



Transportation Concept Report
State Route 125
District 11
February 2016



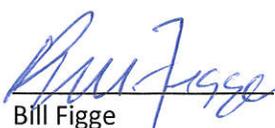
Transportation Concept Report (TCR) Purpose

California’s State Highway System needs long range planning documents to guide the logical development of transportation systems as required by California Government Code §65086 and as necessitated by the public, stakeholders, and system users. The purpose of the TCR is to evaluate current and projected conditions along the route and communicate the vision for the development of each route in each Caltrans District during a 20-25 year planning horizon. The TCR is developed with the goals of increasing safety and health, providing excellent stewardship and efficiency, maintaining system performance, and meeting community and environmental needs of sustainability, livability, and economy along the corridor through integrated management of the transportation network, including highway, transit, pedestrian, bicycle, freight, operational improvements, and travel demand management components of the corridor.

California Department of Transportation

“Provide a safe, sustainable, integrated, and efficient transportation system to enhance California’s economy and livability.”

Approvals:


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ABOUT THE TRANSPORTATION CONCEPT REPORT

System Planning is the long-range transportation planning process for the California Department of Transportation (Caltrans). The System Planning process fulfills the statutory responsibility of Caltrans as owner/operator of the State Highway System (SHS) by evaluating conditions and proposing enhancements to the SHS (Gov. Code §65086). Through System Planning, Caltrans focuses on developing an integrated multimodal transportation system that meets the Caltrans goals of safety and health, stewardship and efficiency, sustainability, livability and economy, system performance, and organizational excellence.

The System Planning process is primarily composed of four parts: the District System Management Plan (DSMP), the Transportation Concept Report (TCR), the Corridor System Management Plan (CSMP), and the DSMP Project List. The district-wide **DSMP** is a strategic policy and planning document that focuses on maintaining, operating, managing, and developing the transportation system. The **TCR** is a planning document that identifies the existing and future route conditions as well as future needs for each route on the SHS. The **CSMP** is a complex, multi-jurisdictional planning document that identifies future needs within corridors experiencing or expected to experience high levels of congestion. The CSMP serves as a TCR for segments covered by the CSMP. The **DSMP Project List** is a list of planned and partially programmed transportation projects used to recommend projects for funding. These System Planning products are also intended as resources for stakeholders, including the public as well as regional and local agencies.

Disclaimer: The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this Transportation Concept Report (TCR) is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, the District 11 System Planning Division makes every effort to ensure the accuracy and timeliness of the information contained in the TCR. The information in the TCR does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures.

STAKEHOLDER PARTICIPATION

As part of the development of this TCR, Caltrans District 11 has coordinated with the jurisdictions located along the State Route 125 (SR-125) corridor. Outreach to internal and external stakeholders is a fundamental component of a TCR's development. The SR-125 local stakeholders include the Cities of Chula Vista, San Diego, Lemon Grove, La Mesa, El Cajon, and Santee, as well as the communities of Otay Mesa, Bonita, and Spring Valley. Additional partners are the San Diego Association of Governments (SANDAG), Otay Mesa Community Planning Group, and the San Diego Navajo Community Planning Group. The County of San Diego is the responsible jurisdiction for the unconstructed section of SR-125 located north of the City of Santee and south of the City of Poway. Much of the TCR information came from internal Caltrans files and databases managed by the Divisions of Program and Project Management, Traffic Operations, Environmental Planning, and Transportation Planning (Travel Modeling and Forecasting Branch). In addition, information came from System Planning in Caltrans Headquarters. Caltrans staff reviewed and considered partner agency documents such as City and County General Plans, Regional Transportation Plans, Bicycle Transportation Plans, Public Transit Plans, traffic studies, past TCRs, and statewide planning tools.

EXECUTIVE SUMMARY

The California State Highway System needs long range planning documents to guide the logical development of transportation systems as required by CA Gov. Code §65086 and as necessitated by the public, stakeholders, and system users. The purpose of the Transportation Concept Report (TCR) is to evaluate current and projected conditions along the route and communicate the vision for the development of each route in each Caltrans District during a 20-25 year planning horizon. The California Department of Transportation (Caltrans) has prepared this TCR for State Route 125 (SR-125) located in San Diego County and stretching from State Route 905 (SR-905) to State Route 52 (SR-52). The TCR is a long term consensus-based vision intended to assist Caltrans, the San Diego Association of Governments (SANDAG), and other public agencies serving San Diego County to manage the route. SANDAG is the Metropolitan Planning Organization for San Diego County and partners with Caltrans. This report includes an assessment of current and future operating conditions. In addition, improvements will be identified to support operational goals on the SR-125 corridor.

SR-125 will be described throughout this report in sections covering route concepts, concept rationale, land use plans, community characteristics, multimodal facilities, environmental considerations, and corridor performance measures. Future projects and planning referenced in this TCR are based upon the 2050 Regional Transportation Plan (2050 RTP) last updated October 2011. However, just as this report was finalized, the SANDAG Board of Directors approved the updated 2050 RTP (October 9, 2015) known as “San Diego Forward: The Regional Plan”. Priorities identified in the newly adopted RTP can be referenced at www.sdforward.com.¹

Two distinctions of SR-125 are that the southern portion of SR-125 is the only toll road in San Diego County and the middle portion is designated as a scenic route. A base year (BY) of 2012 and horizon year (HY) of 2040 will be the focus of analysis to explore the needs of existing and future travel. References to year 2050 are included to aid in identifying projects that could affect the future of SR-125. For simplicity, SR-125 has been divided into six different segments and each will be discussed in more detail in the following pages. In addition, some tables will have grayed out cells due to the fact that no data are available for the data set.

Concept Summary

Identified as a north-south travel way, SR-125 connects south and central San Diego County. The southern end has a toll road facility from State Route 905/Otay Mesa Road to State Route 54 (SR-54). The full length of the travel way is from the beginning of the toll road to a terminus at State Route 52/Mission Gorge Road in the City of Santee. SR-125 traverses the Cities of San Diego, Chula Vista, Lemon Grove, La Mesa, El Cajon, Santee, and the unincorporated communities of Bonita and Spring Valley in San Diego County. The route is comprised of rolling hills and flat terrain. The southern and northern ends of this route are made up of open green space with clusters of urban density filling in the landscape between the two ends.

SR-125 serves a multitude of purposes including completing a missing link in the regional freeway network. Historically, there have been several existing transportation deficiencies in the San Diego

¹ San Diego Forward: The Regional Plan: <http://www.sdforward.com/>

central and southern metropolitan region east of I-805. Within the last ten years, the completion of the SR-125 freeway has alleviated many of these deficiencies. This route has reduced out-of-direction travel by providing a more direct route to other freeway destinations such as SR-94, SR-54, and SR-52. In addition, it has increased north/south travel capacity between the United States and Mexico via the Otay Mesa Port of Entry (POE). When the southern portion (south of SR-54) of SR-125 was built, it contributed to congestion reduction on Interstate 5 (I-5) and Interstate 805 (I-805). This route's location serves existing and future planned and approved development in the eastern Chula Vista and Otay Mesa areas. Increased future traffic demand requires the efficient movement of people and freight on the SR-125 corridor and may require the development of additional transportation improvements. These improvements could include the construction of additional general purpose lanes, the addition of High Occupancy Vehicle (HOV) lanes or Managed Lanes (ML), and/or interchange improvements. Another consideration could be to improve future accessibility between the United States and Mexico border area by enhancing mobility in the southern San Diego region. SR-125 provides a vital north/south connection that can be traversed as a transportation alternative in the southern and central San Diego regions to other north/south routes such as I-5, Interstate 15 (I-15), and I-805.

Concept Rationale

With the completion of SR-125 from the South Bay area (SR-905) to the City of Santee (SR-52), SR-125 has provided regional connectivity within the County that was previously lacking in the inner loop of the freeway network. Future system operations and management concepts need to be further developed for this transportation corridor due to increased future facility usage and additional needs placed on the transportation system. The focus on these future operations and management should include corridor preservation and new technologies. The completion of State Route 11 (SR-11) at the United States and Mexico international border has the potential to add additional future travel demand to the SR-125 corridor and adjacent areas due to its proximity to SR-125 and should be monitored. All of Table 1 below provides a brief overview of future concepts for SR-125.

Segment 4 in Table 1 has unique characteristics that need to be explained. The Existing column shows 6F (8F). The 6F represents the number of existing general purpose lanes on the roadway without including the auxiliary lanes. The SANDAG RTP considers the auxiliary lanes throughout this segment as part of the freeway and shows this segment of SR-125 as 8F as existing condition. Throughout this report, auxiliary lanes were not included during the analysis of any segments; therefore, Segment 4 will be 6F for the purpose of the analysis done in this report. The Mid-Term column (2015-2030) reflects SANDAG's plan to add two additional general purpose lanes (10F) and in the Long-Term column (2030-2050) the SANDAG plan includes the addition of two managed lanes (10F+2ML). For future purposes, all segments in this report were analyzed according to the lane configurations shown in SANDAG's RTP, and Segment 4 will be represented as stated in the SANDAG plan as 10F or 10F+2ML.

Table 1: SR-125 Concepts Rationale

Segment	Segment Description ²	Existing (2012) Facility	Mid-Term (2015-2030) Capital Facility Concept	Mid-Term System Operations and Management Concept	Long-Term (2030-2050) Concept
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM L000.000-009.251	4T ³ /4F ⁴	4T/4F	Maintain	8F(2050)
			SR-905/11/125 add freeway to freeway connectors (TBD ⁵)		
2	SR-54 to Jamacha Road PM 009.251-010.622	6F	6F	Maintain	6F+2ML (2050)
3	Jamacha Road to SR-94 (Westbound Junction) PM 010.622-012.999	6F	6F	Maintain	6F+2ML (2050)
4	SR-94 (Eastbound Junction) to I-8 PM 012.967-R015.409	6F (8F)	10F (2030)	WB SR-94 to NB SR-125 at freeway to freeway connector add ramp meter	10F+2ML (2040)
			South SR-125 to East SR-94 (Freeway Connector) (2020) West SR-94 to North SR-125 (Freeway Connector). Add general purpose lanes to SR-125 (2030)		
5	I-8 to SR-52/Mission Gorge Road PM R015.409-022.301	6F	6F	Add ramp meters to southbound ramps	6F
6	SR-52/Mission Gorge Road to Poway/Espola Road (unconstructed) PM 022.301-030.400	Unconstructed			

Proposed Projects and Strategies

Table 2 represents a summary of projects programmed or planned for system expansion and associated with SR-125. As most of SR-125 was built after the year 2000, projects will be phased for construction as funds become available. SR-125 needs to expand to meet future needs for regional connectivity. This expansion will include additional ramps and lanes to meet the demands of the traveling public. There should also be provisions in place to accommodate expanded mode choices. Insightful choices for the future include providing Bus Rapid Transit, increased rapid transit routes, and better accessibility for bicycles and pedestrians. Operational and safety improvements should be considered where

² PM = Post Mile
³ T = Toll Lanes
⁴ F = Freeway Lanes
⁵ TBD = To Be Determined

appropriate for all segments. For a more expanded list of proposed projects and strategies refer to the Corridor Concept section of this report (see page 67).

