

APPENDIX G
TRAFFIC AND CIRCULATION ASSESSMENT

Traffic and Circulation Assessment

County of San Diego General Plan Update

(Project Number: 08-100-601-00, Phase 4.2.4)

Final Report

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1.0 Introduction

1.1 Report Background and Purpose

The purpose of this report is to evaluate forecast roadway network operations associated with the Proposed Project (Referral Map) and alternative land use plans under consideration as part of the General Plan Update for the County of San Diego. These evaluations are being conducted as part of the Environmental Impact Report (EIR) process for the General Plan Update, consistent with the requirement of the California Environmental Quality Act (CEQA). This study report includes identification and documentation of forecast operational deficiencies along State highways and County Mobility Element (ME) roadways, and associated mitigation requirements assuming buildout of the various land use alternatives.

The County of San Diego's General Plan Update is a multi-year process which began in August 1998 (referred to as General Plan 2020). The current General Plan for the unincorporated County has not been comprehensively updated since 1979 and has been the subject of substantial modification over the years. During this period, considerable growth and change has taken place, leading to the incorporation of a number of cities and to the annexation of lands on the periphery of the unincorporated area.

County staff has met with community groups and residents numerous times in preparation of the various land use and roadway network alternatives under consideration as part of the General Plan Update.

1.2 Description of Proposed Project, Project Alternatives and Cumulative Analysis

The County Board of Supervisors has endorsed two land use maps (the “Referral Map” and “Draft Land Use Map”) for consideration in the Environmental Impact Report (EIR) for the General Plan Update. Because the Board specifically directed creation of the Referral Map and it is more intensive than the Draft Land Use Map, the Referral Map has been identified as the Proposed Project with the Draft Land Use Map as an alternative in the EIR. The California Environmental Quality Act (CEQA) requires that a range of project alternatives be evaluated in the EIR. Therefore, the Hybrid Map and Environmentally Superior Alternative are also included as project alternatives, while a Cumulative Analysis was conducted to address cumulative projects traffic impacts. A description of the Proposed Project, project alternatives and the Cumulative Analysis are summarized below:

- Referral Map (Proposed Project) - The Referral Map is the map the Board of Supervisors created during the land use mapping phase of the project which incorporated a number of the property referrals that are not included in the Draft Land Use Map. This map has remained intact from when it was endorsed with only one modification relating to an expired Specific Plan that needed to be remapped.
- Draft Land Use Map (Project Alternative) - The Draft Land Use Map is the other map endorsed by the Board of Supervisors during the land use mapping phase. It is also the map where the Board directed continued refinements relating to meeting the Housing Element allocation and where additional modifications were made to achieve a more balanced road

network. Changes to the map relating to the road network were primarily made in Valley Center and Alpine as staff continued work with the respective Planning Groups for these areas. In addition, land use changes included minor refinements and the above mentioned expired Specific Plan.

- Hybrid Map (Project Alternative) - The Hybrid Map strikes a balance between the Referral Map and the Draft Land Use Map. It includes the Housing Element site, the road network land use changes, and the other refinements to the map. It also incorporates the Referral Map changes that meet the project objectives and reflects the policy direction of the Regional Elements.
- Environmentally Superior Alternative (Project Alternative) - This alternative reflects a more stringent application of growth restrictions in portions of the Semi-Rural and the Rural Lands regional categories, along with a reduction in the size and intensity of the villages in Valley Center.
- Existing General Plan (No Project) - This alternative includes the land uses and roadway network consistent with the currently adopted County Mobility Element of the General Plan.
- Cumulative Analysis (Cumulative Traffic Impact Analysis) - The Cumulative Analysis assumes a maximum build-out scenario by combining the most intensive land uses from all other alternatives. It also includes additional cumulative projects inconsistent with the General Plan Update, potential projects on tribal lands that have not been publically announced by the tribes, and a preliminary assessment of changes to lands affected by the Forest Conservation Initiative (FCI) that would take effect upon the December 31, 2010 sunset of the Initiative.

1.3 Report Organization

Following this Introduction chapter, this report is organized into the following sections:

- 2.0 Approach and Methodology – This chapter describes the methodologies and standards utilized to analyze roadway traffic conditions. The SANDAG traffic modeling and forecasting process is also documented in this chapter.
- 3.0 Existing Traffic Conditions – This chapter provides analysis results of existing traffic conditions in the unincorporated County. “Existing conditions” is also referred to as “Base Year 2007.”
- 4.0 Forecast Travel Demand - This chapter provides a comparative assessment of trip generation and vehicle miles of travel (VMT) associated with the land use and roadway networks for the Proposed Project, project alternatives, and the Cumulative Analysis.
- 5.0 Future Year Traffic Analysis – This chapter describes projected long-range traffic conditions and Level of Service (LOS) results for buildout of the land use maps and roadway network for the Proposed Project, project alternatives, and the Cumulative Analysis. Traffic operational deficiencies and associated mitigation requirements are identified.

6.0 Traffic Analysis Summary – This chapter provides a summary of traffic operations associated with the various land use and roadway networks for the Proposed Project, project alternatives, and the Cumulative Analysis, including review of LOS, extent of deficient roadway segments, and associated mitigation requirements.

2.0 Approach and Methodology

This traffic and circulation report has been prepared in support of the County General Plan Update, and conducted as a program-level EIR assessment of traffic operations throughout the unincorporated County of San Diego for the proposed project, project alternatives, and the Cumulative Analysis.

2.1 Project Approach

The assessment was performed in accordance with the requirements of the County of San Diego, the SANDAG Regional Congestion Management Program (CMP), and in conformance with the California Environmental Quality Act (CEQA) project review process. The CMP was first adopted on November 22, 1991 and is intended to assist in the monitoring of regional transportation system Level of Service (LOS) performance. Local agencies are required by state statute to conform to the CMP. CMP analysis requirements for the San Diego region are delineated in a San Diego Association of Governments (SANDAG) document entitled the *2008 Congestion Management Program Update*.

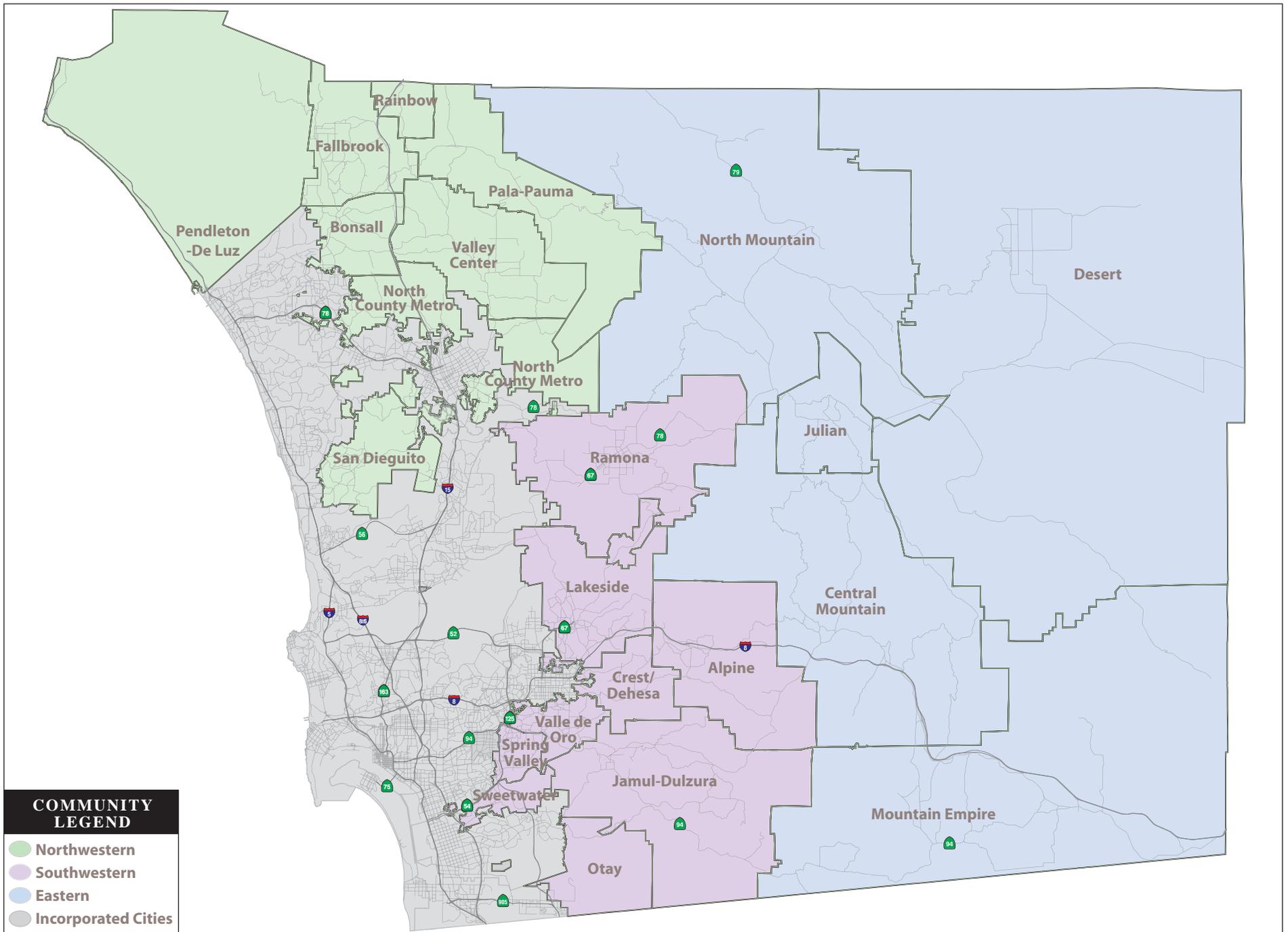
Given that this is a program-level traffic analysis with an associated large study area encompassing the unincorporated portions of the County of San Diego, traffic operations for County roads were evaluated by consideration of daily roadway segment operations rather than peak hour intersection operations. In addition to County roads, State highways perform an important assess and circulation function for the unincorporated County areas and were therefore evaluated for operation deficiencies under the existing General Plan, Proposed Project, project alternatives, and the Cumulative Analysis.

Potential roadway deficiencies were determined based upon the County of San Diego's *Roadway Segment Daily Capacity and LOS Standards* and Caltrans's methodology for evaluating State highway operations, both of which are discussed in later sections of this chapter.

The analysis results in this study are summarized by Community Planning Area (CPA) and Subregion. The three (3) subregions include the Northwestern Communities, Southwestern Communities and Eastern Communities. A map showing CPAs and subregions is included as **Figure 2-1**.

2.2 Analysis Methodology

Detailed information on State highway facilities and Mobility Element (ME) roadway segment analysis methodologies, LOS standards, and impact thresholds are discussed in the following sections.



SOURCE: Wilson & Company, Inc., Engineers & Architects: January 2009



Figure 2-1
CPA & Subregion Locations and Identification

2.2.1 Level of Service Definitions

The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream, and the motorist’s and/or passengers’ perception of operations. A LOS definition generally describes these conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. **Table 2.1** describes generalized definitions of the various LOS categories (A through F) as applied to roadway operations.

**TABLE 2.1
LEVEL OF SERVICE DEFINITIONS**

LOS Category	Definition of Operation
A	This LOS represents a completely free-flow condition, 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 form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.

Source: Highway Capacity Manual 2000

2.2.2 State Highway Level of Service Standards and Thresholds

State highway LOS and performance is based upon procedures derived from the *2000 Highway Capacity Manual (HCM 2000)*. 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 2.2**. 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 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.

**TABLE 2.2
CALTRANS DISTRICT 11
STATE HIGHWAY SEGMENT LEVEL OF SERVICE DEFINITIONS**

LOS	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*	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.

Source: 2000 Highway Capacity Manual

Note: * SANDAG modified the V/C threshold @ LOS D from 0.88 to 0.84 for the County General Plan Update model forecast.

2.2.3 Roadway Segment Level of Service Standards and Thresholds

Roadway segment LOS standards and thresholds provide the basis for analysis of Mobility Element (ME) roadway segment performance. The analysis of a roadway segment is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast Average Daily Traffic (ADT) volumes.

Two (2) sets of roadway segment LOS standards and thresholds were utilized for the roadway analysis in this study. The current roadway segment capacity and LOS standards were used for the Existing (Base Year 2007) and Existing General Plan analyses, while the proposed General Plan Update roadway segment capacity and LOS standards were used for the analyses of the Proposed Project, project alternatives and cumulative projects traffic impacts scenario under future buildout conditions.

Table 2.3 presents the current roadway segment capacity and LOS standards, as derived from the currently adopted County of San Diego Public Road Standards; July 1999. These standards were used for the analysis of existing conditions and the existing General Plan.

TABLE 2.3
COUNTY OF SAN DIEGO
CURRENT ROADWAY SEGMENT DAILY CAPACITY AND LEVEL OF SERVICE STANDARDS

Mobility 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: County of San Diego, Public Road Standards (Table 1), as revised on July 1999.

Table 2.4 presents the proposed General Plan roadway segment capacity and LOS standards, which are a new set of roadway design standards prepared as part of the General Plan Update process. These updated standards include a wider range of roadway facility types and allow for more flexibility in providing roadway classifications compatible with local conditions. These updated standards were used for the analysis of the Proposed Project (Referral Map) and the various project alternatives, including the Draft Land Use Map, Hybrid Map, and Environmentally Superior Alternative, as well as the Cumulative Analysis.

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 wither Roadway Capacity or LOS Standards for local public roads, and local public roads therefore have not been included as part of the assessment of roadway network performance. Local public roads are intended to provide low volume, 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.

For the purposes of this traffic analysis, LOS D was considered the minimum acceptable LOS for County roadway segments as per the *County of San Diego Guidelines for Determining Significance*.

**TABLE 2.4
COUNTY OF SAN DIEGO
PROPOSED ROADWAY SEGMENT DAILY CAPACITY AND LEVEL OF SERVICE STANDARDS**

No.	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 w/ Continuous Turn Lane	3,000	6,000	9,500	13,500	19,000
2.1C			Community Collector w/ 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

Source: County of San Diego

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 operation threshold of any road classification. The standard of LOS D for Mobility Element roads and the LOS D operation thresholds were adopted by the Board of Supervisors.

2.3 Traffic Modeling/Forecasting Process

County staff worked with the San Diego Association of Governments (SANDAG) to prepare traffic forecasts for the Base Year 2007, Existing General Plan, and the future land use and roadway networks for the Proposed Project and project alternatives. The traffic modeling process utilized the SANDAG Series 10 Regional Forecast model, assuming development as forecast for the year 2030 in the incorporated areas in the County, along with build-out of the respective land use maps for the unincorporated County land. 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.

2.3.1 Roadway Network and Land Use Assumptions

The following roadway network and land use assumptions were incorporated into the traffic forecast model:

Roadway Network Assumptions

- Unincorporated County
 - County Roads: Three basic roadway networks were developed: Base Year 2007 (Existing conditions), Existing General Plan, and the Board-Endorsed Roadway Network which was used for the Referral Map, Draft Land Use Map, Hybrid Map, Environmentally Superior Alternative, and the Cumulative Analysis. Road 3A was added to the Referral Map and the Cumulative Analysis within the Valley Center Community Planning Area (CPA) as the only network variation from the Board-Endorsed network.
 - State Facilities: Currently built highway and freeway system plus the “reasonably expected” improvements as indicated in the SANDAG 2030 Regional Transportation Plan (RTP). For additional information regarding the Year 2030 “Reasonably Expected” highway and freeway system, visit link: <http://www.sandag.cog.ca.us/index.asp?projectid=197&fuseaction=projects.detail>
- Incorporated Jurisdictions
 - City Roads: SANDAG Series 10 roadway network reflecting “reasonably expected” improvements with mobility emphasis as indicated in the SANDAG 2030 RTP.
 - State Facilities: SANDAG Series 10 roadway network reflecting “reasonably expected” improvements as indicated in the SANDAG 2030 RTP.

Land Use Assumptions

- Unincorporated County
 - Base Year 2007: Existing land uses as depicted in the SANDAG Series 10 Base Year 2007 traffic model.

-
- Existing General Plan, Proposed Project, project alternatives and the Cumulative Analysis: Buildout development of the County's unincorporated land is assumed in each of these analysis scenarios.
 - Incorporated Jurisdictions – Levels of development as predicted by the SANDAG Series 10 forecast model for the year 2030.
 - Tribal Lands – Development of known or currently proposed tribal gaming facilities.
 - Areas outside of San Diego County: Year 2030 levels of trip attractions/productions based on SANDAG Series 10 forecasts for Riverside, Orange and Imperial Counties and Mexico.

The County's Departments of Public Works (DPW) and Planning and Land Use (DPLU) assisted SANDAG in providing roadway network information, while DPLU supplied land use data for each of the study alternatives. County staff and Wilson & Company (project consultant) participated in the review of the model outputs in terms of land use, facility type, average daily traffic (ADT), and LOS maps.

2.3.2 Refinement and Application of Model Output

Output from the SANDAG traffic model included forecast traffic volumes (ADTs) and plots displaying roadway segment LOS for the Proposed Project and each of the project alternatives, as well as the Cumulative Analysis. Additional review of the model output was undertaken to ensure both the validity and reasonableness of the resulting traffic volumes and LOS.

Based upon detailed review of the model output, in a number of instances the extent of LOS deficiencies as reported by the model was adjusted to account for the following:

1. Variability in traffic forecasts associated with centroid loadings – The coding and location of centroid connectors (connect the TAZ to the roadway network) can impact the loading of traffic onto the adjacent roadway segments. Excess volume loadings can occur on the immediately adjacent links and are more typically associated with larger TAZs and a less developed (sparse) roadway network. Forecast traffic volumes and associated deficiencies were reviewed to ensure a balanced and reasonable loading pattern from the TAZs onto the adjacent roadway network.
2. Variability in traffic forecasts associated with local streets – The SANDAG regional model roadway network does not reflect all local streets, which could result in potential over-forecasting on adjacent mobility element roads. Forecast traffic volumes and associated deficiencies were reviewed to ensure reasonable trip distribution and assignment to the modeled roadway network.
3. Overall accuracy of forecast traffic volumes – Traffic forecasts have an associated level of accuracy, which is typically and conservatively assumed as plus or minus ten percent (10%) for roadway segments. Identified deficiencies from the traffic model were examined to ensure reasonability within the expected accuracy of the model.

Conduct of the above two reasonability checks and adjustments resulted in a refined list of roadway segment deficiencies for the land use and roadway networks of the Proposed Project, project alternatives, and the Cumulative Analysis.

3.0 Existing Conditions

This section describes the existing roadway network in the unincorporated portion of San Diego County, along with an assessment of roadway performance in terms of operating conditions and LOS. Analysis results are reported by planning area and summarized by subregion (Northwestern, Southwestern and Eastern communities).

3.1 Existing Roadway Network

Table 3.1 displays lane miles by facility type (State highways, ME roads and local public roads), as well as by subregion and CPA under existing conditions (Base Year 2007). Lane miles represent the lengths of the roadway (linear miles) multiply by the number of travel lanes.

As shown, the Existing Roadway Network includes 452.5 lane miles of State highways, 2,189.1 lane miles of County ME roads, and 413.5 lane miles of local public roads, for a total of 3,055.1 lane miles in the unincorporated County.

Approximately half of the State highway lane miles are located in the Eastern Communities, with County ME roadway lane miles fairly evenly distributed amongst the subregions. Eastern Communities have the fewest lane miles of the local public roads.

3.2 Roadway Network Performance

Table 3.2 displays roadway network performance under Existing conditions. Roadway lane miles by LOS categories are reported for State highways and ME roads, as well as by subregion and CPA. Lane miles operating at LOS E and F are identified as deficiencies.

As shown, a total of 153.0 lane miles of facilities (approximately 12.3 lane miles of State highways and 140.7 lane miles of ME roads) are currently operating at substandard LOS E. A total of 167.8 lane miles of roadway facilities (65.8 lane miles of State highways and 102.0 lane miles of ME roads) are currently operating at substandard LOS F.

Under existing conditions, the deficient roadway lane miles are generally distributed evenly throughout the Northwestern (54%) and Southwestern (46%) communities, with practically no existing deficient lane miles in the Eastern Communities.

**TABLE 3.1
ROADWAY LANE MILES BY SUBREGION AND CPA
EXISTING CONDITIONS**

CPA	Lane Miles			
	State Highway	ME Roads	Local Public Roads	Total
<i>Northwestern Communities</i>				
Bonsall	8.7	69.9	8.5	87.1
Fallbrook	13.0	133.2	30.9	177.1
North County Metro	10.8	156.3	6.3	173.4
Pala - Pauma	48.3	39.1	3.4	90.8
Pendleton-De Luz	-	28.5	2.4	30.9
Rainbow	-	18.4	-	18.4
San Dieguito	-	102.9	39.7	142.6
Valley Center	-	124.0	40.2	164.2
Northwestern Communities Subtotal	80.8	672.3	131.4	884.5
<i>Southwestern Communities</i>				
Alpine	-	99.5	26.9	126.4
County Islands	-	5.2	-	5.2
Crest - Dehesa	-	50.6	3.6	54.2
Jamul - Dulzura	39.7	118.2	29.8	187.7
Lakeside	22.4	140.6	34.8	197.8
Otay	-	16.7	2.3	19.0
Ramona	55.5	131.0	35.1	221.6
Spring Valley	-	60.4	30.2	90.6
Sweetwater	-	28.5	5.9	34.4
Valle De Oro	11.0	79.3	33.3	123.6
Southwestern Communities Subtotal	128.6	730.0	201.9	1,060.5
<i>Eastern Communities</i>				
Central Mountain	35.2	133.9	45.5	214.6
Desert	50.5	245.3	11.7	307.5
Julian	-	54.3	6.6	60.9
Mountain Empire	59.6	194.8	11.6	266.0
North Mountain	97.8	158.5	4.8	261.1
Eastern Communities Subtotal	243.1	786.8	80.2	1,110.1
Total	452.5	2,189.1	413.5	3,055.1

Source: Wilson & Company; January 2009

**TABLE 3.2
ROADWAY LANE MILES BY LEVEL OF SERVICE
EXISTING CONDITIONS**

CPA	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
<i>Northwestern Communities</i>												
Bonsall	-	53.4	53.4	-	4.8	4.8	-	10.8	10.8	8.7	0.9	9.6
Fallbrook	-	102.5	102.5	4.6	9.8	14.4	4.0	12.7	16.7	4.4	8.2	12.6
North County Metro	1.2	114.3	115.5	9.6	20.2	29.8	-	14.3	14.3	-	7.5	7.5
Pala - Pauma	40.0	35.3	75.3	-	1.8	1.8	-	2.0	2.0	8.3	-	8.3
Pendleton-De Luz	-	17.1	17.1	-	0.1	0.1	-	0.5	0.5	-	10.8	10.8
Rainbow	-	18.4	18.4	-	-	-	-	-	-	-	-	-
San Dieguito	-	60.2	60.2	-	10.4	10.4	-	10.3	10.3	-	22.0	22.0
Valley Center	-	82.7	82.7	-	19.5	19.5	-	14.4	14.4	-	7.4	7.4
Northwestern Communities Subtotal	41.2	483.9	525.1	14.2	66.6	80.8	4.0	65.0	69.0	21.4	56.8	78.2
<i>Southwestern Communities</i>												
Alpine	-	80.8	80.8	-	6.8	6.8	-	5.2	5.2	-	6.7	6.7
County Islands	-	3.2	3.2	-	0.7	0.7	-	-	-	-	1.3	1.3
Crest - Dehesa	-	30.2	30.2	-	9.4	9.4	-	10.4	10.4	-	0.6	0.6
Jamul - Dulzura	23.3	114.4	137.7	10.3	1.3	11.6	-	2.5	2.5	6.1	-	6.1
Lakeside	-	102.5	102.5	-	10.2	10.2	4.3	12.9	17.2	18.1	15.0	33.1
Otay	-	16.7	16.7	-	-	-	-	-	-	-	-	-
Ramona	32.9	104.1	137.0	7.1	2.5	9.6	4.0	17.3	21.3	11.5	7.1	18.6
Spring Valley	-	46.6	46.6	-	5.5	5.5	-	6.2	6.2	-	2.1	2.1
Sweetwater	-	8.1	8.1	-	5.2	5.2	-	9.0	9.0	-	6.2	6.2
Valle De Oro	2.3	49.0	51.3	-	12.3	12.3	-	11.8	11.8	8.7	6.2	14.9
Southwestern Communities Subtotal	58.5	555.6	614.1	17.4	53.9	71.3	8.3	75.3	83.6	44.4	45.2	89.6
<i>Eastern Communities</i>												
Central Mountain	35.2	133.0	168.2	-	0.9	0.9	-	-	-	-	-	-
Desert	50.5	244.6	295.1	-	0.3	0.3	-	0.4	0.4	-	-	-
Julian	-	54.3	54.3	-	-	-	-	-	-	-	-	-

TABLE 3.2 (Continued)
ROADWAY LANE MILES BY LEVEL OF SERVICE
EXISTING CONDITIONS

CPA	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
Mountain Empire	59.6	194.8	254.4	-	-	-	-	-	-	-	-	-
North Mountain	97.8	158.5	256.3	-	-	-	-	-	-	-	-	-
Eastern Communities Subtotal	243.1	785.2	1,028.3	-	1.2	1.2	-	0.4	0.4	-	-	-
Total	342.8	1,824.7	2,167.5	31.6	121.7	153.3	12.3	140.7	153.0	65.8	102.0	167.8

Source: Wilson & Company; January 2009

4.0 Forecast Travel Demand

This section provides a comparative assessment of travel demand, specifically the magnitude in terms of vehicle trip generation and vehicle miles of travel (VMT) under the respective land use and roadway networks for the Proposed Project, project alternatives, and the Cumulative Analysis.

4.1 Trip Generation

Trip generation quantifies the magnitude of trip making as a function of the type and magnitude of the assumed land uses associated with the Proposed Project, project alternatives, and the Cumulative Analysis. 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.

Table 4.1 displays forecast daily vehicle trip generation in the unincorporated portion of the San Diego County. Trip generation is shown for existing conditions, buildout of the Existing General Plan and Proposed Project (Referral Map), as well as the change in vehicle trips associated with the General Plan Update alternatives and the Cumulative Analysis as compared to the Proposed Project.

As shown in Table 4.1, the Proposed Project would generate substantially fewer vehicle trips in the Eastern Communities, it would, however generate approximately 55,000 (1%) more daily when compared with the existing General Plan. Only the Cumulative Analysis would generate more total vehicle trips than the Proposed Project (+4.5%). The Environmentally Superior alternative would generate the fewest number of daily vehicle trips.

4.2 Vehicle Miles of Travel

Vehicle Miles of Travel (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 and roadway network alternatives. In general, a mix of land uses within closer proximity and requiring less driving distance for interaction can result in a reduction in VMT. Typically more dispersed and segregated (not mixed) land uses result in greater VMT.

Table 4.2 displays daily VMT for existing conditions, the existing General Plan and the Proposed Project (Referral Map), as well as the change in daily VMT between the Proposed Project (Referral Map) and the General Plan Update alternatives and the Cumulative Analysis. As shown in the table, the Proposed Project (Referral Map) would result in approximately 3.0 million less daily VMT (about 11%) than the Existing General Plan. All of the alternatives would result in less VMT than the Proposed Project, while the Cumulative Analysis would result in the highest daily VMT (+2.0%).

**TABLE 4.1
DAILY VEHICLE TRIP GENERATION**

CPA	Daily Vehicle Trips (in ADT)						
	Existing	Existing GP	Referral (Proposed Project)	Change From Proposed Project			
				Draft Land Use	Hybrid	Environmentally Superior	Cumulative Analysis
<i>Northwestern Communities</i>							
Bonsall	63,438	112,477	115,560	(1,461)	(401)	(2,001)	253
Fallbrook	286,243	412,923	459,754	(1,055)	3,556	(52,342)	37,173
North County Metro	203,177	308,971	396,980	(14,497)	(12,961)	(62,734)	33,748
Pala - Pauma	61,484	144,156	107,264	(3,967)	(2,917)	(5,571)	6,241
Pendleton - De Luz	153,761	228,679	155,076	779	663	172	779
Rainbow	10,128	38,961	49,016	(26,127)	(25,245)	(26,559)	0
San Dieguito	149,828	258,641	234,306	(1,314)	(1,460)	(220)	0
Valley Center	104,633	220,161	325,170	(45,526)	(40,527)	(74,705)	9,547
Northwestern Communities Subtotal	1,032,692	1,724,969	1,843,126	(93,168)	(79,292)	(223,960)	87,741
<i>Southwestern Communities</i>							
Alpine	214,643	311,826	361,102	(15,414)	(13,884)	(30,043)	78,358
County Islands	13,443	15,340	15,842	2,243	2,237	2,379	2,020
Crest - Dehesa	48,729	61,944	55,946	(3)	20	(489)	20
Jamul - Dulzura	56,987	144,616	102,875	(1,697)	(1,751)	(6,007)	0
Lakeside	436,719	581,552	583,180	3,425	3,071	3,130	3,425
Otay	7,496	229,736	364,897	2,236	1,917	4,086	4,086
Ramona	304,668	467,882	445,737	(7,652)	(7,157)	(6,486)	0
Spring Valley	336,273	412,392	415,986	2,674	2,363	5,424	5,424
Sweetwater	59,150	74,793	69,807	(1,260)	(1,300)	(756)	0
Valle De Oro	383,205	404,852	406,282	2,515	2,228	5,158	5,158
Southwestern Communities Subtotal	1,861,313	2,704,933	2,821,654	(12,933)	(12,256)	(23,604)	98,491
<i>Eastern Communities</i>							
Central Mountain	36,942	49,814	43,403	62	59	(193)	62
Desert	72,198	285,884	205,656	(3,983)	(1,415)	(13,583)	35,854
Julian	30,945	56,872	42,737	(851)	(596)	(821)	0

TABLE 4.1 (Continued)
DAILY VEHICLE TRIP GENERATION

CPA	Daily Vehicle Trips (in ADT)						
	Existing	Existing GP	Referral (Proposed Project)	Change From Proposed Project			
				Draft Land Use	Hybrid	Environmentally Superior	Cumulative Analysis
Mountain Empire	77,193	297,344	236,005	(50,090)	(50,207)	(63,860)	13,169
North Mountain	31,568	62,470	44,824	(3,953)	(3,541)	(4,196)	1,381
Eastern Communities Subtotal	248,846	752,384	572,625	(58,815)	(55,700)	(82,653)	50,466
Total	3,142,851	5,182,286	5,237,405	(164,916)	(147,248)	(330,217)	236,698

Source: SANDAG/Wilson & Company; January 2009

Note: (XX,XXX) indicates negative values.

