highway 101 to Stevens Ave	4-lane Major Arterial	40,000	11,900	A
	Stevens Ave to Solana Hills Dr	4-lane Major Arterial	40,000	17,800	B
	Solana Hills Dr to I-5 SB Ramps	4-lane Major Arterial	40,000	31,700	D
	I-5 SB Ramps to Via Mil Cumbres	4-lane Major Arterial	40,000	28,300	C
	Via Mil Cumbres to Highland Dr	4-lane Major Arterial	40,000	8,900	A

Table 2.15-16 (Continued)

Roadway	Segment	Cross-Section	Capacity (LOS E)	ADT	LOS
Steven Ave	Lomas Santa Fe Dr to Academy Dr	4-lane Collector	30,000	13,000	B
	Academy Dr to La Colonia Park	2-lane Collector	10,000	11,900	**F**
	La Colonia Park to Nardo Ave	4-lane Collector	30,000	11,900	B
	Nardo Ave to Valley Ave	4-lane Collector	30,000	11,000	B
Valley Ave	Stevens Ave to Via De la Valle	4-lane Collector (no center lane)	15,000	13,000	**F**
Highland Dr	El Camino Real to San Andres Dr	2-lane Collector	10,000	5,000	B
Vista					
Sycamore Ave	SR-78 EB Ramps to Hibiscus Way	6-Lane Prime Arterial	60,000	48,900	D
Monte Vista Dr	South Santa Fe Ave to Cypress Ave	2-lane Light Collector	8,800	8,700	**E**
	Cypress Ave to Foothill Dr	2-lane Light Collector	8,800	4,800	A

Note: **Bold** letters indicate substandard LOS.
CLTL = Continuous left-turn lane.
Source: Wilson and Company 2009a

Table 2.15-17. Interregional / International Crossings in the Unincorporated County

Crossing	Roadway	CPA or Subregion	ADTs (000)[1]		Percent Increase (2000-2030)
			2000	2030	
Riverside County	I-15	Rainbow	96	247	157%
Imperial County	I-8	Mountain Empire	11	18	64%
Orange County[2]	I-5	Pendleton/De Luz	104	176	69%
Tecate, Mexico	SR-94	Mountain Empire	6	9	50%
Otay Mesa (2010)	SR-11	Otay	N/A	44	N/A
Jacumba (under consideration)	N/A	Mountain Empire	N/A	1 or 66[3]	N/A

(1) Average daily vehicle trips based on General Plan Update traffic modeling conducted by SANDAG
(2) Based on average daily vehicle trips from Camp Pendleton into Oceanside
(3) Year 2030 projections: Tecate port of entry open to all vehicles (1) or open except commercial vehicles (6)
Source: County of San Diego 2007a

Table 2.15-18. Proposed Project Roadway Lane Miles by Community

CPA/Subregion	Lane Miles			
	State Highway	ME Roads	Local Public Roads	Total
Northwestern Communities				
Bonsall	17	83	22	122
Fallbrook	26	151	50	227
North County Metro	15	201	35	251
Pala/Pauma Valley	60	46	3	109
Pendleton/De Luz	-	58	2	60
Rainbow	-	19	-	19
San Dieguito	-	106	54	160
Valley Center	-	185	36	221
Northwestern Subtotal	118	849	202	1,169
Southwestern Communities				
Alpine	-	109	33	142
County Islands	-	4	-	4
Crest/Dehesa	-	63	9	72
Jamul/Dulzura	55	100	60	215
Lakeside	32	181	53	266
Otay	-	61	7	68
Ramona	65	152	52	269
Spring Valley	-	62	32	94
Sweetwater	-	28	8	36
Valle de Oro	11	97	34	142
Southwestern Subtotal	163	857	288	1,308
Eastern Communities				
Central Mountain	43	146	66	255
Desert	60	266	8	334
Julian	35	25	1	61
Mountain Empire	71	144	76	291
North Mountain	124	120	62	306
Eastern Subtotal	333	701	213	1,247
Total	**614**	**2,407**	**703**	**3,724**

Note: Due to rounding, numbers may not exactly match those in Appendix G.
Source: Wilson and Company 2009a

Table 2.15-19. Proposed Roadway Segment Daily Capacity and LOS Standards

No. [1]	Travel Lanes	Design Speed	Road Classification	Level of Service (in ADT)				
				A	B	C	D	E
6.1	6	65 mph	Expressway	36,000	54,000	70,000	86,000	108,000
6.2	6	65 mph	Prime Arterial	22,200	37,000	44,600	50,000	57,000
4.1A	4	55 mph	Major Road with Raised Median	14,800	24,700	29,600	33,400	37,000
4.1B			Major Road with Intermittent Turn Lanes	13,700	22,800	27,400	30,800	34,200
4.2A	4	40 mph	Boulevard with Raised Median	5,700	12,500	19,000	27,000	32,500
4.2B			Boulevard with Intermittent Turn Lane	5,000	10,900	17,200	25,000	30,000
2.1A	2	45 mph	Community Collector with Raised Median	2,800	6,500	10,300	15,000	20,500
2.1B			Community Collector with Continuous Turn Lane	3,000	6,000	9,500	13,500	19,000
2.1C			Community Collector with Intermittent Turn Lane	3,000	6,000	9,500	13,500	19,000
2.1D			Community Collector with Improvement Options	3,000	6,000	9,500	13,500-15,000	19,000
2.1E			Community Collector	1,900	4,100	7,100	10,900	16,200
2.2A	2	40 mph	Light Collector with Raised Median	3,000	6,000	9,500	13,500	19,000
2.2B			Light Collector with Continuous Turn Lane	3,000	6,000	9,500	13,500	19,000
2.2C			Light Collector with Intermittent Turn Lanes	3,000	6,000	9,500	13,500	19,000
2.2D			Light Collector with Improvement Options	3,000	6,000	9,500	13,500	19,000
2.2E			Light Collector	1,900	4,100	7,100	10,900	16,200
2.2F			Light Collector with Reduced Shoulder	1,550	3,300	5,600	8,700	16,200
2.3A	2	35 mph	Minor Collector with Raised Median	1,400	3,000	5,100	8,000	12,900
2.3B			Minor Collector with Intermittent Turn Lane	1,400	3,000	5,100	8,000	12,900
2.3C			Minor Collector	1,350	2,700	4,500	7,000	11,300

[1] No. refers to road classification number. These numbers also correlate to the County's Public Road Standards, which provides additional criteria for these road types, such as design speed and threshold capacity.

Note: The LOS thresholds for Mobility Element road classifications reflect those in place when EIR traffic modeling was conducted. Some LOS thresholds are subject to change with the revision to the County Public Road Standards (The Standards). However, the 2009 revisions to The Standards will not change the LOS D operational threshold of any road classification. The standard of LOS D for Mobility Element roads and the LOS D operational thresholds were adopted by the Board of Supervisors.

Source: Wilson and Company 2009a

Table 2.15-20. Proposed Roadway Lane Miles by LOS

CPA/ Subregion	Lane Miles											
	LOS A-C			LOS D			LOS E			LOS F		
	State Hwy	ME Roads	Total	State Hwy	ME Roads	Total	State Hwy	ME Roads	Total	State Hwy	ME Roads	Total
Northwestern Communities												
Bonsall	4	73	77	1	4	5	3	7	10	9	-	9
Fallbrook	23	79	102	2	46	48	-	23	23	1	4	5
North County Metro	15	155	170	-	35	35	0	6	6	-	5	5
Pala/Pauma Valley	49	36	85	6	8	14	2	2	4	4	-	4
Pendleton/De Luz	-	42	42	-	15	15	-	-	-	-	-	-
Rainbow	-	13	13	-	3	3	-	1	1	-	2	2
San Dieguito	-	52	52	-	19	19	-	11	11	-	24	24
Valley Center	-	111	111	-	54	54	-	11	11	-	14	14
Northwestern Subtotal	91	561	652	9	184	193	5	61	66	14	49	63
Southwestern Communities												
Alpine	-	80	80	-	13	13	-	9	9	-	7	7
County Islands	-	1	1	-	-	-	-	3	3	-	-	-
Crest/Dehesa	-	53	53	-	10	10	-	-	-	-	-	-
Jamul/Dulzura	13	94	107	23	3	26	4	3	7	14	-	14
Lakeside	19	132	151	3	26	29	3	8	11	6	14	20
Otay	-	48	48	-	13	13	-	-	-	-	0	0
Ramona	54	115	169	9	29	38	1	4	5	2	4	6
Spring Valley	-	35	35	-	20	20	-	4	4	-	3	3
Sweetwater	-	17	17	-	9	9	-	1	1	-	-	-
Valle de Oro	5	74	79	0	14	14	5	5	10	-	5	5
Southwestern Subtotal	91	649	740	35	137	172	13	37	50	22	33	55
Eastern Communities												
Central Mountain	43	143	186	-	3	3	-	-	-	-	-	-
Desert	60	255	316	-	6	6	-	4	4	-	1	1
Julian	35	25	60	-	-	-	-	-	-	-	-	-
Mountain Empire	44	142	185	13	3	16	5	-	5	9	-	9
North Mountain	124	110	234	-	10	10	-	-	-	-	-	-
Eastern Subtotal	306	675	981	13	22	35	5	4	9	9	1	10
Total	**488**	**1,885**	**2,373**	**57**	**343**	**400**	**23**	**102**	**125**	**45**	**83**	**128**

Note: Due to rounding, numbers may not exactly match those in Appendix G.
Source: Wilson and Company 2009a