Table 2: Proposed Projects and Strategies

Segment	Segment Description	Description	Planned or Programmed	Location	Source	Purpose	Implementation Phase
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	Add 4 Freeway Lanes (8F)	Planned	SR-905 to SR-54	SANDAG 2050 RTP (October 2011) ⁶	System Expansion	Revenue Constrained Plan – Phased Highway Projects 2050
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	Add East and West to North (3 Freeway Connectors)	Programmed	EB ⁷ SR-905 to NB ⁸ SR-125; WB ⁹ SR-905 to NB SR-125; WB SR-11 to NB SR-125	SANDAG RTIP ¹⁰	System Management	Phased Highway Projects 2020
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	South Bay Bus Rapid Transit (Rapid)	Programmed	Otay Ranch to Downtown San Diego	SANDAG RTIP	Transit System Expansion	Phased Transit Projects 2018
2	SR-54 to Jamacha Road PM: 009.251-010.622	Add 2 Managed Lanes to 6 Freeway lanes (6F + 2 ML)	Planned	SR-54 to SR-94	SANDAG 2050 RTP (October 2011)	System Management	Revenue Constrained Plan – Phased Highway Projects 2050
3	Jamacha Road to SR-94(Westbound Junction) PM: 010.622-012.999						
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	South to East (Freeway Connector)	Programmed	SB ¹¹ SR-125 to EB SR-94	SANDAG 2050 RTIP	System Management	Phased Highway Projects 2020
		West to North (Freeway Connector)	Planned	WB SR-94 to NB SR-125	SANDAG 2050 RTP (October 2011)	System Management	Revenue Constrained Plan – Phased Highway Projects 2030
		Add 2 Freeway Lanes	Planned	SR-94 to I-8	SANDAG 2050 RTP (October 2011)	System Management	Revenue Constrained Plan – Phased Highway Projects 2030
		Add 2 Managed Lanes	Planned	SR-94 to I-8	SANDAG 2050 RTP (October 2011)	System Management	Revenue Constrained Plan – Phased Highway Projects 2040

⁶ RTP = Regional Transportation Plan

⁷ EB = Eastbound

⁸ NB = Northbound

⁹ WB = Westbound

¹⁰ RTIP = Regional Transportation Improvement Program (September 2014)

¹¹ SB = Southbound

Segment	Segment Description	Description	Planned or Programmed	Location	Source	Purpose	Implementation Phase
5	I-8 to SR-52/Mission Gorge Road PM: R015.409-022.301	No projects identified.					
6	SR-52/Mission Gorge Road to Poway/Espola Road (unconstructed) PM: 022.301-030.400	Not Applicable					

CORRIDOR OVERVIEW

ROUTE SEGMENTATION

The SR-125 corridor is a four to eight lane facility with auxiliary lanes at many locations. The majority of the route has been constructed since the year 2000. This route is comprised of topography that is rolling hills, gentle curves, and flat terrain. As can be seen in Table 3, SR-125 has been divided into six segments. The rationale for the segmentation was based on vehicle usage, constraints in the roadway, and characteristics of the environment. All segments are established for planning purposes only and are subject to change as additional data becomes available.

Table 3: SR-125 Route Segmentation

Segment #	Location Description	County Route Beginning Post Mile ¹²	County Route End Post Mile
1	SR-905/Otay Mesa Road to SR-54 (Toll Road)	SD_125_L000.000	SD_125_009.251
2	SR-54 to Jamacha Road	SD_125_009.251	SD_125_010.622
3	Jamacha Rd to SR-94 (Westbound Junction)	SD_125_010.622	SD_125_012.999
4	SR-94 (Eastbound Junction) to I-8	SD_125_012.967	SD_125_R015.409
5	I-8 to SR-52/Mission Gorge Road	SD_125_R015.409	SD_125_022.301
6	SR-52/Mission Gorge Road to Poway/Espola Road (unconstructed)	SD_125_022.301	SD_125_030.400

For a visual depiction of SR-125, all 30 miles are identified on Map 1 on page 13. The various cities and county jurisdictions are represented adjacent to the defined six segments. In addition, Map 1 displays the locations of airports and the international border ports of entry for the United States and Mexico.

Segment 1 provides improved connectivity for the South Bay region. The boundaries are from SR-905/Otay Mesa Road (PM L000.000) to the SR-54 freeway interchange in Spring Valley (PM 009.251). This segment serves as a major commuter route for the developing Otay Mesa and Eastlake communities. In addition, with close proximity to the United States and Mexico border, SR-125 is a viable route for freight movement. This gently curving roadway is designated as part toll road and part freeway with 4 lanes throughout (2 lanes in each direction). The thoroughfare from SR-905/Otay Mesa Road to San Miguel Road is designated as an express toll road known as the South Bay Expressway (SBX).¹³ The Expressway was originally privately owned and operated. In December 2011, SANDAG acquired the lease to operate SBX. To encourage more ridership, SANDAG revamped the toll structure in 2012 and initiated a nearly 40% toll reduction. Cash and credit card payments are available at the south plaza (for both north and south directions). In addition, the local interchanges, northbound on-ramps and southbound off-ramps accept cash and credit card payment. A third method of payment provides a discounted rate by using the automated FasTrak program. The SBX website defines this type of payment as: *“FasTrak® is an electronic toll collection system. A small electronic device called a transponder is placed on the inside of your vehicle's windshield. The transponder works together with electronic readers installed along the South Bay Expressway. When a FasTrak customer travels in a FasTrak lane, an*

¹² Transportation System Network (TSN) Highway Sequence , Post Mile Log

¹³ SBX source: <http://www.sbxthe125.com/how-to-use-sbx/about-sbx>

overhead antenna (a gantry) reads the data stored in the FasTrak transponder and the toll is automatically deducted from the customer's prepaid FasTrak account. FasTrak is fully electronic – no tollbooths or gates – and above all, there's no need to slow down or stop at tollbooths.”¹⁴ There are overhead gantries located at the south and north ends of the South Bay Expressway. The fourth method of toll payment is to *Pay-by-Plate*. With this method, motorists can pay the toll (plus a \$2.00 premium) up to four business days after the trip was made.

The roadway is designated as freeway from north of San Miguel Road to the junction of SR-54. Although the freeway portion of Segment 1 is toll-free there are no access points for vehicles to exit this portion of the roadway before or after the toll portion of the road. Traveling north, the roadway continues to be gentle curves with the majority of it increasing to a higher elevation as it approaches SR-54. By the future year of 2050, the SANDAG 2050 RTP (October 2011) envisions the full length of Segment 1 as a toll free eight-lane freeway.

The planning groups and governmental jurisdictions for this nearly ten-mile segment are the Otay Mesa Community Planning Group (City of San Diego), the East Otay Mesa Planning Group (County of San Diego), the City of Chula Vista, and the Sweetwater Community Planning Group (County of San Diego). The Otay Mesa area is in the south end of Segment 1 and the community of Bonita (Sweetwater Community Planning Group) is located at the north end. The City of Chula Vista has jurisdiction over all areas in between. The full length of Segment 1 has a wide center median and no traffic barriers between north and south travel.

Segment 2 is a six lane freeway with a wide landscaped median from the junction of SR-54 (PM 009.251) to the Jamacha Road overcrossing (PM 010.622). This short segment has many traffic transitions taking place at the junction of the SR-54 and the Paradise Valley Road/Jamacha Boulevard interchange. Segment 2 ends at Jamacha Road which is the next freeway interchange north of Paradise Valley Road/Jamacha Boulevard. Jamacha Road is a major connection to the Spring Valley and East San Diego areas, and provides on and off-ramps for both directions of travel. There is a marked increase in traffic volumes due to the Jamacha Road interchange; therefore, the travel way from SR-54 to SR-94 was split into two segments, Segment 2 and Segment 3. The Spring Valley Community Planning Group (County of San Diego) is the planning group and governmental jurisdiction to the east and west of Segment 2.

Segment 3 is a six lane freeway with a wide landscaped median from the Jamacha Road interchange (PM 010.622) to the westbound junction of SR-94 (PM 012.999). The traffic volumes at this junction are substantially increased due to the connectivity provided by Jamacha Road. Jamacha Road is a key arterial link to the growing community of Spring Valley, along with being a significant back road connection to the expanding southeastern section of San Diego County. West of SR-125, Jamacha Road continues into the well-established urban areas of the City of San Diego including Paradise Hills. These connections establish Jamacha Road as a significant travel hub for SR-125. Sweetwater Road is the frontage road located to the east of SR-125 and is a major arterial for the area. This frontage road connects at a signalized intersection with Jamacha Road and traverses the length of the community of Spring Valley, continuing into the City of Lemon Grove.

¹⁴ SBX = South Bay Expressway (Website: <http://sbxthe125.com/how-to-use-sbx/faq>)

The majority of Segment 3 is under the jurisdiction of the Spring Valley Community Planning Group (County of San Diego). At the north end and west of SR-125, this segment is within the City of Lemon Grove's jurisdiction.

The SANDAG 2050 RTP (October 2011) proposes Segments 2 and 3 add two managed lanes to the existing six lane freeway by the year 2050. This Spring Valley urban community has many bridges intersecting SR-125 within these two segments. Comprehensive planning and design should be initiated before adding additional lanes.

Segment 4 is a freeway that has six lanes of travel with many auxiliary lanes. There are concrete barriers between the north and south travel ways. Most of this segment is built right to the edge of the urban community of the City of La Mesa. Built in 1964,¹⁵ Segment 4 is the oldest part of SR-125 and has the highest traffic volumes. Its boundaries are from the eastbound junction of SR-94 (PM 012.967) to the junction of I-8 (PM R015.409). At this point, it should be noted that there is a difference between the ending post mile of Segment 3 (012.999) and the beginning post mile of Segment 4 (012.967). This difference is due to the location of the SR-125 northbound and southbound ramps at the junction of eastbound and westbound SR-94.¹⁶

In the southbound PM peak hour of travel, there is a bottleneck between the Spring Street off-ramp and just north of the I-8 junction. The Spring Street off-ramp is signalized and feeds onto a local arterial. Spring Street is the only connection to eastbound SR-94 from southbound SR-125. A freeway to freeway connector from south SR-125 to east SR-94 is proposed between the years 2020 and 2030; currently, the Environmental Impact Report for the connector project is underway. This connector is anticipated to help alleviate the bottleneck.

The current SANDAG 2050 RTP (October 2011) lists a westbound SR-94 to northbound SR-125 freeway connector as a *TransNet*¹⁷ project. This project is slated for the year 2030 and would improve the existing connector.