TABLE 4.2
DAILY VEHICLE MILES OF TRAVEL (VMT)

CPA	Daily Vehicle Miles of Travel						
	Existing	Existing GP	Referral (Proposed Project)	Change From Proposed Project			
				Draft Land Use	Hybrid	Environmentally Superior	Cumulative Analysis
<i>Northwestern Communities</i>							
Bonsall	1,179,857	2,198,576	2,087,790	16,413	3,381	(55,103)	60,846
Fallbrook	1,356,481	2,468,641	2,373,498	3,712	(3,786)	(75,180)	64,540
North County Metro	1,645,889	3,074,185	2,815,934	(7,368)	(14,959)	(98,342)	93,414
Pala - Pauma	270,007	623,253	420,730	(9,111)	(6,835)	(23,016)	2,851
Pendleton - De Luz	2,734,946	3,938,832	3,799,101	2,608	1,413	(3,497)	2,608
Rainbow	422,169	806,804	811,618	(16,406)	(15,847)	(17,489)	955
San Dieguito	503,845	819,883	721,692	604	(549)	(439)	604
Valley Center	402,685	834,261	814,483	(52,149)	(45,011)	(134,886)	23,775
Northwestern Communities Subtotal	8,515,879	14,764,435	13,844,846	(61,697)	(82,192)	(407,953)	249,593
<i>Southwestern Communities</i>							
Alpine	745,350	1,144,080	1,150,694	(11,711)	(9,105)	(25,593)	86,153
County Islands	320,638	385,062	388,723	1,503	1,387	3,058	3,058
Crest - Dehesa	151,969	218,408	205,005	(1,210)	(857)	(3,502)	5,391

TABLE 4.2 (Continued)
DAILY VEHICLE MILES OF TRAVEL (VMT)

CPA	Daily Vehicle Miles of Travel						
	Existing	Existing GP	Referral (Proposed Project)	Change From Proposed Project			
				Draft Land Use	Hybrid	Environmentally Superior	Cumulative Analysis
Jamul - Dulzura	315,670	739,375	584,604	(72,485)	(72,061)	(92,357)	0
Lakeside	1,483,082	2,127,527	2,183,047	7,806	6,910	(2,188)	14,358
Otay	24,779	366,917	461,039	1,933	1,589	2,885	2,885
Ramona	685,606	1,118,342	868,316	(26,166)	(18,309)	(39,414)	3,820
Spring Valley	870,515	1,194,885	1,168,540	4,630	4,241	12,138	12,138
Sweetwater	571,218	881,328	860,577	4,257	3,939	9,788	9,788
Valle De Oro	568,211	707,773	637,346	1,627	902	832	1,627
Southwestern Communities Subtotal	5,737,038	8,883,697	8,507,893	(89,817)	(81,363)	(134,353)	139,217
<i>Eastern Communities</i>							
Central Mountain	559,722	229,028	852,064	1,857	5,540	(24,032)	40,592
Desert	161,005	686,572	323,572	(18,894)	(10,780)	(38,869)	12,199
Julian	66,945	1,301,424	95,203	(8,923)	(6,017)	(13,028)	8,802
Mountain Empire	623,737	1,655,818	1,305,685	(108,616)	(108,564)	(163,904)	56,416
North Mountain	257,823	857,490	441,628	(45,146)	(35,282)	(59,638)	12,229
Eastern Communities Subtotal	1,669,232	4,730,332	3,018,152	(179,722)	(155,103)	(299,471)	130,240
Total	15,922,149	28,378,464	25,370,891	(331,236)	(318,658)	(841,776)	519,050

Source: SANDAG/Wilson & Company; January 2009

Note: (XX,XXX) indicates negative values.

5.0 Future Year Traffic Analysis

This section documents the evaluation of the land use and roadway networks for the Proposed Project, project alternatives, and the Cumulative Analysis under future year buildout conditions. The development scenarios evaluated included Existing General Plan (no project), Referral Map (Proposed Project), Draft Land Use Map, Hybrid Map, Environmentally Superior Alternative, and the Cumulative Analysis.

5.1 Existing General Plan

The Existing General Plan represents the no-project condition, and includes land uses and roadway network consistent with the currently adopted County General Plan.

5.1.1 Roadway Network

Table 5.1 displays lane miles by facility type (State highways, ME roads and local public roads), as well as by subregion and CPA for the Existing General Plan. As shown, buildout of the current General Plan includes 724.3 lane miles of State highways, 3,392.6 lane miles of County ME roads, and 368.5 lane miles of local public roads, for a total of 4,488.4 roadway lane miles in the unincorporated County. Under the Existing General Plan, County ME roadway lane miles would be fairly evenly distributed amongst three subregions. Close to half of the State highway lane miles would be located in the Eastern Communities. The Eastern Communities would have the fewest lane miles of local public roads.

5.1.2 Roadway Network Performance

Table 5.2 displays roadway network performance for buildout of the Existing General Plan. Roadway lane miles by LOS category are reported by facility type (State highways and ME roads), as well as by subregion and CPA. Lane miles operating at LOS E and F are identified as deficiencies and subject to mitigation.

As shown in Table 5.2, a total of 139.0 lane miles of facilities (approximately 53.7 lane miles of State highways and 85.3 lane miles of ME roads) would operate at LOS E. A total of 232.2 lane miles of facilities (150.5 lane miles of State highways and 81.7 lane miles of ME roads) would operate at LOS F under buildout of the Existing General Plan.

The Eastern Communities would have the least deficient roadway lane miles at 81.7, with the Northwestern and Southwestern communities projected to have similar deficient lane miles at 136.5 and 153.0, respectively.

5.1.3 Deficiency Analysis

Table 5.3 lists the deficient roadway segments (LOS E and F) in the unincorporated portion of the County of San Diego assuming buildout of the existing General Plan. This table also includes forecast Average Daily Traffic (ADT) volumes, LOS, roadway classification type and mitigated roadway classification. The roadway classification represents the classification indicated in the existing General Plan. The mitigated roadway classification represents the classification which would be required to mitigate the identified deficiency in capacity/LOS.

**TABLE 5.1
ROADWAY LANE MILES BY SUBREGION AND CPA
EXISTING GENERAL PLAN**

CPA	Lane Miles			
	State Highway	ME Roads	Local Public Roads	Total
<i>Northwestern Communities</i>				
Bonsall	24.2	91.8	8.5	124.5
Fallbrook	26.1	173.4	21.6	221.1
North County Metro	17	307	11.2	335.2
Pala - Pauma	96.6	60.9	3.4	160.9
Pendleton - De Luz	-	70.2	2.4	72.6
Rainbow	-	25	-	25.0
San Dieguito	-	115.7	51.9	167.6
Valley Center	-	201.6	30.5	232.1
Northwestern Communities Subtotal	163.9	1,045.6	129.5	1,339.0
<i>Southwestern Communities</i>				
Alpine	-	143.9	23.6	167.5
County Islands	-	3.9	-	3.9
Crest - Dehesa	-	85.1	4.8	89.9
Jamul - Dulzura	50.8	177.9	27.4	256.1
Lakeside	28.9	211.7	42.6	283.2
Otay	6.8	80.4	-	87.2
Ramona	74.5	227	32.5	334.0
Spring Valley	24.7	75.5	29.3	129.5
Sweetwater	-	46.5	3.3	49.8
Valle De Oro	38.3	106.7	33.3	178.3
Southwestern Communities Subtotal	224.0	1,158.6	196.8	1,579.4
<i>Eastern Communities</i>				
Central Mountain	40.3	211.7	22.6	274.6
Desert	-	434	5.6	439.6
Julian	35	15.8	10.1	60.9
Mountain Empire	68.9	302.3	3.9	375.1
North Mountain	192.2	227.6	-	419.8
Eastern Communities Subtotal	336.4	1,191.4	42.2	1,570.0
Total	724.3	3,392.6	368.5	4,488.4

Source: Wilson & Company; May 2009

**TABLE 5.2
ROADWAY LANE MILES BY LEVEL OF SERVICE
EXISTING GENERAL PLAN**

CPA	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
<i>Northwestern Communities</i>												
Bonsall	-	68.1	68.1	-	17.1	17.1	3.3	4.2	7.5	20.9	2.4	23.3
Fallbrook	11.8	124.8	136.6	9.1	32.3	41.4	5.2	8.9	14.1	-	7.4	7.4
North County Metro	10.2	255.9	266.1	6.8	28.7	35.5	-	12.2	12.2	-	10.2	10.2
Pala - Pauma	76.6	57.6	134.2	-	3.3	3.3	-	-	-	20.0	-	20.0
Pendleton - De Luz	-	70.1	70.1	-	0.1	0.1	-	-	-	-	-	-
Rainbow	-	24.9	24.9	-	-	-	-	0.1	0.1	-	-	-
San Dieguito	-	53.8	53.8	-	29.5	29.5	-	13.1	13.1	-	19.3	19.3
Valley Center	-	157.6	157.6	-	34.7	34.7	-	-	-	-	9.3	9.3
Northwestern Communities Subtotal	98.6	812.8	911.4	15.9	145.7	161.6	8.5	38.5	47.0	40.9	48.6	89.5
<i>Southwestern Communities</i>												
Alpine	-	121.1	121.1	-	13.9	13.9	-	1.4	1.4	-	7.5	7.5
County Islands	-	1.3	1.3	-	-	-	-	2.6	2.6	-	-	-
Crest - Dehesa	-	79.8	79.8	-	3.7	3.7	-	1.6	1.6	-	-	-
Jamul - Dulzura	-	172.4	172.4	12.0	0.5	12.5	25.9	5.0	30.9	12.9	-	12.9
Lakeside	-	172.4	172.4	9.3	14.2	23.5	-	12.3	12.3	19.6	12.8	32.4
Otay	6.8	80.4	87.2	-	-	-	-	-	-	-	-	-
Ramona	27.4	186.9	214.3	26.9	21.6	48.5	0.8	7.9	8.7	19.4	10.6	30.0
Spring Valley	24.7	67.8	92.5	-	6.2	6.2	-	1.5	1.5	-	-	-
Sweetwater	-	41.2	41.2	-	4.3	4.3	-	0.5	0.5	-	0.5	0.5
Valle De Oro	20.5	94.3	114.8	17.8	2.2	20.0	-	8.5	8.5	-	1.7	1.7
Southwestern Communities Subtotal	79.4	1,017.6	1,097.0	66.0	66.6	132.6	26.7	41.3	68.0	51.9	33.1	85.0
<i>Eastern Communities</i>												
Central Mountain	16.1	198.3	214.4	24.2	10.2	34.4	-	3.2	3.2	-	-	-
Desert	-	429.3	429.3	-	2.4	2.4	-	2.3	2.3	-	-	-
Julian	22.0	15.8	37.8	1.4	-	1.4	9.7	-	9.7	1.9	-	1.9

TABLE 5.2 (Continued)
ROADWAY LANE MILES BY LEVEL OF SERVICE
EXISTING GENERAL PLAN

CPA	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
Mountain Empire	29.6	286.0	315.6	-	16.3	16.3	6.8	-	6.8	32.5	-	32.5
North Mountain	166.9	218.8	385.7	-	8.8	8.8	2.0	-	2.0	23.3	-	23.3
Eastern Communities Subtotal	234.6	1,148.2	1,382.8	25.6	37.7	63.3	18.5	5.5	24.0	57.7	-	57.7
Total	412.6	2,978.6	3,391.2	107.5	250.0	357.5	53.7	85.3	139.0	150.5	81.7	232.2

Source: Wilson & Company; May 2009

**TABLE 5.3
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
EXISTING GENERAL PLAN**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
<i>Northwestern Communities</i>							
Bonsall	State Hwy	Mission Road/SR-76	Oceanside/County Boundary to Vista Wy	4-Ln State Highway	80,100	F	6-Ln State Highway
		Mission Road/SR-76	Vista Wy to Holly Ln	4-Ln State Highway	80,100	F	6-Ln State Highway
		Mission Road/SR-76	Holly Ln to North River Rd	4-Ln State Highway	80,100	F	6-Ln State Highway
		Mission Road/SR-76	North River Rd to Via Montellano	4-Ln State Highway	80,100	F	6-Ln State Highway
		Mission Road/SR-76	Via Montellano to Mission Rd	4-Ln State Highway	80,100	F	6-Ln State Highway
		Pala Road/SR-76	Mission Rd to Sweetgrass Ln	4-Ln State Highway	51,800	E	6-Ln State Highway
	ME Road	Camino Del Rey	Old River Rd to West Lilac Rd	2-Ln Light Collector	18,800	F	4-Ln Collector
		Camino Del Rey	West Lilac Rd to Cam Del Cielo	2-Ln Light Collector	15,700	E	4-Ln Collector
		Old Hwy 395	Dublin (W) Rd to West Lilac Rd	2-Ln Rural Collector	12,200	E	4-Ln Collector
		Old Hwy 395	West Lilac Rd to I-15 SB Ramps	2-Ln Rural Collector	17,200	F	4-Ln Collector
Twin Oaks Valley Road		Par Valley Dr to Huckleberry Ln	2-Ln Rural Collector	12,000	E	4-Ln Collector	
Fallbrook	State Hwy	Pala Road/SR-76	Sweetgrass Ln to Gird Rd	4-Ln State Highway	50,700	E	6-Ln State Highway
	ME Road	Alvarado Street	Main Ave to Olive Ave	3-Ln Town Collector	16,200	F	4-Ln Collector
		Alvarado Street	Olive Ave to Brandon Rd	3-Ln Town Collector	14,400	E	4-Ln Collector
		De Luz Road	Sandia Creek Dr to Dougherty St	2-Ln Light Collector	18,900	F	4-Ln Collector
		De Luz Road	Dougherty St to Mission Rd	2-Ln Light Collector	18,900	F	4-Ln Collector
		Fallbrook Street	Main Ave to Olive Ave	3-Ln Town Collector	16,800	E	4-Ln Collector
		Fallbrook Street	Olive Ave to Potter St	3-Ln Town Collector	21,200	F	4-Ln Collector
		Fallbrook Street	Potter St to Calle De La Paloma	3-Ln Town Collector	15,100	E	4-Ln Collector
		Fallbrook Street	Waxflower Ln to Stage Coach Ln	2-Ln Light Collector	13,000	E	3-Ln Town Collector
Mission Road	Hill Ave to De Luz Rd	3-Ln Town Collector	17,000	E	4-Ln Collector		

TABLE 5.3 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
EXISTING GENERAL PLAN

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Fallbrook	ME Road	Mission Road	Live Oak Park Rd to Old Hwy 395	4-Ln Major Road	36,100	E	6-Ln Prime Arterial
		Mission Road	Old Hwy 395 to I-15 SB Ramps	4-Ln Major Road	42,600	F	6-Ln Prime Arterial
		Mission Road	I-15 SB Ramps to I-15 NB Ramps	4-Ln Major Road	34,300	E	6-Ln Prime Arterial
		Main Avenue	Mission Rd to Hawthorne St	2-Ln Light Collector	15,200	E	4-Ln Collector
		Main Avenue	Hawthorne St to Ammunition Rd	2-Ln Light Collector	22,500	F	4-Ln Collector
		Main Avenue	Ammunition Rd to Mission Rd	2-Ln Light Collector	14,600	E	4-Ln Collector
		Pala Mesa Drive	Old Hwy 395 to Pankey Rd	2-Ln Light Collector	15,100	E	4-Ln Collector
		Pankey Road	Stewart Canyon Rd to Pala Mesa Dr	2-Ln Rural Collector	14,100	E	4-Ln Collector
		Pankey Road	Pala Mesa Dr to Pala Rd	2-Ln Rural Collector	21,100	F	4-Ln Collector
		Stage Coach Lane	Alvarado St to Fallbrook St	2-Ln Light Collector	12,500	E	3-Ln Town Collector
North County Metro	ME Road	Buena Creek Road	Monte Vista Dr to Hollyberry Dr	4-Ln Major Road	41,500	F	6-Ln Prime Arterial
		Salem Street	Buena Creek Rd to Twin Oak Valley Rd	4-Ln Major Road	36,300	E	6-Ln Prime Arterial
		Twin Oaks Valley Road	Huckleberry Ln to Quarry Rd	2-Ln Light Collector	13,300	E	3-Ln Town Collector
		Twin Oaks Valley Road	Quarry Rd to Solar Ln	2-Ln Light Collector	16,400	F	4-Ln Collector
		Twin Oaks Valley Road	Solar Ln to Vista Merriam	4-Ln Collector	49,200	F	6-Ln Prime Arterial
		Deer Springs Road	Mesa Rock Rd to I-15 NB Ramps	4-Ln Major Road	50,500	F	6-Ln Expressway
		Deer Springs Road	I-15 NB Ramps to N Centre City Pkwy	4-Ln Major Road	50,500	F	6-Ln Expressway
		Cloverdale Road	Clove Ridge Rd to Rockwood Rd	2-Ln Light Collector	16,400	F	4-Ln Collector
		Smilax Road	Oleander Ave to Mimosa Ave	2-Ln Light Collector	20,300	F	4-Ln Collector
		Hollyberry	Buena Creek to Salem	4-Ln Major Road	36,300	E	6-Ln Prime Arterial
Pala-Pauma	State Hwy	Pala Road/SR-76	Valley Center Rd to South Grade Rd	2-Ln State Highway	22,100	F	4-Ln State Highway

TABLE 5.3 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
EXISTING GENERAL PLAN

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Rainbow	ME Road	Rainbow Valley Boulevard	I-15 NB Ramps to Old Hwy 395	2-Ln Light Collector	15,500	E	4-Ln Collector
San Dieguito	ME Road	Del Dios Highway	Via Rancho Pkwy to El Camino Del Norte	2-Ln Light Collector	55,300	F	6-Ln Expressway
		El Camino Del Norte	Aliso Canyon Rd to Del Dios Hwy	2-Ln Light Collector	11,000	E	4-Ln Collector
		Paseo Delicias	El Camino Del Norte to El Montevideo	2-Ln Light Collector	29,200	F	4-Ln Collector
		Paseo Delicias	El Montevideo to Via De La Valle	2-Ln Light Collector	29,200	F	4-Ln Collector
		Paseo Delicias	Via De La Valle to La Granada	2-Ln Light Collector	14,700	E	4-Ln Collector
		La Bajada	El Mirlo to Los Morros	2-Ln Light Collector	24,500	F	4-Ln Collector
		La Granada	Los Morros to Rambla De Las Flores	2-Ln Light Collector	13,800	F	4-Ln Collector
		La Granada	Rambla De Las Flores to Avenida De Acacias	3-Ln Town Collector	16,300	E	4-Ln Collector
		La Granada	Avenida De Acacias to Paseo Delicias	3-Ln Town Collector	16,300	E	4-Ln Collector
		Linea Del Cielo	El Camino Real to Rambla De Las Flores	2-Ln Light Collector	13,200	E	3-Ln Town Collector
		Via De La Valle	El Camino Real to Las Palomas	3-Ln Town Collector	19,200	F	4-Ln Collector
		Via De La Valle	Las Palomas to Calzada Del Bosque	2-Ln Light Collector	16,200	E	4-Ln Collector
		Via De La Valle	Calzada Del Bosque to Via de Santa Fe	2-Ln Light Collector	18,600	F	4-Ln Collector
		Via De La Valle	Via de Santa Fe to Paseo Delicias	2-Ln Light Collector	18,600	F	4-Ln Collector
		San Dieguito Road	El Apajo to Circa Oriente	2-Ln Light Collector	15,500	E	4-Ln Collector
		Mt Israel Road	Detwiler Rd to Del Dios Hwy	2-Ln Light Collector	40,900	F	6-Ln Prime Arterial
Via De Santa Fe	Paseo Delicias to Via De La Valle	2-Ln Light Collector	13,500	E	3-Ln Town Collector		
Valley Center	ME Road	Old Hwy 395	Circle R Dr to Old Castle Rd	2-Ln Light Collector	26,100	F	4-Ln Collector
		Valley Center Road	Mirar De Valle Rd To Sunday Dr	4-Ln Major Road	43,900	F	6-Ln Prime Arterial
		Valley Center Road	Sunday Dr to Lilac Rd	4-Ln Major Road	43,900	F	6-Ln Prime Arterial
		Valley Center Road	Lilac Rd to Canyon Rd	4-Ln Major Road	43,900	F	6-Ln Prime Arterial

TABLE 5.3 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
EXISTING GENERAL PLAN

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Valley Center	ME Road	Valley Center Road	Canyon Rd to New Southern Pass	4-Ln Major Road	43,900	F	6-Ln Prime Arterial
		Valley Center Road	New Southern Pass to Miller Rd	4-Ln Major Road	43,900	F	6-Ln Prime Arterial
		Valley Center Road	Miller Rd to Indian Creek Rd	4-Ln Major Road	43,600	F	6-Ln Prime Arterial
		Valley Center Road	Indian Creek Rd to Code Grade Rd	4-Ln Major Road	43,900	F	6-Ln Prime Arterial
<i>Southwestern Communities</i>							
Alpine	ME Road	Alpine Boulevard	Boulders Rd to Alpine Special Treatment Center	4-Ln Collector	40,400	F	6-Ln Prime Arterial
		Alpine Boulevard	Alpine Special Treatment Center to W. Victoria Dr	4-Ln Collector	40,400	F	6-Ln Prime Arterial
		Arnold Way	Harbison Canyon Rd to South Grade Rd	2-Ln Light Collector	11,500	E	3-Ln Town Collector
		South Grade Road	Alpine Blvd to Eltinge Dr	2-Ln Light Collector	11,600	E	3-Ln Town Collector
		South Grade Road	Eltinge Dr to Olive View Rd	2-Ln Light Collector	11,600	E	3-Ln Town Collector
		Willows Road	Alpine Blvd to Otto Ave	4-Ln Collector	60,600	F	6-Ln Expressway
		Willows Road	Otto Ave to Viejas Grade Rd	4-Ln Collector	60,600	F	6-Ln Expressway
		Willows Road	Viejas Grade Rd to Viejas/County Boundary	4-Ln Collector	60,600	F	6-Ln Expressway
County Island	ME Road	Pomerado Road	I-15 NB Ramps to Willow Creek Rd	4-Ln Major	35,000	E	6-Ln Prime Arterial
Crest - Dehesa	ME Road	Broadway	Main St to 4 th St	2-Ln Light Collector	12,400	E	3-Ln Town Collector
		Dehesa Road	Harbison Canyon Rd to Sycuan Rd	2-Ln Light Collector	13,400	E	3-Ln Town Collector
Jamul - Dulzura	State Hwy	Campo/SR-94	Lyons Valley Rd to Melody Rd	2-Ln State Highway	32,200	F	4-Ln State Highway
		Campo/SR-94	Melody Rd to Otay Lakes Rd	2-Ln State Highway	32,200	F	4-Ln State Highway
		Campo/SR-94	Otay Lakes Rd to Mother Grundy Truck Trail	2-Ln State Highway	17,700	E	4-Ln State Highway
		Campo/SR-94	Mother Grundy Truck Trail to Little Tecate Rd	2-Ln State Highway	17,700	E	4-Ln State Highway
		Campo/SR-94	Little Tecate Rd to Barrett Lake Rd	2-Ln State Highway	17,700	E	4-Ln State Highway
		Campo/SR-94	Barrett Lake Rd to Tecate Sub-Group Area Boundary	2-Ln State Highway	17,700	E	4-Ln State Highway

TABLE 5.3 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
EXISTING GENERAL PLAN

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Jamul - Dulzura	ME Road	Lyons Valley Road	Skyline Truck Trl to Vista De Chaparros Dr	2-Ln Light Collector	12,000	E	3-Ln Town Collector
		Skyline Truck Trail	Lyons Valley Rd to Lawson Valley Rd	2-Ln Rural Collector	11,200	E	4-Ln Collector
Lakeside	State Hwy	SR-67	Poway/County Boundary to Scripps Poway Pkwy	4-Ln State Highway	45,600	F	6-Ln State Highway
		SR-67	Scripps Poway Pkwy to Sycamore Park	4-Ln State Highway	45,600	F	6-Ln State Highway
		SR-67	Sycamore Park to Vigilante Rd	4-Ln State Highway	45,600	F	6-Ln State Highway
	ME Road	Valle Vista Road	Post Hill Rd to Vista Camino	2-Ln Light Collector	12,700	E	3-Ln Town Collector
		Valle Vista Road	Coping Pl to Riverside Dr	2-Ln Light Collector	11,100	E	3-Ln Town Collector
		Moreno Avenue	San Vicente Ave to Willow Rd	2-Ln Light Collector	12,400	E	3-Ln Town Collector
		Willow Road	SR-67 to Ashwood St	2-Ln Light Collector	11,900	E	3-Ln Town Collector
		Ashwood Street	Mapleview St to El Capitan High School	2-Ln Light Collector	37,400	F	6-Ln Prime Arterial
		Ashwood Street	El Capitan High School to Willow Rd	4-Ln Major Road	36,900	E	6-Ln Prime Arterial
		Wildcat Canyon Road	Willow Rd to Lakeside/Ramona CPA Boundary	2-Ln Light Collector	34,500	F	6-Ln Prime Arterial
		San Vicente Avenue	SR-67 to Moreno Ave	2-Ln Light Collector	12,400	E	3-Ln Town Collector
		Olde Hwy 80	Lake Jennings Park Rd to Pecan Park Ln	2-Ln Light Collector	27,900	F	4-Ln Collector
		Lake Jennings Park Road	I-8 Business Route to I-8 WB Off-Ramp	4-Ln Major Road	38,800	F	6-Ln Prime Arterial
		Woodside Avenue	SR-67 NB Off-Ramp to Riverford Rd	4-Ln Major Road	39,400	F	6-Ln Prime Arterial
		Woodside Avenue	Winter Gardens Blvd to Erwin Ln	4-Ln Major Road	42,900	F	6-Ln Prime Arterial
		Woodside Avenue	Channel Rd to Los Coches Rd	4-Ln Major Road	34,900	E	6-Ln Prime Arterial
		Julian Avenue	Lemoncrest Dr to Los Coches Rd	2-Ln Light Collector	12,300	E	3-Ln Town Collector
		Julian Avenue	Cypress St to Lakeview Rd	2-Ln Light Collector	14,300	E	4-Ln Collector
		Pepper Drive	Graves Ave to Garywood St	2-Ln Light Collector	16,200	F	4-Ln Collector
		Pepper Drive	Garywood St to 1 st St	3-Ln Town Collector	16,400	E	4-Ln Collector

TABLE 5.3 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
EXISTING GENERAL PLAN

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Ramona	State Hwy	Julian Road/SR-67	Mussey Grade Rd to Highland Valley Rd	4-Ln State Highway	37,200	F	6-Ln State Highway
		Main Street/SR-78	11 th St to 9 th St	4-Ln State Highway	34,200	F	6-Ln State Highway
		Main Street/SR-78	9 th St to 8 th St	4-Ln State Highway	29,500	E	6-Ln State Highway
	ME Road	Ramona Street	Raymond to Day	2-Ln Light Collector	11,500	E	3-Ln Town Collector
		Montecito Road	Main St to Ramona St	2-Ln Light Collector	12,100	E	3-Ln Town Collector
		Painted Rock Road	Wildcat Canyon Rd to San Vicente Oak Rd	2-Ln Light Collector	13,800	E	4-Ln Collector
Wildcat Canyon Road		Painted Rock Rd to Harry Hertzberg Rd	2-Ln Light Collector	21,200	F	4-Ln Collector	
Spring Valley	ME Road	Austin Drive	Avenida Bosques to Sweetwater Springs Blvd	2-Ln Light Collector	11,300	E	3-Ln Town Collector
		Paradise Valley Road	Worthington St to Elkilton Blvd	4-Ln Major Road	33,500	E	6-Ln Prime Arterial
Sweetwater	ME Road	Briarwood Road	SR-54 WB Ramps to Robinwood Rd	2-Ln Light Collector	20,100	F	4-Ln Collector
		San Miguel Road	Bonita Rd to Proctor Valley Rd	2-Ln Light Collector	11,500	E	3-Ln Town Collector
Valle De Oro	ME Road	Jamacha Road	Cuyamaca College West to Cuyamaca College East	6-Ln Prime Arterial	52,100	E	6-Ln Expressway
		Campo Road	Kenwood Dr to Conrad Dr	4-Ln Collector	47,900	F	6-Ln Prime Arterial
		Fuerte Drive	Bancroft Dr to Lemon Ave	2-Ln Light Collector	12,900	E	3-Ln Town Collector
		Fuerte Drive	Lemon Ave to Grandview Dr	2-Ln Light Collector	19,900	F	4-Ln Collector
		Fuerte Drive	Grandview Dr to Avocado Blvd	2-Ln Light Collector	13,100	E	3-Ln Town Collector
<i>Eastern Communities</i>							
Central Mountain	ME Road	Painted Rock Road	Ramona CPA Boundary to Central Mountain CPA Boundary	2-Ln Light Collector	11,200	E	4-Ln Collector
Desert	ME Road	Di Giorgio Road	Palm Canyon Dr to Tilting T Dr	2-Ln Light Collector	11,300	E	4-Ln Collector

**TABLE 5.3 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
EXISTING GENERAL PLAN**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Julian	State Hwy	SR-78	Westside Rd to Pine Hills Rd	2-Ln State Highway	16,600	E	4-Ln State Highway
		SR-78	Pine Hills Rd to Coleman Cir	2-Ln State Highway	14,100	F	4-Ln State Highway
Mountain Empire	State Hwy	SR-94	Tecate Sub-Group Area Boundary to Tecate Rd/ SR-188	2-Ln State Highway	19,600	E	4-Ln State Highway
		SR-94	Tecate Rd to Potrero Valley Rd	2-Ln State Highway	13,800	F	4-Ln State Highway
		Tecate/SR-188	Campo Rd to Airport Rd	2-Ln State Highway	35,300	F	4-Ln State Highway
		Tecate/SR-188	Airport Rd to Humphries Rd	2-Ln State Highway	35,300	F	4-Ln State Highway
		Tecate/SR-188	Humphries Rd to USA/Mexico Border	2-Ln State Highway	35,300	F	4-Ln State Highway
North Mountain	State Hwy	SR-76	Henshaw Rd to SR-79	2-Ln State Highway	12,500	E	4-Ln State Highway
		SR-78	Painted Rock Rd to SR-78	2-Ln State Highway	17,600	F	4-Ln State Highway

Source: Wilson & Company; May 2009

Table 5.4 summarizes the projected total number of deficient roadway segments and corresponding deficient roadway lane miles throughout the unincorporated County under buildout of the existing General Plan.