Table 2.15-21. Proposed Project Deficient Facilities (LOS E/F) by Community

CPA/Subregion	Facility Type	Roadway	Segment Limits	Classification [(1)]	ADT	LOS	Mitigated Classification
Northwestern Communities							
Bonsall	State Hwy	Mission Road/SR-76	Oceanside/County Boundary to Vista Way	4-Ln State Highway	58,800	F	6-Ln State Highway
		Mission Road/SR-76	Vista Way to Holly Lane	4-Ln State Highway	45,600	E	6-Ln State Highway
		Mission Road/SR-76	Holly Lane to North River Road	4-Ln State Highway	45,600	E	6-Ln State Highway
		Mission Road/SR-76	North River Road to Via Montellano	4-Ln State Highway	56,300	F	6-Ln State Highway
		Mission Road/SR-76	Via Montellano to Mission Road	4-Ln State Highway	57,800	F	6-Ln State Highway
	ME Road	Old Highway 395	Dublin (W) Road to West Lilac Road	2.1D	16,300	E	4.2B
		Old Highway 395	West Lilac Road to I-15 South Bound Ramps	2.1D	15,900	E	4.2B
Fallbrook	State Hwy	Pala Road/SR-76	Old Highway 395 to I-15 SB Ramps	4-Ln State Highway	37,700	F	6-Ln State Highway
	ME Road	Alvarado Street	Main Avenue to Olive Avenue	2.2C	14,600	E	2.1D
		Del Luz Road	Dougherty Street to Mission Road	2.2C	14,200	E	2.1D
		Fallbrook Street	Main Avenue to Olive Avenue	2.2B	14,800	E	2.1D
		Mission Road	Vine Street to Brandon Road	2.2B	15,000	E	2.1D
		Mission Road	Hamilton Lane to Live Oak Park Road	4.2B	29,400	E	4.1B
		Mission Road	Live Oak Park Road to Old Hwy 395	4.2B	34,200	F	4.1A
		Mission Road	Old Highway 395 to I-15 South Bound Ramps	4.1B	41,300	F	6.2
		Mission Road	I-15 South Bound Ramps to I-15 North Bound Ramps	4.1B	34,000	E	6.2
		Old Highway 395	White Lilac Road to Mission Road	2.1D	21,100	F	4.2B
		Old Highway 395	Mission Road to Reche Road	2.1A	19,400	E	4.2B
		Old Highway 395	Reche Road to Stewart Canyon Road	2.1A	22,200	F	4.2B

Table 2.15-21 (Continued)

CPA/Subregion	Facility Type	Roadway	Segment Limits	Classification [(1)]	ADT	LOS	Mitigated Classification
Fallbrook	ME Road	Old Highway 395	Stewart Canyon Road to Pala Mesa Drive	2.1A	17,400	E	4.2B
		Old Highway 395	Pala Road to Dublin (E) Road	2.1D	14,800	E	2.1A
		Old Highway 395	Dublin (E) Road to Dublin (W) Road	2.1D	16,900	F	4.2B
		Pala Mesa Drive	Daisy Lane to Old Highway 395	2.2F	11,000	E	2.2C
		Pala Mesa Drive	Old Highway 395 to Pankey Road	2.2F	17,400	F	4.2B
		Pankey Road	Pala Mesa Drive to Pala Road	2.1A	15,800	E	4.2B
		Reche Road	Fallbrook Street to Green Canyon Road	2.2C	14,100	E	2.1D
		Pepper Tree Lane	Mission Road to Woodbrook Lane	2.2E	14,300	E	2.1D
North County Metro	ME Road	Deer Springs Road	Mesa Rock Road to I-15 North Bound Ramps	6.2	53,700	E	6.1
		Deer Springs Road	I-15 North Bound Ramps to North Centre City Parkway	4.1B	46,500	F	6.2
		Mountain Meadow Road	North Broadway to Alps Lane	2.1D	20,900	F	4.2B
		Bear Valley Parkway	Eldorado Drive to San Pasqual Valley Road	4.1A	36,000	E	6.2
Pala / Pauma	State Hwy	Pala Road/SR-76	Pala Del Norte Road to 6th Street	2-Ln State Highway	24,300	F	4-Ln State Highway
		Pala Road/SR-76	6th Street to Pala Temecula Road	2-Ln State Highway	22,400	E	4-Ln State Highway
		Pala Road/SR-76	Pala Temecula Road to 1st Street	2-Ln State Highway	22,800	F	4-Ln State Highway
		Pala Road/SR-76	Pala Mission Road to Lilac Road	2-Ln State Highway	17,000	E	4-Ln State Highway
	ME Road	Valley Center Road	Omish Road to Paradise Creek	2.1D	15,500	E	4.2B
Rainbow	ME Road	Old Highway 395	5th Street to Rainbow Valley Road	2.2D	19,200	F	4.2B
		Old Highway 395	Rainbow Valley Road to New Rainbow Valley Road	2.1D	20,500	F	4.2B
		Old Highway 395	New Rainbow Valley Road to White Lilac	2.1D	20,800	F	4.2B

Table 2.15-21 (Continued)

CPA/Subregion	Facility Type	Roadway	Segment Limits	Classification [1]	ADT	LOS	Mitigated Classification
San Dieguito	ME Road	Del Dios Highway	Via Rancho Parkway to El Camino Del Norte	2.1D	31,200	F	4.1A
		Paseo Delicias	El Camino del Norte to El Montevideo	2.2B	24,100	F	4.2B
		Paseo Delicias	El Montevideo to Via De La Valle	2.2B	23,600	F	4.2B
		Paseo Delicias	Via De La Valle to La Granada	2.2A	14,900	E	2.1A
		El Camino Del Norte	Aliso Canyon Road to Del Dios Hwy/Paseo Delicias	2.2F	13,500	E	2.2C
		La Bajada	El Mirlo to Los Morros	2.2F	25,800	F	4.2A
		La Granada	Los Morros to Rambla De Las Flores	2.2F	25,800	F	4.2A
		La Granada	Rambla De Las Flores to Avenida De Acacias	2.2F	15,200	E	4.2B
		La Granada	Avenida De Acacias to Paseo Delicias	2.2F	17,100	F	4.2B
		Linea Del Cielo	El Camino Real to Rambla De Las Flores	2.2F	11,200	E	2.2C
		Via De la Valle	El Camino Real to Las Palomas	2.1E	24,500	F	4.2B
		Via De la Valle	Las Palomas to Calzada Del Bosque	2.1E	25,400	F	4.2A
		Via De la Valle	Calzada Del Bosque to Via de Santa Fe	2.1E	25,400	F	4.2A
		Via De la Valle	Via de Santa Fe to Paseo Delicias	2.1E	16,100	E	4.2B
		El Apajo	Villa De La Valle to Via De Santa Fe	2.1A	16,800	E	4.2B
		San Dieguito Road	El Apajo to Circa Oriente	2.1A	17,500	E	4.2B
Valley Center	ME Road	Mountain Meadow Road/ Mirar De Valle Road	Alps Ln to Burnt Mountain Road	2.1D	27,600	F	4.1B
		Mountain Meadow Road/ Mirar De Valle Road	Burnt Mountain to Red Ironbark Drive	2.1D	27,600	F	4.1B
		Mountain Meadow Road/ Mirar De Valle Road	Red Ironbark Drive to Cypress Ridge	2.1D	27,600	F	4.1B
		Lilac Road	Cypress Ridge to Valley Center Road	4.2A	38,100	F	6.2
		Valley Center Road	Sunday Drive to Lilac Road	4.2A	28,400	E	4.1B
		Valley Center Road	Lilac Road to Canyon Road	4.1A	38,600	F	6.2
		Valley Center Road	Canyon Road to New Southern Pass	4.1A	38,600	F	6.2
		Valley Center Road	New Southern Pass to Miller Road	4.1A	38,600	F	6.2

Table 2.15-21 (Continued)

CPA/Subregion	Facility Type	Roadway	Segment Limits	Classification [1]	ADT	LOS	Mitigated Classification
Valley Center	ME Road	Valley Center Road	Miller Road to Indian Creek Road	4.2A	38,600	F	6.2
		Valley Center Road	Highpoint Drive to Round Tree Road	2.1D	18,800	E	4.2B
		Valley Center Road	North Lake Wolford Road to Paradise Creek	2.1D	15,700	E	4.2B
		Wood Valley Road	Oakmont Road to Augusta Drive	2.1A	17,500	E	4.2B
		Wood Valley Road	Augusta Drive to Karibu Lane	2.2C	14,100	E	4.2B
Southwestern Communities							
Alpine	ME Road	Alpine Boulevard	Tavern Road to Boulders Road	2.2A	14,700	E	2.1A
		Alpine Boulevard	Boulders Road to Alpine Special Treatment Center	2.2A	20,400	F	4.2B
		Alpine Boulevard	Alpine Special Treatment Center to West Victoria Drive	2.2A	15,300	E	4.2B
		Alpine Boulevard	West Victoria Drive to Bay Meadows Drive	2.2A	22,900	F	4.2B
		Alpine Boulevard	Bay Meadow Drive to Viejas View Place	2.2A	16,200	E	4.2B
		Alpine Boulevard	Viejas View Place to Willows Road	2.1D	20,300	F	4.2B
		Alpine Boulevard	Willows Road to Viejas Row	2.1E	12,700	E	2.1C
		South Grade Road	Eltinge Drive to Olive View Road	2.2C	15,600	E	4.2B
		Viejas Row	Willows Road to Alpine Boulevard	4.1A	63,500	F	6.1
		Willows Road	Alpine Boulevard to Otto Avenue	2.2C	17,600	E	4.2B
		Willows Road	Otto Avenue to Viejas Grade Road	2.2C	20,500	F	4.2B
		Tavern Road	I-8 East Bound Ramps to Alpine Boulevard	4.1A	35,700	E	6.2
County Island	ME Road	Pomerado Road	I-15 North Bound Ramps to Willow Creek Road	4.1A	34,800	E	6.2
Jamul / Dulzura	State Hwy	Campo Road/SR-94	Steele Canyon High School to Fair Acres Lane	2-Ln State Highway	28,800	F	4-Ln State Highway
		Campo Road/SR-94	Fair Acres Lane to Steel Canyon Road	2-Ln State Highway	25,500	E	4-Ln State Highway
		Campo Road/SR-94	Steel Canyon Road to Lyons Valley Road	2-Ln State Highway	30,700	F	4-Ln State Highway
		Campo Road/SR-94	Lyons Valley Road to Melody Road	2-Ln State Highway	20,300	E	4-Ln State Highway

Table 2.15-21 (Continued)