Segment 5 is from I-8 (PM R015.409) to SR-52/Mission Gorge Road (PM 022.301). The roadway is comprised of rolling hills and flat spans. The Cities of La Mesa, El Cajon, San Diego, and Santee are the jurisdictions bordering on either side of SR-125 along Segment 5. The majority of Segment 5 was built between the years 2000 and 2013. The south end of this route starts at the junction of I-8 and the north end feeds into the junction of SR-52 while ending in the City of Santee at Mission Gorge Road. Over this span, the lanes of travel vary between six to eight lanes with many auxiliary lanes along the way. There are wide lanes and open median spacing between the north and southbound lanes. Although the south end of this segment at the interchange with I-8 has urbanized areas nudging the SR-125 right of way, the north end opens up to rolling hills with a feeling of large open spaces.

Segment 6 is from SR-52/Mission Gorge Road (PM 022.301) to Poway/Espola Road (PM 030.400). Although Segment 6 is designated as unconstructed, it is still part of the State Highway System and will continue to be part of the SR-125 TCR until legislatively removed. Segment 6 is shown on Map 1 as a reference to its original location as defined in the State Highway System. In 1975, SR-125 north of SR-52

¹⁵ Source: California State Highway Log

¹⁶ Caltrans TASAS Post Mile Log <http://onramp.dot.ca.gov/tsi/ohsip/tasas/sequencelisting/district11.pdf>

¹⁷ *TransNet*: Local half-cent transportation sales tax funding program (November 2004)

was included in SANDAG's first RTP as a freeway extending north and west from SR-52 to Interstate 15 (I-15). The proposed alignment crossed the San Diego River at what is now the City of Santee. It continued north along Fanita Parkway, around the east of the Marine Corps Air Station (MCAS) Miramar, then north to the unincorporated community of Poway, where the route was to connect with proposed State Route 56 (SR-56). Beyond the junction with proposed SR-56, the alignment would have traversed to the northwest and connected with I-15 at what is now Camino Del Norte. The primary purpose of SR-125 North was to help relieve forecasted congestion on I-15.¹⁸

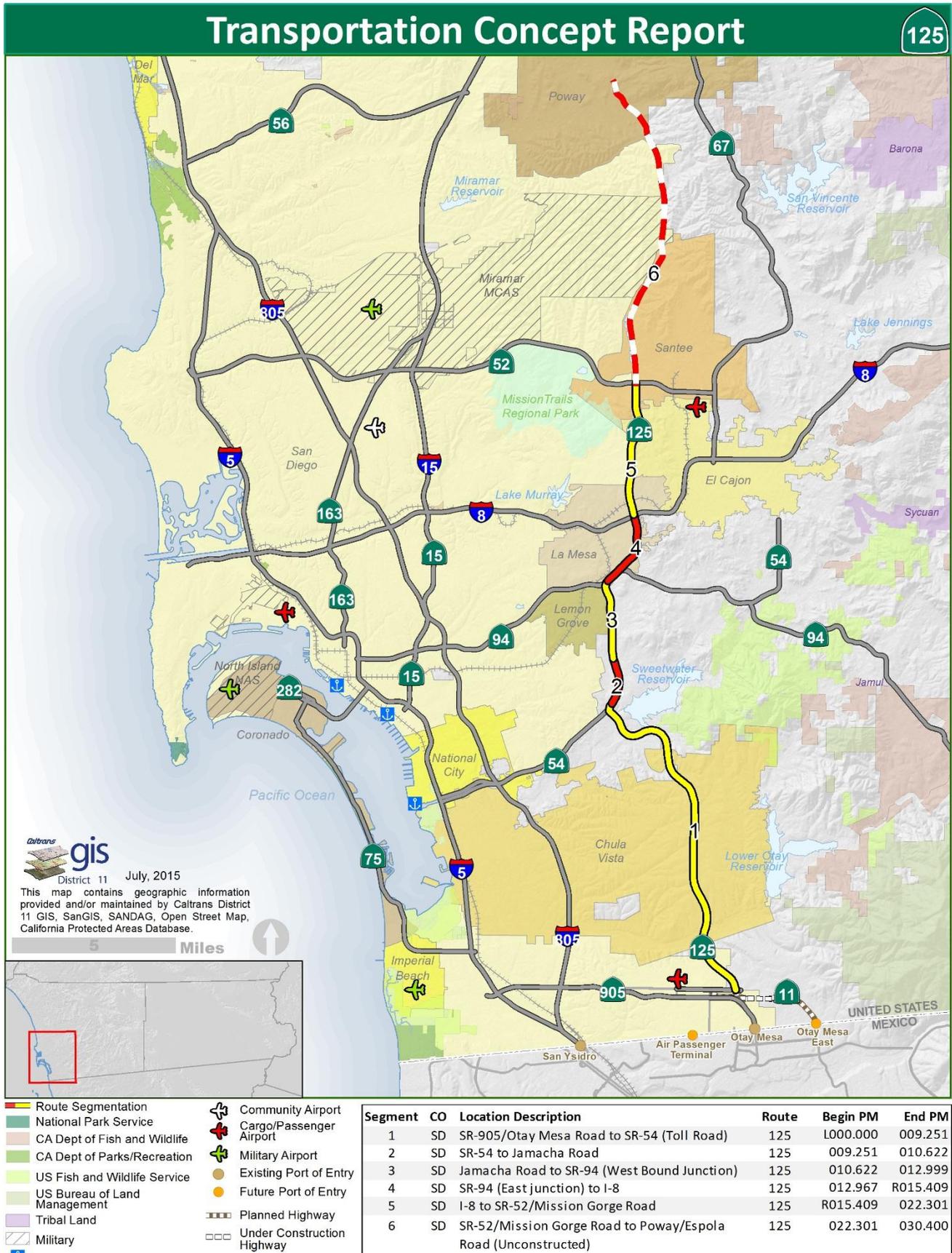
Following its incorporation in 1980, one of the earlier actions taken by the City of Poway was the deletion of SR-125 through most of its jurisdiction. Based upon this action, and the lower forecasted traffic volumes, subsequent RTPs downgraded SR-125 from a freeway to an expressway connecting to Poway's existing road system at the intersection of Espola and Poway Roads. With the completion of Scripps Poway Parkway, the need to construct a proposed road, parallel to SR-56 and east of I-15, was essentially eliminated. The potential northern terminus of SR-125 would have been Scripps Poway Parkway. In addition, as part of the proposed Fanita Ranch development, the City of Santee deleted Segment 6 of SR-125 from its general plan, leaving Segment 6 without a southern connection to SR-52. The Fanita Ranch development proposal subsequently was overturned by a referendum, but the SR-125 was not reinstated.

Issues impairing the potential development of SR-125 north of SR-52 include:

- Both the Cities of Poway and Santee deleted portions of proposed SR-125 from their respective jurisdiction's circulation elements. This includes the City of Poway deleting the segment north of Scripps Poway Parkway. In addition, the SR-125 alignment north of SR-52/Mission Gorge Road is not included in the SANDAG 2050 RTP (October 2011).
- Potential alignments of SR-125 north of SR-52 would traverse environmentally sensitive lands. Major vegetation types and sensitive species are present in the areas north of SR-52 between I-15 and State Route 67 (SR-67). Some of the area has been designated as 'Conserved' to save it from future loss by the individual jurisdictions, and others have been identified as areas proposed for conservation.
- MCAS Miramar, Federal land, is located in an ecologically sensitive area. An Integrated Natural Resources Management Plan (INRMP) was prepared in May 2000 (subject to annual review). The INRMP is a guide to achieve the Marine Corps' natural resources management goals to support military operational requirements of the Station. It complies with federal regulatory and planning processes. The United States Marine Corps has consistently stated its opposition to any highway encroachments into MCAS Miramar.

¹⁸ Source: Draft SR-125 Transportation Concept Summary September 2010

Map 1: SR-125 Route Segmentation



ROUTE DESCRIPTION

Route Location:

State Route 125 is a 22-mile six to eight lane freeway facility that begins at SR-905/Otay Mesa Road and travels north-south to SR-52 in the City of Santee within the County of San Diego. The route officially ends just north of the junction with SR-52 at the arterial roadway of Mission Gorge Road. Vehicles can choose to continue their travels on SR-52 or Mission Gorge Road at the route terminus.

This state route was added in its entirety to the State Highway System, and the Freeway and Expressway System, in 1959. It is also included in the National Highway System.¹⁹ The formal description from Section 425 of the California Streets and Highways Code states:²⁰

SR-125 is from:

- a) Route 905 near Brown Field to Route 54.
- b) Route 54 to Route 94 near La Mesa.
- c) Route 94 near La Mesa to Route 56.

As can be seen on the Route Segmentation Map (Map 1), most of this route has evolved to follow the formal description above. The only alteration in the formal description is in part c, as this route currently ends at SR-52/Mission Gorge Road. Although still part of the State Highway System, there are presently no plans to construct the northern end of the route beyond SR-52/Mission Gorge Road and ending in the City of Poway. This is due to the Cities of Poway and Santee removing this part of the route from their General Plans Circulation Element within their jurisdictions.

SR-125 has the distinction as having the only toll road in San Diego County. The segment of SR-125 from SR-905/Otay Mesa Road to north of San Miguel Road operates as a toll road and is referred to as the South Bay Expressway (SBX). It is expected that by year 2050, this portion of the roadway will no longer be a toll road. With the exception of the tolled roadway, the remainder of SR-125 is toll free.

Route Purpose:

The primary purpose of SR-125 is to provide for northbound and southbound travel, and improved connectivity to south and central San Diego County. With the completion of the southern portion of the route from SR-905 to SR-54 in Spring Valley, SR-125 serves a multitude of purposes. These purposes include completing a missing link in the regional freeway network which decreases out-of-direction travel, and increasing north/south capacity of future travel between the United States and Mexico via the Otay Mesa and Otay Mesa East POEs. Additional benefits would include reducing congestion on I-5 and I-805, and serving eastern Chula Vista and Otay Mesa areas with approved existing and future planned development. Improved connectivity between SR-125, SR-94, SR-905, and SR-11 is anticipated to provide congestion relief in the south-eastern portion of the San Diego Region.

When SR-125 gained direct connection to SR-52, the interconnectivity of SR-52 expanded to include a broader part of San Diego County. This interconnectivity bonds SR-125 to San Diego County by expanding the roadway for international, interregional, commuter, and recreational travel.

¹⁹ Resource: <http://www.cahighways.org/121-128.html#125>

²⁰ Resource: <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=shc&group=00001-01000&file=300-635>

Through the linking of SR-125 to other routes, SR-125 will fulfill its purpose in future years. In areas of increased development and high traffic volumes, future plans are to increase lane capacity, add managed lanes, and enhance transit options. For transit options, refer to the Bicycle, Pedestrian, Transit, and Freight sections in this report for a detailed account of their roles on SR-125. For all segments, operational and safety improvements should be considered where appropriate.