**TABLE 5.4
SUMMARY OF DEFICIENT ROADWAYS
EXISTING GENERAL PLAN**

Type	State Highways	ME Roads	Total
Deficient Segments (#)	29	109	138
Deficient Lane Miles	204.2	167.0	371.2

Source: Wilson & Company; May 2009

5.2 Referral Map – Proposed Project

The Board of Supervisors created the Referral Map during the land use mapping phase of the General Plan Update with the intention of incorporating a number of property referrals not previously included in the Draft Land Use Map.

5.2.1 Roadway Network

As noted previously, all of the General Plan Update land use alternatives were modeled using the Board-Endorsed Roadway Network with one exception: Road 3A in the Valley Center CPA was added for the Referral Map and the Cumulative Analysis.

Table 5.5 displays lane miles by facility type (State highways, ME roads, and local public roads), as well as by subregion and CPA for the Referral Map.

The Referral Map roadway network has 612.6 lane miles of State highways, 2,406 lane miles of County ME roads, and 702.5 lane miles of local public roads, for a total of 3,721 roadway lane miles. When compared to the existing General Plan roadway network, the Referral Map has approximately 111.7 fewer State highway lane miles, 1,007.4 fewer ME road lane miles, and 334.0 more local public road lane miles, for a total of 385.1 fewer total lane miles.

5.2.2 Roadway Network Performance

Table 5.6 displays roadway network performance results for buildout of the Referral Map. Roadway lane miles by LOS category are reported by facility type (State highways and ME roads), as well as by subregion and CPA. LOS E and F are considered to be deficient facilities and subject to mitigation.

As shown in Table 5.6, a total of 122.3 roadway lane miles (approximately 22.1 lane miles of State highways and 100.2 lane miles of ME roads) would operate at a deficient LOS E. A total of 125.5 roadway lane miles (44.0 lane miles of State highways and 81.5 lane miles of ME roads) would operate at LOS F under buildout of the Referral Map.

Under the Referral Map, approximately half of the total deficient roadway lane miles (operating at LOS E and F) are located in the Northwestern Communities, with less than 8% located in the Eastern Communities.

5.2.3 Deficiency Analysis

Table 5.7 displays the deficient roadway segments (LOS E and F) in the unincorporated portion of the County of San Diego, assuming buildout of the Referral Map. This table also includes forecast ADT, LOS, roadway classification type, and mitigated classification. The roadway classification represents the General Plan Update classification indicated in the Board-Endorsed Roadway Network, and the mitigated roadway classification represents the classification which would be required to mitigate the identified deficiency.

**TABLE 5.5
ROADWAY LANE MILES BY SUBREGION AND CPA
REFERRAL MAP**

CPA	Lane Miles			
	State Highway	ME Roads	Local Public Roads	Total
<i>Northwestern Communities</i>				
Bonsall	17.2	83.4	21.6	122.2
Fallbrook	26.1	151.1	50	227.2
North County Metro	15.2	200.8	34.7	250.7
Pala - Pauma	60	46.1	3.4	109.5
Pendleton - De Luz	-	57.7	2.4	60.1
Rainbow	-	19.1	-	19.1
San Dieguito	-	105.7	54.2	159.9
Valley Center	-	185.2	36.4	221.6
Northwestern Communities Subtotal	118.5	849.1	202.7	1,170.3
<i>Southwestern Communities</i>				
Alpine	-	108.5	32.5	141.0
County Islands	-	3.9	-	3.9
Crest - Dehesa	-	63	9.1	72.1
Jamul - Dulzura	54.7	99.5	59.6	213.8
Lakeside	31.5	180.5	52.6	264.6
Otay	-	61.2	6.5	67.7
Ramona	64.6	151.8	51.8	268.2
Spring Valley	-	62.4	31.8	94.2
Sweetwater	-	27.9	8.1	36.0
Valle De Oro	10.8	97	34	141.8
Southwestern Communities Subtotal	161.6	855.7	286.0	1,303.3
<i>Eastern Communities</i>				
Central Mountain	42.6	146.2	66.2	255.0
Desert	60.3	266.2	8.1	334.6
Julian	35	24.5	1.4	60.9
Mountain Empire	70.7	144.2	76.4	291.3
North Mountain	123.9	120.1	61.7	305.7
Eastern Communities Subtotal	332.5	701.2	213.8	1,247.5
Total	612.6	2,406.0	702.5	3,721.1

Source: SANDAG/Wilson & Company; May 2009

**TABLE 5.6
ROADWAY LANE MILES BY LEVEL OF SERVICE
REFERRAL MAP**

CPA	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
<i>Northwestern Communities</i>												
Bonsall	4.4	73.3	77.7	1.1	3.6	4.7	2.7	6.5	9.2	9.0	-	9.0
Fallbrook	23.3	79.4	102.7	2.2	45.7	47.9	-	22.5	22.5	0.6	3.5	4.1
North County Metro	15.2	154.5	169.7	-	35.0	35.0	-	6.3	6.3	-	5.0	5.0
Pala - Pauma	48.5	36.0	84.5	6.0	8.1	14.1	1.6	2.0	3.6	3.9	-	3.9
Pendleton - De Luz	-	42.4	42.4	-	15.3	15.3	-	-	-	-	-	-
Rainbow	-	12.9	12.9	-	3.1	3.1	-	1.2	1.2	-	1.9	1.9
San Dieguito	-	51.5	51.5	-	19.1	19.1	-	11.4	11.4	-	23.7	23.7
Valley Center	-	111.3	111.3	-	53.7	53.7	-	11.1	11.1	-	13.6	13.6
Northwestern Communities Subtotal	91.4	561.3	652.7	9.3	179.1	188.4	4.3	61.0	65.3	13.5	47.7	61.2
<i>Southwestern Communities</i>												
Alpine	-	79.6	79.6	-	13.0	13.0	-	9.1	9.1	-	6.8	6.8
County Islands	-	1.3	1.3	-	-	-	-	2.6	2.6	-	-	-
Crest - Dehesa	-	53.3	53.3	-	9.7	9.7	-	-	-	-	-	-
Jamul - Dulzura	13.3	93.7	107.0	23.3	2.9	26.2	4.0	2.9	6.9	14.1	-	14.1
Lakeside	19.2	132.3	151.5	3.4	26.3	29.7	3.3	7.5	10.8	5.6	14.4	20.0
Otay	-	48.2	48.2	-	12.7	12.7	-	-	-	-	0.3	0.3
Ramona	53.5	115.4	168.9	8.9	28.5	37.4	0.5	3.8	4.3	1.7	4.1	5.8
Spring Valley	-	35.3	35.3	-	19.9	19.9	-	4.0	4.0	-	3.2	3.2
Sweetwater	-	18.6	18.6	-	8.6	8.6	-	0.7	0.7	-	-	-
Valle De Oro	5.4	73.7	79.1	0.3	14.3	14.6	5.1	4.5	9.6	-	4.5	4.5
Southwestern Communities Subtotal	91.4	651.4	742.8	35.9	135.9	171.8	12.9	35.1	48.0	21.4	33.3	54.7
<i>Eastern Communities</i>												
Central Mountain	42.6	143.2	185.8	-	3.0	3.0	-	-	-	-	-	-
Desert	60.3	255.2	315.5	-	6.4	6.4	-	4.1	4.1	-	0.5	0.5
Julian	35.0	24.5	59.5	-	-	-	-	-	-	-	-	-

TABLE 5.6 (Continued)
ROADWAY LANE MILES BY LEVEL OF SERVICE
REFERRAL MAP

CPA	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
Mountain Empire	43.5	141.7	185.2	13.2	2.5	15.7	4.9	-	4.9	9.1	-	9.1
North Mountain	123.9	109.7	233.6	-	10.4	10.4	-	-	-	-	-	-
Eastern Communities Subtotal	305.3	674.3	979.6	13.2	22.3	35.5	4.9	4.1	9.0	9.1	0.5	9.6
Total	488.1	1,887.0	2,375.1	58.4	337.3	395.7	22.1	100.2	122.3	44.0	81.5	125.5

Source: Wilson & Company; May 2009

**TABLE 5.7
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
REFERRAL MAP**

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

TABLE 5.7 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
REFERRAL MAP

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

**TABLE 5.7 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
REFERRAL MAP**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
San Dieguito	ME Road	Del Dios Highway	Via Rancho Pkwy 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 Rd 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 Rd	2.1D	27,600	F	4.1B
		Mountain Meadow Road/ Mirar De Valle Road	Burnt Mountain to Red Ironbark Dr	2.1D	27,600	F	4.1B
		Mountain Meadow Road/ Mirar De Valle Road	Red Ironbark Dr to Cypress Ridge	2.1D	27,600	F	4.1B
		Lilac Road	Cypress Ridge to Valley Center Rd	4.2A	38,100	F	6.2

**TABLE 5.7 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
REFERRAL MAP**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Valley Center	ME Road	Valley Center Road	Sunday Dr to Lilac Rd	4.2A	28,400	E	4.1B
		Valley Center Road	Lilac Rd to Canyon Rd	4.1A	38,600	F	6.2
		Valley Center Road	Canyon Rd to New Southern Pass	4.1A	38,600	F	6.2
		Valley Center Road	New Southern Pass to Miller Rd	4.1A	38,600	F	6.2
		Valley Center Road	Miller Rd to Indian Creek Rd	4.2A	38,600	F	6.2
		Valley Center Road	Highpoint Dr to Round Tree Rd	2.1D	18,800	E	4.2B
		Valley Center Road	N Lake Wolford Rd to Paradise Crk	2.1D	15,700	E	4.2B
		Wood Valley Road	Oakmont Rd to Augusta Dr	2.1A	17,500	E	4.2B
		Wood Valley Road	Augusta Dr to Karibu Ln	2.2C	14,100	E	4.2B
<i>Southwestern Communities</i>							
Alpine	ME Road	Alpine Boulevard	Tavern Rd to Boulders Rd	2.2A	14,700	E	2.1A
		Alpine Boulevard	Boulders Rd to Alpine Special Treatment Center	2.2A	20,400	F	4.2B
		Alpine Boulevard	Alpine Special Treatment Center to W. Victoria Dr	2.2A	15,300	E	4.2B
		Alpine Boulevard	W. Victoria Dr to Bay Meadows Dr	2.2A	22,900	F	4.2B
		Alpine Boulevard	Bay Meadow Dr to Viejas View Pl	2.2A	16,200	E	4.2B
		Alpine Boulevard	Viejas View Pl to Willows Rd	2.1D	20,300	F	4.2B
		Alpine Boulevard	Willows Rd to Viejas Row	2.1E	12,700	E	2.1C
		South Grade Road	Eltinge Dr to Olive View Rd	2.2C	15,600	E	4.2B
		Viejas Row	Willows Rd to Alpine Blvd	4.1A	63,500	F	6.1
		Willows Road	Alpine Blvd to Otto Ave	2.2C	17,600	E	4.2B
		Willows Road	Otto Ave to Viejas Grade Rd	2.2C	20,500	F	4.2B
		Tavern Road	I-8 EB Ramps to Alpine Blvd	4.1A	35,700	E	6.2

TABLE 5.7 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
REFERRAL MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
County Island	ME Road	Pomerado Road	I-15 NB Ramps to Willow Creek Rd	4.1A	34,800	E	6.2
Jamul - Dulzura	State Hwy	Campo Road/SR-94	Steele Canyon High School to Fair Acres Ln	2-Ln State Highway	28,800	F	4-Ln State Highway
		Campo Road/SR-94	Fair Acres Ln to Steel Canyon Rd	2-Ln State Highway	25,500	E	4-Ln State Highway
Jamul - Dulzura	State Hwy	Campo Road/SR-94	Steel Canyon Rd to Lyons Valley Rd	2-Ln State Highway	30,700	F	4-Ln State Highway
		Campo Road/SR-94	Lyons Valley Rd to Melody Rd	2-Ln State Highway	20,300	E	4-Ln State Highway
		Campo Road/SR-94	Barrett Lake Rd to Tecate Sub-Group Area Boundary	2-Ln State Highway	19,500	F	4-Ln State Highway
	ME Road	Lyons Valley Road	Campo Rd to Skyline Truck Trail	2.2D	17,200	E	4.2B
Lakeside	State Hwy	SR-67	Poway/County Boundary to Scripps Poway Pkwy	4-Ln State Highway	35,800	F	6-Ln State Highway
		SR-67	Scripps Poway Pkwy to Sycamore Park	4-Ln State Highway	45,100	F	6-Ln State Highway
		SR-67	Johnson Lake Rd to Posthill Rd	4-Ln State Highway	44,500	E	6-Ln State Highway
		SR-67	Willow Rd to Lakeside Ave	4-Ln State Highway	43,300	E	6-Ln State Highway
		SR-67	Lakeside Ave to Mapleview St	4-Ln State Highway	55,300	F	6-Ln State Highway
	ME Road	Maine Avenue	Mapleview St to Lakeshore Dr	2.2E	15,400	E	4.2B
		Maine Avenue	Lakeshore Dr to Parkside St	2.2E	16,300	F	4.2B
		Maine Avenue	Parkside St to Woodside Ave	2.2E	14,300	E	4.2B
		Los Coches Road	Woodside Ave to Julian Ave	2.1D	17,300	E	4.2B
		Los Coches Road	Del Sol Rd to I-8 Business Route	2.1D	17,700	E	4.2B
		Willow Road	SR-67 to Ashwood St	2.2E	15,300	E	4.2B
		Wildcat Canyon Road	Willow Rd to Lakeside/Ramona CPA Boundary	2.1D	34,900	F	6.2
		Mapleview Street	Maine Ave to Ashwood St	4.1A	39,300	F	6.2

TABLE 5.7 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
REFERRAL MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Lakeside	ME Road	Lake Jennings Park Road	Jenning Vista Dr to I-8 Business Route	4.1B	31,400	E	6.2
		Lake Jennings Park Road	I-8 Business Route to I-8 WB Off-Ramp	4.1B	37,800	F	6.2
		Lake Jennings Park Road	I-8 WB Off-Ramp to I-8 EB Off-Ramp	4.1B	32,000	E	6.2
		Woodside Avenue	SR-67 NB Off-Ramp to Riverford Rd	4.2A	29,700	E	4.1B
Otay	ME Road	Siempre Viva Road	SR-11 EB Ramps to Loop Rd	4.1A	39,400	F	6.2
Ramona	State Hwy	Julian Rd/SR-67	Mussey Grade Rd to Highland Valley Rd	4-Ln State Highway	28,700	F	6-Ln State Highway
		Main Street/SR-78	9th St to 11th St	4-Ln State Highway	31,000	E	6-Ln State Highway
		Julian Road/SR-78	3rd St to Earham St	2-Ln State Highway	17,400	E	4-Ln State Highway
	ME Road	7th Street	Elm St to A St	2.2E	14,900	E	2.1D
		7th Street	Main St to D St	2.2E	15,400	F	4.2B
		San Vicente Road	H St to 11th St	2.1B	14,000	E	2.1D
Wildcat Canyon Road	Harry Hertzberg Rd to Lakeside/Ramona CPA Boundary	2.1D	34,900	F	6.2		
Spring Valley	ME Road	Paradise Valley Road	Elkelton Blvd to Sweetwater Rd	4.1B	35,500	F	6.2
		Jamacha Road	SR-125 SB Ramps to SR-125 NB Ramps	4.1B	34,300	E	6.2
		Jamacha Road	SR-125 NB Ramps to Sweetwater Rd	4.1B	39,900	F	6.2
		Bancroft Drive	Troy St to SR-94 EB Ramps	2.2D	20,000	F	4.2B
		Kenwood Drive	Andreen St to SR-94 EB Ramps	2.2D	14,600	E	2.1D
Sweetwater	ME Road	Briarwood Road	SR-54 WB Ramps to Robinwood Rd	2.1D	18,700	E	4.2B
		Sweetwater Road	Willow St to Orchard Hill Rd	2.1A	15,900	E	4.2B
		Central Avenue	Sweetwater Rd to San Miguel Rd	2.2B	17,100	E	4.2B
Valle De Oro	State Hwy	Campo Road/SR-94	Avocado Blvd to Jamacha Blvd	4-Ln State Highway	70,900	E	6-Ln State Highway
		Campo Road/SR-94	Jamacha Blvd to Jamacha Rd	4-Ln State Highway	79,600	E	6-Ln State Highway

TABLE 5.7 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
REFERRAL MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Valle De Oro	ME Road	Jamacha Road	Campo Rd/SR-94 to Fury Ln	6.2	70,100	F	6.1
		Campo Road	Kenwood Dr to Conrad Dr	4.2B	47,500	F	6.2
		Fuerte Drive	Bancroft Dr to Lemon Ave	2.1E	13,400	E	2.1C
		Fuerte Drive	Lemon Ave to Grandview Dr	2.2E	19,300	F	4.2B
		Fuerte Drive	Grandview Dr to Avocado Blvd	2.1E	14,300	E	2.1D
<i>Eastern Communities</i>							
Desert	ME Road	Borrego Springs Road	Diamond Bar Rd to Tilting T Dr	2.2D	14,100	E	2.1D
		Palm Canyon Drive	Ocotillo Cir to Borrego Springs Rd	2.2A	19,400	F	4.2B
Mountain Empire*	State Hwy	Tecate Road/SR-188	Campo Rd to Airport Rd	2-Ln State Highway	37,200	F	4-Ln State Highway
		Tecate Road/SR-188	Airport Rd to Humphries Rd	2-Ln State Highway	37,200	F	4-Ln State Highway
		Tecate Road/SR-188	Humphries Rd 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 Rd to Potrero Valley Rd	2-Ln State Highway	15,700	E	4-Ln State Highway

Source: Wilson & Company; May 2009

Note: * 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**.

Table 5.8 summarizes the projected total number of deficient roadway segments and corresponding deficient roadway lane miles throughout the unincorporated County under buildout of the Referral Map.

**TABLE 5.8
SUMMARY OF DEFICIENT ROADWAYS
REFERRAL MAP**

Type	State Highways	ME Roads	Total
Deficient Segments (#)	31	105	136
Deficient Lane Miles	66.1	181.7	247.8

Source: Wilson & Company; May 2009

5.3 Draft Land Use Map

The Draft Land Use Map was endorsed by the Board of Supervisors during the land use mapping phase of the General Plan Update. It is also the map wherein the Board directed continued refinements relating to meeting the Housing Element allocation and where additional modifications were made to achieve a more balanced road network.

5.3.1 Roadway Network

As noted previously, all of the General Plan Update land use alternatives were modeled using the Board-Endorsed Roadway Network with one exception: Road 3A in Valley Center CPA was added for the Referral Map and the Cumulative Analysis as a Mobility Element roadway. Therefore, the Draft Land Use Map includes two (2) less total lane miles in comparison to the Referral Map.

Table 5.9 displays roadway lane miles by facility type (State highways, ME roads and local public roads), as well as by subregion and CPA under the Draft Land Use Map. The Draft Lane Use Map roadway network includes 612.6 lane miles of State highways, 2,404.0 lane miles of County ME roads, and 702.5 lane miles of local public roads, for a total of 3,719.1 roadway lane miles. When compared to the Proposed Project (Referral Map), the Draft Land Use Map has the same number of State highway and local public road lane miles, and two (2) less ME road lane miles.

5.3.2 Roadway Network Performance

Table 5.10 displays roadway network performance under buildout of the Draft Land Use Map. Performance is reported by facility type (State highways and ME roads), as well as by subregion and CPA. LOS E and F are considered to be deficient facilities and subject to mitigation.

As shown in Table 5.10, a total of 112.6 lane miles of facilities (approximately 20.4 lane miles of State highways and 92.2 lane miles of ME roads) would operate at deficient LOS E. A total of 108.0 lane miles of facilities (28.4 lane miles of State highways and 79.6 lane miles of ME roads) would operate at LOS F under buildout of the Draft Land Use Map.

Under the Draft Land Use Map, just over half (54%) of the total deficient roadway lane miles (operating at LOS E and F) are located in the Northwestern Communities, with less than 4% located in the Eastern Communities.

5.3.3 Deficiency Analysis

Table 5.11 lists the deficient roadway segments (LOS E and F) in the unincorporated portion of the County of San Diego under buildout of the Draft Land Use Map. This table also includes forecast ADT, LOS, roadway classification type and mitigated classification. The roadway classification represents the General Plan Update classification indicated in the Board-Endorsed Roadway Network, and the mitigated roadway classification represents the classification which would be required to mitigate the identified deficiency.

**TABLE 5.9
ROADWAY LANE MILES BY SUBREGION AND CPA
DRAFT LAND USE MAP**

CPA	Lane Miles			
	State Highway	ME Roads	Local Public Roads	Total
<i>Northwestern Communities</i>				
Bonsall	17.2	83.4	21.6	122.2
Fallbrook	26.1	151.1	50	227.2
North County Metro	15.2	200.8	34.7	250.7
Pala - Pauma	60	46.1	3.4	109.5
Pendleton - De Luz	-	57.7	2.4	60.1
Rainbow	-	19.1	-	19.1
San Dieguito	-	105.7	54.2	159.9
Valley Center	-	183.2	36.4	219.6
Northwestern Communities Subtotal	118.5	847.1	202.7	1,168.3
<i>Southwestern Communities</i>				
Alpine	-	108.5	32.5	141.0
County Islands	-	3.9	-	3.9
Crest - Dehesa	-	63	9.1	72.1
Jamul - Dulzura	54.7	99.5	59.6	213.8
Lakeside	31.5	180.5	52.6	264.6
Otay	-	61.2	6.5	67.7
Ramona	64.6	151.8	51.8	268.2
Spring Valley	-	62.4	31.8	94.2
Sweetwater	-	27.9	8.1	36.0
Valle De Oro	10.8	97	34	141.8
Southwestern Communities Subtotal	161.6	853.1	286.0	1,300.7
<i>Eastern Communities</i>				
Central Mountain	42.6	146.2	66.2	255.0
Desert	60.3	266.2	8.1	334.6
Julian	35	24.5	1.4	60.9
Mountain Empire	70.7	144.2	76.4	291.3
North Mountain	123.9	120.1	61.7	305.7
Eastern Communities Subtotal	332.5	701.2	213.8	1,247.5
Total	612.6	2,404.0	702.5	3,719.1

Source: SANDAG/Wilson & Company; May 2009

**TABLE 5.10
ROADWAY LANE MILES BY LEVEL OF SERVICE
DRAFT LAND USE MAP**

CPA	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	2.2	70.3	72.5	3.3	6.4	9.7	1.1	4.5	5.6	10.6	2.2	12.8
Fallbrook	23.3	78.7	102.0	2.2	47.6	49.8	0.6	22.4	23.0	-	2.4	2.4
North County Metro	15.2	155.4	170.6	-	35.0	35.0	-	5.4	5.4	-	5.0	5.0
Pala - Pauma	48.5	36.0	84.5	6.4	10.1	16.5	1.2	-	1.2	3.9	-	3.9
Pendleton - De Luz	-	42.4	42.4	-	15.3	15.3	-	-	-	-	-	-
Rainbow	-	13.4	13.4	-	2.6	2.6	-	3.0	3.0	-	0.1	0.1
San Dieguito	-	51.3	51.3	-	16.0	16.0	-	14.7	14.7	-	23.7	23.7
Valley Center	-	129.4	129.4	-	36.6	36.6	-	5.1	5.1	-	12.1	12.1
Northwestern Communities Subtotal	89.2	576.9	666.1	11.9	169.6	181.5	2.9	55.1	58.0	14.5	45.5	60.0
Southwestern Communities												
Alpine	-	83.6	83.6	-	11.3	11.3	-	7.5	7.5	-	6.1	6.1
County Islands	-	1.3	1.3	-	-	-	-	2.6	2.6	-	-	-
Crest - Dehesa	-	53.3	53.3	-	9.7	9.7	-	-	-	-	-	-
Jamul - Dulzura	37.7	94.1	131.8	9.1	2.5	11.6	2.4	2.9	5.3	5.5	-	5.5
Lakeside	18.0	134.0	152.0	1.9	23.2	25.1	6.0	9.1	15.1	5.6	14.2	19.8
Otay	-	50.2	50.2	-	10.7	10.7	-	-	-	-	0.3	0.3
Ramona	53.7	120.7	174.4	9.2	26.2	35.4	-	0.8	0.8	1.7	4.1	5.8
Spring Valley	-	32.4	32.4	-	22.2	22.2	-	2.9	2.9	-	4.9	4.9
Sweetwater	-	18.6	18.6	-	6.8	6.8	-	2.5	2.5	-	-	-
Valle De Oro	4.0	72.1	76.1	-	15.9	15.9	6.8	4.5	11.3	-	4.5	4.5
Southwestern Communities Subtotal	113.4	660.3	773.7	20.2	128.5	148.7	15.2	32.8	48.0	12.8	34.1	46.9
Eastern Communities												
Central Mountain	42.6	145.3	187.9	-	0.9	0.9	-	-	-	-	-	-
Desert	60.3	255.2	315.5	-	6.7	6.7	-	4.3	4.3	-	-	-
Julian	35.0	24.5	59.5	-	-	-	-	-	-	-	-	-

TABLE 5.10 (Continued)
ROADWAY LANE MILES BY LEVEL OF SERVICE
DRAFT LAND USE MAP

CPA	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
Mountain Empire	67.0	142.3	209.3	0.3	1.9	2.2	2.3	-	2.3	1.1	-	1.1
North Mountain	123.9	109.7	233.6	-	10.4	10.4	-	-	-	-	-	-
Eastern Communities Subtotal	328.8	677.0	1,005.8	0.3	19.9	20.2	2.3	4.3	6.6	1.1	-	1.1
Total	531.4	1,914.2	2,445.6	32.4	318.0	350.4	20.4	92.2	112.6	28.4	79.6	108.0

Source: Wilson & Company; May 2009

**TABLE 5.11
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
DRAFT LAND USE MAP**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
<i>Northwestern Communities</i>							
Bonsall	State Hwy	Mission Road/SR-76	Oceanside/County Boundary to Vista Wy	4-Ln State Highway	60,000	F	6-Ln State Highway
		Mission Road/SR-76	Vista Wy to Holly Ln	4-Ln State Highway	60,000	F	6-Ln State Highway
		Mission Road/SR-76	Holly Ln to North River Rd	4-Ln State Highway	47,200	E	6-Ln State Highway
		Mission Road/SR-76	North River Rd to Via Montellano	4-Ln State Highway	56,700	F	6-Ln State Highway
		Mission Road/SR-76	Via Montellano to Mission Rd	4-Ln State Highway	59,300	F	6-Ln State Highway
	ME Road	Old Hwy 395	Dublin (W) Rd to West Lilac Rd	2.1D	16,800	E	4.2B
Old Hwy 395		West Lilac Rd to I-15 SB Ramps	2.1D	20,500	F	4.2B	
Fallbrook	State Hwy	Pala Road/SR-76	Old Hwy 395 to I-15 SB Ramps	4-Ln State Highway	36,600	E	6-Ln State Highway
	ME Road	Alvarado Street	Main Ave to Olive Ave	2.2C	14,900	E	2.1D
		De Luz Road	Dougherty St to Mission Road	2.2C	14,800	E	2.1D
		Fallbrook Street	Main Ave to Olive Ave	2.2B	15,200	E	4.2B
		Mission Road	Vine St to Brandon Rd	2.2B	14,900	E	2.1D
		Mission Road	Hamilton Ln to Live Oak Park Rd	4.2B	32,400	E	4.1A
		Mission Road	Live Oak Park Rd to Old Hwy 395	4.2B	32,400	E	4.1A
		Mission Road	Old Hwy 395 to I-15 SB Ramps	4.1B	38,100	F	6.2
		Old Hwy 395	White Lilac Rd to Mission Rd	2.1D	17,000	E	4.2B
		Old Hwy 395	Mission Rd to Reche Rd	2.1A	18,600	E	4.2B
		Old Hwy 395	Reche Rd to Stewart Canyon Rd	2.1A	22,200	F	4.2B
		Old Hwy 395	Stewart Canyon Rd to Pala Mesa Dr	2.1A	17,600	E	4.2B
Old Hwy 395	Pala Rd to Dublin (E) Rd	2.1D	14,900	E	4.2B		

TABLE 5.11 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
DRAFT LAND USE MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Fallbrook	ME Road	Old Hwy 395	Dublin (E) Rd to Dublin (W) Rd	2.1D	17,000	F	4.2B
		Pala Mesa Drive	Old Hwy 395 to Pankey Rd	2.2F	16,900	F	4.2B
		Reche Road	Fallbrook St to Green Canyon Rd	2.2C	14,000	E	2.1D
		Pepper Tree Lane	Mission Rd to Woodbrook Ln	2.2E	14,500	E	2.1D
North County Metro	ME Road	Deer Springs Road	Mesa Rock Rd to I-15 NB Ramps	6.2	53,000	E	6.1
		Deer Springs Road	I-15 NB Ramps to N Centre City Pkwy	4.1B	45,500	F	6.2
		Mountain Meadow Road	North Broadway to Alps Ln	2.1D	21,900	F	4.2B
		Bear Valley Parkway	Eldorado Dr to San Pasqual Valley Rd	4.1A	35,800	E	6.2
Pala - Pauma	State Hwy	Pala Road/SR-76	Pala Del Norte Rd to 6th St	2-Ln State Highway	24,900	F	4-Ln State Highway
		Pala Road/SR-76	6th St to Pala Temecula Rd	2-Ln State Highway	22,500	E	4-Ln State Highway
		Pala Road/SR-78	Pala Temecula Rd to 1st St	2-Ln State Highway	23,400	F	4-Ln State Highway
Rainbow	ME Road	Rainbow Valley Boulevard	I-15 NB Ramps to Old Hwy 395	2.2E	17,100	F	4.2B
		Old Hwy 395	5th St to Rainbow Valley Rd	2.1D/2.2D	17,000	E	4.2B
		Old Hwy 395	Rainbow Valley Rd to New Rainbow Valley Rd	2.1D/2.2D	17,000	E	4.2B
		Old Hwy 395	New Rainbow Valley Rd to White Lilac	2.1D/2.2D	17,000	E	4.2B
San Dieguito	ME Road	Del Dios Highway	Via Rancho Pkwy to El Camino Del Norte	2.1D	31,500	F	4.1A
		Paseo Delicias	El Camino Del Norte to El Montevideo	2.2B	24,200	F	4.2B
		Paseo Delicias	El Montevideo to Via De La Valle	2.2B	23,100	F	4.2B
		Paseo Delicias	Via De La Valle to La Granada	2.2A	15,200	E	4.2B
		El Camino Del Norte	Aliso Canyon Rd to Del Dios Hwy/Paseo Delicias	2.2F	13,700	E	2.1A
		La Bajada	El Mirlo to Los Morros	2.2F	24,700	F	4.2B
San	ME	La Granada	Los Morros to Rambla De Las Flores	2.2F	24,700	F	4.2B