CPA/Subregion	Facility Type	Roadway	Segment Limits	Classification [(1)]	ADT	LOS	Mitigated Classification
Jamul / Dulzura	State Hwy	Campo Road/SR-94	Barrett Lake Road to Tecate Sub-Group Area Boundary	2-Ln State Highway	19,500	F	4-Ln State Highway
	ME Road	Lyons Valley Road	Campo Road to Skyline Truck Trail	2.2D	17,200	E	4.2B
Lakeside	State Hwy	SR-67	Poway/County Boundary to Scripps Poway Parkway	4-Ln State Highway	35,800	F	6-Ln State Highway
		SR-67	Scripps Poway Parkway to Sycamore Park	4-Ln State Highway	45,100	F	6-Ln State Highway
		SR-67	Johnson Lake Road to Posthill Road	4-Ln State Highway	44,500	E	6-Ln State Highway
		SR-67	Willow Road to Lakeside Avenue	4-Ln State Highway	43,300	E	6-Ln State Highway
		SR-67	Lakeside Avenue to Mapleview Street	4-Ln State Highway	55,300	F	6-Ln State Highway
	ME Road	Maine Avenue	Mapleview Street to Lakeshore Drive	2.2E	15,400	E	4.2B
		Maine Avenue	Lakeshore Drive to Parkside Street	2.2E	16,300	F	4.2B
		Maine Avenue	Parkside Street to Woodside Avenue	2.2E	14,300	E	4.2B
		Los Coches Road	Woodside Avenue to Julian Avenue	2.1D	17,300	E	4.2B
		Los Coches Road	Del Sol Road to I-8 Business Route	2.1D	17,700	E	4.2B
		Willow Road	SR-67 to Ashwood Street	2.2E	15,300	E	4.2B
		Wildcat Canyon Road	Willow Road to Lakeside/Ramona CPA Boundary	2.1D	34,900	F	6.2
		Mapleview Street	Maine Avenue to Ashwood Street	4.1A	39,300	F	6.2
		Lake Jennings Park Road	Jenning Vista Drive to I-8 Business Route	4.1B	31,400	E	6.2
		Lake Jennings Park Road	I-8 Business Route to I-8 West Bound Off-Ramp	4.1B	37,800	F	6.2
		Lake Jennings Park Road	I-8 West Bound Off-Ramp to I-8 East Bound Off-Ramp	4.1B	32,000	E	6.2
		Woodside Avenue	SR-67 North Bound Off-Ramp to Riverford Road	4.2A	29,700	E	4.1B
Otay	ME Road	Siempre Viva Road	SR-11 East Bound Ramps to Loop Road	4.1A	39,400	F	6.2

Table 2.15-21 (Continued)

CPA/Subregion	Facility Type	Roadway	Segment Limits	Classification [1]	ADT	LOS	Mitigated Classification
Ramona	State Hwy	Julian Rd/SR-67	Mussey Grade Road to Highland Valley Road	4-Ln State Highway	28,700	F	6-Ln State Highway
		Main Street/SR-78	9th Street to 11th Street	4-Ln State Highway	31,000	E	6-Ln State Highway
		Julian Road/SR-78	3rd Street to Earlham Street	2-Ln State Highway	17,400	E	4-Ln State Highway
	ME Road	7th Street	Elm Street to A Street	2.2E	14,900	E	2.1D
		7th Street	Main Street to D Street	2.2E	15,400	F	4.2B
		San Vicente Road	H Street to 11th Street	2.1B	14,000	E	2.1D
		Wildcat Canyon Road	Harry Hertzberg Road to Lakeside/Ramona CPA Boundary	2.1D	34,900	F	6.2
Spring Valley	ME Road	Paradise Valley Road	Elkelton Boulevard to Sweetwater Road	4.1B	35,500	F	6.2
		Jamacha Road	SR-125 South Bound Ramps to SR-125 North Bound Ramps	4.1B	34,300	E	6.2
		Jamacha Road	SR-125 North Bound Ramps to Sweetwater Road	4.1B	39,900	F	6.2
		Bancroft Drive	Troy Street to SR-94 East Bound Ramps	2.2D	20,000	F	4.2B
		Kenwood Drive	Andreen Street to SR-94 East Bound Ramps	2.2D	14,600	E	2.1D
Sweetwater	ME Road	Briarwood Road	SR-54 West Bound Ramps to Robinwood Road	2.1D	18,700	E	4.2B
		Sweetwater Road	Willow Street to Orchard Hill Road	2.1A	15,900	E	4.2B
		Central Avenue	Sweetwater Road to San Miguel Road	2.2B	17,100	E	4.2B
Valle De Oro	State Hwy	Campo Road/SR-94	Avocado Boulevard to Jamacha Blvd	4-Ln State Highway	70,900	E	6-Ln State Highway
		Campo Road/SR-94	Jamacha Boulevard to Jamacha Road	4-Ln State Highway	79,600	E	6-Ln State Highway
	ME Road	Jamacha Road	Campo Road/SR-94 to Fury Lane	6.2	70,100	F	6.1
		Campo Road	Kenwood Drive to Conrad Drive	4.2B	47,500	F	6.2
		Fuerte Drive	Bancroft Drive to Lemon Avenue	2.1E	13,400	E	2.1C
		Fuerte Drive	Lemon Avenue to Grandview Drive	2.2E	19,300	F	4.2B
		Fuerte Drive	Grandview Drive to Avocado Boulevard	2.1E	14,300	E	2.1D

Table 2.15-21 (Continued)

CPA/Subregion	Facility Type	Roadway	Segment Limits	Classification [1]	ADT	LOS	Mitigated Classification
Eastern Communities							
Desert	ME Road	Borrego Springs Road	Diamond Bar Road to Tilting T Drive	2.2D	14,100	E	2.1D
		Palm Canyon Drive	Ocotillo Circle to Borrego Springs Road	2.2A	19,400	F	4.2B
Mountain Empire[2]	State Hwy	Tecate Road/SR-188	Campo Road to Airport Road	2-Ln State Highway	37,200	F	4-Ln State Highway
		Tecate Road/SR-188	Airport Road to Humphries Road	2-Ln State Highway	37,200	F	4-Ln State Highway
		Tecate Road/SR-188	Humphries Road to USA/Mexico Border	2-Ln State Highway	37,200	F	4-Ln State Highway
		Campo Road/SR-94	Tecate Sub-Group Area Boundary to Tecate Rd/ SR-188	2-Ln State Highway	23,400	F	4-Ln State Highway
		Campo Road/SR-94	Tecate Road to Potrero Valley Road	2-Ln State Highway	15,700	E	4-Ln State Highway

(1) Roadway classification definitions are provided above in Table 2.15-19.

(2) A technical memorandum dated 1/21/2009 was prepared by Kimley-Horn and Associates to evaluate the potential roadway deficiencies for the Referral Map in Tecate area of the unincorporated County. The findings in this memo were derived from the SANDAG Series 11 2030 model forecast in combination to an economic research/market demand study prepared by Tecate Sponsor Group in March of 2007. This technical memo along with Wilson & Company's (County Consultant) review memo can be found in Appendix A.

Source: Wilson and Company 2008a

Table 2.15-22. Sphere of Influence Comparison of Mobility Element Road Classifications for the Unincorporated County to Adjacent Cities

City	CPA/Subregion within SOI	Road Name (Segment)	City Road Classification	Number of Lanes	General Plan Update Classification	Number of Lanes	Consistent		
							Yes	Partially	No
Chula Vista	Sweetwater	Sweetwater Road (Plaza Bonita Center Way to Willow Street)	4 Lane Major	4	Major Road	4	X		
		Sweetwater Road (Willow Street to Briarwood Road)	Class I Collector (similar to Blvd)	4	Community Collector with Raised Median	2		X	
		Sweetwater Road (Briarwood to Bonita Road)	Class I Collector (similar to Blvd)	4	Light Collector with Improvement Options[5]	2		X	
		Sweetwater Road (Bonita Road to Spring Valley community boundary)	Class I Collector (similar to Blvd)	4	Light Collector	2			X
		Willow Street (Sweetwater Road to Chula Vista city limits)	4 Lane Major	4	Major Road	4	X		
		Plaza Bonita Road (Chula Vista city limits to Chula Vista city limits near I-805)	4 Lane Major	4	Major Road	4	X		
		Bonita Road (I-805 interchange to Central Avenue)	4 Lane Major	4	Major Road	4	X		
		Bonita Road (Central Avenue to Sweetwater Road)	Class I Collector (similar to Blvd)	4	Community Collector with Improvement Options[5]	2		X	
		Briarwood Road (SR-53 to Sweetwater Road)	Other Road	2	Community Collector with Improvement Options[5]	2	X		
		San Miguel Road (Bonita Road to Proctor Valley Road)	Other Road	2	Minor Collector	2	X		
		Central Avenue (Sweetwater Road to Corral Canyon Road)	Class I Collector (similar to Blvd)	4	Light Collector with Continuous Turn Lane (Bonita Road to Corral Canyon Road)	3			X
		Corral Canyon Road (Central Avenue to Chula Vista city limits)	Class I Collector (similar to Blvd)	4	Light Collector with Continuous Turn Lane	3			X

Table 2.15-22 (Continued)

City	CPA/Subregion within SOI	Road Name (Segment)	City Road Classification	Number of Lanes	General Plan Update Classification	Number of Lanes	Consistent		
							Yes	Partially	No
Chula Vista	Jamul-Dulzura	Proctor Valley Road (Chula Vista city limits to SR-94)	4 Lane Major	4	Light Collector	2			X
	Otay	Otay Lakes Road (Chula Vista city limits to second entrance to Otay Village 13)	6 Lane Prime	6	Major Road	4			X
El Cajon	Lakeside	Magnolia Avenue (Pepper Drive to Vernon Way)	Secondary	4	Major Road	4	X		
		Graves Avenue (Pepper Drive to Bradley Avenue)	Collector	2	Major Road	4			X
		Graves Avenue (Bradley Avenue to El Cajon city limits)	Primary	6	Light Collector	2			X
		Pepper Drive (Graves Avenue to Bradley Avenue)	Collector	2	Light Collector	2	X		
		Pepper Drive (Bradley Avenue to Winter Gardens Boulevard)	Primary	6	Major Road	4			X
		Pepper Drive (Winter Gardens Boulevard to El Cajon city limits)	Primary	6	Light Collector	2			X
		Bradley Avenue (N. Magnolia Ave to N. 1st St)	Primary	6	Major Road	4			X
		Greenfield Drive (El Cajon city limits to El Cajon city limits [near Mollison Avenue] and El Cajon city limits to Pepper Drive)	Secondary	4	Light Collector with Continuous Turn Lane	3			X
		Ballantyne Street (Hart Drive to Greenfield Drive)	Primary	6	Boulevard	4			X
		North Mollison Avenue (El Cajon city limits to Pepper Drive)	Secondary	4	Light Collector	2			X
		North First Street (Sumner Ave to Pepper Drive)	Secondary	4	Light Collector	2			X
		Oro Street (El Cajon city limits to El Cajon city limits [near Greenfield Ave])	Collector	2	Light Collector	2	X		
El Cajon	Crest-Dehesa	Greenfield Drive (El Cajon city limits to East Madison Avenue)	Primary	6	Major Road	4			X