Major Route Features:

Major route features are defined as any features that will influence the route concepts and traffic movement on any given route. There are many different features that influence SR-125, either directly or indirectly, and will continue to have some bearing on this route and its connecting routes in the future.

At the southern expanse of the route, the South Bay Expressway tolling has one of the strongest influences on the travel demand along this part of SR-125. The toll road is expected to be a pay-as-you-go route for many years into the future. Since there is a direct fee associated with traveling from point A to point B, the toll determines the driving appeal to the traveler and impacts travel demand on this route. Once the fee is removed, travel on SR-125 should be re-examined to observe the results. In the meantime, accurate roadway data should be readily available to assist in future decisions.

The continuing growth of the southern area of San Diego County will affect goods movement in San Diego County. SR-125 is within 2-miles of the Otay Mesa POE and the future Otay Mesa East POE which are considered major trip attractors for the trucking of international goods. In addition, the expectation of the new international pedestrian bridge connecting the United States with Tijuana, Mexico's Rodriguez International Airport is that it will become a major attractor, for trips utilizing the Rodriguez International Airport. Also, consideration should be given to the two airports within the vicinity of SR-125. One (Brown Field) is located at the south end of the route and one (Gillespie Field) at the north end of the route. Both general aviation airports contribute to the distribution of goods movement traffic. Since goods movement is not limited to a specific location, it is reasonable to assume that these accelerated demands from the POEs and airports will need to be a focus for any future decisions on SR-125.

As seen in the list below, there are many recreational areas either bordering SR-125 or in close proximity. As outdoor facilities are great public attractions, there is potential for an increase in the quantity of recreational vehicles, bicycles, walkers, and other transportation modes.

- ❖ Johnson Canyon Open Space Preserve
- ❖ Otay Lake Recreational Area
- ❖ Sweetwater Reservoir
- ❖ Mission Trails Regional Park
- ❖ Cowles Mountain
- ❖ Mount Helix
- ❖ Santee Lakes

With the majority of this route surrounded by urban density, centers of community activity have developed along portions of SR-125. Some are smaller and primarily visited by the local residents. Others are large commercial retail developments and are designed to attract customers from far and wide. All of these centers can be accessed by multiple means of transport and are dependent on

various modes of goods movement. Below is a list of the larger community centers that could affect this route:

- ❖ Otay Ranch Town Center
- ❖ Eastlake Terraces
- ❖ Grossmont Shopping Center
- ❖ Navajo Road Town Centers
- ❖ Santee Trolley Square and Town Centers

Medical centers and hospitals are continuous trip generators. Sharp Grossmont Hospital is located next to SR-125 at the junction of I-8. There are medical centers surrounding the hospital. This hospital started out as a small community hospital and has grown into the largest health care facility in East San Diego County. It is the only major emergency medical service to the east and within a four mile radius of the nearest hospital to the west. With SR-125 connecting to SR-52 and I-8, the route provides improved connectivity for emergency medical services. As the population increases, this connectivity will become more essential and play a larger role.

Schools of all levels surround SR-125 from the south to the north. There are two major community colleges at or near SR-125. Southwestern College is two miles west of SR-125 in the Chula Vista area. Grossmont Community College is near the junction of SR-125 and SR-52 with direct ramps to the college from SR-125. Both colleges have grown in attendance over the years. Based on the Otay Ranch general plan, a proposed four-year university is to be built within the Otay Mesa area.²¹ Schools are substantial contributors to the transportation needs for SR-125 and influence the commuter's decisions for transportation and housing.

Route Designations and Characteristics:

Table 4 below represents the route designations and multiple characteristics pertaining to SR-125. It is divided into the six segments assigned to SR-125 for simplicity of understanding. SR-125 was added in its entirety to the State Highway System, and Freeway and Expressway System, in 1959 and it is included in the National Highway System.²²

The metropolitan planning organization (MPO) for all of San Diego County is the San Diego Association of Governments (SANDAG). *"This public agency serves as the forum for regional decision-making. SANDAG builds consensus; makes strategic plans; obtains and allocates resources; plans, engineers, and builds public transportation; and provides information on a broad range of topics pertinent to the region's quality of life."*²³ This MPO represents the whole county and 18 incorporated cities. There are many different local agencies along the SR-125 route. The number of planning groups is the largest in the Otay Mesa area and Segment 1.

Although there are many Native American tribes within San Diego County, none have jurisdiction within the area scope of SR-125; therefore, they are not discussed within this report.

²¹ Resource: Otay Mesa General Plan, <http://chulavistaca.gov/home/showdocument?id=6777>

²² Resource: <http://www.cahighways.org/121-128.html#125>

²³ SANDAG: <http://www.sandag.org/index.asp?fuseaction=about.home>

Segment 4 (PM: 012.967-R015.409) is officially designated as part of the State Scenic Highway System.²⁴ *“California’s Scenic Highway Program was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler’s enjoyment of the view.”*²⁵ A rectangle shaped sign displaying the State Flower, the California poppy, is posted along this part of the route as a symbol of the Scenic Highway.

There are four areas of SR-125 that are part of the Classified Landscape Freeway list.²⁶ These post miles on SR-125: 1) 009.59-012.68, 2) 012.77-013.71, 3) 014.82-018.45, and 4) 018.54-022.18 have regulated and controlled landscape plantings directed by the criteria of the Caltrans Landscape Architecture PS & E Guide.²⁷ These regulations also control Outdoor Advertising Displays.

In 1989 a California legislative citation identified the Interregional Road System (IRRS) for interregional people and goods movement. SR-125 was not officially identified as part of the system but due to its location it is a connector in the system.

Segments 2, 3, 4, and 5 are part of the interstate National Network authorized by the Surface Transportation Act of 1982 (STAA). For more details about freight movement on SR-125 refer to the Freight section (page 46) in this report.

The San Diego County Air Pollution Control District (APCD) is the local regulatory agency responsible for protecting the public’s health from adverse impacts of air pollution. For additional details regarding air quality on SR-125, refer to the Environmental (page 54) and Air Quality sections (page 57) in this TCR.

Table 4: Route Designations and Characteristics

Segment Number	1	2	3	4	5	6
Post Miles	L000.000-009.251	009.251-010.622	010.622-012.999	012.967-R15.409	R015.409-022.301	022.301-030.400
Freeway and Expressway	Yes	Yes	Yes	Yes	Yes	
National Highway System	Yes	Yes	Yes	Yes	Yes	Yes
Strategic Highway Network	No	No	No	No	No	
Scenic Highway	No	No	No	Yes	No	
Interregional Road System	No	No	No	No	No	
High Emphasis	No	No	No	No	No	
Focus Route	No	No	No	No	No	

²⁴ Resource: http://www.dot.ca.gov/hq/LandArch/scenic_highways/ (Caltrans 2014)

²⁵ Resource: http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm

²⁶ Resource: <http://www.dot.ca.gov/hq/LandArch/lswfy/>

²⁷ Resource: http://dot.ca.gov/hq/LandArch/lap_guide/index.htm

Segment Number	1	2	3	4	5	6
Federal Functional Classification	Expressway /Freeway	Freeway	Freeway	Freeway	Freeway	
Goods Movement Route	No	Yes	Yes	Yes	Yes	
Truck Designation	CA Legal	National Network	National Network	National Network	National Network	
Rural/Urban/Urbanized	Rural/Urban	Urban	Urban	Urban	Urban	
Metropolitan Planning Organization	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG
Regional Transportation Planning Agency	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG
County Transportation Commission	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG
Local Agency	Otay Mesa Community Planning Group (City of San Diego), East Otay Mesa Community Planning Group ²⁸ (County of San Diego), City of Chula Vista, Sweetwater Community Planning Group (County of San Diego)	Sweetwater Community Planning Group (County of San Diego), Spring Valley Community Planning Group (County of San Diego)	Spring Valley Community Planning Group (County of San Diego), and City of Lemon Grove	City of La Mesa, City of Lemon Grove, and Spring Valley Community Planning Group (County of San Diego)	City of La Mesa, City of El Cajon, Navajo Community Planning Group (City of San Diego), and City of Santee	City of Santee and City of Poway
Tribes	N/A	N/A	N/A	N/A	N/A	N/A
Air District	San Diego Air Pollution Control District	San Diego Air Pollution Control District	San Diego Air Pollution Control District	San Diego Air Pollution Control District	San Diego Air Pollution Control District	San Diego Air Pollution Control District
Terrain	Rolling	Rolling	Rolling	Rolling	Rolling and Flat	Flat

COMMUNITY CHARACTERISTICS

As noted in Table 4, SR-125 is made up of many different cities and community planning groups along its route. The following are community characteristics about each jurisdiction along this route.



Otay Mesa

Otay Mesa is located in the southernmost part of San Diego County. This area was settled in the late 19th century. It was a rural community that practiced dry farming. In 1956, and again in 1985, annexation took place between the City and the County of San Diego to create the Otay Mesa region. The City of San Diego and the County of San Diego are the two governmental regulating authorities overseeing the roadmap of the Otay Mesa district. The SR-125 toll road was completed in 2007 and intersects the boundaries where both the City and the County jurisdictions join. The flat Otay Mesa area surrounding this part of the toll road is still young in its development. The majority of the SR-125 boundaries are made of

²⁸ Resource: County of San Diego, <http://www.sandiegocounty.gov/content/sdc/pds/CommunityGroups.html>

commercial and industrial facilities. These are due to the influence of close proximity to the international border and its commercial needs. Otay Mesa is one of the fastest growing areas of San Diego County.

Within the City of San Diego,²⁹ the Otay Mesa Community Planning Group (CPG) encompasses approximately 12,500 acres of land. The boundaries are I-805 and San Ysidro to the west, the Otay River Valley and City of Chula Vista to the north, the County of San Diego to the east, and the U.S./Mexico border to the south. SR-125 is located at the far eastern section of the Otay Mesa CPG area and encompasses a small portion of the planning area. The vicinity bordering both sides of SR-125 is made up of some commercial enterprises, primarily light industrial facilities, and open space. With the proximity to the international border and Brown Field airport, the land to the west of SR-125 has been developing to meet interregional industrial and commercial needs.

The County of San Diego³⁰ oversees the East Otay Mesa CPG which is comprised of approximately 3,013 acres of land. The boundaries are the Otay River Valley to the north, the U.S./Mexico international border to the south, the San Ysidro Mountains to the east, and the City of San Diego's Otay Mesa Community Plan Area to the west. SR-125 intersects the northwest corner of the described boundaries near Otay Mesa Road. Major attractions that could influence future growth are the international border, Brown Field Airport, state and private prisons, electrical facilities, the Otay Landfill, and the Otay River Valley Regional Park. Although the land is currently flat and open, future plans include increased development of commercial and industrial land uses, while developing a more enhanced roadway infrastructure.