TABLE 5.11 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
DRAFT LAND USE MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Dieguito	Road	La Granada	Rambla De Las Flores to Avenida De Acacias	2.2F	15,300	E	4.2B
		La Granada	Avenida De Acacias to Paseo Delicias	2.2F	17,200	F	4.2B
		Linea Del Cielo	El Camino Real to Rambla De Las Flores	2.2F	11,400	E	2.2C
		Via De La Valle	El Camino Real to Las Palomas	2.1B	25,200	F	4.2A
		Via De La Valle	Las Palomas to Calzada Del Bosque	2.1E	25,500	F	4.2A
		Via De La Valle	Calzada Del Bosque to Via de Santa Fe	2.1E	25,500	F	4.2A
		Via De La Valle	Via de Santa Fe to Paseo Delicias	2.1E	18,200	E	4.2B
		El Apajo	Via De La Valle to Via De Santa Fe	2.1A	16,900	E	4.2B
		San Dieguito Road	El Apajo to Circa Oriente	2.1A	17,600	E	4.2B
Valley Center	ME Road	Mountain Meadow Road/Mirar De Valle Road	Alps Ln to Burnt Mountain Rd	2.1D	28,800	F	4.1B
		Mountain Meadow Road/Mirar De Valle Road	Burnt Mountain to Red Ironbark Dr	2.1D	28,800	F	4.1B
		Mountain Meadow Road/Mirar De Valle Road	Red Ironbark Dr to Cypress Ridge	2.1D	28,800	F	4.1B
		Lilac Road	Cypress Ridge to Valley Center Rd	4.2A	36,300	F	6.2
		Valley Center Road	Lilac Rd to Canyon Rd	4.1A	39,600	F	6.2
		Valley Center Road	Canyon Rd to New Southern Pass	4.1A	39,600	F	6.2
		Valley Center Road	New Southern Pass to Miller Rd	4.1A	39,600	F	6.2
		Valley Center Road	Miller Rd to Indian Creek Rd	4.2A	36,000	F	6.2
		Valley Center Road	High Point Dr to Round Tree Rd	2.1D	16,600	E	4.2B

TABLE 5.11 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
DRAFT LAND USE MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
<i>Southwestern Communities</i>							
Alpine	ME Road	Alpine Boulevard	Arnold Way to Peutz Valley Rd	2.1D	17,300	E	4.2B
		Alpine Boulevard	Tavern Rd to Boulders Rd	2.2A	20,500	F	4.2B
		Alpine Boulevard	Boulders Rd to Alpine Special Treatment Center	2.2A	15,800	E	4.2B
		Alpine Boulevard	Alpine Special Treatment Center to W. Victoria Dr	2.2A	15,800	E	4.2B
		Alpine Boulevard	W. Victoria Dr to Bay Meadows Dr	2.2A	24,800	F	4.2B
		Alpine Boulevard	Bay Meadows Dr to Viejas View Pl	2.1D	16,400	E	4.2B
		Alpine Boulevard	Viejas View Pl to Willows Rd	2.1D	21,000	F	4.2B
		Alpine Boulevard	Willows Rd to Viejas Row	2.1E	12,900	E	2.1C
		South Grade Road	Eltinge Dr to Olive View Rd	2.2C	15,600	E	4.2B
		Willows Road	Alpine Blvd to Otto Ave	2.2C	20,900	E	4.2B
		Willows Road	Otto Ave to Viejas Grade Rd	2.2E	20,900	F	4.2B
		Viejas Row	Willows Rd to Alpine Blvd	4.1A	63,500	F	6.1
County Island	ME Road	Pomerado Road	I-15 NB Ramps to Willow Creek Rd	4.1A	35,400	E	6.2
Jamul - Dulzura	State Hwy	Campo Road/SR-94	Steele Canyon High School to Fair Acres Ln	2-Ln State Highway	29,000	F	4-Ln State Highway
		Campo Road/SR-94	Fair Acres Ln to Steele Canyon Rd	2-Ln State Highway	25,600	E	4-Ln State Highway
		Campo Road/SR-94	Steel Canyon Rd to Lyons Valley Rd	2-Ln State Highway	30,600	F	4-Ln State Highway
		Campo Road/SR-94	Lyons Valley Rd to Melody Rd	2-Ln State Highway	19,900	E	4-Ln State Highway
	ME Road	Lyons Valley Road	Campo Rd to Skyline Truck Trail	2.2D	17,200	E	4.2B
Lakeside	State Hwy	SR-67	Poway/County Boundary to Scripps Poway Pkwy	4-Ln State Highway	45,600	F	6-Ln State Highway
		SR-67	Scripps Poway Pkwy To Sycamore Park	4-Ln State Highway	45,600	E	6-Ln State Highway

TABLE 5.11 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
DRAFT LAND USE MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Lakeside	State Hwy	SR-67	Johnson Lake Rd to Posthill Rd	4-Ln State Highway	44,800	E	6-Ln State Highway
		SR-67	Willow Rd to Lakeside Ave	4-Ln State Highway	43,000	E	6-Ln State Highway
		SR-67	Lakeside Ave to Mapleview St	4-Ln State Highway	55,400	F	6-Ln State Highway
	ME Road	Maine Avenue	Mapleview St to Lakeshore Dr	2.2E	18,300	E	4.2B
		Maine Avenue	Lakeshore Dr to Parkside St	2.2E	15,300	E	4.2B
		Maine Avenue	Parkside St to Woodside Ave	2.2E	15,300	E	4.2B
		Los Cochés Road	Woodside Ave to Julian Ave	2.1D	17,100	E	4.2B
		Los Cochés Road	Del Sol Rd to I-8 Business Route	2.1D	17,800	E	4.2B
		Willow Road	SR-67 to Ashwood St	2.2E	15,600	E	4.2B
		Wildcat Canyon Road	Willow Rd to Lakeside/Ramona CPA Boundary	2.1D	35,700	F	6.2
		Mapleview Street	Maine Ave to Ashwood St	4.1A	39,400	F	6.2
		Woodside Avenue	SR-67 NB Off-Ramp to Riverford Rd	4.2A	29,700	E	4.1B
		Woodside Avenue	Winter Gardens Blvd to Erwin Ln	4.2A	28,300	E	4.1B
		Lake Jennings Park Road	Jennings Vista Dr to I-8 Business Route	4.1B	31,300	E	4.1A
		Lake Jennings Park Road	I-8 Business Route to I-8 WB Off-Ramp	4.1B	37,900	F	6.2
		Lake Jennings Park Road	I-8 WB Off-Ramp to I-8 EB Off-Ramp	4.1B	32,100	E	4.1A
Greenfield Drive	Graves Ave to Ballantyne St	2.2B	14,000	E	2.1D		
Siempre Viva Road	SR-11 EB Ramps to Loop Rd	4.1A	39,600	F	6.2		
Ramona	State Hwy	Julian Road/SR-67	Mussey Grade Rd to Highland Valley Rd	4-Ln State Highway	28,600	F	6-Ln State Highway
		Main Street/SR-78	9th St to 11th St	4-Ln State Highway	29,400	F	6-Ln State Highway
	ME Road	7th Street	Elm St to A St	2.2E	14,700	E	2.1D
		7th Street	Main St to D St	2.2E	12,100	F	2.2C

TABLE 5.11 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
DRAFT LAND USE MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Ramona	ME Road	7th Street	E St to G St	2.2E	14,000	E	2.1D
		San Vicente Road	H St to 11th St	2.1C	14,800	E	2.1D
		Wildcat Canyon Road	Harry Hertzberg Rd to Lakeside/Ramona CPA Boundary	2.1D	35,700	F	6.2
Spring Valley	ME Road	Paradise Valley Road	Worthington St to Elkelton Blvd	4.1B	32,700	E	4.1A
		Paradise Valley Road	Elkelton Blvd to Sweetwater Rd	4.1B	37,500	F	6.2
		Jamacha Road	SR-125 SB Ramps to SR-125 NB Ramps	4.1B	34,500	F	6.2
		Bancroft Drive	Troy St to SR-94 EB Ramp	2.2D	20,000	F	4.2B
		Kenwood Drive	Andreen St to SR-94 EB Ramps	2.2D	14,600	E	2.1D
Sweetwater	ME Road	Briarwood Road	SR-54 WB Ramps to Robinwood Rd	2.1D	17,300	E	4.2B
		Sweetwater Road	Willow St to Orchard Hill Rd	2.1A	16,700	E	4.2B
		Central Avenue	Sweetwater Rd to San Miguel Rd	2.2B	17,200	E	4.2B
Valle De Oro	State Hwy	Campo Road/SR-93	Avocado Blvd to Jamacha Blvd	4-Ln State Highway	70,400	E	6-Ln State Highway
		Campo Road/SR-94	Jamacha Blvd to Jamacha Rd	4-Ln State Highway	79,600	E	6-Ln State Highway
	ME Road	Jamacha Road	Campo Rd/SR-94 to Fury Ln	6.2	61,300	F	6.1
		Campo Road	Kenwood Dr to Conrad Dr	4.2B	47,800	F	6.2
		Fuerte Drive	Bancroft Dr to Lemon Ave	2.1E	16,100	E	4.2B
		Fuerte Drive	Lemon Ave to Grandview Dr	2.1E	19,400	F	4.2B
		Fuerte Drive	Grandview Dr to Avocado Blvd	2.1E	15,400	E	4.2B
<i>Eastern Communities</i>							
Desert	ME Road	Borrego Springs Road	Diamond Bar Rd to Tilting T Dr	2.2D	14,300	E	2.1D
		Palm Canyon Drive	Ocotillo Cir to Borrego Springs Rd	2.2A	19,000	E	4.2B

TABLE 5.11 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
DRAFT LAND USE MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Mountain Empire	State Hwy	Tecate Rd/SR-188	Campo Rd to Airport Rd	2-Ln State Highway	21,000	E	4-Ln State Highway
		Tecate Rd/SR-188	Airport Rd to Humphries Rd	2-Ln State Highway	21,000	E	4-Ln State Highway
		Tecate Rd/SR-188	Humphries Rd to USA/Mexico Border	2-Ln State Highway	22,500	F	4-Ln State Highway

Source: Wilson & Company; May 2009

Table 5.12 summarizes the projected total number of deficient roadway segments and corresponding deficient roadway lane miles throughout the unincorporated County under buildout of the Draft Land Use Map.

**TABLE 5.12
SUMMARY OF DEFICIENT ROADWAYS
DRAFT LAND USE MAP**

Type	State Highways	ME Roads	Total
Deficient Segments (#)	25	101	126
Deficient Lane Miles	48.8	171.8	220.6

Source: Wilson & Company; May 2009

5.4 Hybrid Map

The Hybrid Map strikes a balance between the Referral Map and the Draft Land Use Map. It includes the Regional Housing Needs Allocation refinements, the road network land use changes, and the other refinements to the Referral Map. It also incorporates the Referral Map changes that meet the project objectives and reflect the policy direction of the proposed General Plan Update Elements.

5.4.1 Roadway Network

As noted previously, all of the General Plan Update land use alternatives were modeled using the Board-Endorsed Roadway Network with one exception: Road 3A in Valley Center CPA was added for the Referral Map and the Cumulative Analysis as a Mobility Element roadway. Therefore, like the Draft Land Use Map, the Hybrid Map would have two (2) less total lane miles in comparison to the Proposed Project (Referral Map). **Table 5.13** displays lane miles by facility type (State highways, ME roads and local public roads), as well as by subregion and CPA under the Hybrid Map.

The Hybrid Map roadway network includes 612.6 lane miles of State highways, 2,404.0 lane miles of County ME roads, and 702.5 lane miles of local public roads, for a total of 3,719.1 roadway lane miles. When compared to the Proposed Project (Referral Map), the Hybrid Map has the same number of State highway and local public road lane miles, and two (2) less ME road lane miles.

5.4.2 Roadway Network Performance

Table 5.14 displays roadway network performance under buildout of the Hybrid Map. Performance is reported by facility type (State highways and ME roads), as well as by subregion and CPA. LOS E and F are considered to be deficient facilities and subject to mitigation.

As shown in Table 5.14, a total of 128.1 lane miles of roadway facilities (21.0 lane miles of State highways and 107.1 lane miles of ME roads) would operate at deficient LOS E. A total of 109.2 roadway lane miles (30.3 lane miles of State highways and 78.9 lane miles of ME roads) would operate at LOS F under buildout of the Hybrid Map.

Similar to the Draft Land Use Map, just over half (51%) of the total deficient roadway lane miles (operating at LOS E and F) under the Hybrid Map are located in the Northwestern Communities, with less than 4% located in the Eastern Communities.

5.4.3 Deficiency Analysis

Table 5.15 lists the deficient roadway segments (LOS E and F) in the unincorporated County of San Diego under buildout of the Hybrid Map. This table also includes forecast ADT, LOS, roadway classification type and mitigated classification. The roadway classification represents the General Plan Update classification indicated in the Board-Endorsed Roadway Network, and the mitigated roadway classification represents the classification which would be required to mitigate the identified deficiency.

**TABLE 5.13
ROADWAY LANE MILES BY SUBREGION AND CPA
HYBRID MAP**

CPA	Lane Miles			
	State Highway	ME Roads	Local Public Roads	Total
<i>Northwestern Communities</i>				
Bonsall	17.2	83.4	21.6	122.2
Fallbrook	26.1	151.1	50.0	227.2
North County Metro	15.2	200.8	34.7	250.7
Pala - Pauma	60.0	46.1	3.4	109.5
Pendleton - De Luz	-	57.7	2.4	60.1
Rainbow	-	19.1	-	19.1
San Dieguito	-	105.7	54.2	159.9
Valley Center	-	183.2	36.4	219.6
Northwestern Communities Subtotal	118.5	847.1	202.7	1,168.3
<i>Southwestern Communities</i>				
Alpine	-	108.5	32.5	141.0
County Islands	-	3.9	-	3.9
Crest - Dehesa	-	63.0	9.1	72.1
Jamul - Dulzura	54.7	99.5	59.6	213.8
Lakeside	31.5	180.5	52.6	264.6
Otay	-	61.2	6.5	67.7
Ramona	64.6	151.8	51.8	268.2
Spring Valley	-	62.4	31.8	94.2
Sweetwater	-	27.9	8.1	36.0
Valle De Oro	10.8	97.0	34.0	141.8
Southwestern Communities Subtotal	161.6	855.7	286.0	1,303.3
<i>Eastern Communities</i>				
Central Mountain	42.6	146.2	66.2	255.0
Desert	60.3	266.2	8.1	334.6
Julian	35.0	24.5	1.4	60.9
Mountain Empire	70.7	144.2	76.4	291.3
North Mountain	123.9	120.1	61.7	305.7
Eastern Communities Subtotal	332.5	701.2	213.8	1,247.5
Total	612.6	2,404.0	702.5	3,719.1

Source: SANDAG/Wilson & Company; May 2009

**TABLE 5.14
ROADWAY LANE MILES BY LEVEL OF SERVICE
HYBRID MAP**

CPA	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	2.2	70.3	72.5	3.3	6.2	9.5	1.1	6.9	8.0	10.6	-	10.6
Fallbrook	23.3	79.3	102.6	2.2	46.2	48.4	0.6	23.2	23.8	-	2.4	2.4
North County Metro	15.2	157.5	172.7	-	33.4	33.4	-	4.1	4.1	-	5.8	5.8
Pala - Pauma	48.5	36.2	84.7	6.0	9.9	15.9	1.6	-	1.6	3.9	-	3.9
Pendleton - De Luz	-	42.4	42.4	-	15.3	15.3	-	-	-	-	-	-
Rainbow	-	13.4	13.4	-	2.6	2.6	-	3.0	3.0	-	0.1	0.1
San Dieguito	-	51.3	51.3	-	14.8	14.8	-	15.9	15.9	-	23.7	23.7
Valley Center	-	126.3	126.3	-	40.5	40.5	-	4.3	4.3	-	12.1	12.1
Northwestern Communities Subtotal	89.2	576.7	665.9	11.5	169.0	180.5	3.3	57.3	60.6	14.5	44.1	58.6
Southwestern Communities												
Alpine	-	83.6	83.6	-	8.1	8.1	-	10.7	10.7	-	6.1	6.1
County Islands	-	1.3	1.3	-	-	-	-	2.6	2.6	-	-	-
Crest - Dehesa	-	53.3	53.3	-	9.7	9.7	-	-	-	-	-	-
Jamul - Dulzura	37.7	94.1	131.8	6.5	2.5	9.0	5.0	2.9	7.9	5.5	-	5.5
Lakeside	18.0	134.3	152.3	-	23.3	23.3	6.0	8.5	14.5	7.5	14.4	21.9
Otay	-	50.2	50.2	-	10.7	10.7	-	-	-	-	0.3	0.3
Ramona	53.2	120.3	173.5	9.7	18.7	28.4	-	8.7	8.7	1.7	4.1	5.8
Spring Valley	-	32.4	32.4	-	21.3	21.3	-	3.8	3.8	-	4.9	4.9
Sweetwater	-	18.6	18.6	-	5.7	5.7	-	3.6	3.6	-	-	-
Valle De Oro	4.7	72.1	76.8	1.7	15.5	17.2	4.4	4.9	9.3	-	4.5	4.5
Southwestern Communities Subtotal	113.6	660.2	773.8	17.9	115.5	133.4	15.4	45.7	61.1	14.7	34.3	49.0
Eastern Communities												
Central Mountain	42.6	143.2	185.8	-	3.0	3.0	-	-	-	-	-	-
Desert	60.3	255.2	315.5	-	6.4	6.4	-	4.1	4.1	-	0.5	0.5
Julian	35.0	24.5	59.5	-	-	-	-	-	-	-	-	-

TABLE 5.14 (Continued)
ROADWAY LANE MILES BY LEVEL OF SERVICE
HYBRID MAP

CPA	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
Mountain Empire	67.0	142.3	209.3	0.3	1.9	2.2	2.3	-	2.3	1.1	-	1.1
North Mountain	123.9	109.7	233.6	-	10.4	10.4	-	-	-	-	-	-
Eastern Communities Subtotal	328.8	674.9	1,003.7	0.3	21.7	22.0	2.3	4.1	6.4	1.1	0.5	1.6
Total	531.6	1,911.8	2,443.4	29.7	306.2	335.9	21.0	107.1	128.1	30.3	78.9	109.2

Source: Wilson & Company; May 2009

**TABLE 5.15
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
HYBRID MAP**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
<i>Northwestern Communities</i>							
Bonsall	State Hwy	Mission Road/SR-76	Oceanside/County Boundary to Vista Wy	4-Ln State Highway	59,500	F	6-Ln State Highway
		Mission Road/SR-76	Vista Wy to Holly Ln	4-Ln State Highway	59,500	F	6-Ln State Highway
		Mission Road/SR-76	Holly Ln to North River Rd	4-Ln State Highway	46,300	E	6-Ln State Highway
		Mission Road/SR-76	North River Rd to Via Montellano	4-Ln State Highway	56,300	F	6-Ln State Highway
		Mission Road/SR-76	Via Montellano to Mission Rd	4-Ln State Highway	58,900	F	6-Ln State Highway
	ME Road	Old Hwy 395	Dublin (W) Rd to West Lilac Rd	2.1D	17,100	E	4.2B
		Old Hwy 395	West Lilac Rd to I-15 SB Ramps	2.1D	17,100	E	4.2B
Fallbrook	State Hwy	Pala Road/SR-76	Old Hwy 395 to I-15 SB Ramps	4-Ln State Highway	37,600	E	6-Ln State Highway
	ME Road	Alvarado Street	Main Ave to Olive Ave	2.2C	15,200	E	4.2B
		De Luz Road	Dougherty St to Mission Rd	2.2C	14,700	E	2.1D
		Fallbrook Street	Main Ave to Olive Ave	2.2B	13,900	E	2.1D
		Mission Road	Vine St to Brandon Rd	2.2B	15,400	E	4.2B
		Mission Road	Hamilton Ln to Live Oak Park Rd	4.2B	32,600	E	4.1A
		Mission Road	Live Oak Park Rd to Old Hwy 395	4.2B	32,600	E	4.1A
		Mission Road	Old Hwy 395 to I-15 SB Ramps	4.1B	38,400	F	6.2
		Old Hwy 395	White Lilac Rd to Mission Rd	2.1D	16,500	E	4.2B
		Old Hwy 395	Mission Rd to Reche Rd	2.1A	18,600	E	4.2B
		Old Hwy 395	Reche Rd to Stewart Canyon Rd	2.1A	22,200	F	4.2B
		Old Hwy 395	Stewart Canyon Rd to Pala Mesa Dr	2.1A	17,600	E	4.2B
		Old Hwy 395	Pala Rd to Dublin (E) Rd	2.1D	15,400	E	4.2B

TABLE 5.15 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
HYBRID MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Fallbrook	ME Road	Old Hwy 395	E Dublin Rd to Dublin (W) Rd	2.1D	17,600	F	4.2B
		Pala Mesa Drive	Daisy Ln to Old Hwy 395	2.2F	10,900	E	2.2E
		Pala Mesa Drive	Old Hwy 395 to Pankey Road	2.1A	17,500	F	4.2B
		Pankey Road	Pala Mesa Dr to Pala Rd	2.1A	16,000	E	4.2B
North County Metro	ME Road	Deer Springs Road	Mesa Rock Rd to I-15 NB Ramps	6.2	53,700	E	6.1
		Deer Springs Road	I-15 NB Ramps to N Centre City Pkwy	4.1B	46,100	F	6.2
		Mountain Meadows Road / Mirar De Valle	North Broadway to Alps Ln	2.1D	21,200	F	4.2B
		Bear Valley Parkway	Eldorado Dr to San Pasqual Valley Rd	4.1A	36,400	E	6.2
Pala - Pauma	State Hwy	Pala Road/SR-76	Pala Del Norte Rd to 6th St	2-Ln State Highway	23,700	F	4-Ln State Highway
		Pala Road/SR-76	6th St to Pala Temecula Rd	2-Ln State Highway	21,800	E	4-Ln State Highway
		Pala Road/SR-76	Pala Temecula Rd to 1st St	2-Ln State Highway	23,600	F	4-Ln State Highway
		Pala Road/SR-76	Pala Mission Rd to Lilac Rd	2-Ln State Highway	17,000	E	4-Ln State Highway
Rainbow	ME Road	Rainbow Valley Boulevard	I-15 NB Ramps to Old Hwy 395	2.1C	17,300	F	4.2B
		Old Hwy 395	5th St to Rainbow Valley Rd	2.2D	17,800	E	4.2B
		Old Hwy 395	Rainbow Valley Rd to New Rainbow Valley Rd	2.2D	17,800	E	4.2B
		Old Hwy 395	New Rainbow Valley Rd to White Lilac Rd	2.2D	17,800	E	4.2B
San Dieguito	ME Road	Del Dios Highway	Via Rancho Pkwy to El Camino Del Norte	2.1D	31,300	F	4.1A
		Paseo Delicias	El Camino Del Norte to El Montevideo	2.2B	22,300	F	4.2B
		Paseo Delicias	El Montevideo to Via De La Valle	2.2B	22,300	F	4.2B
San Dieguito	ME Road	Paseo Delicias	Via De La Valle to La Granada	2.2A	14,300	E	2.1A
		La Bajada	El Mirlo to Los Morros	2.2F	25,700	F	4.2A

TABLE 5.15 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
HYBRID MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
		La Granada	Los Morros to Rambla De Las Flores	2.2F	25,700	F	4.2A
		La Granada	Rambia de las Flores to Avenida De Acacias	2.2F	15,100	E	4.2B
		La Granada	Avenida De Acacias to Paseo Delicias	2.2F	16,800	F	4.2B
		Linea Del Cielo	El Camino Real to Rambla De Las Flores	2.2F	11,700	E	2.2C
		Via De La Valle	El Camino Real to Las Palomas	2.1B	24,000	F	4.2B
		Via De La Valle	Las Palomas to Calzada Del Bosque	2.1E	25,100	F	4.2A
		Via De La Valle	Calzada Del Bosque to Via de Santa Fe	2.1E	25,100	F	4.2A
		El Camino Del Norte	Aliso Canyon Rd to Del Dios Hwy	2.2F	13,700	E	2.1A
		El Apajo	Via De La Valle to Via De Santa Fe	2.1A	17,100	E	4.2B
		San Dieguito Road	El Apajo to Circa Oriente	2.1A	16,700	E	4.2B
Valley Center	ME Road	Mountain Meadows Road/ Mirar De Valle Road	Alps Ln to Burnt Mountain Rd	2.1D	27,500	F	4.1B
		Mountain Meadows Road/ Mirar De Valle Road	Burnt Mountain to Red Ironbark Dr	2.1D	27,500	F	4.1B
		Mountain Meadows Road/ Mirar De Valle Road	Red Ironbark Dr to Cypress Ridge	2.1D	27,500	F	4.1B
		Lilac Road	Cypress Ridge to Valley Center Rd	4.2A	35,900	F	6.2
		Valley Center Road	Lilac Rd to Canyon Rd	4.1A	38,000	F	6.2
		Valley Center Road	Canyon Rd to New Southern Pass	4.1A	36,700	E	6.2
		Valley Center Road	New Southern Pass to Miller Rd	4.1A	34,900	E	6.2
		Valley Center Road	Miller Rd to Indian Creek Rd	4.2A	34,900	E	6.2
		Valley Center Road	High Point Drive to Round Tree Rd	2.1D	18,000	E	4.2B

TABLE 5.15 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
HYBRID MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
<i>Southwestern Communities</i>							
Alpine	ME Road	Alpine Boulevard	Arnold Wy to Peutz Valley Rd	2.1D	17,700	E	4.2B
		Alpine Boulevard	Tavern Rd to Boulders Rd	2.2A	20,000	F	4.2B
		Alpine Boulevard	Boulders Rd to Alpine Special Treatment Center	2.2A	15,400	E	4.2B
		Alpine Boulevard	Alpine Special Treatment Center to W. Victoria Dr	2.2A	15,400	E	4.2B
		Alpine Boulevard	W. Victoria Dr to Bay Meadows Dr	2.2A	20,200	F	4.2B
		Alpine Boulevard	Bay Meadows Dr to Viejas View Pl	2.1D	14,500	E	4.2B
		Alpine Boulevard	Viejas View Pl to Willows Rd	2.1D	14,500	E	4.2B
		South Grade Road	Eltinge Dr to Olive View Rd	2.2C	13,600	E	2.1A
		Willows Road	Alpine Blvd to Otto Ave	2.2C	15,800	E	4.2B
		Willows Road	Otto Ave to Viejas Grade Rd	2.2C	15,800	E	4.2B
		Viejas Row	Willows Rd to Alpine Blvd	4.1A	40,600	F	6.2
County Island	ME Road	Pomerado Road	I-15 NB Ramps to Willow Creek Rd	4.1A	35,400	E	6.2
Jamul - Dulzura	State Hwy	Campo Road/SR-94	Steele Canyon High School to Fair Acres Ln	2-Ln State Highway	29,700	F	4-Ln State Highway
		Campo Road/SR-94	Fair Acres Ln to Steele Canyon Rd	2-Ln State Highway	25,700	E	4-Ln State Highway
		Campo Road/SR-94	Steel Canyon Rd to Lyons Valley Rd	2-Ln State Highway	30,600	F	4-Ln State Highway
		Campo Road/SR-94	Lyons Valley Rd to Melody Rd	2-Ln State Highway	20,100	E	4-Ln State Highway
	ME Road	Lyons Valley Road	Campo Rd to Skyline Truck Trail	2.2D	17,100	E	4.2B
Lakeside	State Hwy	SR-67	Poway/County Boundary to Scripps Poway Pkwy	4-Ln State Highway	45,400	F	6-Ln State Highway
		SR-67	Scripps Poway Pkwy To Sycamore Park	4-Ln State Highway	45,400	E	6-Ln State Highway
		SR-67	Johnson Lake Rd to Posthill Rd	4-Ln State Highway	44,900	E	6-Ln State Highway

TABLE 5.15 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
HYBRID MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Lakeside	ME Road	SR-67	Willow Rd to Lakeside Ave	4-Ln State Highway	50,000	E	6-Ln State Highway
		SR-67	Lakeside Ave to Maplevue St	4-Ln State Highway	59,900	F	6-Ln State Highway
		Maine Avenue	Maplevue St to Lakeshore Dr	2.2E	16,700	E	4.2B
		Maine Avenue	Lakeshore Dr to Parkside St	2.1E	16,500	F	4.2B
		Maine Avenue	Parkside St to Woodside Ave	2.2E	14,200	E	2.1D
		Lake Jennings Park Road	Jennings Vista Dr to I-8 Business Route	4.1B	31,400	E	4.1A
		Lake Jennings Park Road	I-8 Business Route to I-8 WB Off-Ramp	4.1B	32,200	E	4.1A
		Lake Jenning Park Road	I-8 WB Off-Ramp to I-8 EB Off-Ramp	4.1B	32,200	E	4.1A
		Los Coches Road	Woodside Ave to Julian Ave	2.1D	17,200	E	4.2B
		Los Coches Road	Del Sol Rd to I-8 Business Route	2.1D	18,000	E	4.2B
		Willow Road	SR-67 to Ashwood St	2.2E	18,500	F	4.2B
		Wildcat Canyon Road	Willow Rd to Lakeside/Ramona CPA Boundary	2.1D	31,800	F	4.1A
		Maplevue Street	Maine Ave to Ashwood St	4.1A	36,800	E	6.2
		Woodside Avenue	SR-67 NB Off Ramp to Riverford Rd	4.2A	30,000	E	4.1B
		Woodside Avenue	Winter Gardens Blvd to Erwin Ln	4.2A	27,300	E	4.1B
Otay	ME Road	Sempre Viva Road	SR-11 EB Ramps to Loop Rd	4.1A	40,700	F	6.2
Ramona	State Hwy	Main Street/SR-78	Mussey Grade Rd to Highland Valley Rd	4-Ln State Highway	28,900	F	6-Ln State Highway
		Main Street/SR-78	9th St to 11th St	4-Ln State Highway	31,200	F	6-Ln State Highway
		Julian Road/SR-78	3rd St to Earham St	4-Ln State Highway	18,000	F	6-Ln State Highway
	ME Road	7th Street	Elm St to A St	2.2E	14,000	E	2.1D
		7th Street	Main St to D St	2.2E	12,000	F	2.2C
		7th Street	E St to G St	2.3C	10,000	E	2.2E

**TABLE 5.15 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
HYBRID MAP**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Ramona	ME Road	Wildcat Canyon Road	Painted Rock Rd to Harry Hertzberg Rd	2.1D	14,800	E	2.1D
		Wildcat Canyon Road	Harry Hertzberg Rd to Lakeside/Ramona CPA Boundary	2.1D	37,100	F	6.2
Spring Valley	ME Road	Paradise Valley Road	Worthington St to Elkelton Blvd	4.1B	32,700	E	4.1A
		Paradise Valley Road	Elkelton Blvd to Sweetwater Rd	4.1B	37,500	F	6.2
		Jamacha Road	SR-125 SB Ramps to SR-125 NB Ramps	4.1B	33,900	E	6.2
		Jamacha Road	SR-125 NB Ramps to Sweetwater Rd	4.1B	39,300	F	6.2
		Bancroft Drive	Troy St to SR-94 EB Ramp	2.2D	20,000	F	4.2B
		Kenwood Drive	Andreen St to SR-94 EB Ramps	2.2D	14,600	E	2.1D
Sweetwater	ME Road	Briarwood Road	SR-54 WB Ramps to Robinwood Rd	2.1D	20,000	E	4.2B
		Sweetwater Road	Willow St to Orchard Hill Rd	2.1A	16,700	E	4.2B
		Central Avenue	Sweetwater Rd to San Miguel Rd	2.2C	16,700	E	4.2B
Valle De Oro	State Hwy	Campo Road/SR-94	Avocado Blvd to Jamacha Blvd	4-Ln State Highway	72,200	E	6-Ln State Highway
		Campo Road/SR-94	Jamacha Blvd to Jamacha Rd	4-Ln State Highway	82,300	E	6-Ln State Highway
	ME Road	Jamacha Road	Campo Rd/SR-94 to Fury Ln	6.2	61,500	F	6.1
		Campo Road	Kenwood Dr to Conrad Dr	4.2B	45,600	F	6.2
		Fuerte Drive	Bancroft Dr to Lemon Ave	2.1E	14,300	E	2.1D
		Fuerte Drive	Lemon Ave to Grandview Dr	2.2E	19,500	F	4.2B
		Fuerte Drive	Grandview Dr to Avocado Blvd	2.1E	14,400	E	2.1D
<i>Eastern Communities</i>							
Desert	ME Road	Palm Canyon Drive	Ocotillo Cir to Borrego Springs Rd	2.2A	17,300	E	4.2B

TABLE 5.15 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
HYBRID MAP

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Mountain Empire	State Hwy	Tecate Road/SR-188	Campo Rd to Airport Rd	2-Ln State Highway	22,500	F	4-Ln State Highway
		Tecate Road/SR-188	Airport Rd to Humphries Rd	2-Ln State Highway	22,300	E	4-Ln State Highway

Source: Wilson & Company; May 2009

Table 5.16 summarizes the projected total number of deficient roadway segments and corresponding deficient roadway lane miles throughout the unincorporated County under buildout of the Hybrid Map.