Table 2.15-22 (Continued)

City	CPA/Subregion within SOI	Road Name (Segment)	City Road Classification	Number of Lanes	General Plan Update Classification	Number of Lanes	Consistent		
							Yes	Partially	No
		La Cresta Road (Greenfield Drive to Carob Tree Lane)	Primary	6	Community Collector with Improvement Options[(5)]	2			**X**
		Granite Hills Drive (El Cajon city limits to Melody Lane)	Secondary	4	Major Road	4	**X**		
Escondido	North County Metro	Deer Springs Road (Escondido SOI boundary to Mesa Rock Road)	Major Road	6	Prime Arterial	6	**X**		
		Mesa Rock Road (Deer Springs Road to North Centre City Parkway)	Local Collector	2	Light Collector	2	**X**		
		North Centre City Parkway (Mountain Meadow Road to Escondido city limits [near Nutmeg Street])	Collector	4	Major Road	4	**X**		
		Jesmond Dene Road (Centre City Parkway to North Broadway)	Local Collector	2	Light Collector	2	**X**		
		North Broadway (Mountain Meadow Road to North Avenue)	Collector	4	Community Collector with Improvement Options[(5)]	2		**X**	
		Mountain Meadow Road (I-15 to North Broadway)	Collector	4	Major Road	4	**X**		
		Mirar de Valle Road/Alps Way (North Broadway to Burnt Mountain Road)	Collector	4	Community Collector with Improvement Options[(5)]	2		**X**	
		Rock Springs Road (San Marcos city limits to Escondido city limits)	Collector	4	Major Road	4	**X**		
		Nordahl Road (Rock Springs Road to El Norte Parkway)	Major Road	4	Major Road	4	**X**		
		El Norte Parkway (Reese Road to El Norte Parkway)	Major Road	4	Major Road	4	**X**		
Escondido	North County Metro	North Ash Street (Escondido city limits [near Collins Terrace] to Hubbard Avenue])	Collector	4	Community Collector with Improvement Options[(5)]	2		**X**	

Table 2.15-22 (Continued)

City	CPA/Subregion within SOI	Road Name (Segment)	City Road Classification	Number of Lanes	General Plan Update Classification	Number of Lanes	Consistent		
							Yes	Partially	No
		Del Dios Highway (Escondido city limits to Via Rancho Parkway)	Major Road	6	Major Road	4			X
		Del Dios Highway (South of Via Rancho Parkway to Escondido city limits)	Major Road	6	Community Collector with Improvement Options[(5)]	2			X
		Via Rancho Parkway (Del Dios Highway to Montesano Road)	Major Road	4	Major Road	4	X		
		Felicita Road (Hamilton Lane to Via Rancho Parkway)	Collector	4	Light Collector	2			X
		Gamble Lane (Escondido city limits [near Mountain Hills Place] to Escondido city limits [near Felicita Road])	Major Road	4	Major Road	4	X		
		Sunset Drive (Escondido city limits to Bear Valley Parkway)	Local Collector	2	Light Collector	2	X		
		17th Avenue (Escondido city limits to San Pasqual Valley Road)	Collector	4	Light Collector with Improvement Options[(5)]	2		X	
		Idaho Avenue (Escondido city limits [near Pedregal Drive] to Bear Valley Parkway)	Local Collector	2	Light Collector with Improvement Options[(5)]	2		X	
		San Pasqual Valley Road (SR-78) (Birch Avenue to Cloverdale Road)	Major Road	4	Major Road	4	X		
		Bear Valley Parkway (Austin Way to Encino Drive)	Major Road	4	Major Road	4	X		
		Citrus Avenue (Escondido city limits [near Coltrane Place] to San Pasqual Valley Road)	Local Collector	2	Light Collector	2	X		
		Mountain View Drive (Royal Oak Drive to Cloverdale Road)	Local Collector	2	Light Collector	4	X		
Escondido	North County Metro	Mary Lane/Summit Drive (Escondido city limits [near Jasmine Place] to San Pasqual Valley Road)	Local Collector	2	Community Collector	2	X		

Table 2.15-22 (Continued)

City	CPA/Subregion within SOI	Road Name (Segment)	City Road Classification	Number of Lanes	General Plan Update Classification	Number of Lanes	Consistent		
							Yes	Partially	No
		San Pasqual Road (San Pasqual Valley Road to Bear Valley Parkway [excluding portions with Escondido city limits])	Major Road	4	Major Road	4	X		
		Lake Wohlford Road (Valley Center Road to Valley Center boundary)	Local Collector	2	Light Collector	2	X		
	North County Metro/ Valley Center	Valley Center Road (Valley Center community boundary to Escondido city limits)	Prime Arterial	8	Major Road	4			X
Lemon Grove[(1)]	Spring Valley	Sweetwater Road (Blossom Lane to Jamacha Road)	Undesignated	2	Major Road	4			X
National City	County Island of Lincoln Acres	Euclid Avenue (National City limits to Sweetwater Road)	Arterial	4	Major Road	4	X		
		Sweetwater Road (Entire length within Lincoln Acres County Island)	Arterial	4	Prime Arterial	6			X
Poway	Lakeside	Scripps Poway Parkway (Poway city limits to SR-67)	Prime Arterial	6	Prime Arterial	6	X		
		State Route 67 (Poway city limits to Scripps Poway Parkway)	Major Roadway	4	Major Road	4	X		
San Diego	County Islands of Scripps-Miramar	Pomerado Road (I-15 to San Diego city limits)	Prime Arterial	6	Major Road	4			X
San Marcos	North County Metro	N. Twin Oaks Valley Road (San Marcos city limits to Twin Oaks Crest Drive)	Prime Arterial	6	Light Collector	2			X
		Buena Creek Road (Bluebird Canyon Road to San Marcos city limits)	Secondary Arterial	4	Major Road	4	X		
San Marcos	North County Metro	Deer Springs Road(San Marcos city limits [near Twin Oaks Valley Road] to San Marcos SOI boundary [near I-15])	Rural Major Arterial	4	Prime Arterial	6			X
San Marcos	North County Metro	Rancho Santa Fe Road (Melrose Drive [Vista] to San Marcos Boulevard [San Marcos])	Prime Arterial	6	Prime Arterial	6	X		

Table 2.15-22 (Continued)

City	CPA/Subregion within SOI	Road Name (Segment)	City Road Classification	Number of Lanes	General Plan Update Classification	Number of Lanes	Consistent		
							Yes	Partially	No
Vista[2]	Bonsall	East Vista Way (Vista city limits to Mason Road)	Major Road[4]	4	Major Road	4	X		
		Osborne Street (Vista city limits to East Vista Way)	N/A[2]	-	Light Collector with Raised Median	2			
	North County Metro	Sunset Drive (Oceanside city limits [near Sky Haven Lane] to Vista city limits [near Melrose Drive])	N/A[2]	-	Light Collector	2			
		Mar Vista Drive (Cannon Road [Oceanside] to Mar Vista Drive [Vista])	2 lane[3] w/ Continuous Turn Lane	3	Light Collector	2		X	
		Foothill Drive (Vista city limits to Monte Vista Drive)	Community Collector[3]	2	Light Collector with Improvement Options[5]	2		X	
		Monte Vista Drive (Vista city limits to Buena Creek Road)	Community Collector[3]	2	Major Road	4			X
		South Santa Fe Avenue (Vista city limits to San Marcos city limits)	N/A[2]	-	Major Road	4			
		Buena Creek Road (South Santa Fe Avenue to Monte Vista Drive)	N/A[2]	-	Major Road	4			
Vista[2]	North County Metro	Sycamore Avenue (South Santa Fe Avenue to SR 78)	Prime Arterial[4]	6	Prime Arterial	6	X		
		Smilax Road (San Marcos city limits [near Oleander Avenue] to South Santa Fe Avenue)	N/A[2]	-	Major Road	4			

(1) Lemon Grove's Circulation Element does not include Sweetwater Road.
(2) Vista's Circulation Element does not include roads within their SOI. They are in the process of updating their GP, which will include roads within the SOI.
(3) Circulation Element designations provided in Vista's comment letter on County Draft General Plan.
(4) Road classification from Vista's GP for road within city boundary that has a direct connection to County Mobility Element road.
(5) This County Mobility Element classification reserves the right-of-way for a four-lane road.

Source: DPLU 2009

Table 2.15-23. SANTEC/ITE Measures of Significant Project Traffic Impacts

LOS with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min.)
E & F (or ramp meter delays greater than 15 minutes)	0.01	1	0.02	1	2	2

Source: Wilson and Company 2009b

Table 2.15-24. Significant Traffic Impacts to Adjacent Cities Resulting from the Proposed Project

Roadway	Segment	Existing			General Plan Update			Δ in V/C
		ADT	V/C	LOS	ADT	V/C	LOS	
Carlsbad								
No Significant Impacts								
Chula Vista								
Bonita Road	Bonita Glen Dr to I-805 South Bound Ramps	34,300	0.91	**E**	37,800	1.01	**F**	0.10
	I-805 South Bound Ramps to I-805 North Bound Ramps	54,000	1.44	**F**	55,500	1.48	**F**	0.04
	I-805 North Bound Ramps to Plaza Bonita Rd	42,400	1.13	**F**	43,500	1.16	**F**	0.03
	Plaza Bonita Rd to Willow St	30,300	0.81	**D**	33,900	0.90	**E**	0.09
	Willow St to Chula Vista City Limit	32,500	0.87	**D**	39,000	1.04	**F**	0.17
Del Mar								
No Significant Impacts								
El Cajon								
Jamacha Road	Main Street to Granite Hill Dr	35,000	0.88	**E**	37,000	0.93	**E**	0.05
2nd Street	Persimmon Avenue to Broadway	32,000	0.80	D	36,100	0.90	**E**	0.10
	Broadway to I-8 West Bound Ramps	33,500	0.84	D	38,900	0.97	**E**	0.13
Encinitas								
Rancho Santa Fe Road	Manchester Ave to Eastern City Limit	22,700	1.15	**F**	24,500	1.23	**F**	0.08
Escondido								
Centre City Parkway	Centre City Rd to Brotherton Rd	39,400	1.06	**F**	43,400	1.17	**F**	0.11
	Brotherton Rd to Citracado Parkway	32,600	0.88	**D-**	34,200	0.92	**E**	0.04
Felicita Avenue/17th Avenue	Escondido Blvd to Centre City Parkway	27,000	0.79	C	29,700	0.87	**D-**	0.08
Bear Valley Parkway	San Pasqual Road to Mary Lane	27,900	0.75	C	35,300	0.95	**E**	0.20
La Mesa								
Fuerte Drive	Grossmont Dr to Avocado Blvd	15,700	1.57	**F**	18,500	1.85	**F**	0.28