City of Chula Vista

The City of Chula Vista is located in the southern portion of San Diego County. Seven miles from downtown San Diego and Tijuana, Mexico, its boundaries cover west from San Diego Harbor near I-5, north to SR-54, east to the Lower Otay Reservoir, and south to National City. The total area is approximately 50 square miles.³¹ In 1795, Chula Vista was originally part of Rancho del Rey (known today as King's Ranch), and its early history depicts agriculture as a booming industry. In 1911 the City of Chula Vista was incorporated by the people's vote. Industrialization came to Chula Vista in the 1940's and 50's and brought major growth to the area. As the development and commercialization of Chula Vista increased, the era of agriculture dominance decreased. Since 2000, the population has increased by 45.4% to more than 250,000 inhabitants in 2012.³² The median household income in 2012 was \$62,421.00. The City of Chula Vista has now expanded to include large areas of residential housing, Southwestern College, the U. S. Olympic Training Center, Sweetwater Marsh and Otay Valley Regional Park, expanded retail shopping facilities, and multiple entertainment venues. With large areas of undeveloped acreage, it is considered to be one of the faster growing cities in San Diego County.

²⁹ Resource: <http://www.sandiego.gov/planning/community/cpu/otaymesa/>

³⁰ Resource: <http://www.sandiegocounty.gov/pds/EastOtayMesa.html>

³¹ Resource: City of Chula Vista, <http://www.chulavista.gov/residents/about-chula-vista>

³² Resource: <http://www.city-data.com/city/Chula-Vista-California.html>



Community of Bonita³³

Established in 1949, the unincorporated Community of Bonita is located in the southern part of San Diego County, south of SR-54, west of SR-125, and north of the City of Chula Vista. It is within the boundaries of the County of San Diego's Sweetwater Community Planning Group (CPG) and has a strong community organization in the Sweetwater Valley Civic Association (SVCA). Bonita's total area is approximately 5.1 square miles. In 1964, SVCA along with the County of San Diego developed a master plan for managing the Sweetwater Valley "to ensure the architecture of commercial projects was suitable to the rural lifestyle of the valley".³⁴ Sweetwater River Valley is a semi-rural equestrian community used for golfing, parks, equestrian trails, and other open space uses that include the San Diego National Wildlife Refuge and the Sweetwater Reservoir. The open space of the Sweetwater Reservoir is a major attraction for outdoor activities. Although the 2007 construction of SR-125 went right through the eastern portion of the Community of Bonita, community members made sure the valley environment was considered and preserved. Based on the 2010 United States Census, the population for this community has increased since 2000 by 1.1% to approximately 12,500. Most housing units are owner-occupied. Multi-family development is concentrated along Bonita Road near South Bay Parkway.



Community of Spring Valley

Spring Valley is in an unincorporated area of the County of San Diego. There are many community planning groups that represent unincorporated villages. The Spring Valley CPG is made up of several unincorporated communities including Spring Valley and La Presa. Spring Valley CPG has a boundary covering approximately 14 square miles.³⁵ Segments 2, 3, and 4 on SR-125 are bordered by the Spring Valley CPG. This area is considered the largest unincorporated community in San Diego County.³⁶ There are fewer than 64,500 residents and the median income is \$61,791.00 per household.³⁷ Just south of SR-125, on Jamacha Boulevard, there is a developed community center and a well-established swap meet. Little known attractions include theater productions at *The Young Actors' Theatre*, horseback riding at *Bright Valley Farms*, and an inflatable play area at *Air Time Party House*.



City of Lemon Grove

Only nine miles from downtown San Diego, the four square miles of the City of Lemon Grove are located in the southwest portion of San Diego County. Ranching and agriculture were prevalent in the City's early days of establishment. The town acquired its name from the lemon trees that were widespread in the area. By the end of World War II, Lemon Grove was changing and developing toward the city it is today. Incorporated in 1977, the City of Lemon Grove has a general law form of government. SR-125 follows north and south along the eastern boundaries of Lemon Grove. The current population is approximately 26,000 people with a median

³³ Resource: County of San Diego, <http://www.sandiegocounty.gov/content/sdc/pds/gpupdate/comm/sweetwater.html>

³⁴ Resource: SVCA, http://www.sweetwatervalleyca.org/SVCA_History.html

³⁵ Resource: County of San Diego, <http://www.sandiegocounty.gov/content/sdc/pds/gpupdate/comm/springvly.html>

³⁶ Resource: <http://springvalleyca.com/>

³⁷ Resource: San Diego East County Economic Development Council, *Demographics of East County* (2014)

household income level³⁸ of \$47,586.00 and both have increased since year 2000. Based on the SANDAG “Preliminary 2050 Regional Growth Forecast”³⁹ report, the City of Lemon Grove is expected to increase its population by 23% and the housing market by 16% by the year 2050. Lemon Grove’s claim to fame is the “World’s Largest Lemon” weighing in at 3,000 pounds. It is next to the Orange Line trolley tracks and located in downtown.



City of La Mesa

Located in the eastern part of San Diego County, La Mesa is nestled between the Cities of San Diego, El Cajon, Lemon Grove, and the unincorporated section of San Diego County. The City of La Mesa is comprised of approximately nine square miles and known as the “Jewel of the Hills” due to the scenic hills throughout its community. A prominent hill to the east of the city is Mount Helix. The white cross protruding from the top of Mount Helix can be seen while driving on SR-125 from Segment 4 and parts of Segment 5. La Mesa is a mature east county urban sub-center. It is centrally located with trolley connections to most of metropolitan San Diego. There are connections to three major freeways including SR-125 which broadens La Mesa’s trade area. In 2014, the population was over 58,000 with a median income of \$59,054.00 per year.⁴⁰ La Mesa was incorporated in 1912. City government is general law with a Council-Manager format. With deep community roots, the 2012 La Mesa General Plan is focused on preserving the history of the communities, while intensifying land use to better meet the community needs and developing a stronger commercial area around the Grossmont Shopping Center. In addition to the shopping center, attractions in and around the City of La Mesa include views and plays on Mount Helix, Sharp Grossmont Hospital, historical facilities such as the Pacific Southwest Railroad Museum, along with regional parks and walking trails.



City of El Cajon

Incorporated in 1912 as a General Law City, the City of El Cajon was changed to a Charter City by the people’s vote in 2012. This change in structure gave more local control of municipal affairs to the City Council. At an elevation of 435.63 feet, the city covers 14.4 square miles in the eastern portion of San Diego County. El Cajon is known as “The Box” because it is flanked by mountains all around the valley. It is located 15 miles inland from San Diego. As the fifth largest city in the county of San Diego, El Cajon has a population of over 100,400 people and a little over 40,200 registered voters. The median age of the residents is 33.7 years. Although El Cajon has a large contingency of single and multi-family dwellings, it also has a large area of industrial land use located in the eastern and northern parts of the city limits. Within its boundaries are three major freeways, SR-125, SR-67, and I-8. SR-125 is located at the north western edge of the El Cajon Valley. Attractions within the City of El Cajon boundaries are the revitalized downtown Main Street, Parkway Plaza Shopping Center, the Green and Orange Line Transit Center, Gillespie Field Airport, plus museums and art centers.

³⁸ Resource: <http://www.city-data.com/city/Lemon-Grove-California.html>

³⁹ Resource: http://www.sandag.org/resources/demographics_and_other_data/demographics/fastfacts/lemon.htm

⁴⁰ Resource: <http://www.cityoflamesa.com/index.aspx?nid=311>



City of San Diego-Navajo Community Planning Group (Navajo CPG)

Within its boundaries, the City of San Diego has multiple community planning groups representing small unincorporated communities. The Navajo CPG encompasses approximately 14 square miles and comprised of five communities with the inclusion of San Carlos. Located on the west side of SR-125, San Carlos is between the cities of Santee to the north, El Cajon to the east, and La Mesa to the south. On SR-125 along Segment 5, the community of San Carlos is more specifically between Dallas Street and Grossmont College Drive. San Carlos is principally comprised of single-family homes with median household incomes at \$70,536.00 in the year 2011. The Navajo Community Planners goal is to develop a plan that provides for the health, safety, and welfare of the existing and future residents; along with maintaining the area as a desirable neighborhood in which predominantly single-family residents can live.⁴¹ Two outdoor attractions are Mission Trails Regional Park (approximately 6,200 acres) and Cowles Mountain with spectacular views of San Diego County from the summit.



City of Santee

The City of Santee was incorporated in 1980 and became a Charter City in 2009. Santee encompasses 16.5 square miles in eastern San Diego County. SR-125 is located in the southwestern portion of Santee's boundaries. In addition to SR-125, SR-67 and SR-52 provide freeway connections in the City's area. The Green Line Trolley ends at a 700-acre mixed use Town Center (Santee Trolley Square). SR-125 terminates within the City of Santee boundary. Santee's goal is to steadily enhance the community's quality of life.⁴² In 2014, the population was approximately 56,000 residents with a median income of \$69,000.00 per year.⁴³ Most households are owner occupied. The SANDAG 2050 Regional Growth forecast for the year 2050 has predicted an increase in population by 37%, housing by 30%, and jobs by 38%.⁴⁴ Since approximately half of Santee's land is undeveloped, it has space to grow. Located in the northern portion of Santee, Fanita Ranch is a future 2600-acre site for a master-planned community that would encompass 25% of the City. Attractions in the area are Santee Lakes, Mission Trails Regional Park, large shopping complexes, and a museum on Creation and Earth History.



City of Poway

Located in the northeast part of San Diego County, the City of Poway has been incorporated since 1980. It has the slogan "the City in the Country."⁴⁵ The City of Poway's beginnings were oriented toward interstate transportation when an all-weather road from Yuma, Arizona to San Diego came through their area. Later, this community was a stopping point for the Butterfield Stage which expanded the trade route in 1858. The 1970's building boom changed Poway's rural complexion and set the foundation for the current City of Poway. The land area of this city is 39.2 square miles. Mountains and hills comprise a major part of its topography. The composite of the area is 96% urban and 4% rural.⁴⁶ The population has risen 3.4% to just over 49,000

⁴¹ Resource: <http://www.sandiego.gov/planning/community/profiles/navajo/conditions.shtml>

⁴² Resource: <http://www.ci.santee.ca.us/Index.aspx?page=2>

⁴³ Resource: <http://eastcountyledc.org/communities/>

⁴⁴ Resource: http://www.sandag.org/resources/demographics_and_other_data/demographics/fastfacts/sant.htm

⁴⁵ Resource: <http://poway.org/documentcenter/view/321>

⁴⁶ Resource: <http://www.city-data.com/city/Poway-California.html>

people in 2013⁴⁷. The median household income is estimated at \$89,000.00. Attractions to the area are the Old Poway Park, the Poway-Midland Railroad historic site, and the Iron Mountain hiking trails.

LAND USE

The Land Use Element of a General Plan ensures a compatible balance of land uses to meet the diverse needs of the communities in the County. Equally important, the Land Use Element provides planning tools, such as land use policy maps, as well as land use policy strategies, that will coordinate future development and revitalization efforts in the County. The Land Use Element's principal aims are to be visionary, flexible, and sustainability-focused.