**TABLE 5.16
SUMMARY OF DEFICIENT ROADWAYS
HYBRID MAP**

Type	State Highways	ME Roads	Total
Deficient Segments (#)	26	97	123
Deficient Lane Miles	51.3	186.0	237.3

Source: Wilson & Company; May 2009

5.5 Environmentally Superior Alternative

The Environmentally Superior Alternative was developed for the purpose of completing a reasonable range of alternatives for the General Plan Update. The mapping portion of this alternative was intended to reflect a more stringent application of growth restrictions in portions of the Semi-Rural and the Rural Lands regional categories.

5.5.1 Roadway Network

As noted previously, all of the General Plan Update land use alternatives were modeled using the Board-Endorsed Roadway Network with one exception: Road 3A in Valley Center CPA was added for the Referral Map and the Cumulative Analysis as a Mobility Element roadway. Therefore, the Environmentally Superior Alternative would have two (2) less total roadway lane miles in comparison to the Referral Map.

Table 5.17 displays lane miles by facility type (State highways, ME roads and local public roadways), as well as by subregion and CPA under the Environmentally Superior Alternative.

As shown in Table 5.17, the Environmentally Superior Alternative includes 612.6 lane miles of State highways, 2,404.0 lane miles of County ME roads, and 702.5 lane miles of local public roads, for a total of 3,719.1 roadway lane miles. When compared to the Proposed Project (Referral Map), the Environmentally Superior Alternative has the same number of State highways and local public road lane miles, and two (2) less ME road lane miles.

5.5.2 Roadway Network Performance

Table 5.18 displays roadway network performance under the Environmentally Superior Alternative. Performance is reported by facility type (State highways and ME roads), as well as by subregion and CPA. LOS E and F are considered to be deficient facilities and subject to mitigation.

As shown in Table 5.18, a total of 107.0 lane miles of roadway facilities (16.3 lane miles of State highways and 90.7 lane miles of ME roads) would operate at deficient LOS E. A total of 97.9 roadway lane miles (29.2 lane miles of State highways and 68.7 lane miles of ME roads) would operate at LOS F under buildout of the Environmentally Superior Alternative.

Similar to the Draft Land Use Map and Hybrid Map, approximately half of the total deficient roadway lane miles (operating at LOS E and F) under the Environmentally Superior Alternative would be located in the Northwestern Communities, with less than 4% located in the Eastern Communities.

5.4.4 Deficiency Analysis

Table 5.19 lists the deficient roadway segments (LOS E and F) in the unincorporated County of San Diego under buildout of the Environmentally Superior Alternative. This table also includes forecast ADT, LOS, roadway classification type and mitigated classification. The roadway classification represents the General Plan Update classification indicated in the Board-Endorsed Roadway Network, and the mitigated roadway classification represents the classification which would be required to mitigate the identified deficiency.

**TABLE 5.17
ROADWAY LANE MILES BY SUBREGION AND CPA
ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CPA	Lane Miles			
	State Highway	ME Roads	Local Public Roads	Total
<i>Northwestern Communities</i>				
Bonsall	17.2	83.4	21.6	122.2
Fallbrook	26.1	151.1	50.0	227.2
North County Metro	15.2	200.8	34.7	250.7
Pala - Pauma	60.0	46.1	3.4	109.5
Pendleton - De Luz	-	57.7	2.4	60.1
Rainbow	-	19.1	-	19.1
San Dieguito	-	105.7	54.2	159.9
Valley Center	-	183.2	36.4	219.6
Northwestern Communities Subtotal	118.5	847.1	202.7	1,168.3
<i>Southwestern Communities</i>				
Alpine	-	108.5	32.5	141.0
County Islands	-	3.9	-	3.9
Crest - Dehesa	-	63.0	9.1	72.1
Jamul - Dulzura	54.7	99.5	59.6	213.8
Lakeside	31.5	180.5	52.6	264.6
Otay	-	61.2	6.5	67.7
Ramona	64.6	151.8	51.8	268.2
Spring Valley	-	62.4	31.8	94.2
Sweetwater	-	27.9	8.1	36.0
Valle De Oro	10.8	97.0	34.0	141.8
Southwestern Communities Subtotal	161.6	855.7	286.0	1,303.3
<i>Eastern Communities</i>				
Central Mountain	42.6	146.2	66.2	255.0
Desert	60.3	266.2	8.1	334.6
Julian	35.0	24.5	1.4	60.9
Mountain Empire	70.7	144.2	76.4	291.3
North Mountain	123.9	120.1	61.7	305.7
Eastern Communities Subtotal	332.5	701.2	213.8	1,247.5
Total	612.6	2,404.0	702.5	3,719.1

Source: SANDAG/Wilson & Company; May 2009

**TABLE 5.18
ROADWAY LANE MILES BY LEVEL OF SERVICE
ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CPA	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
<i>Northwestern Communities</i>												
Bonsall	2.2	74.4	76.6	3.3	3.9	7.2	2.7	5.1	7.8	9.0	-	9.0
Fallbrook	25.5	89.1	114.6	-	41.1	41.1	0.6	20.7	21.3	-	0.2	0.2
North County Metro	15.2	174.7	189.9	-	16.6	16.6	-	4.0	4.0	-	5.5	5.5
Pala - Pauma	54.5	36.0	90.5	0.4	10.1	10.5	1.2	-	1.2	3.9	-	3.9
Pendleton - De Luz	-	42.4	42.4	-	15.3	15.3	-	-	-	-	-	-
Rainbow	-	13.4	13.4	-	2.7	2.7	-	3.0	3.0	-	-	-
San Dieguito	-	53.6	53.6	-	16.9	16.9	-	11.5	11.5	-	23.7	23.7
Valley Center	-	138.4	138.4	-	28.9	28.9	-	9.6	9.6	-	6.3	6.3
Northwestern Communities Subtotal	97.4	622.0	719.4	3.7	135.5	139.2	4.5	53.9	58.4	12.9	35.7	48.6
<i>Southwestern Communities</i>												
Alpine	-	83.9	83.9	-	12.2	12.2	-	7.0	7.0	-	5.4	5.4
County Islands	-	1.3	1.3	-	-	-	-	2.6	2.6	-	-	-
Crest - Dehesa	-	53.3	53.3	-	9.7	9.7	-	-	-	-	-	-
Jamul - Dulzura	37.7	95.3	133.0	7.5	1.7	9.2	4.4	2.5	6.9	5.1	-	5.1
Lakeside	19.2	133.4	152.6	3.4	25.3	28.7	3.3	7.4	10.7	5.6	14.4	20.0
Otay	-	50.2	50.2	-	10.7	10.7	-	-	-	-	0.3	0.3
Ramona	53.7	120.4	174.1	9.2	26.5	35.7	-	0.8	0.8	1.7	4.1	5.8
Spring Valley	-	32.4	32.4	-	21.6	21.6	-	4.7	4.7	-	3.7	3.7
Sweetwater	-	17.9	17.9	-	6.4	6.4	-	3.6	3.6	-	-	-
Valle De Oro	5.4	71.9	77.3	0.3	16.1	16.4	3.0	3.9	6.9	2.1	5.1	7.2
Southwestern Communities Subtotal	116.0	660.0	776.0	20.4	130.2	150.6	10.7	32.5	43.2	14.5	33.0	47.5
<i>Eastern Communities</i>												
Central Mountain	42.6	145.3	187.9	-	0.9	0.9	-	-	-	-	-	-
Desert	60.3	257.1	317.4	-	4.8	4.8	-	4.3	4.3	-	-	-
Julian	35.0	24.5	59.5	-	-	-	-	-	-	-	-	-

TABLE 5.18 (Continued)
ROADWAY LANE MILES BY LEVEL OF SERVICE
ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CPA	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
Mountain Empire	67.0	143.1	210.1	0.8	1.1	1.9	1.1	-	1.1	1.8	-	1.8
North Mountain	123.9	109.7	233.6	-	10.4	10.4	-	-	-	-	-	-
Eastern Communities Subtotal	328.8	679.7	1,008.5	0.8	17.2	18.0	1.1	4.3	5.4	1.8	0.0	1.8
Total	542.2	1,961.7	2,503.9	24.9	282.9	307.8	16.3	90.7	107.0	29.2	68.7	97.9

Source: Wilson & Company; May 2009

**TABLE 5.19
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
<i>Northwestern Communities</i>							
Bonsall	State Hwy	Mission Road/SR-76	Oceanside/County Boundary to Vista Wy	4-Ln State Highway	58,900	F	6-Ln State Highway
		Mission Road/SR-76	Vista Wy to Holly Ln	4-Ln State Highway	46,000	E	6-Ln State Highway
		Mission Road/SR-76	Holly Ln to North River Rd	4-Ln State Highway	56,500	F	6-Ln State Highway
		Mission Road/SR-76	North River Rd to Via Montellano	4-Ln State Highway	56,500	F	6-Ln State Highway
		Mission Road/SR-76	Via Montellano to Mission Rd	4-Ln State Highway	58,100	F	6-Ln State Highway
	ME Road	Old Hwy 395	Dublin (W) Rd to West Lilac Rd	2.1D	15,800	E	4.2B
		Old Hwy 395	West Lilac Rd to I-15 SB Ramps	2.1D	18,400	E	4.2B
Fallbrook	State Hwy	Pala Road/SR-76	Old Hwy 395 to I-15 SB Ramps	4-Ln State Highway	36,400	E	6-Ln State Highway
	ME Road	Alvarado Street	Main Ave to Olive Ave	2.2C	15,000	E	2.1D
		Fallbrook Street	Main Ave to Olive Ave	2.2B	15,200	E	4.2B
		Mission Road	Vine St to Brandon Rd	2.2B	14,400	E	2.1D
		Mission Road	Hamilton Ln to Live Oak Park Rd	4.2B	28,100	E	4.1B
		Mission Road	Old Hwy 395 to I-15 SB Ramps	4.1B	37,000	F	6.2
		Old Hwy 395	White Lilac Rd to Mission Rd	2.1D	16,000	E	4.2B
		Old Hwy 395	Mission Rd to Reche Rd	2.1A	18,300	E	4.2B
		Old Hwy 395	Reche Rd to Stewart Canyon Rd	2.1A	18,300	E	4.2B
		Old Hwy 395	Stewart Canyon Rd to Pala Mesa Rd	2.1A	18,300	E	4.2B
		Old Hwy 395	Pala Rd to Dublin (E) Rd	2.1D	16,100	E	4.2B

**TABLE 5.19 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
North County Metro	ME Road	Deer Springs Road	I-15 NB Ramps to N Centre City Pkwy	4.1B	36,600	E	6.2
		Mountain Meadow Road	North Broadway to Alps Ln	2.1D	19,200	F	4.2B
Pala - Pauma	State Hwy	Pala Road/SR-76	Pala Del Norte Rd to 6th St	2-Ln State Highway	25,000	F	4-Ln State Highway
		Pala Road/SR-76	6th St to Pala Temecula Rd	2-Ln State Highway	22,600	E	4-Ln State Highway
		Pala Road/SR-76	Pala Temecula Rd to 1st St	2-Ln State Highway	22,600	F	4-Ln State Highway
Rainbow	ME Road	Old Hwy 395	5th St to Rainbow Valley Rd	2.1D / 2.2D	16,000	E	4.2B
		Old Hwy 395	Rainbow Valley Rd to New Rainbow Valley Rd	2.1D / 2.2D	16,000	E	4.2B
		Old Hwy 395	New Rainbow Valley Rd to White Lilac	2.1D / 2.2D	16,000	E	4.2B
San Dieguito	ME Road	Del Dios Highway	Via Rancho Pkwy to El Camino Del Norte	2.1D	27,700	F	4.1B
		Paseo Delicias	El Camino Del Norte to El Montevideo	2.2B	23,000	F	4.2B
		Paseo Delicias	El Montevideo to Via De La Valle	2.2B	23,000	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 Rd to Del Dios Hwy/Paseo Delicias	2.2F	13,700	E	2.1D
		La Bajada	El Mirlo to Los Morros	2.2F	24,600	F	4.2B
		La Granada	Los Morros to Rambla De Las Flores	2.2F	24,600	F	4.2B
		La Granada	Rambla De Las Flores to Avenida De Acacias	2.2F	15,000	E	2.1D
		La Granada	Avenida De Acacias to Paseo Delicias	2.2F	17,100	F	4.2B
		Linea De La Cielo	El Camino Real to Rambla De Las Flores	2.2F	11,000	E	2.2C
		Via De La Valle	El Camino Real to Las Palomas	2.1B	25,000	F	4.2B
		Via De La Valle	Las Palomas to Calzada Del Bosque	2.1E	25,000	F	4.2B
		Via De La Valle	Calzada Del Bosque to Via de Santa Fe	2.1E	25,000	F	4.2B
Via De La Valle	Via de Santa Fe to Paseo Delicias	2.1E	16,200	E	4.2B		

TABLE 5.19 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
San Dieguito	ME Road	El Apajo	Via De La Valle to Via De Santa Fe	2.1A	16,600	E	4.2B
		San Dieguito Road	El Apajo to Circa Oriente	2.1A	17,700	E	4.2B
Valley Center	ME Road	Mountain Meadow Road/ Mirar De Valle Road	Alps Ln to Burnt Mountain Rd	2.1D	19,200	F	4.2B
		Mountain Meadow Road/ Mirar De Valle Road	Burnt Mountain to Red Ironbark Dr	2.1D	18,800	E	4.2B
		Mountain Meadow Road/ Mirar De Valle Road	Red Ironbark Dr to Cypress Ridge	2.1D	26,900	F	4.2A
		Lilac Road	Cypress Ridge to Valley Center Rd	4.2A	31,100	E	4.1A
		Valley Center Road	Lilac Rd to Canyon Rd	4.1A	35,100	E	6.2
		Valley Center Road	Canyon Rd to New Southern Pass	4.1A	35,100	E	6.2
		Valley Center Road	New Southern Pass to Miller Rd	4.1A	35,100	E	6.2
		Valley Center Road	Miller Rd to Indian Creek Rd	4.2A	33,700	F	6.2
		Valley Center Road	High Point Dr to Round Tree Rd	2.1D	17,000	E	4.2B
<i>Southwestern Communities</i>							
Alpine	ME Road	Alpine Boulevard	Arnold Wy to Peutz Valley Rd	2.1D	17,100	E	4.2B
		Alpine Boulevard	Tavern Rd to Boulders Rd	2.2A	20,200	F	4.2B
		Alpine Boulevard	Boulders Rd to Alpine Special Treatment Center	2.2A	15,300	E	4.2B
		Alpine Boulevard	Alpine Special Treatment Center to W. Victoria Dr	2.2A	15,300	E	4.2B
		Alpine Boulevard	W. Victoria Dr to Bay Meadows Dr	2.2A	25,500	F	4.2A
		Alpine Boulevard	Bay Meadows Dr to Viejas View Pl	2.2A	15,200	E	4.2B
		Alpine Boulevard	Viejas View Pl to Willows Rd	2.1D	20,300	F	4.2B
		Willows Road	Alpine Blvd to Otto Ave	2.2C	15,300	E	4.2B

TABLE 5.19 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Alpine	ME Road	Willows Road	Otto Ave to Viejas Grade Rd	2.2C	20,800	F	4.2B
		Viejas Row	Willows Rd to Alpine Blvd	4.1A	64,100	F	6.1
County Island	ME Road	Pomerado Road	I-15 NB Ramps to Willow Creek Rd	4.1A	35,400	E	6.2
Jamul - Dulzura	State Hwy	Campo Road/SR-94	Steele Canyon High School to Fair Acres Ln	2-Ln State Highway	28,700	F	4-Ln State Highway
		Campo Road/SR-94	Fair Acres Ln to Steel Canyon Rd	2-Ln State Highway	25,200	E	4-Ln State Highway
		Campo Road/SR-94	Steele Canyon Rd to Lyon Valley Rd	2-Ln State Highway	29,900	F	4-Ln State Highway
		Campo Road/SR-94	Lyon Valley Rd to Melody Rd	2-Ln State Highway	19,800	E	4-Ln State Highway
	ME Road	Lyons Valley Road	Campo Rd to Skyline Truck Trail	2.2D	16,500	E	4.2B
Lakeside	State Hwy	SR-67	Poway/County Boundary to Scripps Poway Pkwy	4-Ln State Highway	35,700	F	6-Ln State Highway
		SR-67	Scripps Poway Pkwy to Sycamore Park	4-Ln State Highway	45,400	F	6-Ln State Highway
		SR-67	Johnson Lake Rd to Posthill Rd	4-Ln State Highway	44,500	E	6-Ln State Highway
		SR-67	Willow Rd to Lakeside Ave	4-Ln State Highway	43,000	E	6-Ln State Highway
		SR-67	Lakeside Ave to Maplevue St	4-Ln State Highway	55,000	F	6-Ln State Highway
	ME Road	Maine Avenue	Maplevue St to Lakeshore Dr	2.2E	15,400	E	4.2B
		Maine Avenue	Lakeshore Dr to Parkside St	2.2E	16,200	F	4.2B
		Maine Avenue	Parkside St to Woodside Ave	2.2E	14,300	E	2.1A
		Los Cocheros Road	Woodside Ave to Julian Ave	2.1D	17,400	E	4.2B
		Los Cocheros Road	Del Sol Rd to I-8 Business Route	2.1D	17,900	E	4.2B
		Willow Road	SR-67 to Ashwood St	2.2E	14,400	E	2.1A
		Wildcat Canyon Road	Willow Rd to Lakeside/Ramona CPA Boundary	2.1D	30,700	F	4.1B
		Maplevue Street	Maine Ave to Ashwood St	4.1A	39,700	F	6.2

TABLE 5.19 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Lakeside	ME Road	Woodside Avenue	SR-67 NB Off Ramp to Riverford Rd	4.2A	29,600	E	4.1B
		Lake Jennings Park Road	Jenning Vista Dr to I-8 Business Route	4.1B	35,700	E	6.2
		Lake Jennings Park Road	I-8 Business Route to I-8 WB Off-Ramp	4.1B	39,400	F	6.2
		Lake Jennings Park Road	I-8 WB Off-Ramp to I-8 EB Off-Ramp	4.1B	39,400	F	6.2
Otay	ME Road	Siempre Viva Road	SR-11 EB Ramps to Loop Rd	4.1A	39,800	F	6.2
Ramona	State Hwy	Julian Road/SR-67	Mussey Grade Rd to Highland Valley Rd	4-Ln State Highway	28,600	F	6-Ln State Highway
		Main Street/SR-78	9th St to 11th St	4-Ln State Highway	29,400	F	6-Ln State Highway
		7th Street	Elm St to A St	2.2E	13,400	E	2.2C
		7th Street	Main St to D St	2.2E	14,700	F	2.1D
		Wildcat Canyon Road	Harry Hertzberg Rd to Lakeside/Ramona CPA Boundary	2.1D	36,200	F	6.2
Spring Valley	ME Road	Paradise Valley Road	Elkelton Blvd to Sweetwater Rd	4.1A	40,200	F	6.2
		Bancroft Drive	Troy St to SR-94 EB Ramp	2.2D	20,000	F	4.2B
Sweetwater	ME Road	Briarwood Rd	SR-54 WB Ramps to Robinwood Rd	2.1D	18,900	E	4.2B
Valle De Oro	State Hwy	Campo Road/SR-94	Avocado Blvd to Jamacha Blvd	4-Ln State Highway	72,200	E	6-Ln State Highway
		Campo Road/SR-94	Jamacha Blvd to Jamacha Rd	4-Ln State Highway	79,500	F	6-Ln State Highway
	ME Road	Fuerte Drive	Bancroft Dr to Lemon Ave	2.1E	14,800	E	2.1D
		Fuerte Drive	Lemon Ave to Grandview Dr	2.1E	19,400	F	4.2B
		Fuerte Drive	Grandview Dr to Avocado Blvd	2.1E	14,500	E	2.1D
<i>Eastern Communities</i>							
Desert	ME Road	Palm Canyon Road	Ocotillo Cir to Borrego Springs Rd	2.2A	16,000	E	4.2B

TABLE 5.19 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Mountain Empire	State Hwy	Tecate Road/SR-188	Campo Rd to Airport Rd	2-Ln State Highway	22,800	F	4-Ln State Highway
		Tecate Road/SR-188	Airport Rd to Humphries Rd	2-Ln State Highway	20,700	E	4-Ln State Highway

Source: Wilson & Company; May 2009

Table 5.20 summarizes the projected total number of deficient roadway segments and corresponding deficient roadway lane miles throughout the unincorporated County under buildout of the Environmentally Superior Alternative.

**TABLE 5.20
SUMMARY OF DEFICIENT ROADWAYS
ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

Type	State Highways	ME Roads	Total
Deficient Segments (#)	24	78	102
Deficient Lane Miles	45.5	159.4	204.9

Source: Wilson & Company; May 2009

5.6 Cumulative Analysis

The Cumulative Analysis assumes a maximum build-out scenario by combining the most intensive land uses from all of the alternatives. Additionally, it includes cumulative projects that are not included in the other General Plan Update alternatives, such as tribal projects and development that might occur once the Forest Conservation Initiative (FCI) sunsets.

5.6.1 Roadway Network

As noted previously, all of the General Plan Update land use alternatives were modeled using the Board-Endorsed Roadway Network with one exception: Road 3A in Valley Center CPA was added for the Referral Map and the Cumulative Analysis as a Mobility Element roadway. Therefore, the Cumulative Analysis includes the same roadway network as the Proposed Project (Referral Map).

Table 5.21 displays lane miles by facility type (State highways, ME roads and local public roads), as well as by subregion and CPA for the Cumulative Analysis.

As shown in Table 5.21, the Cumulative Analysis roadway network includes 612.6 lane miles of State highways, 2,406 lane miles of County ME roads, and 702.5 roadway lane miles of local public roads, for a total of 3,721 roadway lane miles. When compared to the Proposed Project (Referral Map), the Cumulative Analysis has the same number of State highway, ME road, and local public road lane miles.

5.6.2 Roadway Network Performance

Table 5.22 shows roadway network performance under the Cumulative Analysis. Performance is reported by facility type (State highways and ME roads), as well as by subregion and CPA. LOS E and F are considered to be deficient facilities and subject to mitigation.

As shown in Table 5.22, a total of 161.2 lane miles of roadway facilities (31.2 lane miles of State highways and 130.0 lane miles of ME roads) would operate at substandard LOS E. A total of 137.1 lane miles of facilities (48.5 lane miles of State highway and 88.6 lane miles of ME roads) would operate at substandard LOS F under the Cumulative Analysis.

Under the Cumulative Analysis, approximately half of the total deficient roadway lane miles (operating at LOS E and F) would be located in the Northwestern Communities, with just over 11% located in the Eastern Communities.

5.6.3 Deficiency Analysis

Table 5.23 lists the deficient roadway segments (LOS E and F) in the unincorporated County of San Diego under the Cumulative Analysis. This table also includes forecast ADT, LOS, roadway classification type and mitigated classification. The roadway classification represents the General Plan Update classification indicated in the Board-Endorsed Roadway Network, and the mitigated roadway classification represents the classification which would be required to mitigate the identified deficiency.