Table 2.15-24 (Continued)

Roadway	Segment	Existing			GP Update			Δ in V/C
		ADT	V/C	LOS	ADT	V/C	LOS	
Lemon Grove								
No Significant Impacts								
National City								
No Significant Impacts								
Oceanside								
No Significant Impacts								
Poway								
Poway Road	Iola Way to Oak Knoll Rd	27,300	0.68	C	40,000	1.00	**F**	0.32
	Oak Knoll Rd to Pomerado Rd	36,000	0.90	**E**	39,600	0.99	**E**	0.09
	Pomerado Rd to Carriage Rd	33,500	0.84	D	37,500	0.94	**E**	0.10
	Carriage Rd to Community Rd	36,500	0.91	**E**	40,000	1.00	**F**	0.09
	Espola Road to SR-67	18,800	1.88	**F**	20,100	2.01	**F**	0.13
Scripps Poway Parkway	Springbrook Dr to Community Rd	49,400	0.82	C	56,600	0.94	**E**	0.12
San Diego								
Rancho Bernardo Road	Via Del Campo to W. Bernardo Dr	23,700	0.59	C	35,800	0.90	**E**	0.31
	West Bernardo Dr to I-15	47,400	1.19	**F**	56,100	1.40	**F**	0.21
Scripps Poway Parkway	I-15 to Spring Canyon Road	52,900	0.88	D	61,600	1.03	**F**	0.15
Via de la Valle	I-15 North Bound Ramps to San Andres Dr	37,700	0.94	**E**	43,100	1.08	**F**	0.14
	San Andres Dr to El Camino Real	22,500	2.25	**F**	26,500	2.65	**F**	0.40
Airway Road	Michael Faraday Dr to SR-905	6,600	0.66	C	17,500	1.75	**F**	1.09
Siempre Viva Road	SR-125 to Enrico Fermi Dr	19,400	0.39	A	59,300	1.19	**F**	0.80
San Marcos								
Las Posas Road	SR-78 West Bound Ramps to Grand Ave	37,700	0.75	D	56,500	1.13	**F**	0.38
	Grand Ave to Vista Dr	15,900	0.53	C	31,500	1.05	**F**	0.52
	Vista Dr to Stone Dr	12,100	0.40	B	25,600	0.85	**E**	0.45
Santee								
Mast Boulevard	Shirley Garden to Magnolia Ave	21,700	0.72	D	27,400	0.91	**E**	0.19
Woodside Avenue	Magnolia Ave to SR-67	32,000	0.80	D	37,400	0.94	**E**	0.14
Solana Beach								
Lomas Santa Fe Drive	Solana Hills Dr to I-5 South Bound Ramps	31,700	0.79	D	37,000	0.93	**E**	0.14
Vista								
Sycamore Avenue	SR-78 East Bound Ramps to Hibiscus Way	48,900	0.82	D	54,600	0.91	**E**	0.09

Note: Bold lettering indicates deficient LOS
Source: Wilson and Company 2009a

Table 2.15-25. Cumulative Traffic Map Roadway Lane Miles by Community

CPA/Subregion	Lane Miles			
	State Highway	ME Roads	Local Public Roads	Total
Northwestern Communities				
Bonsall	17	83	22	122
Fallbrook	26	151	50	227
North County Metro	15	201	35	251
Pala/Pauma Valley	60	46	3	109
Pendleton/De Luz	0	58	2	60
Rainbow	0	19	0	19
San Dieguito	0	106	54	160
Valley Center	0	185	36	221
Northwestern Subtotal	118	849	202	1,169
Southwestern Communities				
Alpine	0	109	33	142
County Islands	0	4	0	4
Crest/Dehesa	0	63	9	72
Jamul/Dulzura	55	100	60	215
Lakeside	32	181	53	266
Otay	0	61	7	68
Ramona	65	152	52	269
Spring Valley	0	62	32	94
Sweetwater	0	28	8	36
Valle de Oro	11	97	34	142
Southwestern Subtotal	163	857	288	1,308
Eastern Communities				
Central Mountain	43	146	66	255
Desert	60	266	8	334
Julian	35	25	1	61
Mountain Empire	71	144	76	291
North Mountain	124	120	62	306
Eastern Subtotal	333	701	213	1,247
Total	**614**	**2,407**	**703**	**3,724**

Note: Due to rounding, numbers may not exactly match those in Appendix G.
Source: Wilson and Company 2009a

Table 2.15-26. Cumulative Traffic Map Roadway Lane Miles by LOS

CPA/Subregion	Lane Miles											
	LOS A-C			LOS D			LOS E			LOS F		
	State Hwy	ME Roads	Total	State Hwy	ME Roads	Total	State Hwy	ME Roads	Total	State Hwy	ME Roads	Total
Northwestern Communities												
Bonsall	2	69	72	3	8	11	1	7	8	11	-	11
Fallbrook	22	77	99	4	42	46	1	24	25	-	8	8
North County Metro	15	146	161	-	33	33	0	16	16	-	7	7
Pala/Pauma Valley	49	36	85	5	8	13	2	2	4	4	-	4
Pendleton/ De Luz	-	42	42	-	15	15	-	-	-	-	-	-
Rainbow	-	13	13	-	3	3	-	2	2	-	1	1
San Dieguito	-	51	51	-	20	20	-	11	11	-	24	24
Valley Center	-	106	106	-	53	53	-	12	12	-	14	14
Northwestern Subtotal	88	540	629	12	182	194	4	74	78	15	54	69
Southwestern Communities												
Alpine	-	73	73	-	13	13	-	14	14	-	8	8.3
County Islands	-	1	1	-	-	-	-	3	3	-	-	-
Crest/Dehesa	-	52	52	-	11	11	-	-	-	-	-	-
Jamul/Dulzura	18	94	112	18	2	20	8	4	12	11	-	10.6
Lakeside	16	132	148	7	23	30	3	11	14	6	14	20.0
Otay	-	55	55	-	6	6	-	-	-	-	0	0.3
Ramona	53	119	172	10	20	30	1	9	10	1	4	5.8
Spring Valley	-	36	36	-	19	19	-	5	5	-	3	2.8
Sweetwater	-	19	19	-	9	9	-	0	0	-	-	-
Valle de Oro	5	74	79	0	14	14	3	4	7	2	5	7.2
Southwestern Subtotal	92	655	747	35	117	152	15	50	65	20	34	55
Eastern Communities												
Central Mountain	43	143	186	-	3	3	-	-	-	-	-	-
Desert	61	253	314	-	6	6	-	7	7	-	-	-
Julian	35	25	60	-	-	-	-	-	-	-	-	-
Mountain Empire	44	141	185	-	3	3	13	-	13	14	-	14
North Mountain	124	110	234	-	10	10	-	-	-	-	-	-
Eastern Subtotal	307	672	979	-	22	22	13	7	20	14	-	14
Total	**487**	**1,867**	**2,355**	**47**	**321**	**368**	**32**	**131**	**163**	**49**	**88**	**138**

Note: Due to rounding, numbers may not exactly match those in Appendix G.
Source: Wilson and Company 2009a

Table 2.15-27. Cumulative Significant Traffic Impacts Existing Conditions vs. Existing General Plans

Roadway	Segment	Existing Conditions			Existing General Plan			Δ in V/C
		ADT	V/C	LOS	ADT	V/C	LOS	
Carlsbad								
No Significant Impacts								
Chula Vista								
Bonita Rd	Bonita Glen Dr to I-805 SB Ramps	34,300	0.91	**E**	37,700	1.01	**F**	0.10
	I-805 SB Ramps to I-805 NB Ramps	54,000	1.44	**F**	55,300	1.47	**F**	0.03
	I-805 NB Ramps to Plaza Bonita Rd	42,400	1.13	**F**	43,200	1.15	**F**	0.02
	Plaza Bonita Rd to Willow St	30,300	0.81	**D**	34,100	0.91	**E**	0.10
	Willow St to Chula Vista City Limit	32,500	0.87	**D**	34,100	0.91	**E**	0.04
Del Mar								
No Significant Impacts								
El Cajon								
Jamacha Rd	Main St to Granite Hill Dr	35,000	0.88	**E**	38,000	0.95	**E**	0.07
2nd St	Persimmon Ave to Broadway	32,000	0.80	D	39,000	0.98	**E**	0.18
Encinitas								
No Significant Impacts								
Escondido								
Centre City Pkwy	Centre City Rd to Brotherton Rd	39,400	1.06	**F**	43,100	1.16	**F**	0.10
	Brotherton Rd to Citracado Pkwy	32,600	0.88	**D-**	34,000	0.92	**E**	0.04
Felicita Ave/ 17th Ave	Escondido Blvd to Centre City Pkwy	27,000	0.79	C	29,900	0.87	**D-**	0.08
La Mesa								
No Significant Impacts								
Lemon Grove								
No Significant Impacts								
National City								
No Significant Impacts								
Oceanside								
No Significant Impacts								
Poway								
Poway Rd	Iola Way to Oak Knoll Rd	27,300	0.68	C	40,300	1.01	**F**	0.33
	Oak Knoll Rd to Pomerado Rd	36,000	0.90	**E**	39,900	1.00	**E**	0.10
	Pomerado Rd to Carriage Rd	33,500	0.84	D	37,800	0.95	**E**	0.11
	Carriage Rd to Community Rd	36,500	0.91	**E**	40,300	1.01	**F**	0.10
	Silver Ridge Rd to Espola Rd	12,900	0.86	D	13,700	0.91	**E**	0.05
	Espola Rd to SR-67	18,800	1.88	**F**	21,200	2.12	**F**	0.24
Scripps Poway Pkwy	Springbrook Dr to Community Rd	49,400	0.82	C	58,000	0.97	**E**	0.15

Table 2.15-27 (Continued)