Land use policy is used to define how communities utilize the territory within their boundaries. Each jurisdiction has a General Plan which identifies each land use category and describes specifically how that category can be developed. Understanding existing and proposed future land use is imperative to assist in rounding out the picture of how cities and counties envision their territories. Implementing land use planning and regulating the use of the land is a good model for avoiding land use conflicts. As stated in the City of Chula Vista's General Plan, *"Both the pattern of mixed use area and individual project designs must be sensitive to edge transitions between neighborhoods and strive to minimize potential impacts on adjacent residential neighborhoods."*⁴⁸ Land use policies are in place to establish guidelines for future land use development. These policies focus on land use arrangements to encourage non-auto modes of travel and easier access to transit. With design guidelines and zoning standards, land use policies will enable communities to provide villages that maintain historical resources and develop diverse, livable, and sustainable communities while supporting the commercial and industrial usage of the area.

Maps 2, 3, and 4 are visualizations of land use along SR-125 as it exists today and what is proposed by the future year 2050. The maps depict sixteen different land use categories with color coding to assist in category classification. The basis for the year 2050 is derived from the land use data developed for the SANDAG 2050 RTP (October 2011) and has had input from the 18 different cities and the county government within San Diego County boundaries. There is no map for Segment 6 as it is unconstructed with very little chance of SR-125 being built in the future.

At the south and north ends of the SR-125 route, there are open undeveloped spaces for proposed growth. The future expectation is for commercial, mixed-use, and housing development to infill many of these areas. A portion of this undeveloped space will be left in its natural state or become green space.

Increased industrial development is expected in pockets of south Segment 1, east Segment 2, and northeast Segment 5. With the airports (Brown Field and Gillespie Field) in Segments 1 and 5, it is only natural that there would be increased industrial development around these areas. In addition, the close proximity of SR-125 to the Mexico and United States border will continue to serve the need to handle transportation of trade commodities, leading to expanded commercial and industrial use of SR-125. Urban-type environments are characterized by a mix of land uses and housing types, especially higher density, within walking distance of daily shopping needs. In the future this will bring increased demand

⁴⁷ Resource: <http://quickfacts.census.gov/qfd/states/06/0658520.html>

⁴⁸ City of Chula Vista: <http://www.chulavistaca.gov/>

for services, infrastructure, and other needs. These types of urban areas can be referred to as villages, smart growth, or sustainable communities and encourage multimodal transportation along with close proximity to restaurants, entertainment, parks, plazas, and community facilities. Refer to the section titled Major Route Features (page 15) earlier in this report for more specific details of attractions along SR-125.

Although Segments 2, 3, 4, and most of 5 are located adjacent to predominantly single family residential housing, the future focus is to develop residential clustering thus creating a highly dense urban environment. Residential clustering means that the land use may be changed to accommodate multifamily dwellings or more structures per acre. Clustering works most effectively when both the site resources and the residences are benefited. As Segment 1 continues to grow, land use development will need to be closely monitored to make sure it is meeting the needs of the community and following the approved General Plans of the territory.

The southern and northern ends of SR-125 are expected to expand and diversify their commercial, industrial, mixed-use, and multiple family land usage. Segments 2, 3, and 4 are fairly built-out today, but the future anticipates tighter density and mixed use diversification. For all segments, operational and safety improvements should be considered where appropriate. In addition, all changes incurred should include input from local and regional agencies to ensure corridor preservation measures are implemented.

In 2004, SANDAG approved the Regional Comprehensive Plan for the San Diego Region. A Smart Growth Concept Map was created in 2014 to identify locations in the San Diego County region that can support smart growth and transit. The eastern area of the City of Chula Vista, the communities of Spring Valley and La Presa, the City of La Mesa, the San Diego City's Navajo community area, and the City of El Cajon are zones identified along SR-125 for Smart Growth development. The SANDAG website⁴⁹ can provide additional detailed information about Smart Growth areas.

North of Santee, SR-125 was expected to traverse through the undeveloped Sycamore Canyon area within the County of San Diego, enter the City of Poway, and terminate at Poway/Espola Road. Very shortly after the cities of Santee and Poway were incorporated, each entity deleted portions of SR-125 from their respective jurisdiction's circulation elements. Without the support of either the City of Poway or the City of Santee, it is very unlikely SR-125 will ever continue north of its current terminus at SR-52/Mission Gorge Road in Santee. As stated previously, this unconstructed portion of the route is not included in the SANDAG 2050 RTP (October 2011).

Development Review

Based on the Caltrans Traffic Impact Study (TIS) guidelines, a 1,000 Average Daily Traffic (ADT) threshold size triggers the need for developers to prepare a traffic study for their project. There may be an additional number of smaller development projects that may have additional cumulative impacts on traffic in the corridor. Because of uncertainties associated with future demographic, socioeconomic, and political climates, the scale of development may be subject to change. The development application and approval process is also subject to change. Changes in land use prompting rapid housing and commercial development growth will need to be monitored closely by all impacted jurisdictions and agencies. Good

⁴⁹ Resource: SANDAG Smart Growth <http://www.sandag.org/index.asp?classid=12&projectid=296&fuseaction=projects.detail>

examples of these types of changes can be seen in Map 2, SR-125 Segment 1 Land Use, in the City of Chula Vista and Otay Mesa areas; and on Map 4, SR-125 Segments 4 and 5 Land Use, in the cities of El Cajon and Santee. The land use map depicts many changes in these areas along SR-125 when comparing today and future years.

The development review process is vital for the developing areas of Otay Mesa which includes the cities of San Diego and Chula Vista, and the county of San Diego. Currently, there are many proposed villages with anticipated infrastructure needs that could include new interchanges connecting directly to SR-125 and additional multimodal transit considerations. Appendix B has a map of established and planned villages within the Otay Mesa and City of Chula Vista area along SR-125.

On either side of the Otay Mesa Bridge, there are three proposed interchanges under consideration: 1) Main Street (Rock Mountain Road); 2) Otay Valley Road;⁵⁰ and 3) Lonestar Road.⁵¹ With a partnership between Caltrans and the City of Chula Vista, a Cooperative Agreement was executed to examine interchanges at Main Street and Otay Valley Road as a way to help alleviate the future travel needs of the southern communities along SR-125. Caltrans prepared a Project Initiation Document (PID) for the construction of interchanges on the SR-125 Toll Road south of the Birch Road interchange. The purpose of the PID was:

1. To determine if one interchange or two interchanges will be needed (one interchange being at Main Street/Rock Mountain Street and the other at Otay River Road).
2. To determine the foot print of the project in order to preserve required right of way along the SR-125 Toll Road Corridor for the future interchange alternative.
3. To identify any design exceptions that may be required.

Caltrans studied various alternatives with several iterations of traffic forecasts during preparation of the PID. In the end, four possible interchange alternatives were developed.

1. Alternative 1: One Interchange at Main Street/Rock Mountain Road
 - a. A Type L-9, a partial cloverleaf interchange providing loop on-ramps in addition to the four diamond-type ramps.
2. Alternative 2: One Interchange at Main Street/Rock Mountain Road
 - a. A modified Type L-7, a two quadrant cloverleaf interchange with half diamond ramps in the same two quadrants as the two loop ramps.
3. Alternative 3: Two Interchanges, one at Main Street/Rock Mountain Road and a second at Otay Valley Road
 - a. A modified Type L-7, a two quadrant cloverleaf interchange with half diamond ramps in the same two quadrants as the two loop ramps. This type is proposed at both Main Street/Rock Mountain Road interchange and Otay Valley Road interchange.
4. Alternative 4: One interchange, at Main Street/Rock Mountain Road
 - a. A modified Type L-1, a tight diamond interchange.

⁵⁰ Resource: City of Chula Vista General Plan (Land Use), <http://www.keepsandiegomoving.com/Documents/SouthBay-BRT/Chula%20Vista%20SB%20BRT%20Gen%20Plan%20Sections.pdf>

⁵¹ Resource: Otay Mesa East General Plan (Circulation Element), <http://www.sandiegocounty.gov/content/dam/sdc/dplu/regulatory/docs/2014-OTAY-BUSINESS-PARK/Specific-Plan-Amendment-East-Otay-Mesa-Chapter-2-Circulation.pdf>

The conclusion of this PID is as follows:

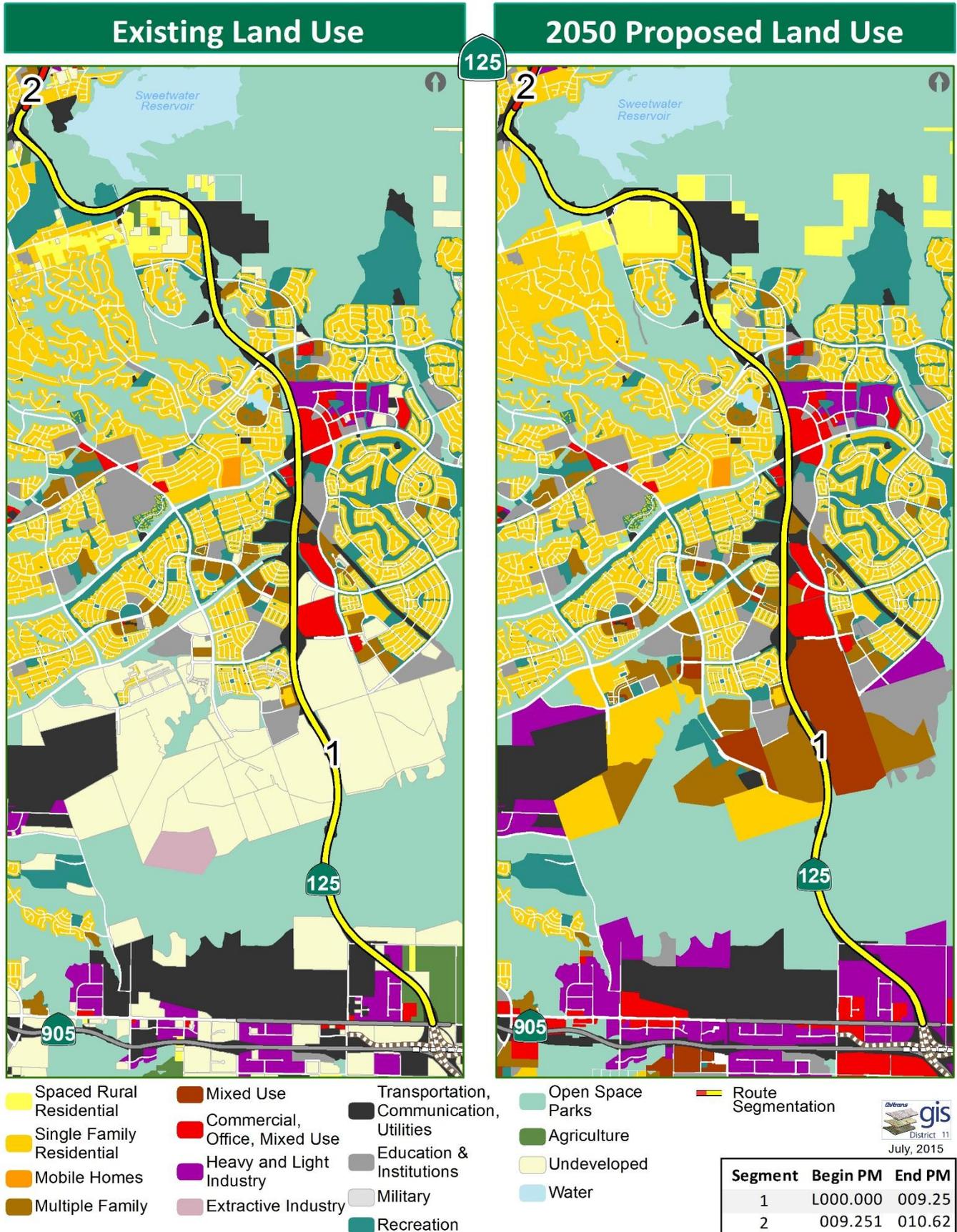
1. It has been determined that Alternative 1 with one interchange at Main Street/Rock Mountain with an overcrossing (OC) at Otay River Road and Alternative 3 with two interchanges, one at Main Street/Rock Mountain Road and a second at Otay Valley Road are adequate to accommodate the projected traffic volumes.
2. A design exception is required per current standards of the Highway Design Manual Chapter 501.3 (3-7-14) for Alternative 1 due to non-standard intersection spacing of less than 1 mile between the Birch Road OC and Main Street/Rock Mountain Road OC interchanges. A design exception would also be required for Alternative 3 due to non-standard intersection spacing between Birch Road OC and Main Street/Rock Mountain Road OC interchanges and the non-standard , also less than 1 mile, between the Main Street/Rock Mountain Road OC and Otay Valley Road OC.
3. The future project foot print has been identified.