**TABLE 5.21
ROADWAY LANE MILES BY SUBREGION AND CPA
CUMULATIVE ANALYSIS**

CPA	Lane Miles			
	State Highway	ME Roads	Local Public Roads	Total
<i>Northwestern Communities</i>				
Bonsall	17.2	83.4	21.6	122.2
Fallbrook	26.1	151.1	50.0	227.2
North County Metro	15.2	200.8	34.7	250.7
Pala - Pauma	60.0	46.1	3.4	109.5
Pendleton - De Luz	-	57.7	2.4	60.1
Rainbow	-	19.1	0.0	19.1
San Dieguito	-	105.7	54.2	159.9
Valley Center	-	185.2	36.4	221.6
Northwestern Communities Subtotal	118.5	849.1	202.7	1,170.3
<i>Southwestern Communities</i>				
Alpine	-	108.5	32.5	141.0
County Islands	-	3.9	-	3.9
Crest - Dehesa	0.0	63.0	9.1	72.1
Jamul - Dulzura	54.7	99.5	59.6	213.8
Lakeside	31.5	180.5	52.6	264.6
Otay	-	61.2	6.5	67.7
Ramona	64.6	151.8	51.8	268.2
Spring Valley	-	62.4	31.8	94.2
Sweetwater	-	27.9	8.1	36.0
Valle De Oro	10.8	97.0	34.0	141.8
Southwestern Communities Subtotal	161.6	855.7	286.0	1,303.3
<i>Eastern Communities</i>				
Central Mountain	42.6	146.2	66.2	255.0
Desert	60.3	266.2	8.1	334.6
Julian	35.0	24.5	1.4	60.9
Mountain Empire	70.7	144.2	76.4	291.3
North Mountain	123.9	120.1	61.7	305.7
Eastern Communities Subtotal	332.5	701.2	213.8	1,247.5
Total	612.6	2,406.0	702.5	3,721.1

Source: Wilson & Company; May 2009

**TABLE 5.22
ROADWAY LANE MILES BY LEVEL OF SERVICE
CUMULATIVE ANALYSIS**

CPA	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
<i>Northwestern Communities</i>												
Bonsall	2.2	69.4	71.6	3.3	7.5	10.8	1.1	6.5	7.6	10.6	-	10.6
Fallbrook	21.8	77.4	99.2	3.7	41.9	45.6	0.6	23.7	24.3	-	8.1	8.1
North County Metro	15.2	145.6	160.8	-	32.5	32.5	-	15.7	15.7	-	7.0	7.0
Pala - Pauma	49.4	36.0	85.4	5.1	8.1	13.2	1.6	2.0	3.6	3.9	-	3.9
Pendleton - De Luz	-	42.4	42.4	-	15.3	15.3	-	-	-	-	-	-
Rainbow	-	12.6	12.6	-	3.4	3.4	-	1.9	1.9	-	1.2	1.2
San Dieguito	-	50.7	50.7	-	19.9	19.9	-	11.4	11.4	-	23.7	23.7
Valley Center	-	105.8	105.8	-	53.4	53.4	-	12.4	12.4	-	13.6	13.6
Northwestern Communities Subtotal	88.6	539.9	628.5	12.1	182.0	194.1	3.3	73.6	76.9	14.5	53.6	68.1
<i>Southwestern Communities</i>												
Alpine	-	73.0	73.0	-	13.3	13.3	-	13.9	13.9	-	8.3	8.3
County Islands	-	1.3	1.3	-	-	-	-	2.6	2.6	-	-	-
Crest - Dehesa	-	52.2	52.2	-	10.8	10.8	-	-	-	-	-	-
Jamul - Dulzura	17.8	93.7	111.5	18.4	1.7	20.1	7.9	4.1	12.0	10.6	-	10.6
Lakeside	15.6	132.0	147.6	7.0	23.2	30.2	3.3	10.9	14.2	5.6	14.4	20.0
Otay	-	55.1	55.1	-	5.8	5.8	-	-	-	-	0.3	0.3
Ramona	52.6	118.6	171.2	9.8	20.3	30.1	0.5	8.8	9.3	1.7	4.1	5.8
Spring Valley	-	36.0	36.0	-	19.0	19.0	-	4.6	4.6	-	2.8	2.8
Sweetwater	-	18.6	18.6	-	9.0	9.0	-	0.3	0.3	-	-	-
Valle De Oro	5.4	73.7	79.1	0.3	14.3	14.6	3.0	3.9	6.9	2.1	5.1	7.2
Southwestern Communities Subtotal	91.4	654.2	745.6	35.5	117.4	152.9	14.7	49.1	63.8	20.0	35.0	55.0
<i>Eastern Communities</i>												
Central Mountain	42.6	143.2	185.8	-	3.0	3.0	-	-	-	-	-	-
Desert	60.3	252.9	313.2	-	6.0	6.0	-	7.3	7.3	-	-	-
Julian	35.0	24.5	59.5	-	-	-	-	-	-	-	-	-

TABLE 5.22 (Continued)
ROADWAY LANE MILES BY LEVEL OF SERVICE
CUMULATIVE ANALYSIS

CPA	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
Mountain Empire	43.5	140.9	184.4	-	3.3	3.3	13.2	-	13.2	14.0	-	14.0
North Mountain	123.9	109.7	233.6	-	10.4	10.4	-	-	-	-	-	-
Eastern Communities Subtotal	305.3	671.2	976.5	-	22.7	22.7	13.2	7.3	20.5	14.0	-	14.0
Total	485.3	1,865.3	2,350.6	47.6	322.1	369.7	31.2	130.0	161.2	48.5	88.6	137.1

Source: Wilson & Company; May 2009

**TABLE 5.23
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
CUMULATIVE ANALYSIS**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
<i>Northwestern Communities</i>							
Bonsall	State Hwy	Mission Road/SR-76	Oceanside/County Boundary to Vista Wy	4-Ln State Highway	59,800	F	6-Ln State Highway
		Mission Road/SR-76	Vista Wy to Holly Ln	4-Ln State Highway	46,700	F	6-Ln State Highway
		Mission Road/SR-76	Holly Ln to North River Rd	4-Ln State Highway	46,000	E	6-Ln State Highway
		Mission Road/SR-76	North River Rd to Via Montellano	4-Ln State Highway	56,700	F	6-Ln State Highway
		Mission Road/SR-76	Via Montellano to Mission Rd	4-Ln State Highway	59,200	F	6-Ln State Highway
		Pala Road/SR-76	Mission Rd to Sweetgrass Ln	4-Ln State Highway	57,700	E	6-Ln State Highway
	CE Road	Old Hwy 395	Dublin (W) Rd to West Lilac Rd	2.1D	17,100	E	4.2B
		Old Hwy 395	West Lilac Rd to I-15 SB Ramps	2.1D	15,900	E	4.2B
Fallbrook	State Hwy	Pala Road/SR-76	Old Hwy 395 to I-15 SB Ramps	4-Ln State Highway	39,600	E	6-Ln State Highway
	ME Road	Alvarado Street	Main Ave to Olive Ave	2.2C	14,700	E	2.1D
		De Luz Road	Dougherty St to Mission Rd	2.2C	14,900	E	2.1D
		Fallbrook Street	Main Ave to Olive Ave	2.2B	14,800	E	2.1D
		Mission Road	Vine St to Brandon Rd	2.2B	15,400	E	4.2B
		Mission Road	Hamilton Ln to Live Oak Park Rd	4.2B	29,300	E	4.1B
		Mission Road	Live Oak Park Rd to Old Hwy 395	4.2B	35,300	F	6.2
		Mission Road	Old Hwy 395 to I-15 SB Ramps	4.1B	42,000	F	6.2
		Mission Road	I-15 SB Ramps to I-15 NB Ramps	4.1B	34,500	F	6.2
Old Hwy 395	White Lilac Rd to Mission Rd	2.2D	20,900	F	4.2B		

TABLE 5.23 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
CUMULATIVE ANALYSIS

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Fallbrook	ME Road	Old Hwy 395	Mission Rd to Reche Rd	2.1A	19,800	E	4.2B
		Old Hwy 395	Reche Rd to Stewart Canyon Rd	2.1A	23,300	F	4.2B
		Old Hwy 395	Stewart Canyon Rd to Pala Mesa Dr	2.1A	17,500	E	4.2B
		Old Hwy 395	Pala Rd to Dublin (E) Rd	2.1D	14,700	E	4.2B
		Old Hwy 395	Dublin (E) Rd to Dublin (W) Rd	2.1D	17,500	F	4.2B
		Pala Mesa Drive	Daisy Ln to Old Hwy 395	2.2F	11,500	E	2.2C
		Pala Mesa Drive	Old Hwy 395 to Pankey Rd	2.1A	19,400	F	4.2B
		Pankey Road	Pala Mesa Dr to Pala Rd	2.1A	18,700	F	4.2B
		Pankey Road	Pala Rd to Shearer Crossing	2.1E	16,500	F	2.1C
		Reche Road	Fallbrook St to Green Canyon Rd	2.2C	14,000	E	2.1D
		Pepper Tree Lane	Mission Rd to Woodbrook Ln	2.2E	14,200	E	2.1D
		Rice Canyon Road	Pala Mesa Heights Dr to Pala Rd	2.2F	13,300	E	2.2C
North County Metro	ME Road	Deer Springs Road	Deer Springs Pl to Mesa Rock Rd	6.2	50,200	E	6.1
		Deer Springs Road	Mesa Rock Rd to I-15 NB Ramps	6.2	54,200	E	6.1
		Deer Springs Road	I-15 NB Ramps to N Centre City Pkwy	4.1B	48,600	F	6.2
		Mountain Meadow Road	North Broadway to Alps Ln	2.1D	20,800	F	4.2B
		Bear Valley Parkway	Eldorado Dr to San Pasqual Valley Rd	4.1A	37,000	F	6.2
Pala - Pauma	State Hwy	Pala Road/SR-76	Pala Del Norte Rd to 6th St	2-Ln State Highway	23,400	E	4-Ln State Highway
		Pala Road/SR-76	6th St to Pala Temecula Rd	2-Ln State Highway	23,400	E	4-Ln State Highway

TABLE 5.23 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
CUMULATIVE ANALYSIS

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Pala - Pauma	State Hwy	Pala Road/SR-76	Pala Temecula Rd to 1st St	2-Ln State Highway	23,700	F	4-Ln State Highway
		Pala Road/SR-76	Pala Mission Rd to Lilac Rd	2-Ln State Highway	17,000	E	4-Ln State Highway
	ME Road	Valley Center Road	Omish Rd to Paradise Creek	2.1D	15,400	E	4.2B
Rainbow	ME Road	Rainbow Valley Boulevard	I-15 NB Ramps to Old Hwy 395	2.1C	21,400	F	4.2B
		Old Hwy 395	2nd Street to 5 th Street	2.2D	17,800	E	4.2B
		Old Hwy 395	5th St to Rainbow Valley Rd	2.2D	18,900	E	4.2B
		Old Hwy 395	Rainbow Valley Rd to New Rainbow Valley Rd	2.1D	20,200	F	4.2B
		Old Hwy 395	New Rainbow Valley Rd to White Lilac Rd	2.1D	20,600	F	4.2B
San Dieguito	ME Road	Del Dios Highway	Via Rancho Pkwy to El Camino Del Norte	2.1D	25,100	F	4.1A
		Paseo Delicias	El Camino del Norte to El Montevideo	2.2B	23,500	F	4.2B
		Paseo Delicias	El Montevideo to Via De La Valle	2.2	22,400	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 Rd to Del Dios Hwy/Paseo Delicias	2.2F	13,800	E	2.2C
		La Bajada	El Mirlo to Los Morros	2.2F	25,900	F	4.2A
		La Granada	Los Morros to Rambla De Las Flores	2.2F	19,700	F	4.2A
		La Granada	Rambla De Las Flores to Avenida De Acacias	2.2F	14,600	E	4.2B
		La Granada	Avenida De Acacias to Paseo Delicias	2.2F	16,400	F	4.2B
		Linea Del Cielo	El Camino Real to Rambla De Las Flores	2.2F	11,500	E	2.2C
		Via De la Valle	El Camino Real to Las Palomas	2.1E	24,300	F	4.2A
		Via De la Valle	Las Palomas to Calzada Del Bosque	2.1E	23,200	F	4.2A
		Via De la Valle	Calzada Del Bosque to Via de Santa Fe	2.1E	24,100	F	4.2A

TABLE 5.23 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
CUMULATIVE ANALYSIS

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
San Dieguito	ME Road	Via De la Valle	Via de Santa Fe to Paseo Delicias	2.1E	15,500	E	4.2B
		El Apajo	Via De La Valle to Via De Santa Fe	2.1A	16,900	E	4.2B
		San Dieguito Road	El Apajo to Circa Oriente	2.1A	17,300	E	4.2B
Valley Center	ME Road	Mountain Meadow Road/ Mirar De Valle Road	Alps Ln to Burnt Mountain Rd	2.1D	20,800	F	4.2B
		Mountain Meadow Road/ Mirar De Valle Road	Burnt Mountain to Red Ironbark Dr	2.1D	19,900	F	4.2B
		Mountain Meadow Road/ Mirar De Valle Road	Red Ironbark Dr to Cypress Ridge	2.1D	27,500	F	4.2B
		Lilac Road	Cypress Ridge to Valley Center Rd	4.2A	38,100	F	6.2
		Valley Center Road	Sunday Dr to Lilac Rd	4.2A	29,900	E	4.2B
		Valley Center Road	Lilac Rd to Canyon Rd	4.1A	29,800	F	6.2
		Valley Center Road	Canyon Rd to New Southern Pass	4.1A	38,300	F	6.2
		Valley Center Road	New Southern Pass to Miller Rd	4.1A	37,100	F	6.2
		Valley Center Road	Miller Rd to Indian Creek Rd	4.2A	37,100	F	6.2
		Valley Center Road	High Point Dr to Round Tree Rd	2.1D	18,700	E	4.2B
		Valley Center Road	N Lake Wolford Rd to Paradise Creek	2.1D	15,400	E	4.2B
		Wood Valley Road	Oakmont Rd to Augusta Dr	2.1A	17,500	E	4.2B
		Wood Valley Road	Augusta Dr to Karibu Ln	2.2C	14,100	E	4.2B
<i>Southwestern Communities</i>							
Alpine	ME Road	Alpine Boulevard	Arnold Wy to Peutz Valley Rd	2.2A	22,300	F	4.2B
		Alpine Boulevard	Tavern Rd to Boulders Rd	2.2A	14,800	E	4.2B
		Alpine Boulevard	Boulders Rd to Alpine Special Treatment Center	2.2A	20,500	F	4.2B

TABLE 5.23 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
CUMULATIVE ANALYSIS

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Alpine	ME Road	Alpine Boulevard	Alpine Special Treatment Center to W. Victoria Dr	2.2A	15,400	E	4.2B
		Alpine Boulevard	W. Victoria Dr to Bay Meadows Dr	2.2A	25,100	F	4.2A
		Alpine Boulevard	Bay Meadows Dr to Viejas View Pl	2.2A	18,700	E	4.2B
		Alpine Boulevard	Viejas View Pl to Willows Rd	2.1D	23,000	F	4.1B
		Alpine Boulevard	Willows Rd to Viejas Row	2.1E	12,900	E	2.1C
		Arnold Way	Tavern Rd to Alpine Village Dr	2.2A	14,400	E	2.1A
		Arnold Way	Alpine Village Dr to Oliver Wood Ln	2.2A	14,200	E	2.1A
		South Grade Road	Eltinge Dr to Olive View Rd	2.2E	16,900	F	4.2B
		South Grade Road	Olive View Rd to Boulders Oak Ln	2.2E	11,900	E	2.2C
		Viejas Row	Willows Rd to Alpine Blvd	4.1A	63,000	F	6.1
		Willows Road	Alpine Blvd to Otto Ave	2.2C	20,200	F	6.2
		Willows Road	Otto Ave to Viejas Grade Rd	2.2C	26,800	F	6.2
		Willows Road	Viejas Grade Rd to Viejas/County Boundary	4.2A	27,500	E	6.2
		Willows Road	Viejas/County Boundary to Browns Rd	2.2E	29,400	F	4.1A
		Harbison Canyon Road	Bullard Ln to Arnold Wy	2.2A	13,700	E	2.1A
		Tavern Road	I-8 EB Ramps to Alpine Blvd	4.2A	30,300	E	4.1A
County Island	ME Road	Pomerado Road	I-15 NB Ramps to Willow Creek Rd	4.1A	35,400	E	6.2
Jamul - Dulzura	State Hwy	Campo Road/SR-94	Steele Canyon High School to Fair Acres Ln	2-Ln State Highway	28,800	F	4-Ln State Highway
		Campo Road/SR-94	Fair Acres Ln to Steel Canyon Rd	2-Ln State Highway	25,400	E	4-Ln State Highway
		Campo Road/SR-94	Steel Canyon Rd to Lyons Valley Rd	2-Ln State Highway	30,500	F	4-Ln State Highway
		Campo Road/SR-94	Lyons Valley Rd to Melody Rd	2-Ln State Highway	20,100	E	4-Ln State Highway

TABLE 5.23 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
CUMULATIVE ANALYSIS

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Jamul - Dulzura	State Hwy	Campo Road/SR-94	Barrett Lake Rd to Tecate Sub-Group Area Boundary	2-Ln State Highway	18,800	F	4-Ln State Highway
	ME Road	Lyons Valley Road	Campo Rd to Skyline Truck Trail	2.2D	17,200	E	4.2B
Lakeside	State Hwy	SR-67	Poway/County Boundary to Scripps Poway Pkwy	4-Ln State Highway	36,100	F	6-Ln State Highway
		SR-67	Scripps Poway Pkwy to Sycamore Park	4-Ln State Highway	45,300	F	6-Ln State Highway
		SR-67	Johnson Lake Rd to Posthill Rd	4-Ln State Highway	44,500	E	6-Ln State Highway
		SR-67	Willow Rd to Lakeside Ave	4-Ln State Highway	43,300	E	6-Ln State Highway
		SR-67	Lakeside Ave to Maplevue St	4-Ln State Highway	55,200	F	6-Ln State Highway
	ME Road	Maine Avenue	Maplevue St to Lakeshore Dr	2.2E	15,300	E	4.2B
		Maine Avenue	Lakeshore Dr to Parkside St	2.2E	16,200	F	4.2B
		Maine Avenue	Parkside St to Woodside Ave	2.2E	14,200	E	4.2B
		Los Cochés Road	Woodside Ave to Julian Ave	2.1D	17,100	E	4.2B
		Los Cochés Road	Del Sol Rd to I-8 Business Route	2.1D	16,300	E	4.2B
		Willow Road	SR-67 to Ashwood St	2.2E	15,300	E	4.2B
		Wildcat Canyon Road	Willow Rd to Lakeside/Ramona CPA Boundary	2.1D	30,400	F	6.2
		Maplevue Street	Maine Ave to Ashwood St	4.1A	39,600	F	6.2
		Olde Hwy 80	Flinn Crest St to Silva Rd	2.2B	14,500	E	2.1D
		Woodside Avenue	SR-67 NB Off-Ramp to Riverford Rd	4.2A	29,400	E	4.1B
		Woodside Avenue	Winter Gardens Blvd to Erwin Ln	4.2A	25,800	E	4.1B
		Lake Jennings Park Road	Jenning Vista Dr to I-8 Business Route	4.1B	32,800	E	6.2
		Lake Jennings Park Road	I-8 Business Route to I-8 WB Off-Ramp	4.1B	38,100	F	6.2
Lake Jennings Park Road	I-8 WB Off-Ramp to I-8 EB Off-Ramp	4.1B	32,500	E	6.2		

**TABLE 5.23 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
CUMULATIVE ANALYSIS**

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Lakeside	ME Road	Greenfield Drive	Graves Ave to Ballantyne St	2.2B	13,700	E	2.1D
Otay	ME Road	Siempre Viva Road	SR-11 EB Ramps to Loop Rd	4.1A	39,000	F	6.2
Ramona	State Hwy	Julian/SR-67	Mussey Grade Rd to Highland Valley Rd	4-Ln State Highway	28,700	F	6-Ln State Highway
		Main Street/SR-78	11th St to 9th St	4-Ln State Highway	31,000	E	6-Ln State Highway
		Main Street/SR-78	9th St to 8th St	4-Ln State Highway	30,100	F	6-Ln State Highway
		Julian Road/SR-78	3rd St to Earham St	2-Ln State Highway	17,400	E	4-Ln State Highway
	ME Road	7th Street	Elm St to A St	2.2E	15,000	E	2.1D
		7th Street	Main St to D St	2.2E	15,400	F	2.2C
		7th Street	E St to G St	2.3C	10,200	E	2.2E
		San Vicente Road	H St to 11th St	2.1B	14,100	E	2.1D
		Wildcat Canyon Road	Painted Rock Rd to Harry Hertzberg Rd	2.1D	15,100	E	4.2B
		Wildcat Canyon Road	Harry Hertzberg Rd to Lakeside/Ramona CPA Boundary	2.1D	35,100	F	6.2
Spring Valley	ME Road	Paradise Valley Road	Worthington St to Elkelton Blvd	4.1B	32,400	E	4.1A
		Paradise Valley Road	Elkelton Blvd to Sweetwater Rd	4.1B	35,000	F	6.2
		Jamacha Road	SR-125 SB Ramps to SR-125 NB Ramps	4.1B	34,100	E	6.2
		Jamacha Road	SR-125 NB Ramps to Sweetwater Rd	4.1B	39,500	F	6.2
		Jamacha Road	Sweetwater Rd to Helix Street	4.1B	31,100	E	4.1A
		Bancroft Drive	Troy St to SR-94 EB Ramp	2.2D	20,000	4.2B	2.2C
		Kenwood Drive	Andreen St to SR-94 EB Ramps	2.2D	14,500	E	2.1D

TABLE 5.23 (Continued)
DEFICIENT FACILITIES (LOS E/F) BY SUBREGION AND CPA
CUMULATIVE ANALYSIS

CPA	Facility Type	Roadway	Segment Limits	Classification	ADT	LOS	Mitigated Classification
Sweetwater	ME Road	Briarwood Road	SR-54 WB Ramps to Robinwood Rd	2.1D	18,600	E	4.2B
		Sweetwater Road	Willow St to Orchard Hill Rd	2.1A	16,300	E	4.2B
		Central Avenue	Sweetwater Rd to San Miguel Rd	2.2B	16,900	E	4.2B
Valle De Oro	State Hwy	Campo Road/SR-94	Avocado Blvd to Jamacha Blvd	4-Ln State Highway	70,700	E	6-Ln State Highway
		Campo Road/SR-94	Jamacha Blvd to Jamacha Rd	4-Ln State Highway	79,200	F	6-Ln State Highway
Valle De Oro	ME Road	Jamacha Road	Campo Rd/SR-94 to Fury Ln	6.2	60,800	F	6.1
		Campo Road	Kenwood Dr to Conrad Dr	4.2B	47,300	F	6.2
		Fuerte Drive	Bancroft Dr to Lemon Ave	2.1E	13,300	E	4.2B
		Fuerte Drive	Lemon Ave to Grandview Dr	2.2E	19,100	F	4.2B
		Fuerte Drive	Grandview Dr to Avocado Blvd	2.1E	14,200	E	4.2B
<i>Eastern Communities</i>							
Desert	ME Road	Palm Canyon Drive	Ocotillo Cir to Borrego Springs Rd	2.2A	18,100	E	4.2B
		Borrego Springs Road	Diamond Bar Rd to Tilling T Dr	2.2D	13,700	E	2.1D
Mountain Empire	State Hwy	Tecate Road/SR-188	Campo Rd to Airport Rd	2-Ln State Highway	40,000	F	4-Ln State Highway
		Tecate Road/SR-188	Airport Rd to Humphries Rd	2-Ln State Highway	39,300	F	4-Ln State Highway
		Tecate Road/SR-188	Humphries Rd to USA/Mexico Border	2-Ln State Highway	22,600	F	4-Ln State Highway
		Campo Road/SR-94	Tecate Sub-Group Area Boundary to Tecate Rd/SR-188	2-Ln State Highway	18,800	F	4-Ln State Highway
		Campo Road/SR-94	Tecate Rd to Potrero Valley Rd	2-Ln State Highway	16,300	F	4-Ln State Highway
		Campo Road/SR-94	Potrero Valley Rd to Forest Lake Rd	2-Ln State Highway	13,900	E	4-Ln State Highway

Source: Wilson & Company; May 2009

Table 5.24 summarizes the projected total number of deficient roadway segments and corresponding deficient roadway lane miles throughout the unincorporated County under buildout of the Cumulative Analysis.

**TABLE 5.24
SUMMARY OF DEFICIENT ROADWAYS
CUMULATIVE ANALYSIS**

Type	State Highways	ME Roads	Total
Deficient Segments (#)	34	124	158
Deficient Lane Miles	79.7	218.6	295.7

Source: Wilson & Company; May 2009

6.0 Summary

This section provides a comparative summary of the various General Plan Update land use and roadway network alternatives, including review of LOS results, extent of identified deficient roadway segments, and associated mitigation requirements.

Roadway Network Performance

Table 6.1 summarizes roadway network lane miles by LOS under future year buildout conditions for the General Plan Update proposed project, project alternatives, and the Cumulative Analysis.

**TABLE 6.1
SUMMARY OF ROADWAY LANE MILES BY LEVEL OF SERVICE
GENERAL PLAN UPDATE ANALYSIS SCENARIOS**

Analysis Scenarios	LOS A-C	LOS D	Deficient LOS			
			LOS E	LOS F	Total LOS E/F	Percent of Total
Existing General Plan (No Project)	3,391.2	357.5	139.0	232.2	371.2	9.0%
Referral Map (Proposed Project)	2,375.1	395.7	122.3	125.5	247.8	8.2%
Draft Land Use Map (Alternative)	2,445.6	350.4	112.6	108.0	220.6	7.3%
Hybrid Map (Alternative)	2,443.4	335.9	128.1	109.2	237.3	7.9%
Environmentally Superior (Alternative)	2,503.9	307.9	106.9	97.9	204.9	6.8%
Cumulative Analysis	2,350.6	369.7	161.2	137.1	298.3	9.9%

Source: Wilson & Company; May 2009

As shown above, the Existing General Plan, would have the highest number of deficient roadway lane miles (371.2, representing 9.0% of the total lane miles), followed by the Cumulative Analysis with 298.3 deficient roadway lane miles, representing 9.9% of the roadway (State highways and ME roads) network. In comparison, the Proposed Project (Referral Map) would have over 33.2% fewer deficient roadway lane miles (123.4) than the existing General Plan, representing approximately 8.2% of the roadway (State highways and ME roads) network. The Environmentally Superior Alternative is forecasted to have the fewest number of deficient lane miles (204.9), representing approximately 6.8% of the total roadway (State highways and ME roads) network.

Table 6.2 displays the number of deficient roadway segments and corresponding deficient lane miles for each of the General Plan Update alternative analysis scenarios.

As shown, under buildout conditions, the Cumulative Analysis would have the highest number of deficient roadway segments. The Existing General Plan would have the highest deficient roadway (State highways and ME roads) lane miles operating at LOS E/F. The Environmentally Superior Alternative would have the fewest number of deficient roadway segments and lane miles operating at LOS E/F.

TABLE 6.2
SUMMARY OF DEFICIENT ROADWAYS
GENERAL PLAN UPDATE ANALYSIS SCENARIOS

Analysis Scenarios	Deficient Segments (#)			Deficient Lane miles		
	State Highway	ME Roads	Total	State Highway	ME Roads	Total
Existing General Plan (No Project)	29	109	138	204.2	167.0	371.2
Referral Map (Proposed Project)	31	105	136	66.1	181.7	247.8
Draft Land Use Map (Alternative)	25	101	126	48.8	171.8	220.6
Hybrid Map (Alternative)	26	97	123	51.3	186.0	237.3
Environmentally Superior (Alternative)	24	78	102	45.5	159.4	204.9
Cumulative Analysis	34	124	158	79.7	218.6	298.3

Source: Wilson & Company; May 2009

Deficiency Summary

Table 6.3 provides a summary list of the identified deficient roadway segments cross-referenced to buildout of the respective analysis scenarios including of the existing General Plan, Proposed Project, project alternatives, and the Cumulative Analysis.

**TABLE 6.3
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS**

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral Map (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative Analysis
<i>Northwestern Communities</i>									
Bonsall	State Hwy	Mission Road/SR-76	Oceanside/County Boundary to Vista Wy	X	X	X	X	X	X
		Mission Road/SR-76	Vista Wy to Holly Ln	X	X	X	X	X	X
		Mission Road/SR-76	Holly Ln to North River Rd	X	X	X	X	X	X
		Mission Road/SR-76	North River Rd to Via Montellano	X	X	X	X	X	X
		Mission Road/SR-76	Via Montellano to Mission Rd	X	X	X	X	X	X
		Pala Road/SR-76	Mission Rd to Sweetgrass Ln	X					X
	ME Road	Camino Del Rey	Old River Rd to West Lilac Rd	X					
		Camino Del Rey	West Lilac Rd to Cam Del Cielo	X					
		Old Hwy 395	Dublin (W) Rd to West Lilac Rd	X	X	X	X	X	X
		Old Hwy 395	West Lilac Rd to I-15 SB Ramps	X	X	X	X	X	X
Twin Oaks Valley Road		Par Valley Dr to Huckleberry Ln	X						
Fallbrook	State Hwy	Pala Road/SR-76	Old Hwy 395 to I-15 SB Ramps		X	X	X	X	X
		Pala Road/SR-76	Sweetgrass Ln to Gird Rd	X					
	ME Road	Alvarado Street	Main Ave to Olive Ave	X	X	X	X	X	X
		Alvarado Street	Olive Ave to Brandon Rd	X					
		De Luz Road	Sandia Creek Dr to Dougherty St	X					
		De Luz Road	Dougherty St to Mission Rd	X	X	X	X		X
		Fallbrook Street	Main Ave to Olive Ave	X	X	X	X	X	X
Fallbrook Street	Olive Ave to Potter St	X							

**TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS**

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
Fallbrook	ME Road	Fallbrook Street	Potter St to Calle De La Paloma	X					
		Fallbrook Street	Waxflower Ln to Stage Coach Ln	X					
		Mission Road	Hill Ave to De Luz Rd	X					
		Mission Road	Vine St to Brandon Rd		X	X	X	X	X
		Mission Road	Hamilton Ln to Live Oak Park Rd		X	X	X	X	X
		Mission Road	Live Oak Park Rd to Old Hwy 395	X	X	X	X		X
		Mission Road	Old Hwy 395 to I-15 SB Ramps	X	X	X	X	X	X
		Mission Road	I-15 SB Ramps to I-15 NB Ramps	X	X				X
		Old Hwy 395	White Lilac Rd to Mission Rd		X	X	X	X	X
		Old Hwy 395	Mission Rd to Reche Rd		X	X	X	X	X
		Old Hwy 395	Reche Rd to Stewart Canyon Rd		X	X	X	X	X
		Old Hwy 395	Stewart Canyon Rd to Pala Mesa Dr		X	X	X	X	X
		Old Hwy 395	Pala Rd to Dublin (E) Rd		X	X	X	X	X
		Old Hwy 395	Dublin (E) Rd to Dublin (W) Rd		X	X	X		X
		Main Avenue	Mission Rd to Hawthorne St	X					
		Main Avenue	Hawthorne St to Ammunition Rd	X					
		Main Avenue	Ammunition Rd to Mission Rd	X					
		Pala Mesa Drive	Daisy Ln to Old Hwy 395		X		X		X
		Pala Mesa Drive	Old Hwy 395 to Pankey Rd	X	X	X	X		X
		Pankey Road	Stewart Canyon Rd to Pala Mesa Dr	X					

**TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS**

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
Fallbrook	ME Road	Pankey Road	Pala Mesa Dr to Pala Rd	X	X		X		X
		Pankey Road	Pala Rd to Shearer Crossing						X
		Reche Road	Fallbrook St to Green Canyon Rd		X	X			X
		Pepper Tree Lane	Mission Rd to Woodbrook Ln		X	X			X
		Stage Coach Lane	Alvarado St to Fallbrook St	X					
		Rice Canyon Road	Pala Mesa Heights Dr to Pala Rd						X
North County Metro	ME Road	Buena Creek Road	Monte Vista Dr to Hollyberry Dr	X					
		Salem Street	Buena Creek Rd to Twin Oak Valley Rd	X					
		Twin Oaks Valley Road	Huckleberry Ln to Quarry Rd	X					
		Twin Oaks Valley Road	Quarry Rd to Solar Ln	X					
		Twin Oaks Valley Road	Solar Ln to Vista Merriam	X					
		Cloverdale Road	Clove Ridge Rd to Rockwood Rd	X					
		Smilax Road	Oleander Ave to Mimosa Ave	X					
		Hollyberry	Buena Creek to Salem	X					
		Deer Springs Road	Deer Springs Pl to Mesa Rock Rd						X
		Deer Springs Road	Mesa Rock Rd to I-15 NB Ramps	X	X	X	X		X
		Deer Springs Road	I-15 NB Ramps to N Centre City Pkwy	X	X	X	X	X	X
		Mountain Meadow Road	North Broadway to Alps Ln		X	X	X	X	X
North County Metro	ME Road	Bear Valley Parkway	Eldorado Dr to San Pasqual Valley Rd		X	X	X		X

**TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS**

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
Pala - Pauma	State Hwy	Pala Road/SR-76	Valley Center Rd to South Grade Rd	X					
		Pala Road/SR-76	Pala Del Norte Rd to 6th St		X	X	X	X	X
		Pala Road/SR-76	6th St to Pala Temecula Rd		X	X	X	X	X
		Pala Road/SR-76	Pala Temecula Rd to 1st St		X	X	X	X	X
		Pala Road/SR-76	Pala Mission Rd to Lilac Rd		X		X		X
	ME Road	Valley Center Road	Omish Rd to Paradise Creek		X				X
Rainbow	ME Road	Rainbow Valley Boulevard	I-15 NB Ramps to Old Hwy 395	X		X	X		X
		Old Hwy 395	2nd Street to 5 th Street						X
		Old Hwy 395	5th St to Rainbow Valley Rd		X	X	X	X	X
		Old Hwy 395	Rainbow Valley Rd to New Rainbow Valley Rd		X	X	X	X	X
		Old Hwy 395	New Rainbow Valley Rd to White Lilac		X	X	X	X	X
San Dieguito	ME Road	Del Dios Highway	Via Rancho Pkwy to El Camino Del Norte	X	X	X	X	X	X
		Paseo Delicias	El Camino Del Norte to El Montevideo	X	X	X	X	X	X
		Paseo Delicias	El Montevideo to Via De La Valle	X	X	X	X	X	X
		Paseo Delicias	Via De La Valle to La Granada	X	X	X	X	X	X
		El Camino Del Norte	Aliso Canyon Rd to Del Dios Hwy/Paseo Delicias	X	X	X	X	X	X
		La Bajada	El Mirlo to Los Morros	X	X	X	X	X	X

**TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS**

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
San Dieguito	ME Road	La Granada	Los Morros to Rambla De Las Flores	X	X	X	X	X	X
		La Granada	Rambla De Las Flores to Avenida De Acacias	X	X	X	X	X	X
		La Granada	Avenida De Acacias to Paseo Delicias	X	X	X	X	X	X
		Linea Del Cielo	El Camino Real to Rambla De Las Flores	X	X	X	X	X	X
		Via De La Valle	El Camino Real to Las Palomas	X	X	X	X	X	X
		Via De La Valle	Las Palomas to Calzada Del Bosque	X	X	X	X	X	X
		Via De La Valle	Calzada Del Bosque to Via de Santa Fe	X	X	X	X	X	X
		Via De La Valle	Via de Santa Fe to Paseo Delicias	X	X	X	X	X	X
		El Apajo	Via De La Valle to Via De Santa Fe		X	X	X	X	X
		San Dieguito Road	El Apajo to Circa Oriente	X	X	X	X	X	X
		Mt Israel Road	Detwiler Rd to Del Dios Hwy	X					
Via De Santa Fe	Paseo Delicias to Via De La Valle	X							
Valley Center	ME Road	Old Hwy 395	Circle R Dr to Old Castle Rd	X					
		Mountain Meadow Road/ Mirar De Valle Road	Alps Ln to Burnt Mountain Rd		X	X	X	X	X
		Mountain Meadow Road/ Mirar De Valle Road	Burnt Mountain to Red Ironbark Dr		X	X	X	X	X
		Mountain Meadow Road/ Mirar De Valle Road	Red Ironbark Dr to Cypress Ridge		X	X	X	X	X
		Lilac Road	Cypress Ridge to Valley Center Rd		X	X	X	X	X
		Valley Center Road	Mirar De Valle Rd To Sunday Dr	X					

**TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS**

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
Valley Center	ME Road	Valley Center Road	Sunday Dr to Lilac Rd	X	X				X
		Valley Center Road	Lilac Rd to Canyon Rd	X	X	X	X	X	X
		Valley Center Road	Canyon Rd to New Southern Pass	X	X	X	X	X	X
		Valley Center Road	New Southern Pass to Miller Rd	X	X	X	X	X	X
		Valley Center Road	Miller Rd to Indian Creek Rd	X	X	X	X	X	X
		Valley Center Road	Indian Creek Rd to Code Grade Rd	X					
		Valley Center Road	High Point Dr to Round Tree Rd		X	X	X	X	X
		Valley Center Road	N Lake Wolford Rd to Paradise Creek			X			X
		Wood Valley Road	Oakmont Rd to Augusta Dr			X			X
		Wood Valley Road	Augusta Dr to Karibu Ln			X			X
Southwestern Communities									
Alpine	ME Road	Alpine Boulevard	Arnold Wy to Peutz Valley Rd			X	X	X	X
		Alpine Boulevard	Tavern Rd to Boulders Rd		X	X	X	X	X
		Alpine Boulevard	Boulders Rd to Alpine Special Treatment Center	X	X	X	X	X	X
		Alpine Boulevard	Alpine Special Treatment Center to W. Victoria Dr	X	X	X	X	X	X
		Alpine Boulevard	W. Victoria Dr to Bay Meadows Dr		X	X	X	X	X
		Alpine Boulevard	Bay Meadows Dr to Viejas View Pl		x	X	x	X	X
		Alpine Boulevard	Viejas View Pl to Willows Rd		X	X	x	X	X
		Alpine Boulevard	Willows Rd to Viejas Row		X	X			X
		Arnold Way	Harbison Canyon Rd to South Grade Rd	X					

**TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS**

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
Alpine	ME Road	Arnold Way	Tavern Rd to Alpine Village Dr						X
		Arnold Way	Alpine Village Dr to Oliver Wood Ln						X
		South Grade Road	Alpine Blvd to Eltinge Dr	X					
		South Grade Road	Eltinge Dr to Olive View Rd	X	X	X	X		X
		South Grade Road	Olive View Rd to Boulders Oak Ln						X
		Viejas Row	Willows Rd to Alpine Blvd		X	X	X	X	X
		Willows Road	Alpine Blvd to Otto Ave	X	X	X	X	X	X
		Willows Road	Otto Ave to Viejas Grade Rd	X	X	X	X	X	X
		Willows Road	Viejas Grade Rd to Viejas/County Boundary	X					X
		Willows Road	Viejas/County Boundary to Browns Rd						X
		Harbison Canyon Road	Bullard Ln to Arnold Wy						X
		Tavern Road	I-8 EB Ramps to Alpine Blvd			X			X
County Island	ME Road	Pomerado Road	I-15 NB Ramps to Willow Creek Rd	X	X	X	X	X	X
Crest - Dehesa	ME Road	Broadway	Main St to 4th St	X					
		Dehesa Road	Harbison Canyon Rd to Sycuan Rd	X					
Jamul - Dulzura	State Hwy	Campo Road/SR-94	Steele Canyon High School to Fair Acres Ln		X	X	X	X	X
		Campo Road/SR-94	Fair Acres Ln to Steel Canyon Rd		X	X	X	X	X
		Campo Road/SR-94	Steel Canyon Rd to Lyons Valley Rd		X	X	X	X	X
		Campo/SR-94	Lyons Valley Rd to Melody Rd	X	X	X	X	X	X

**TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS**

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
Jamul - Dulzura	State Hwy	Campo/SR-94	Melody Rd to Otay Lakes Rd	X					
		Campo/SR-94	Otay Lakes Rd to Mother Grundy Truck Trail	X					
		Campo/SR-94	Mother Grundy Truck Trail to Little Tecate Rd	X					
		Campo/SR-94	Little Tecate Rd to Barrett Lake Rd	X					
		Campo Road/SR-94	Barrett Lake Rd to Tecate Sub-Group Area Boundary	X	X				X
	ME Road	Lyons Valley Road	Campo Rd to Skyline Truck Trail		X	X	X	X	X
		Lyons Valley Road	Skyline Truck Trl to Vista De Chaparros Dr	X					
		Skyline Truck Trail	Lyons Valley Rd to Lawson Valley Rd	X					
	Lakeside	State Hwy	SR-67	Poway/County Boundary to Scripps Poway Pkwy	X	X	X	x	X
SR-67			Scripps Poway Pkwy to Sycamore Park	X	X	x	x	X	X
SR-67			Sycamore Park to Vigilante Rd	X					
SR-67			Johnson Lake Rd to Posthill Rd		X	X	X	X	X
SR-67			Willow Rd to Lakeside Ave		X	X	X	X	X
SR-67			Lakeside Ave to Mapleview St		X	X	X	X	X
ME Road		Maine Avenue	Mapleview St to Lakeshore Dr		X	X	X	X	X
		Maine Avenue	Lakeshore Dr to Parkside St		X	x	X	X	X
		Maine Avenue	Parkside St to Woodside Ave		X	x	X	X	X
		Los Coches Road	Woodside Ave to Julian Ave		X	X	X	X	X
	Los Coches Road	Del Sol Rd to I-8 Business Route		X	X	X	X	X	

**TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS**

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
Lakeside	ME Road	Valle Vista Road	Post Hill Rd to Vista Camino	X					
		Valle Vista Road	Coping Pl to Riverside Dr	X					
		Moreno Avenue	San Vicente Ave to Willow Rd	X					
		Willow Road	SR-67 to Ashwood St	X	X	X	X	X	X
		Ashwood Street	Mapleview St to El Capitan High School	X					
		Ashwood Street	El Capitan High School to Willow Rd	X					
		Wildcat Canyon Road	Willow Rd to Lakeside/Ramona CPA Boundary	X	X	X	X	X	X
		San Vicente Avenue	SR-67 to Moreno Ave	X					
		Mapleview Street	Maine Ave to Ashwood St		X	X	X	X	X
		Olde Hwy 80	Lake Jennings Park Rd to Pecan Park Ln	X					
		Olde Hwy 80	Flinn Crest St to Silva Rd						X
		Lake Jennings Park Road	Jenning Vista Dr to I-8 Business Route		x	X	x	X	X
		Lake Jennings Park Road	I-8 Business Route to I-8 WB Off-Ramp	X	X	X	x	X	X
		Lake Jennings Park Road	I-8 WB Off-Ramp to I-8 EB Off-Ramp		x	X	X	X	X
		Woodside Avenue	SR-67 NB Off-Ramp to Riverford Rd	X	X	X	X	X	X
		Woodside Avenue	Winter Gardens Blvd to Erwin Ln	X		X	X		X
		Woodside Avenue	Channel Rd to Los Coches Rd	X					
		Julian Avenue	Lemoncrest Dr to Los Coches Rd	X					
		Julian Avenue	Cypress St to Lakeview Rd	X					
Pepper Drive	Graves Ave to Garywood St	X							

**TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS**

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
Lakeside	ME Road	Pepper Drive	Garywood St to 1st St	X					
		Greenfield Drive	Graves Ave to Ballantyne St			X			X
Otay	ME Road	Siempre Viva Road	SR-11 EB Ramps to Loop Rd		X	X	X	X	X
Ramona	State Hwy	Julian Road/SR-67	Mussey Grade Rd to Highland Valley Rd	X	X	X	X	X	X
		Main Street/SR-78	9th St to 11th St	X	X	X	X	X	X
		Main Street/SR-78	9th St to 8th St	X					X
		Julian Road/SR-78	3rd St to Earham St		X		X		X
	ME Road	Ramona Street	Raymond to Day	X					
		Montecito Road	Main St to Ramona St	X					
		7th Street	Elm St to A St		X	X	X	X	X
		7th Street	Main St to D St		X	X	X	X	X
		7th Street	E St to G St			X	X		X
		San Vicente Road	H St to 11th St		X	X			X
		Painted Rock Road	Wildcat Canyon Rd to San Vicente Oak Rd	X					
Wildcat Canyon Road	Painted Rock Rd to Harry Hertzberg Rd	X				X		X	
Wildcat Canyon Road	Harry Hertzberg Rd to Lakeside/Ramona CPA Boundary	X	X	X	X	X	X	X	
Spring Valley	ME Road	Austin Drive	Avenida Bosques to Sweetwater Springs Blvd	X					
		Paradise Valley Road	Worthington St to Elkelton Blvd	X		X	X		X
		Paradise Valley Road	Elkelton Blvd to Sweetwater Rd		X	X	X	X	X

TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
Spring Valley	ME Road	Jamacha Road	SR-125 SB Ramps to SR-125 NB Ramps		X	X	X		X
		Jamacha Road	SR-125 NB Ramps to Sweetwater Rd		X		X		X
		Jamacha Road	Sweetwater Rd to Helix Street						X
		Bancroft Drive	Troy St to SR-94 EB Ramp		X	X	X	X	X
		Kenwood Drive	Andreen St to SR-94 EB Ramps		X	X	X		X
Sweetwater	ME Road	Briarwood Road	SR-54 WB Ramps to Robinwood Rd	X	X	X	X	X	X
		Sweetwater Road	Willow St to Orchard Hill Rd		X	X	X		X
		Central Avenue	Sweetwater Rd to San Miguel Rd		X	X	X		X
		San Miguel Road	Bonita Rd to Proctor Valley Rd	X					
Valle De Oro	State Hwy	Campo Road/SR-94	Avocado Blvd to Jamacha Blvd		X	x	X	X	X
		Campo Road/SR-94	Jamacha Blvd to Jamacha Rd		X	X	X	X	X
	ME Road	Jamacha Road	Campo Rd/SR-94 to Fury Ln		X	X	X		X
		Jamacha Road	Cuyamaca College W. to Cuyamaca College E.	X					
		Campo Road	Kenwood Dr to Conrad Dr	X	X	X	X		X
		Fuerte Drive	Bancroft Dr to Lemon Ave	X	X	X	X	X	X
		Fuerte Drive	Lemon Ave to Grandview Dr	X	X	X	X	X	X
Fuerte Drive	Grandview Dr to Avocado Blvd	X	X	X	X	X	X		

TABLE 6.3 (Continued)
SUMMARY OF FORECAST DEFICIENT ROADWAY SEGMENTS

CPA	Facility Type	Deficient Facility	Segment Limits	Existing GP	Referral (Proposed Project)	Draft Land Use	Hybrid	Environmentally Superior	Cumulative
<i>Eastern Communities</i>									
Central Mountain	ME Road	Painted Rock Road	Ramona CPA Boundary to Central Mountain CPA Boundary	X					
Desert	CE Road	Di Giorgio Road	Palm Canyon Dr to Tilting T Dr	X					
		Borrego Springs Road	Diamond Bar Rd to Tilting T Dr		X	X			X
		Palm Canyon Drive	Ocotillo Cir to Borrego Springs Rd		X	X	X	X	X
Julian	State Hwy	SR-78	Westside Rd to Pine Hills Rd	X					
		SR-78	Pine Hills Rd to Coleman Cir	X					
Mountain Empire	State Hwy	Tecate/SR-188	Campo Rd to Airport Rd	X	X	X	X	X	X
		Tecate/SR-188	Airport Rd to Humphries Rd	X	X	X	X	X	X
		Tecate/SR-188	Humphries Rd to USA/Mexico Border	X	X	X			X
		Campo Road/SR-94	Tecate Sub-Group Area Boundary to Tecate Rd/SR-188	X	X				X
		Campo Road/SR-94	Tecate Rd to Potrero Valley Rd	X	X				X
		Campo Road/SR-94	Potrero Valley Rd to Forest Lake Rd						X
North Mountain	State Hwy	SR-76	Henshaw Rd to SR-79	X					
		SR-78	Painted Rock Rd to SR-78	X					

Source: Wilson & Company; May 2009

Appendix A
Mountain Empire - Tecate Analysis
Kimley-Horn and Wilson & Company Memorandums



Memorandum

■
Suite 600
401 B St
San Diego, California
92101

To: Devon Muto
Department of Planning and Land Use, County of San Diego

From: Dave Sorenson, T.E.
Adam Dankberg, P.E.
Kimley-Horn and Associates, Inc.

Date: May 21, 2009

Subject: Tecate Sponsor Group Proposed Land Use and Traffic Modeling

This technical report summarizes and evaluates the Tecate Sponsor Group's proposed land plan for the Tecate area of San Diego County. Tecate, USA currently has minimal development, but is located directly across the international border from Tecate, Mexico, which has a population of 94,000. Tecate, USA is relatively isolated from other more populated communities in San Diego County, such as Jamul (21 miles), Rancho San Diego (26 miles), and eastern Chula Vista (28 miles). As such, the Tecate Sponsor Group desires to develop a land use plan focused on interacting with the nearby, heavily populated Tecate, Mexico. The Sponsor Group also seeks to create an economically viable plan that does not overburden the traffic load on State Route 94. A land use plan focused on appealing to Mexican consumers may actually improve State Route 94 by attracting shoppers locally that would otherwise travel into San Diego and other shopping areas accessed by State Route 94. The Tecate Sponsor Group has retained a consultant team to help develop a plan that meets the above objectives, and this team has been in dialogue with County staff to help refine the plan.

Market Demand in Mexico for Tecate, USA Services

One of the first steps in developing the plan was to determine the demand from Mexican residents for services in the USA. Economic Research Associates was retained to prepare a retail analysis specifically targeting those crossing from Mexico into the United States at the Tecate border crossing. The resulting study, Tecate Retail Analysis II, March 22, 2007, reached the following conclusions:



- Mexican residents crossing into Tecate were asked their primary reason for entering the USA:
 - 59% - Shopping
 - 19% - Work/Business
 - 15% - Family/Social Visit
 - 7% - Other reasons
- Mexican residents crossing into Tecate were asked why they preferred to shop in the USA:
 - 85% - Better Prices/Value
 - 42 % - Better Quality
 - 31% - More Variety
- Mexican residents crossing into Tecate were asked what type of goods they were looking for in the United States:
 - 78% - Clothing
 - 43% - Groceries/Food
 - 9% - Electronics
 - 8% - Shoes
- Mexican residents crossing into Tecate were asked what stores they would like to shop
 - 68% - WalMart
 - 38% - Target
 - 28% - Costco
 - 17% - Ross
 - 13% - Home Depot
 - 10% - Sears
- The study concluded that based on the area's regional location, approximately 76% of the shoppers in Tecate, USA would be from Tecate, Mexico, with 12% coming from the US within a 15 minute drive to the Tecate, and the remaining 12% coming from the USA with a drive in excess of 15 minutes from Tecate.
- Tecate, Mexico shoppers create a demand that would support approximately 870,000 square feet of retail use by the year 2020.

Review of General Plan Update Traffic Studies

Transportation modeling efforts performed for the County of San Diego's General Plan Update were reviewed to determine the interaction of the County's Proposed Project land uses with uses in Mexico as well as the rest of San Diego County. Kimley-Horn commissioned SANDAG to conduct several traffic model runs, including select zone traffic assignments for the traffic analysis



zones in Tecate, USA and the traffic analysis zone representing vehicles entering the United States from Tecate, Mexico. Kimley-Horn reviewed both the Series 10 General Plan traffic model and the updated Series 11 traffic model, with the inclusion of General Plan land uses. Based on a review of the modeling data by Kimley-Horn, County staff and consultants, and SANDAG staff, the following conclusions were reached:

- The General Plan traffic model dramatically underrepresented the traffic interaction between Tecate, USA and Mexico.
- The traffic model matched too much traffic internally amongst the three Tecate, USA Traffic Analysis Zones.
- Traffic on State Route 94, west of Tecate Road, was shown by the General Plan traffic model to exceed the capacity of that roadway, resulting in projected Level-of-Service F conditions.
- Traffic projections for the Tecate Sponsor Group plan should be developed based on the findings of this modeling review and the economic analysis.

Tecate Sponsor Group Land Use Plan

A land use plan was developed to best respond to retail market demands from Tecate, Mexico, as shown by the economic study. **Figure 1** displays the Tecate Sponsor Group land use plan. The plan includes certain elements of the Proposed Project land use plan, but with a number of modifications. The Sponsor Group plan incorporates a total of just under 100 acres of retail use, corresponding to approximately 1 million square feet of actual building area. The retail is focused along Tecate Road to maximize visibility to motorists traveling up from Mexico. The retail would be located in two areas. The first area would be on both sides of Tecate Road between the border and Humphries Road. The second area would be located north of Humphries Road on the east side of Tecate Road. This area was intentionally placed on the east side to facilitate ease of flow into the site (right-turn movements) and designed with deep parcel sizes that may attract the larger multi-faceted retailers desired by Mexican shoppers.

The remainder of the plan is similar to the Board Referral Alternative, with the exception that nearly all Medium Impact Industrial was changed to Limited Impact Industrial, to reflect actual market demands and to reduce trip making potential. Limited impact industrial uses include warehousing, storage, and light industrial business park. These uses have less environmental impact and generate fewer trips than the manufacturing/assembly-associated uses



incorporated into the medium impact industrial classification, allowing for an increase in total acreage, while reducing the total trip generation.

Trip Generation

Trip generation for the plan was calculated using building square footage estimates and detailed selection of appropriate land use types, since many of the uses proposed in the Sponsor Group plan were specifically selected to capture traffic crossing the border, based on the market research. Trip rates were utilized from the SANDAG Brief Guide of Vehicular Traffic Generation Rates. Modeled trip rates that are assigned by broad land use classification were deemed to be too general for this effort. **Table 1** displays the trip generation estimates for the Sponsor Group Plan. This plan generates about 65,000 daily trip ends, of which seventy-four percent is attributable to retail activity. Residential use occupies most of the land, but due to the very low density (1 dwelling unit per 10, 20 or 40 acres), only about 90 dwelling units are anticipated to be built. Industrial use is located on approximately 350 acres and generates about twenty-five percent of the trips. See Table 1 for the mix of specific land use types assumed for each land use designation.

Table 2 compares the land use and trip generation of the Tecate Sponsor Group Plan to the Proposed Project analyzed in the General Plan Environmental Impact Report. The Sponsor Group plan generates about two-thirds of the traffic of the Proposed Project, largely due to the shift in industrial intensity and by limiting uses to those that would likely interact with Tecate, Mexico.

Trip Interaction

The Tecate Sponsor Group plan was designed such that the majority of trip ends generated in Tecate, USA will not be utilizing State Route 94. **Figure 2** was prepared to illustrate the interaction that is expected for retail uses. Forty percent of the retail trips are expected to be made by Mexican shoppers. Another forty percent of the retail trips are expected to occur between other uses in Tecate, USA. These uses include residential, employment/industrial, and other retail sites (linked shopping trips). Due to the time penalty associated with crossing the international border and the lack of competing retail centers anywhere near the area, it is anticipated that many shoppers to the area will visit multiple retail stores. The remaining twenty percent of the retail trips would use State Route 94. The split of trips between those using SR-94 to/from the east and those using SR-94 to/from the west was based on a select zone assignment for Tecate, USA of the General Plan Update EIR traffic forecast model.



Figure 3 shows the distribution of industrial trips. Thirty-five percent of the industrial trips are expected to cross into Tecate, Mexico. It is expected that most industrial sites developing in Tecate will have some type of interaction with Mexico, due to proximity to the border and isolation from the more populated portions of San Diego County. Twenty percent of the industrial trips are expected to interact with Tecate residential (workers) and retail (lunch and service trips). The remaining forty-five percent of the industrial trips would use State Route 94. The split of trips between those using SR-94 to/from the east and those using SR-94 to/from the west was based on a select zone assignment for Tecate, USA of the General Plan Update EIR traffic forecast model.

Figure 4 shows the distribution of residential trips from Tecate. The overall number of residential trips is minor compared with the number of retail and industrial trips due to the minimal amount of residential development anticipated to occur in the area. Seventeen percent of the residential trips are expected to cross into Mexico (one round trip per day per dwelling unit). Half of the residential trips would interact with other uses in Tecate, USA. The remaining one-third of the trips (two round trips out of town per day per dwelling unit) would use State Route 94.

Figure 5 summarizes the combined trip distribution of all proposed uses in Tecate, USA. As shown, just less than 25,000 daily trips are expected to interact between Tecate, USA and Mexico. This reflects thirty-eight percent of the total trip ends in Tecate, USA. About twenty-six percent of the trips will travel on State Route 94 to the east and west. The remainder of the trips will be between uses in Tecate, USA.

Table 3, shown below, displays the assumed interaction between Tecate, USA uses. It should be noted that most of the retail internal interaction is to/from other retail sites in the community. This is logical in that many of the shopping trips from Mexico will likely involve stops at multiple stores.

Table 3
Internal Trip Interaction between Tecate uses (in daily trip ends)

From/To	Retail	Industrial	Residential
Retail	15,577	3,127	486
Industrial	3,127	0	54
Residential	486	54	0



Figure 6 shows the resulting daily traffic volumes on roadways within Tecate, including traffic crossing the border and on State Route 94. The amount of traffic from Mexico shown traveling on State Route 94 is approximately the same as existing conditions, which is a conservative approach since many existing shopping trips from Mexico would no longer need to use State Route 94. **Figure 7** depicts the traffic volumes assigned to County Circulation Element roadways in the areas influenced by Tecate traffic patterns. As shown in Figure 7, all roadways operate at acceptable LOS D or better conditions. Per the County General Plan Update Environmental Impact Report traffic forecast model, SR-94 is classified as a two-lane Community Collector with Improvement Options throughout the study area with a total of capacity of 19,000 daily trips. As noted on this figure, Tecate Road will require further analysis to determine the roadway width, which will depend on the spatial distribution of specific land uses within Tecate. Given the existing level of detail in the analysis, it is recommended that Tecate Road be a four lane Major Street, and the right-of-way width required by a six-lane Prime Arterial be reserved to allow for expansion should future studies indicate the need for additional capacity.

Additional Land Use Plan Considerations

While the land use plan shown in Figure 1 meets a number of stakeholder objectives, it is likely that future site development patterns will result in modifications to the precise placement of specific land uses and parcel access points. In order to ensure that any revisions to the land use plan do not substantially alter the conclusion of this report that SR-94 would operate effectively with Sponsor Group plan, the daily trip generation for the area covered by the plan should be limited to 65,000 total trips. Refinement of the land use plan may require modifications to the proposed internal Tecate transportation network, including Tecate Road and associated collectors.

Additional site design and transportation elements should be encouraged as the land use plan comes to fruition. Encouragement of the development of shuttle, pedestrian and bicycle facilities near the border will further encourage trips from Mexico to remain in Tecate and utilize the planned commercial uses in the area. In addition, with the projected increase in cross-border interaction with Mexico, demands on border-crossing inspection facilities will increase, resulting in potential impact. The Sponsor Group plan provides additional parcels for federal inspection facilities beyond those identified in the Proposed Project. The extent to which existing inspection facilities will require expansion will need to be considered by federal agencies.

SR-94 currently has truck use restrictions due to the rural character of the roadway. Between SR-125 and Otay Lakes Road, it is classified as a Terminal Access Route, allowing use by all California Legal Trucks. Between Otay Lakes



Road and Tierra del Sol Road (located two miles west of the junction with I-8), SR-94 is classified as a California Legal Advisory Route. Over this stretch of 38 miles of SR-94, a Truck Advisory is in effect. Over this stretch, trucks with a kingpin-to-rear-axle length of 30 feet or greater are not advised. Between Tierra del Sol Road and I-8, SR-94 is classified as a Terminal Access Route. SR-188 (Tecate Road) has a similar Truck Advisory as SR-94 between SR-94 and Humphries Road. Between Humphries Road and the border it is classified as a California Legal Route, allowing use by all California Legal Trucks. It is anticipated that future development in the Tecate area will need to abide by these advisories.

Summary

The above analysis indicates that, given a land use plan focused on attracting Mexican consumers and minimizing traffic to/from other portions of San Diego County, development can occur in Tecate while maintaining State Route 94 as a two-lane roadway. The land use plan developed and contained in this memorandum leans on the economic analysis performed of border crossers at Tecate, which indicates strong Mexican demand for American retail uses near the border crossing. Given the remoteness of Tecate, USA to other populated areas on the American side of the border, it is anticipated that the trips generated by the proposed land uses will be primarily linked within the Tecate, Mexico and Tecate, USA area, minimizing trips on State Route 94.