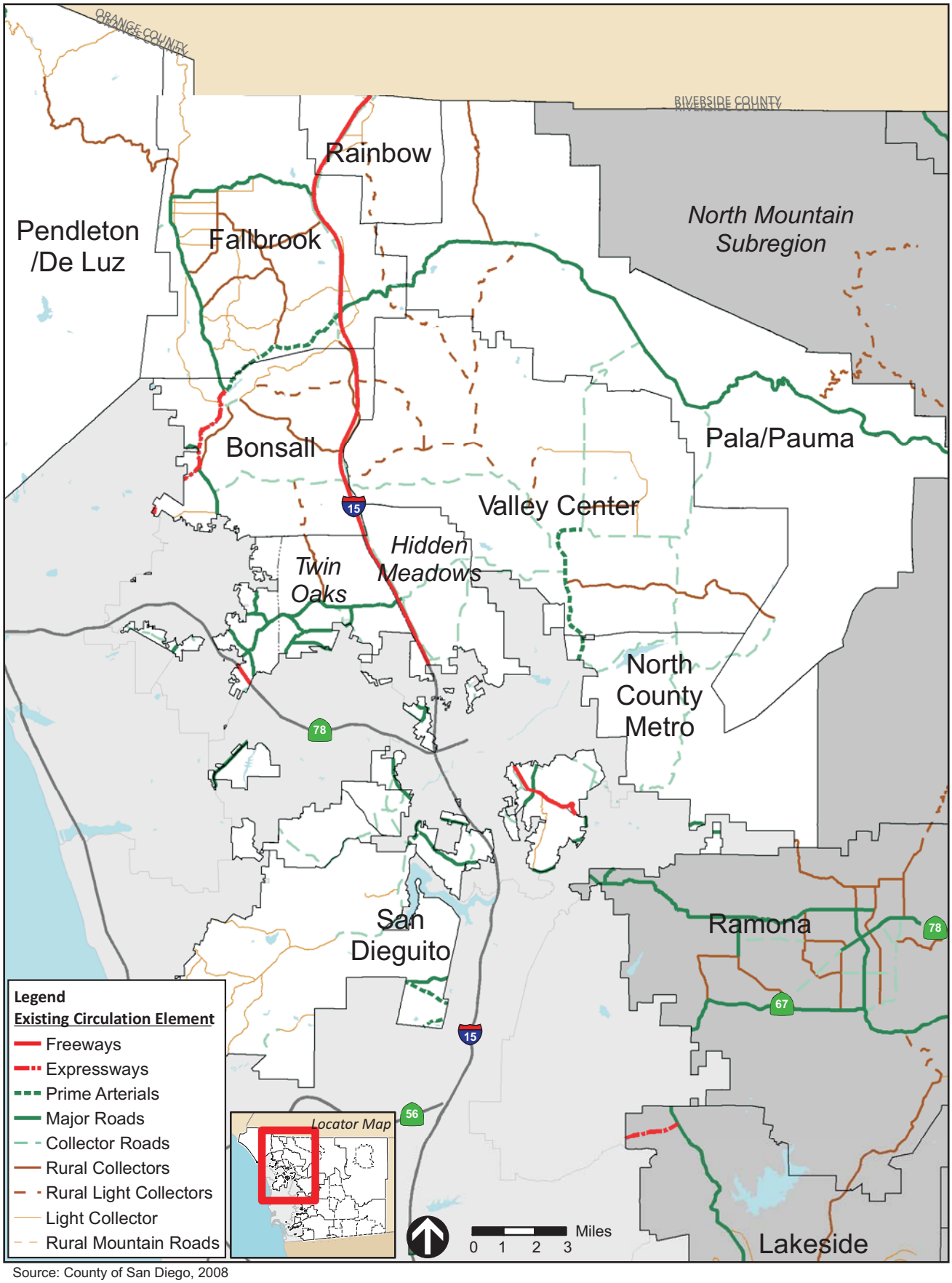
Roadway	Segment	Existing Conditions			Existing GP			Δ in V/C
		ADT	V/C	LOS	ADT	V/C	LOS	
San Diego								
Rancho Bernardo Rd	Via Del Campo to W. Bernardo Dr	23,700	0.59	C	36,700	0.92	**E**	0.33
	W. Bernardo Dr to I-15	47,400	1.19	**F**	56,900	1.42	**F**	0.23
Scripps Poway Pkwy	I-15 to Spring Canyon Rd	52,900	0.88	D	61,300	1.02	**F**	0.14
Via de la Valle	Jimmy Durante Blvd to I-15 NB Ramps	31,200	0.78	D	37,900	0.95	**E**	0.17
	I-15 NB Ramps to San Andres Dr	37,700	0.94	**E**	40,200	1.01	**F**	0.07
	San Andres Dr to El Camino Real	22,500	2.25	**F**	27,100	2.71	**F**	0.46
Airway Rd	Michael Faraday Dr to SR-905	6,600	0.66	C	16,100	1.61	**F**	0.95
Siempre Viva Rd	SR-125 to Enrico Fermi Dr	19,400	0.39	A	50,700	1.01	**F**	0.62
San Marcos								
Las Posas Rd	SR-78 WB Ramps to Grand Ave	37,700	0.75	D	55,500	1.11	**F**	0.36
	Grand Ave to Vista Dr	15,900	0.53	C	31,000	1.03	**F**	0.50
	Vista Dr to Stone Dr	12,100	0.40	B	25,100	0.84	**E**	0.44
Santee								
Mast Blvd	Shirley Garden to Magnolia Ave	21,700	0.72	D	25,900	0.86	**E**	0.14
Woodside Ave	Magnolia Ave to SR-67	32,000	0.80	D	37,700	0.94	**E**	0.14
Solana Beach								
Lomas Santa Fe Dr	Solana Hills Dr to I-5 SB Ramps	31,700	0.79	D	37,600	0.94	**E**	0.15
	I-5 SB Ramps to Via Mil Cumbres	28,300	0.71	C	36,100	0.90	**E**	0.19
Vista								
Sycamore Ave	SR-78 EB Ramps to Hibiscus Way	48,900	0.82	D	57,300	0.96	**E**	0.14

Δ in V/C = the change in the volume to capacity ratio between the two scenarios.
Note: **Bold** letters indicate deficient LOS.
Source: Wilson and Company 2009a

Table 2.15-28. Criteria for Accepting LOS E/F Roads

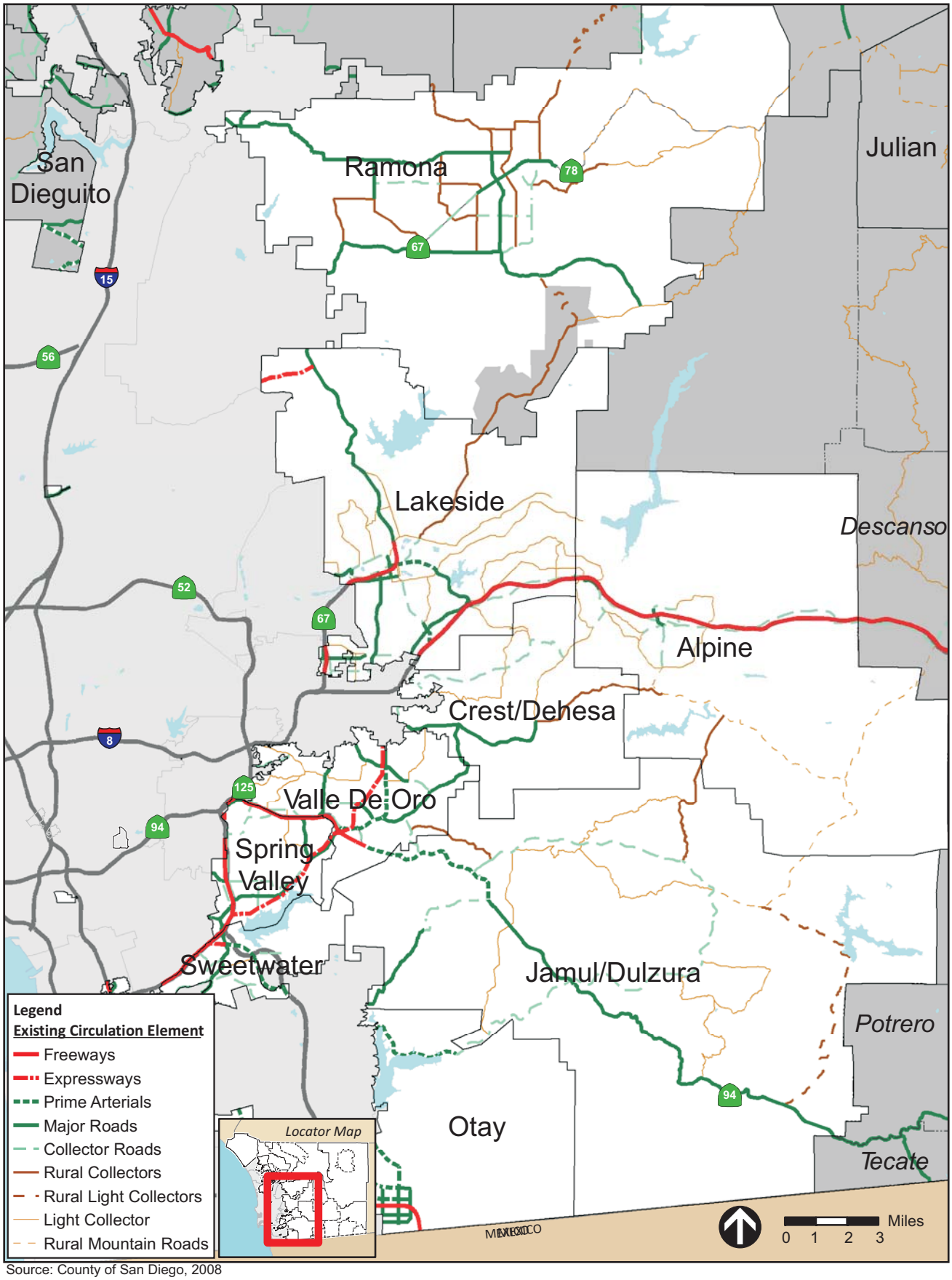
	Constraints	Criteria	Possible Options
Town Centers	Construction Costs Established Land Development Patterns	Within established or planned town center Community willing to accept a lower LOS Improvements would require removing a significant number of existing businesses or residences	Bypass roads when feasible Alternate routes for local residents Couplets to improve traffic flow Operational improvements Land use modifications, where feasible
Regional Connectivity	Construction Costs Environmental Impacts Established Land Development	Connects major interregional corridors Provides alternate routes to interregional corridors with failing LOS Improvements to increase capacity attract additional overflow traffic from interregional corridors and still produce failing LOS Improvements would have substantial impacts on environmental resources Community willing to accept a lower LOS	Region-wide solutions to housing and traffic problems Improvements to I-15 and regional arterials Wider ROW along routes that parallel I-15 and if needed to minimize impacts to local roads
Marginal Deficiencies	Environmental Impacts Construction Costs Established Land Development	Only a short segment of the road fails Underutilized, alternate routes exist	Operational improvements Traffic monitoring every 5–10 years Reclassify two-lane roads to retain wider ROW Operational improvements
Environmental Constraints	Construction Costs Environmental Impacts	Proposed alignment or widening would impact significant Tier I habitat, MSCP preserves, historic landmarks, wetlands, or significant archaeological sites Located in area with steep slopes that would require excessive grading Improvements would substantially impact major public facilities (reservoirs, power lines, etc.) Community willing to accept a lower LOS	Land use modifications Alternate routes Road classification that maximizes road capacity within the ROW Operational improvements