Based upon the work completed for the Cooperative Agreement and the alternatives studied, the conclusion was either one or both interchanges are adequate to accommodate the projected future traffic volumes. For the same two interchanges, the City of Chula Vista established a Transportation Development Impact Fee Program (TDIF)⁵² designed to collect supporting development funds. The TDIF funds are to be used toward future community infrastructure development.

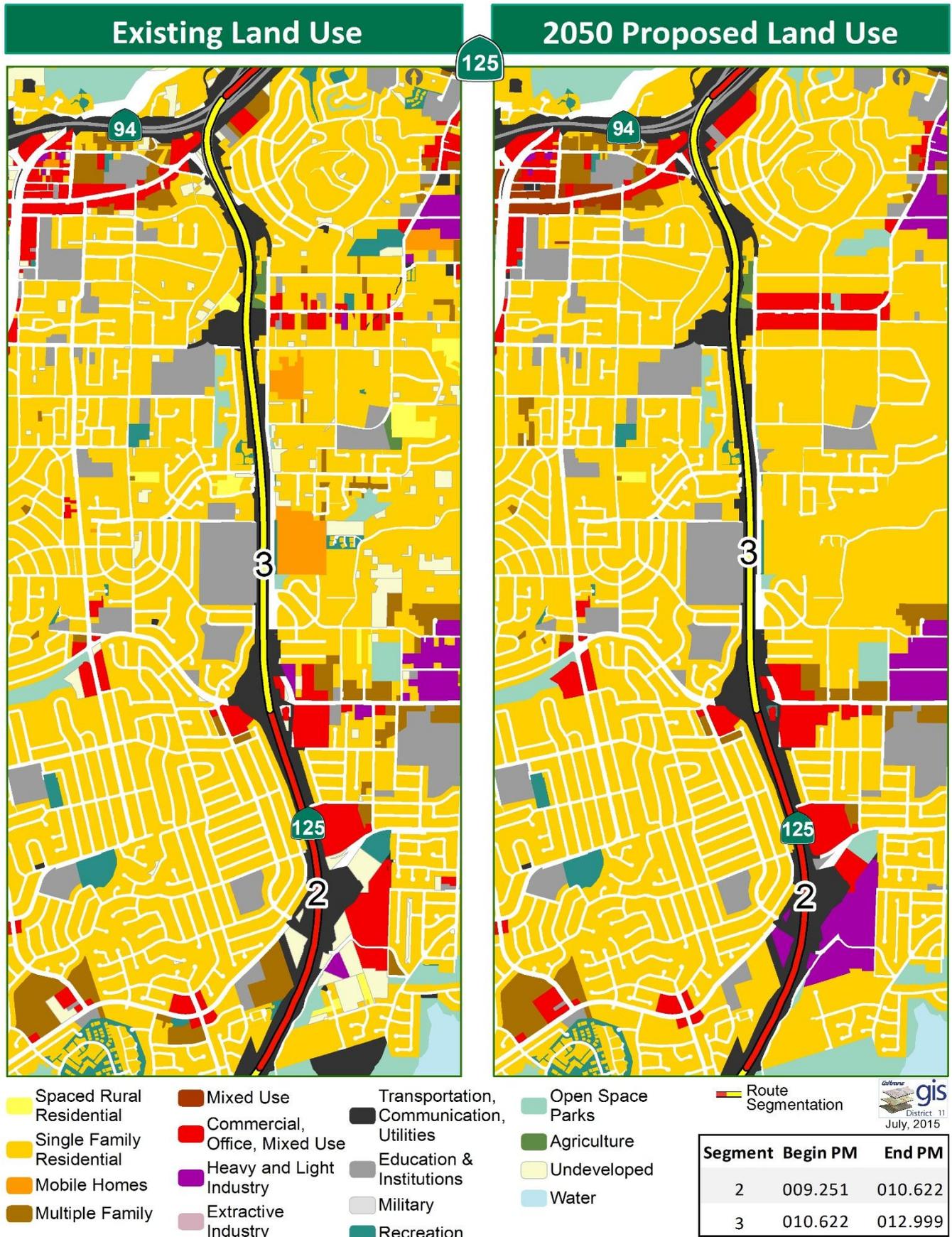
Appropriate traffic studies for any proposed developments near SR-125 will need to be conducted and reviewed carefully by Caltrans staff. Land development and local capital improvement projects should also be coordinated with Caltrans projects and SANDAG. Further information regarding specific development projects in the SR-125 corridor can be obtained from the Caltrans District 11 Development Review/Intergovernmental Review (IGR) Branch.

⁵² Resource: City of Chula Vista (DIF), <http://www.chulavistaca.gov/departments/development-services/land-development/fees>

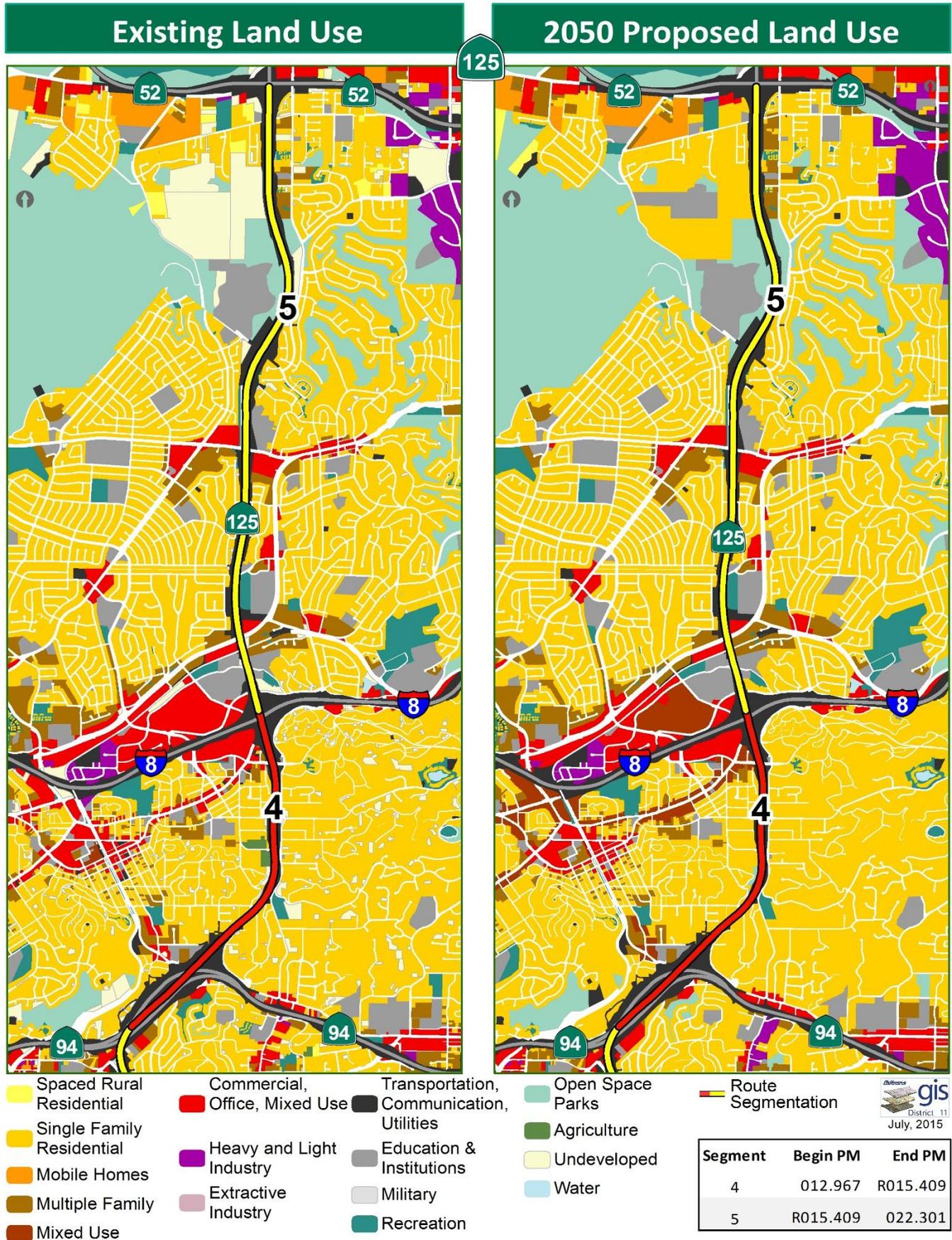
Map 2: SR-125 Segment 1 Land Use



Map 3: SR-125 Segment 2 and Segment 3 Land Use



Map 4: SR-125, Segment 4 and Segment 5 Land Use



SYSTEM CHARACTERISTICS

Below, in Table 5, are System Characteristics data for SR-125. Although, Segment 1 is a designated toll road the majority of the SR-125 facility is freeway. The lane count varies from four to six lanes with the exception of a short portion of roadway in Segment 5 with eight lanes. By year 2050 the entire route is expected to be upgraded to six to ten lanes of travel with the addition of HOV or Managed Lanes along Segments 2, 3, and 4. This north and south route has divided medians with areas that vary between paved and unpaved. There are some medians that have landscaping down the middle.