Attachments:

Figure 1: General Plan Update – Tecate Sponsor Group Land Use Plan

Figure 2: Tecate, USA Retail Trip Distribution with Sponsor Group Proposed Land Use

Figure 3: Tecate, USA Industrial Trip Distribution with Sponsor Group Proposed Land Use

Figure 4: Tecate, USA Residential Trip Distribution with Sponsor Group Proposed Land Use

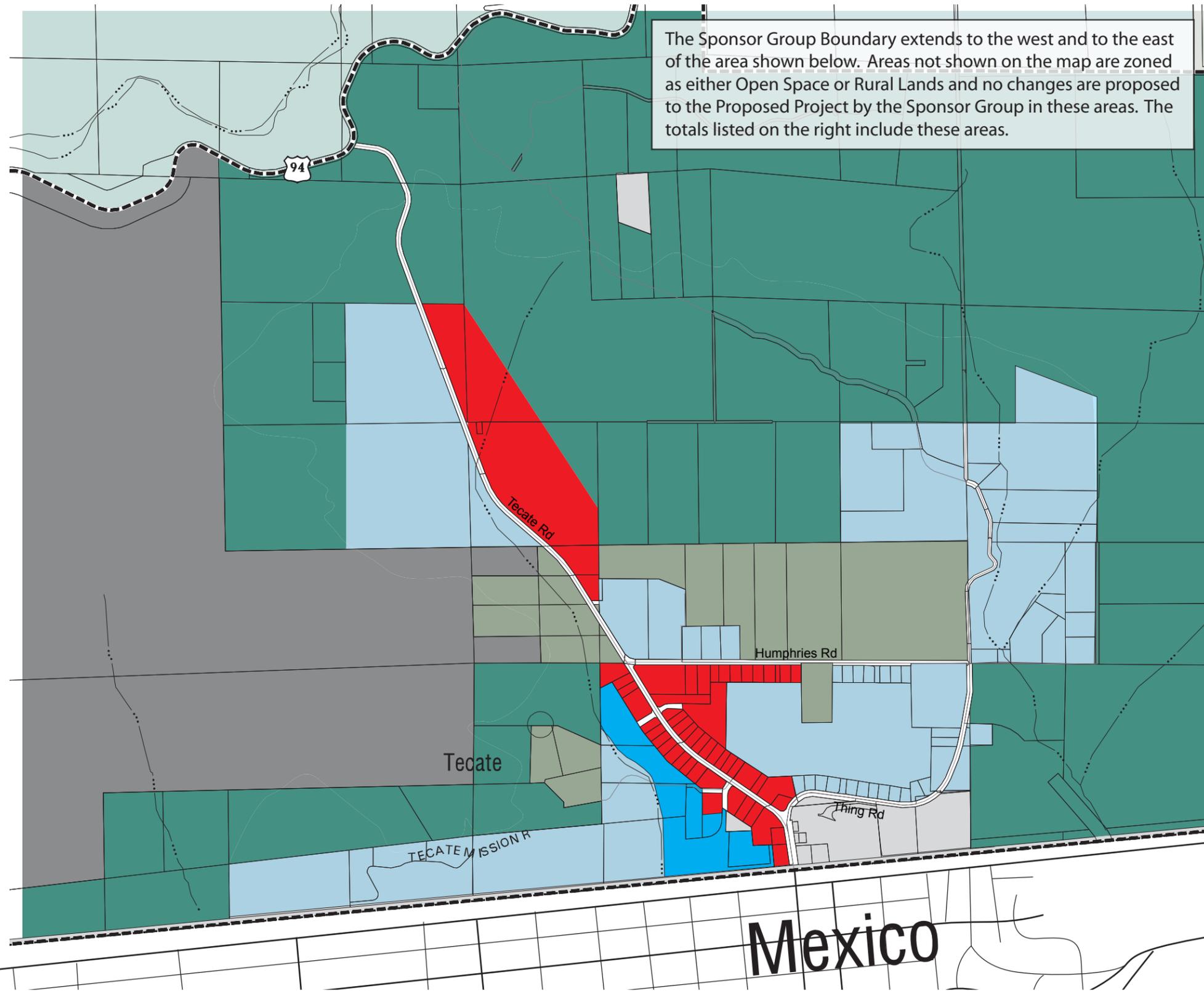
Figure 5: Tecate, USA Total Trip Distribution with Sponsor Group Proposed Land Use

Figure 6: Daily Roadway Volumes with Sponsor Group Land Use

Figure 7: 2030 Level of Service and Daily Volumes with Sponsor Group Land Use

Table 1: Proposed Tecate Land Uses Trip Generation Summary

Table 2: Tecate Land Use Comparison

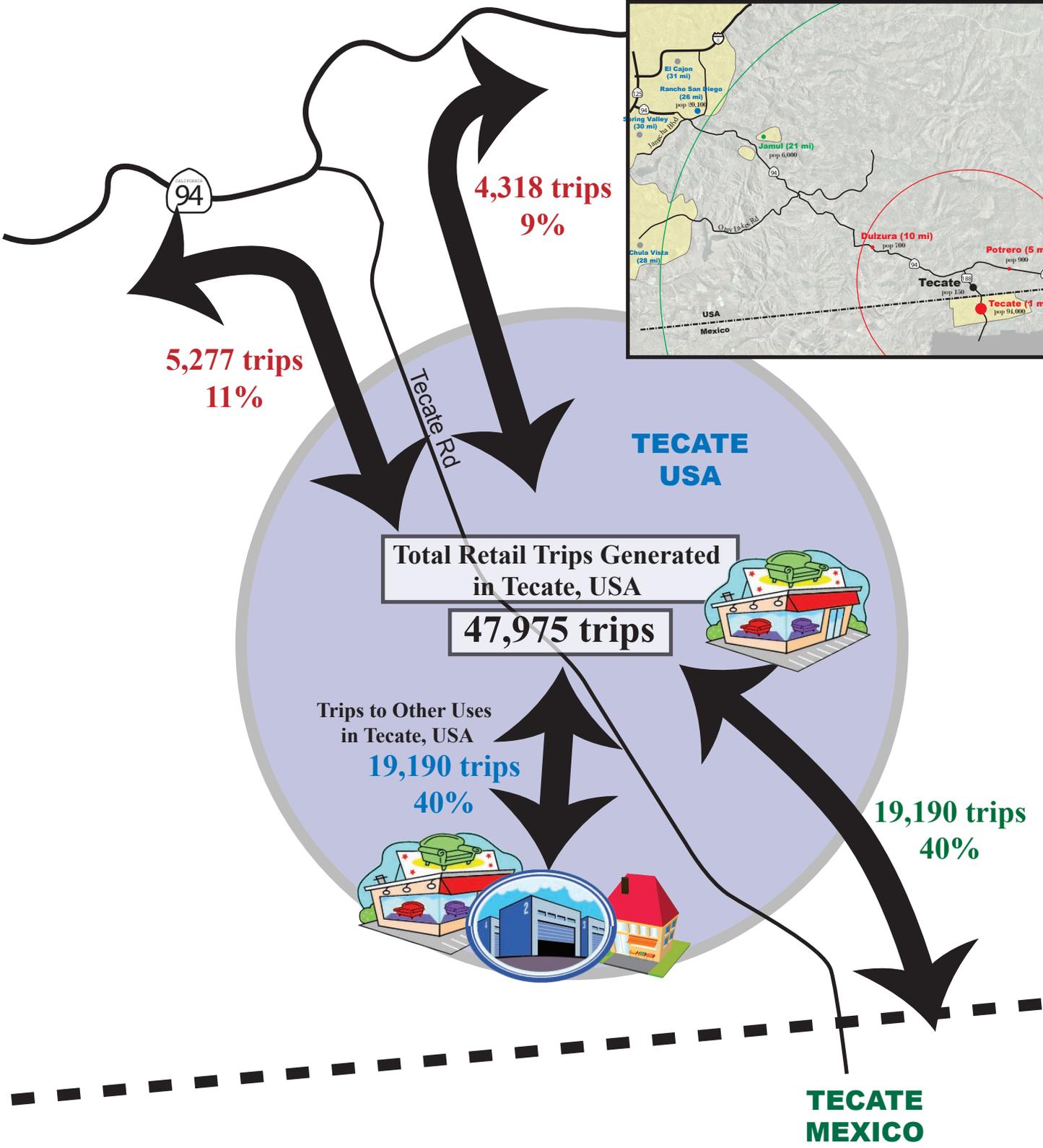
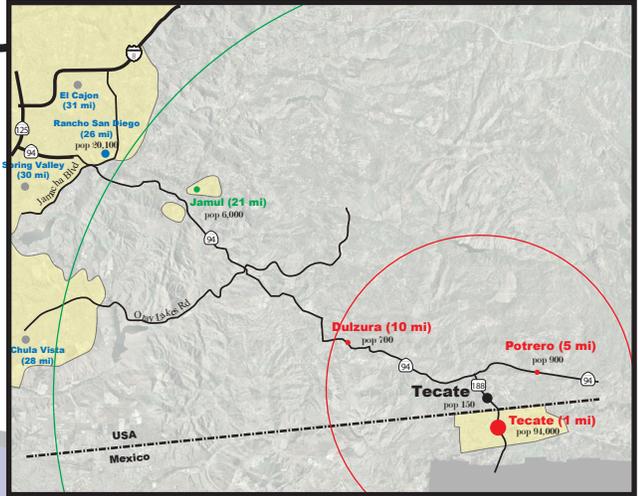


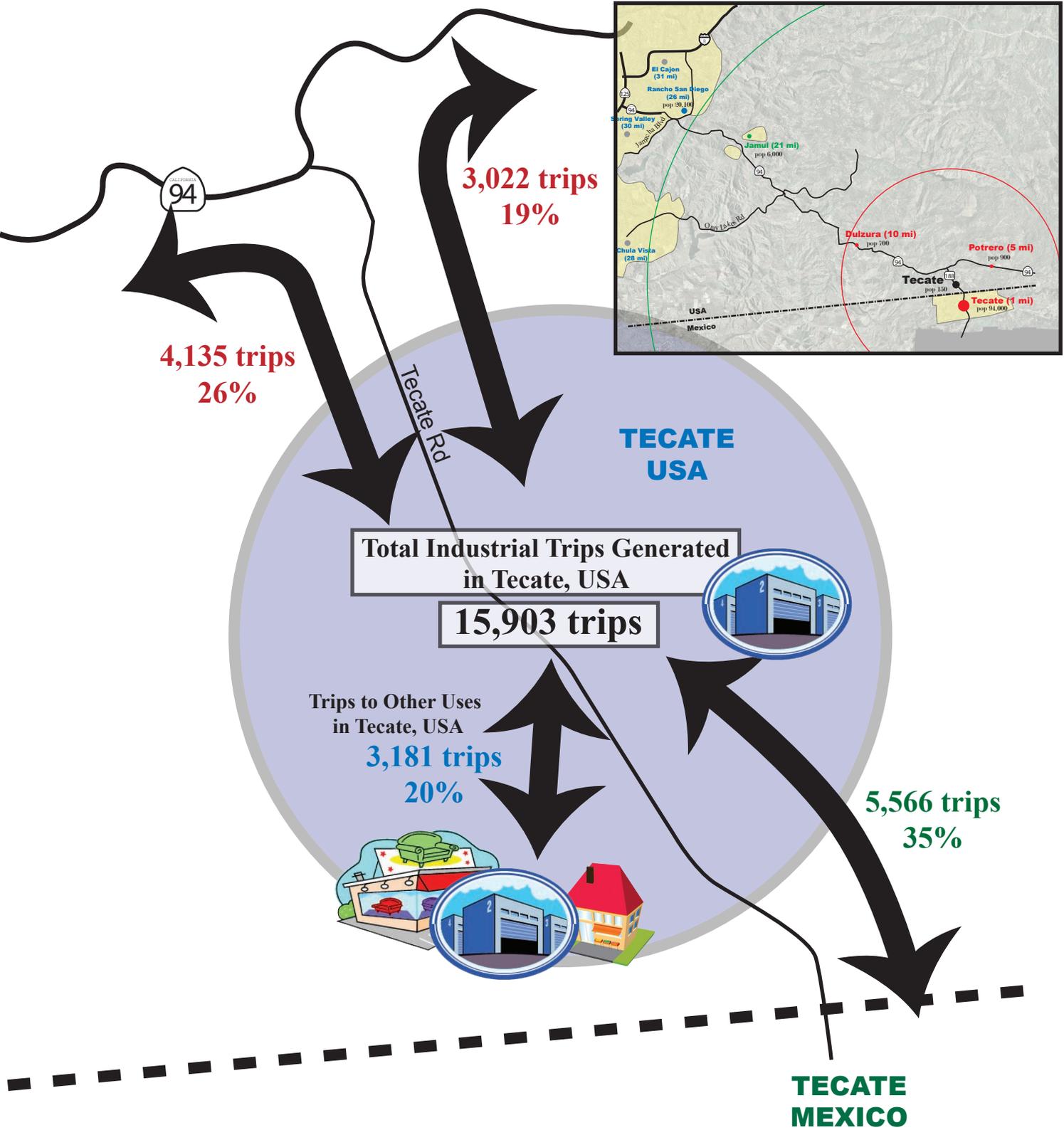
Sponsor Group Proposed Land Use Map

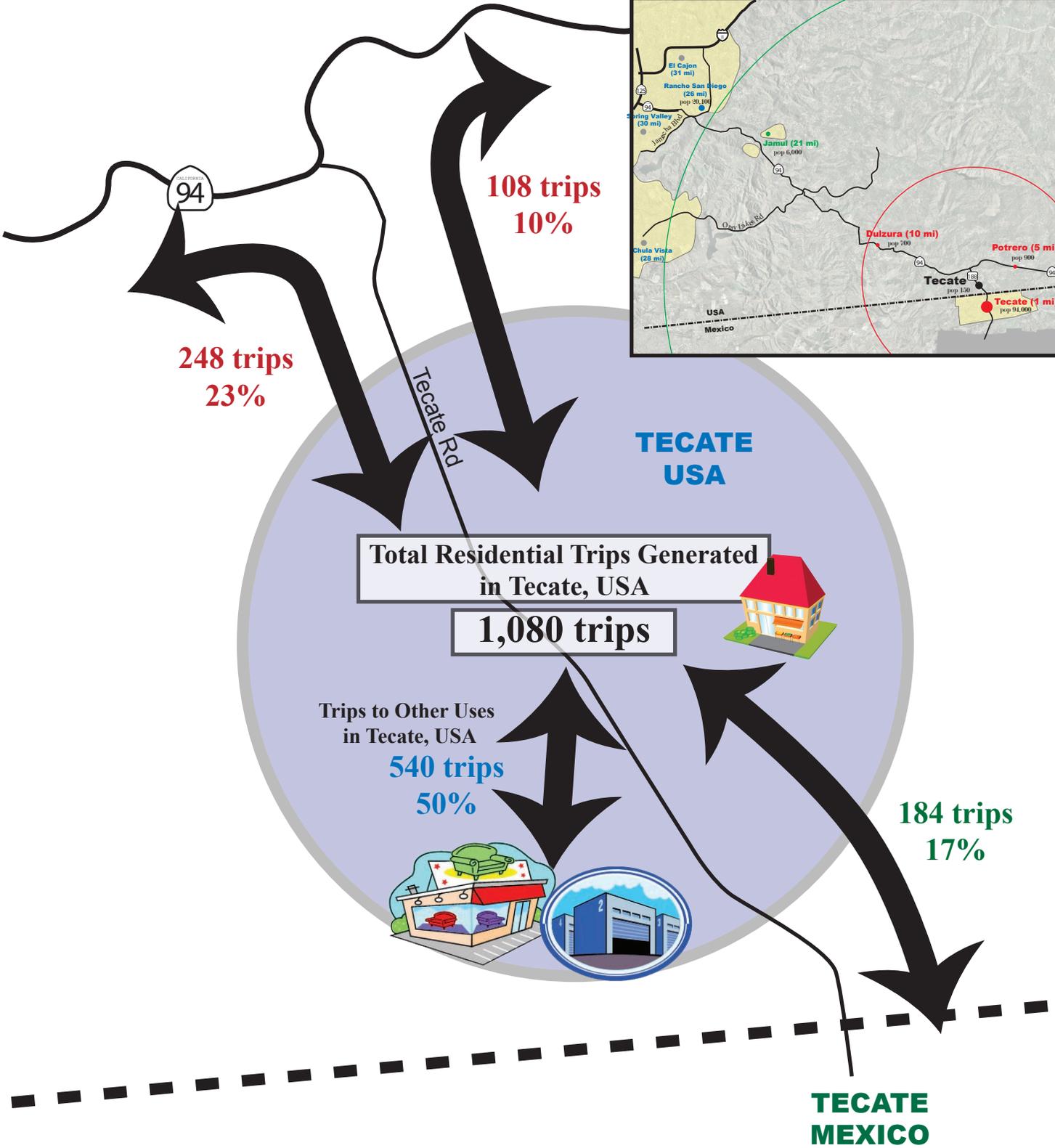
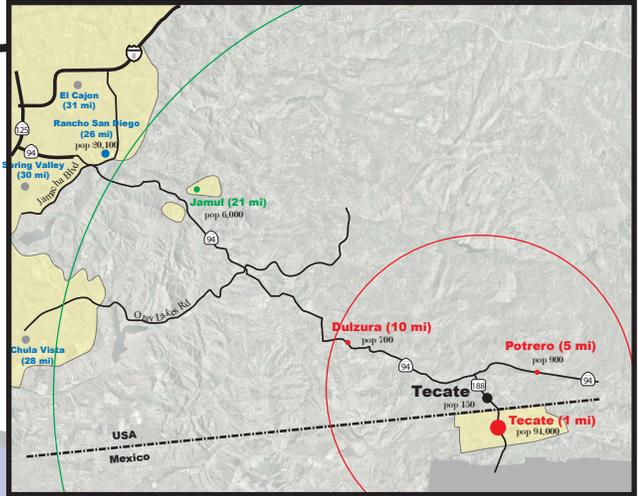
	Village Residential (VR-29), 29 du/ac	
	Village Residential (VR-24), 24 du/ac	
	Village Residential (VR-20), 20 du/ac	
	Village Residential (VR-14.5), 14.5 du/ac	
	Village Residential (VR-10.9), 10.9 du/ac	
	Village Residential (VR-7.3), 7.3 du/ac	
	Village Residential (VR-4.3), 4.3 du/ac	
	Village Residential (VR-2.9), 2.9 du/ac	
	Village Residential (VR-2), 2 du/ac	
	Semi-rural Residential (SR-1), 1 du/1,2,4 ac	
	Semi-rural Residential (SR-2), 1 du/2,4,8 ac	
	Semi-rural Residential (SR-4), 1 du/4,8,16 ac	
	Semi-rural Residential (SR-10), 1 du/10,20 ac	118.0 ac
	Rural Lands (RL-20), 1 du/20 ac	
	Rural Lands (RL-40), 1 du/40 ac	3125.5 ac
	Rural Lands (RL-80), 1 du/80 ac	
	Rural Lands (RL-160), 1 du/160 ac	
	Specific Plan Area (densities indicated in italics)	
	Office Professional	
	Neighborhood Commercial	
	General Commercial	96.2 ac
	Rural Commercial	
	Limited Impact Industrial	326.6 ac
	Medium Impact Industrial	23.1 ac
	High Impact Industrial	
	Village Core Mixed Use	
	Public/Semi-Public Facilities	23.6 ac
	National Forest and State Parks	
	Tribal Lands	
	Open Space (Recreation)	
	Open Space (Conservation)	
	Military Installations	
	Forest Conservation Initiative Overlay	
	Area Subject to Further Refinements	
	County Water Authority Boundary	
	Tecate Sponsor Group Boundary	
	Adjacent Community Plan and Sponsor Group Boundary	
	Jurisdictional Boundary	

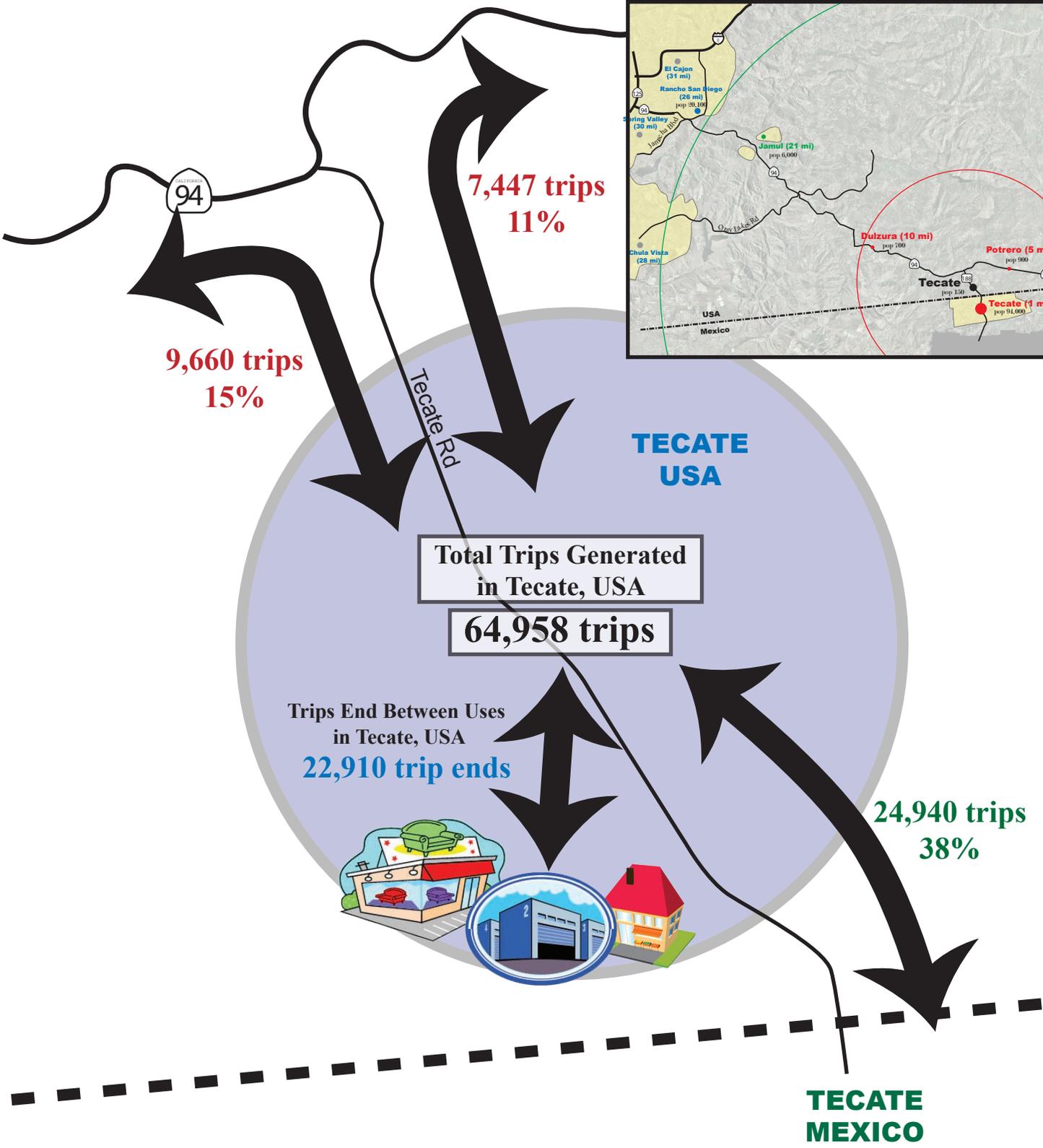
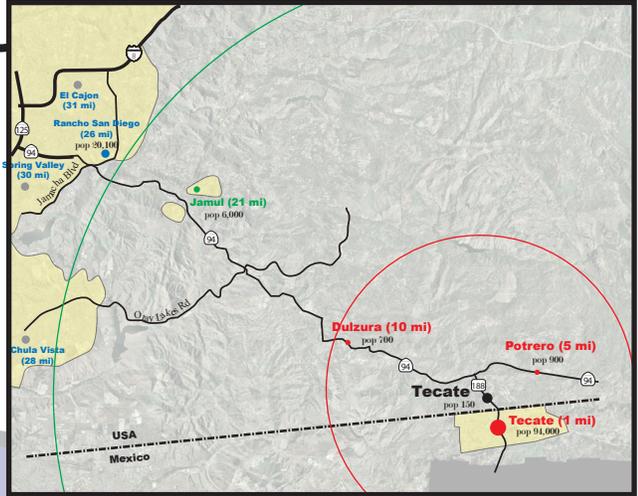


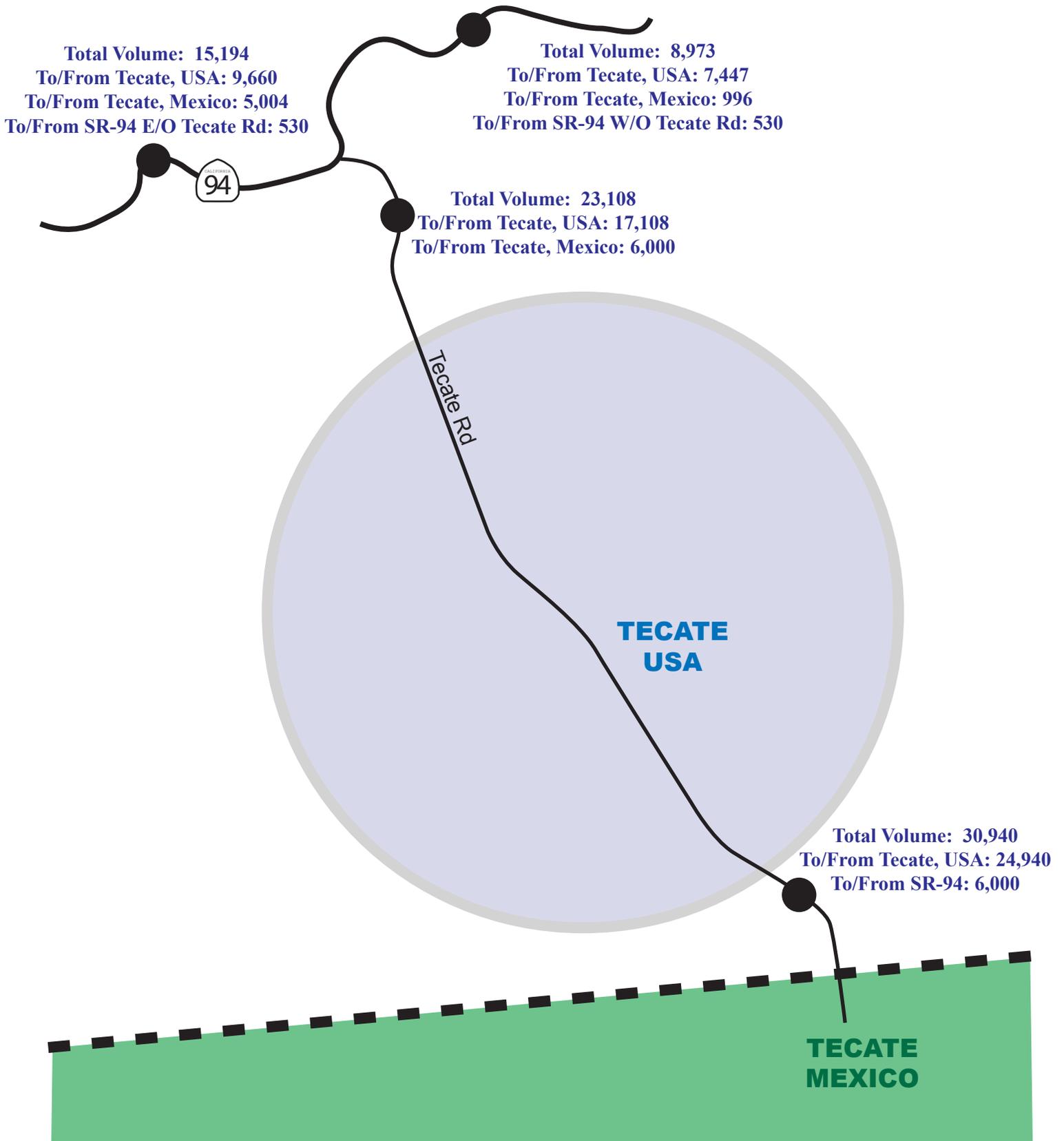
NOT TO SCALE











Note: Volumes are daily and bi-directional

**TABLE 1
PROPOSED TECATE LAND USES TRIP GENERATION SUMMARY**

Land Use	Land Use as listed in SANDAG	Units ¹	Trip Rate ²	Daily Trips	% of ADT ²	AM Peak-Hour				PM Peak-Hour				
						In:Out Ratio ²	In	Out	Total	% of ADT ²	In:Out Ratio ²	In	Out	Total
DRIVEWAY TRIPS³														
Residential Uses														
Semi-Rural Residential	Estate, Urban or Rural	12 du	12 / du	144	8%	3.00 : 7.00	3	9	12	10%	7.00 : 3.00	10	4	14
Rural Lands	Estate, Urban or Rural	78 du	12 / du	936	8%	3.00 : 7.00	22	53	75	10%	7.00 : 3.00	66	28	94
Commercial Uses														
General Commercial	Community Shopping Center	126 ksf	80 / ksf	10,057	4%	6.00 : 4.00	241	161	402	10%	5.00 : 5.00	503	503	1,006
General Commercial	Specialty Retail/Strip Commercial	251 ksf	40 / ksf	10,057	3%	6.00 : 4.00	181	121	302	9%	5.00 : 5.00	453	452	905
General Commercial	Drugstore	63 ksf	90 / ksf	5,657	4%	6.00 : 4.00	136	90	226	10%	5.00 : 5.00	283	283	566
General Commercial	Discount Store	126 ksf	60 / ksf	7,543	3%	6.00 : 4.00	136	90	226	8%	5.00 : 5.00	302	301	603
General Commercial	Furniture Store	63 ksf	6 / ksf	377	4%	7.00 : 3.00	11	4	15	9%	5.00 : 5.00	17	17	34
General Commercial	Lumber Store	63 ksf	30 / ksf	1,886	7%	6.00 : 4.00	79	53	132	9%	5.00 : 5.00	85	85	170
General Commercial	Auto Parts Sales	63 ksf	60 / ksf	3,771	4%	0.00 : 0.00	0	151	151	10%	0.00 : 0.00	0	377	377
General Commercial	Gas Station with/Food Mart	8 v/s	160 / v/s	1,280	7%	5.00 : 5.00	45	45	90	8%	5.00 : 5.00	51	51	102
General Commercial	Motel	25 oc	9 / oc	225	8%	4.00 : 6.00	7	11	18	9%	6.00 : 4.00	12	8	20
General Commercial	Storage	58 ksf	2 / ksf	117	6%	5.00 : 5.00	4	3	7	9%	5.00 : 5.00	5	6	11
General Commercial	Hardware/Paint Store	58 ksf	60 / ksf	3,502	2%	6.00 : 4.00	42	28	70	9%	5.00 : 5.00	158	157	315
General Commercial	Garden Nursery	58 ksf	40 / ksf	2,335	3%	6.00 : 4.00	42	28	70	10%	5.00 : 5.00	117	116	233
General Commercial	Auto Repair Center	58 ksf	20 / ksf	1,167	8%	7.00 : 3.00	65	28	93	11%	4.00 : 6.00	51	77	128
Industrial Uses														
Limited Impact Industrial	Industrial Park (no commercial)	711 ksf	8 / ksf	5,691	11%	9.00 : 1.00	563	63	626	12%	2.00 : 8.00	137	546	683
Limited Impact Industrial	Warehousing	1,067 ksf	5 / ksf	5,335	13%	7.00 : 3.00	485	209	694	15%	4.00 : 6.00	320	480	800
Limited Impact Industrial	Storage	1,778 ksf	2 / ksf	3,557	6%	5.00 : 5.00	107	106	213	9%	5.00 : 5.00	160	160	320
Medium Impact Industrial	Industrial Park (no commercial)	63 ksf	8 / ksf	503	11%	9.00 : 1.00	50	5	55	12%	2.00 : 8.00	12	48	60
Medium Impact Industrial	Manufacturing/Assembly	126 ksf	4 / ksf	503	19%	9.00 : 1.00	86	10	96	20%	2.00 : 8.00	20	81	101
Medium Impact Industrial	Warehousing	63 ksf	5 / ksf	314	13%	7.00 : 3.00	29	12	41	15%	4.00 : 6.00	19	28	47
NET TRIP GENERATION =				64,958	2,334 1,280 3,614				2,781 3,808 6,589					

Note:
1. ksf = thousand square feet; v/sf = vehicle fueling stations; ac = acres; oc = occupied rooms
2. Trip rates referenced from the Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, SANDAG, April 2002
3. Driveway trips are the total number of trips generated by a site.

TABLE 2
TECATE LAND USE COMPARISON

Land Use	Land Use by Alternative (ac)	
	Sponsor Group Proposal	Proposed Project Alternative
Semi-rural Residential (SR-10)	118.3	118.3
Rural Lands (RL-40)	3125.5	3220.7
Total Residential	3243.8	3339.0
General Commercial	96.2	63.8
Rural Commercial		4.1
Streetfront Commercial		3.8
Other Commercial		1.2
Total Commercial	96.2	72.9
Church		14.3
Limited Impact Industrial	326.6	17.4
Medium Impact Industrial	23.1	255.4
Warehousing/Storage		16.1
Total Industrial	349.7	288.9
	Sponsor Group	Proposed Project
Daily Total Trip Generation	64,958	93,339
<p>Note: Daily trip generation for Proposed Project alternative from SANDAG series 10 GPU model run. Daily trip generation for Sponsor Group land use from projected land uses, floor-to-area ratios, and corresponding SANDAG daily trip generation rates.</p>		

K:\TPTO\095591000\Excel\[Model Trip Gen.xlsx]Comparison