Source: County DPLU 2009



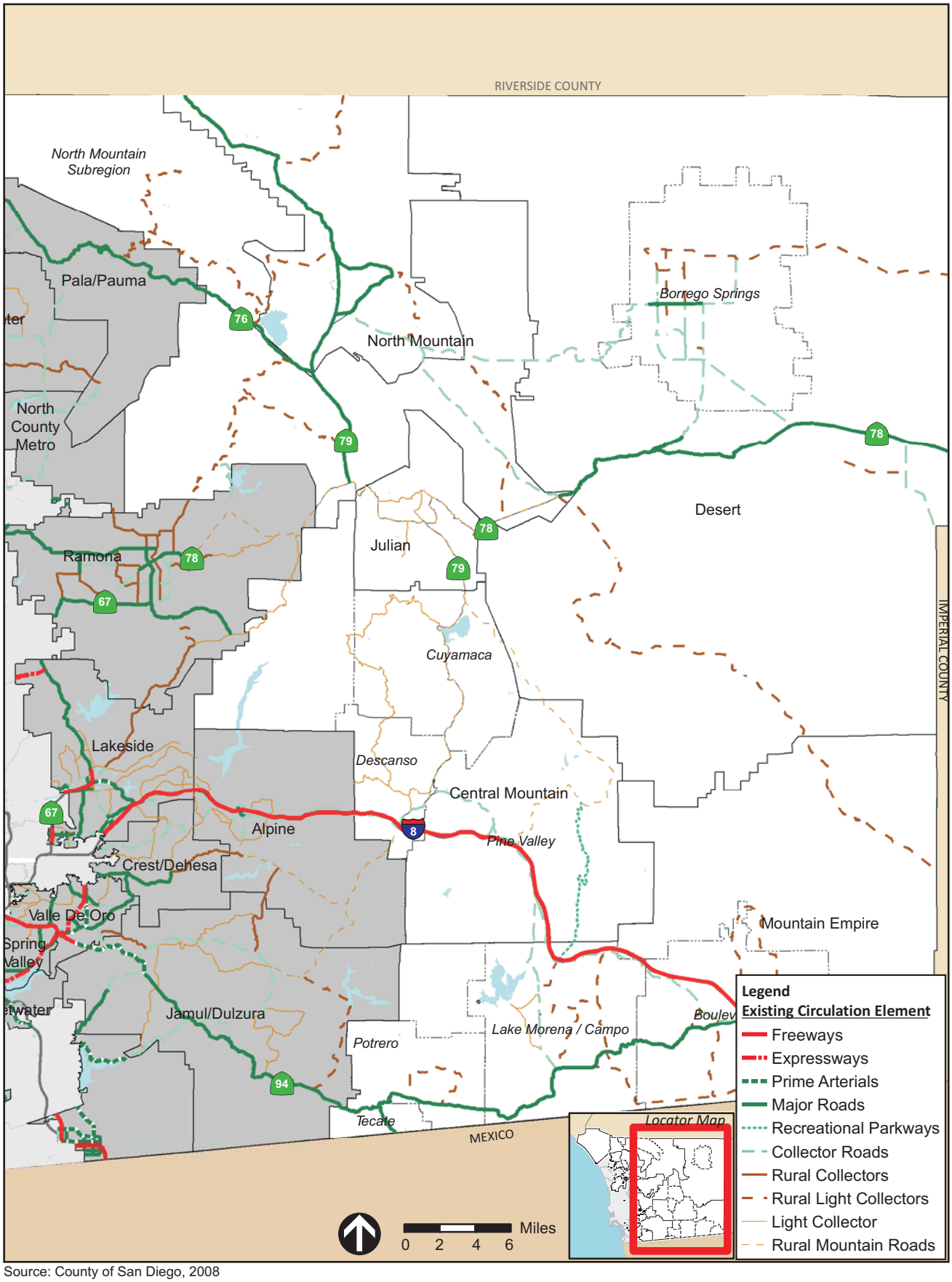
Source: County of San Diego, 2008

EXISTING NORTH COUNTY MAJOR ROADWAYS **FIGURE 2.15-1**



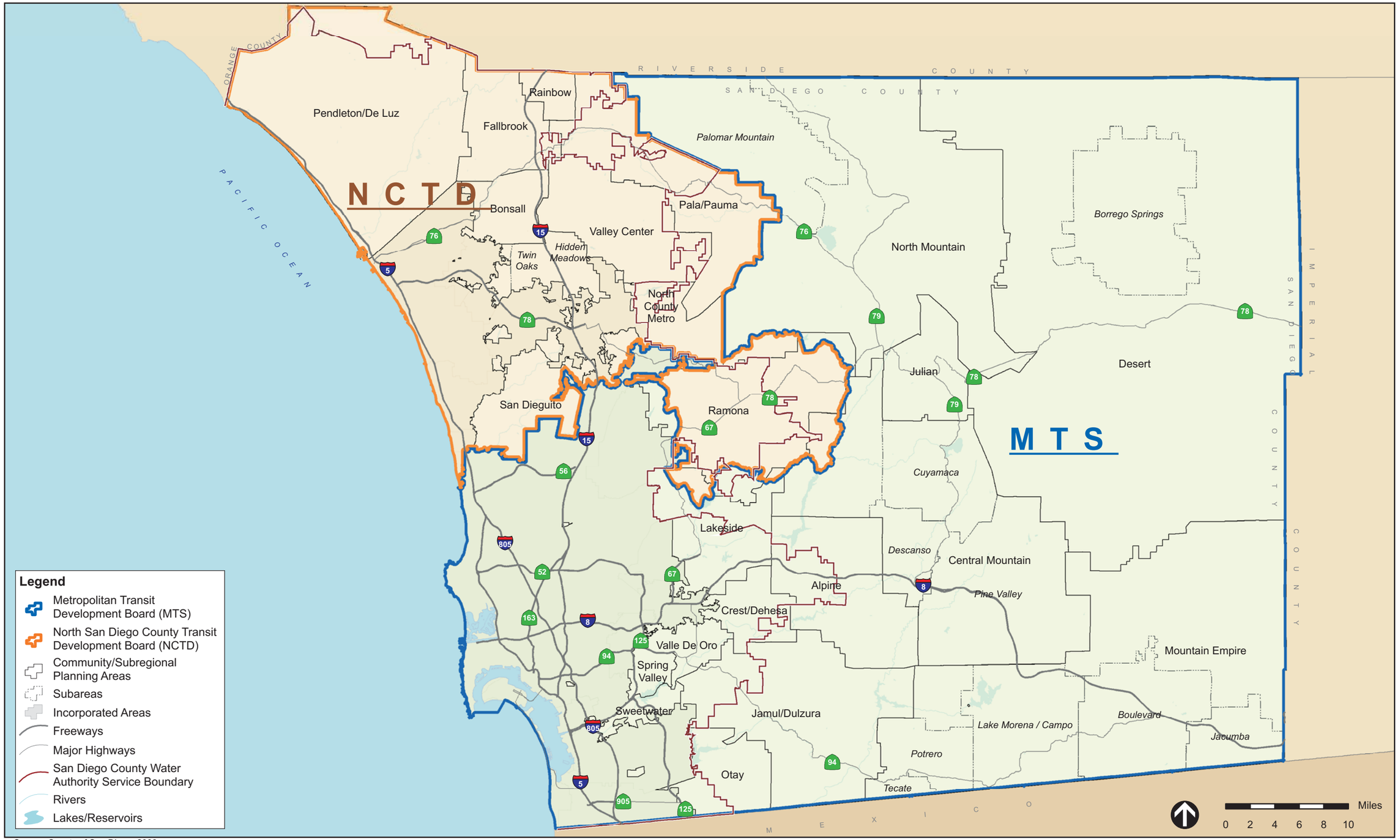
Source: County of San Diego, 2008

EXISTING EAST COUNTY MAJOR ROADWAYS **FIGURE 2.15-2**



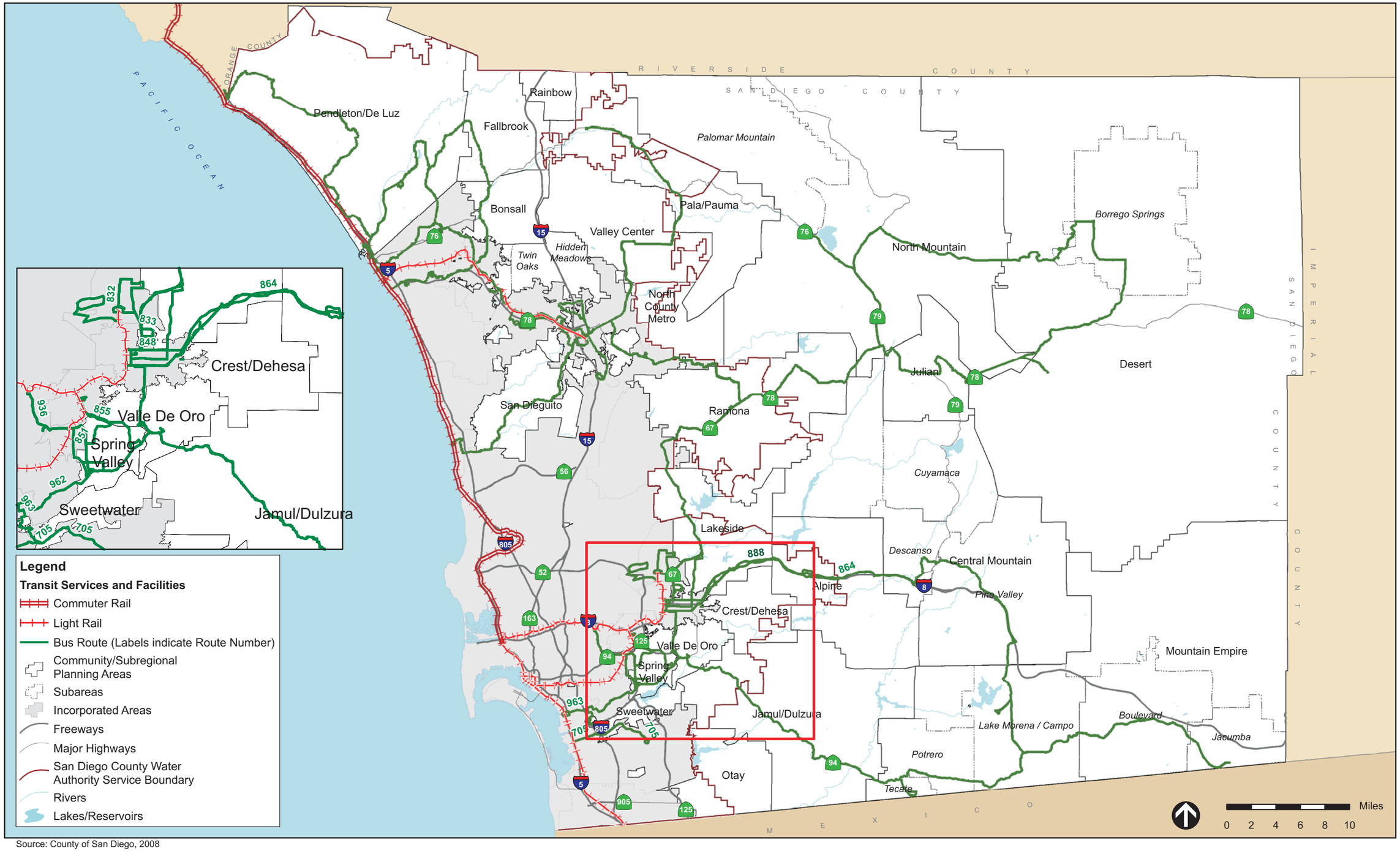
Source: County of San Diego, 2008

EXISTING BACKCOUNTRY MAJOR ROADWAYS — FIGURE 2.15-3



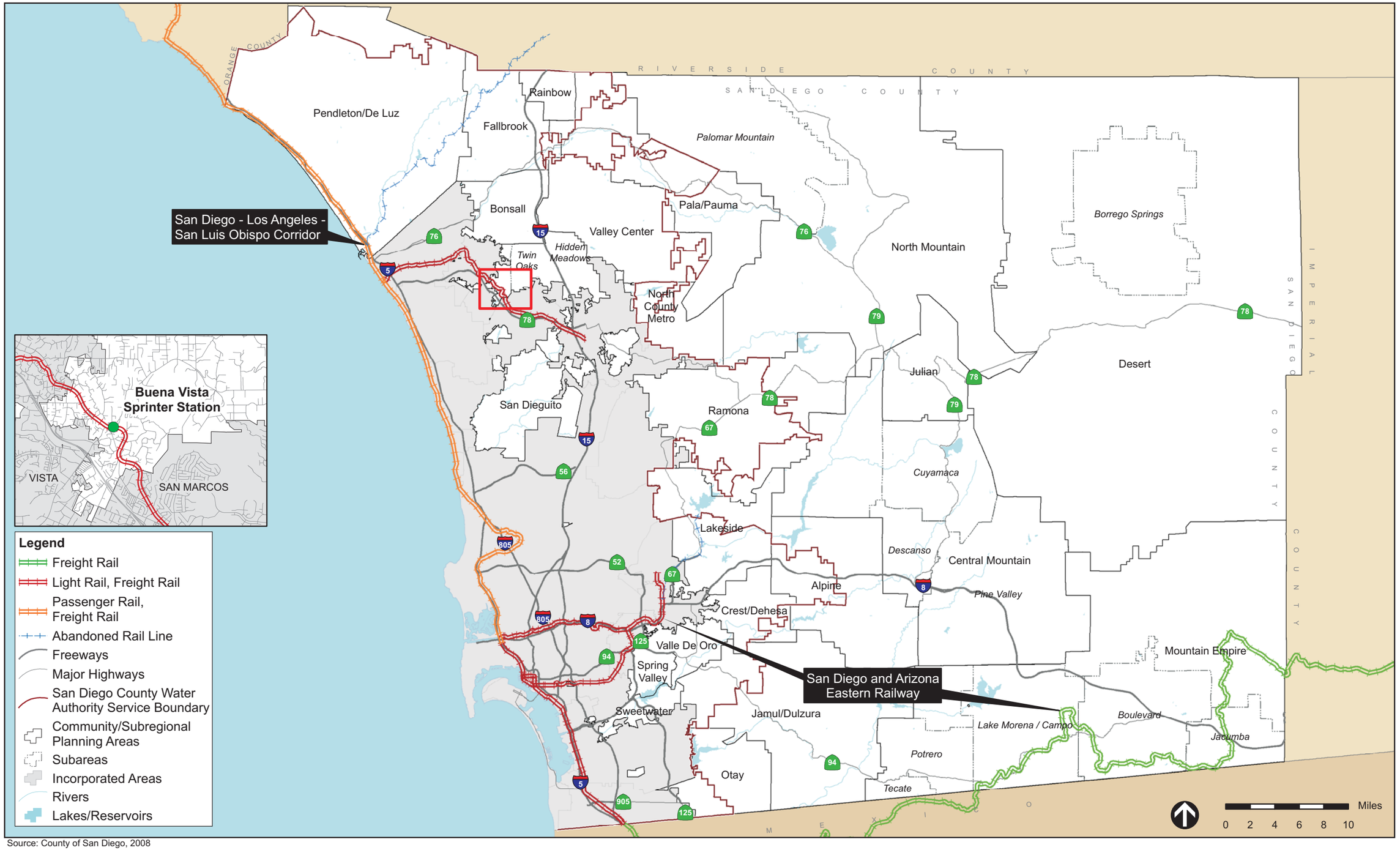
Source: County of San Diego, 2008

TRANSIT AGENCY SERVICE AREAS **FIGURE 2.15-4**



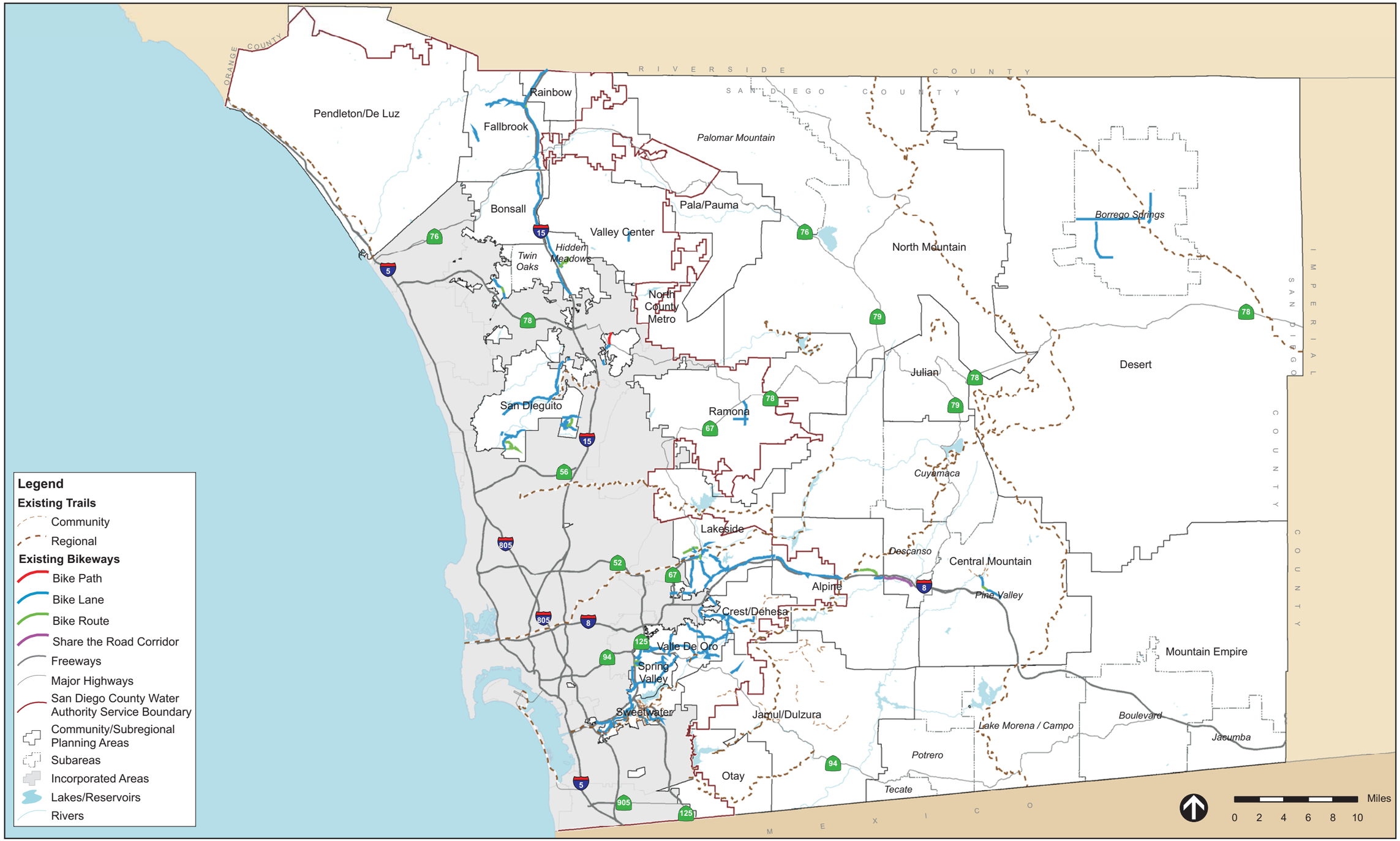
Source: County of San Diego, 2008

BUS AND RAIL SERVICE FOR THE UNINCORPORATED COUNTY **FIGURE 2.15-5**



Source: County of San Diego, 2008

SAN DIEGO COUNTY RAIL ROAD CORRIDORS **FIGURE 2.15-6**



Source: KTU&A, 2008; County of San Diego, 2008

BIKE AND PEDESTRIAN ROUTES WITHIN THE UNINCORPORATED COUNTY **FIGURE 2.15-7**