Caltrans Deputy Directive 98 requires the Department to support the integration of Bus Rapid Transit (BRT) into State Facilities.⁵³ In San Diego County, the term BRT has been redefined by SANDAG as “Rapid”. SANDAG’s “Rapid” transit service is modeled after the definition of BRT which is identified as a rapid mode of transportation. Currently, there are no existing Rapid bus routes on SR-125. According to the SANDAG 2050 RTP (October 2011), Revenue Constrained Plan Focus, there are three new Rapid bus routes planned in the near future along SR-125. Two Rapid bus routes are planned to be part of Segment 1 by the year 2018 and one Rapid bus route is planned for Segment 4 in the year 2020.⁵⁴

Based on Senate Bill 1098, Chapter 212, Statutes of 2004, Caltrans is required to prepare a Five-Year Maintenance Plan and this plan includes the identification of distressed pavement. SHOPP is the acronym for the Caltrans State Highway Operation and Protection Program. Maintenance of the roadbed is one of the SHOPP’s responsibilities. Segments 4 and 5 have been identified with distressed pavement on SR-125 in the SHOPP 2013 Pavement Condition Survey.⁵⁵

Integration of advanced communication technologies through the Intelligent Transportation System (ITS) enhances reliability and improves transportation safety and mobility. In conjunction with ITS, Traffic Management Systems (TMS) collect data from Vehicle Detection Stations and Ramp Metering; provide the public with up to date information on activities affecting their travels through Changeable Message Signs and Closed Circuit Television; and control traffic movements using Ramp Metering and Signals. As can be seen in Table 5, SR-125 has all of these TMS Elements. Segments 3, 4, and 5 are expected to have upgrades on some elements in the future.

Table 5: SR-125 System Characteristics

Segment Number	1	2	3	4	5	6
Post Miles	L000.000-009.251	009.251-010.622	010.622-012.999	012.967-R15.409	R015.409-022.301	022.301-030.400
Existing Facility (2012)						
Facility Type	Toll Road/Expressway	Freeway	Freeway	Freeway	Freeway	Unconstructed
General Purpose Lanes	4	6	6	6 (8)	6	
Lane Miles	37.004	8.2268	14.262	14.652	41.352	

⁵³ CT Deputy Directive 98: <http://www.dot.ca.gov/hq/MassTrans/Brt.html>

⁵⁴ Rapid (BRT) = Bus Rapid Transit, based on SANDAG 2050 RTP (released October 2011), Revenue Constrained Plan Focus

⁵⁵ Resource: 2013 Pavement Condition Report Map, <http://onramp.dot.ca.gov/hq/maint/roadway/gis/pcs2013survey.shtml>

Segment Number	1	2	3	4	5	6
Centerline Miles	9.251	1.371	2.377	2.442	6.892	
Median Characteristics	Divided Unpaved	Divided, Unpaved, Landscape Barrier	Divided, Unpaved, Landscape Barrier	Divided/ Unpaved, Divided/Paved	Divided, Unpaved, Landscaped	
HOV Lanes	0	0	0	0	0	
HOV Characteristics	N/A	N/A	N/A	N/A	N/A	
Toll Lanes	4	0	0	0	0	
Toll Lane Characteristics	24-hour	N/A	N/A	N/A	N/A	
Rapid (BRT) Lanes	0	0	0	0	0	
Auxiliary Lanes	4	2	0	4	6	
Passing Lanes	0	0	0	0	0	
Truck Climbing Lanes	0	0	0	0	0	
Distressed Lane Miles ⁵⁶	0%	0%	0%	2.460	0.845	
Concept Facility (2015-2040)						
Facility Type	Toll Road/ Expressway	Freeway	Freeway	Freeway	Freeway	Unconstructed
General Purpose Lanes	4	6	6	10 ⁵⁷	6	
Lane Miles	37.004	8.226	14.262	29.420	41.352	
HOV/Managed Lanes	0	0	0	0	0	
Rapid (BRT) Lanes	0	0	0	0	0	
Toll Lanes	4	0	0	0	0	
Post 25 Year Facility (2040-2050)						
Facility Type	Freeway	Freeway	Freeway	Freeway	Freeway	Unconstructed
General Purpose Lanes	8	6	6	10	6	
Lane Miles	74.008	10.968	19.016	29.304	41.352	
HOV/Managed Lanes	0	2	2	2	0	
Rapid (BRT) Lanes	0	0	0	0	0	
Toll Lanes	0	0	0	0	0	
TMS⁵⁸ Elements⁵⁹						
TMS Elements (BY)	VDS, ⁶⁰ CMS, ⁶¹ Signal ⁶²	VDS, RM, ⁶³ Signal	VDS, Signal	VDS, RM, Signal	VDS, RM, CCTV, Signal	
TMS Elements (HY)	VDS, CMS, Signal	VDS, RM, Signal	VDS, Signal, CMS, CCTV ⁶⁴	VDS, RM, Signal, CMS, CCTV	VDS, RM, CCTV, Signal	

⁵⁶ 2009, D-11 Traffic Operations)

⁵⁷ SANDAG 2050 RTP (2011)

⁵⁸ TMS = Traffic Management System

⁵⁹ Caltrans ITS Master Plan 2011

⁶⁰ VDS = Vehicle Detection Stations

⁶¹ CMS = Changeable Message Signs

⁶² Signal = Ramp Intersection Traffic Signal

⁶³ RM = Ramp Metering

⁶⁴ CCTV = Closed Circuit Television

MULTIMODAL TRANSPORTATION

Multimodal transportation is comprised of a variety of modes. The modes include rail, sea, vehicular, pedestrian, cycling, and public transit. These diverse transportation modes integrate interconnectivity and provide accessibility options for all forms of transportation.

“Complete Street” is defined as a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists appropriate to the function and context of the facility.⁶⁵

Caltrans “Complete Streets” policy (2014 Deputy Directive 64-R2)⁶⁶ guides Caltrans to provide for travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the State Highway System. Caltrans views all transportation improvements (new and retrofit) as opportunities to improve safety, access, and mobility for all travelers and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system. Multimodal projects need to be integrated in balance with community goals, plans, and values. Caltrans addresses the mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding.

The implementation of “Complete Streets” supports local agencies as required by the California Complete Streets Act of 2008 (Assembly Bill 1358) and is supported by Senate Bill 375 which further requires development of Sustainable Communities Strategies (SCS). The SCS integrates land use, housing, and transportation planning to provide a regional policy foundation that local governments may build upon to create a more sustainable Southern California. These strategies can be used to demonstrate how the future land use development pattern and the transportation network, policies, and programs in the region can work together to achieve effective partnerships. All future developments on SR-125 are encouraged to refer to Caltrans “Complete Streets” guidelines, and to follow the strategies established by federal and state law for multimodal transportation.

BICYCLE FACILITIES

Bicyclists and pedestrians have a legal right to access most public roads in California. While pedestrians are prohibited from all freeways, bicycles are permitted on the outside shoulders of nearly 25 percent of all freeways located within the state. The legal authority to prohibit bicycle and pedestrian use from freeways and expressways is specified in the California Vehicle Code, section 21960.

As summarized in Table 6 below, the SR-125 corridor has one area where bicyclists are legally allowed to ride on the freeway shoulders. Bicycles are allowed on the southern portion of the route between post miles L000.000 to 002.286 (Otay Mesa Road to Birch Road). From post mile 002.286 to the end of SR-125 at Mission Gorge Road, the freeway is not open to bicyclists. Local streets provide parallel facilities and supply alternative routes for bicyclists throughout the SR-125 corridor. The Quarry Road Bike Path from SR-54 to Jamacha Road and the Grossmont College Bike Path from Navajo Road to Grossmont College Drive are Class I bike paths. A Class I bike path is a facility that accommodates bicycle,

⁶⁵ Resource: Complete Streets, http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets_files/CS_Brochure_6_pages_1.pdf

⁶⁶ Resource: Deputy Directive DD-64-R2, http://www.dot.ca.gov/hq/tpp/offices/ocp/docs/dd_64_r2.pdf

pedestrian, and other non-motorized forms of transportation. Within the SR-125 corridor, all three bicycle classifications are represented within parallel facilities on all five segments. The *Regional Corridor Classification System*, in Figure 1 below, provides an explanation of Class I, II, and III bicycle facilities. Additional bicycle mapping information can be attained from the Caltrans D-11 Bicycle and Pedestrian Coordinator or visit <http://www.dot.ca.gov/dist11/departments/planning/pages/bicyclepages.htm>.

Any future land use and transportation development should consider bikeway connectivity and upgrades to existing facilities to meet or exceed local and regional agency bicycle plans. Segments 4 and 5 are the only segments that identify changes to future bicycle facilities within the Caltrans right of way on SR-125. These future facilities are identified in mobility plans for the cities of La Mesa, San Diego, and Santee. They are individually acknowledged in the Corridor Concept section (page 67) of this report.

Table 6: SR-125 Corridor Bicycling Facilities

Segment Number		1	2	3	4	5	6
Segment Description		SR-905/Otay Mesa Road to SR-54 (Toll Road)	SR-54 to Jamacha Road	Jamacha Rd to SR-94 (Westbound Junction)	SR-94 (Eastbound Junction) to I-8	I-8 to SR-52/Mission Gorge Road	SR-52/Mission Gorge Road to Poway/Espola Road (unconstructed)
State Bicycle Facility	Post Mile	L000.000-002.286	009.251-010.622	010.622-012.999	012.967-R015.409	R015.409-022.301	
	Location Description	Otay Mesa Rd. to Birch Rd.	SR-54 to Jamacha Rd.	Jamacha Rd. to SR-94	SR-94 (Eastbound Junction) to I-8	I-8 to SR-52/ Mission Gorge Rd.	
	Bicycle Access Prohibited	No	Yes	Yes	Yes	Yes	
	Facility Type	Freeway	Not Allowed	Not Allowed	Not Allowed	Not Allowed	
	Outside Paved Shoulder Width	10 feet					
	Facility Description	Bicycles on Freeway Shoulder	Bicycles Prohibited	Bicycles Prohibited	Bicycles Prohibited	Bicycles Prohibited	
	Distressed Shoulder Pavement	No					

Segment Number		1	2	3	4	5	6
Segment Description		SR-905/Otay Mesa Road to SR-54 (Toll Road)	SR-54 to Jamacha Road	Jamacha Rd to SR-94 (Westbound Junction)	SR-94 (Eastbound Junction) to I-8	I-8 to SR-52/Mission Gorge Road	SR-52/Mission Gorge Road to Poway/Espola Road (unconstructed)
	Volumes	Unknown					
	Role	Local, Regional, and Interregional					
	Posted Speed Limit	65 MPH	65 MPH	65 MPH	65 MPH	65 MPH	
Parallel Bicycle Facility	Parallel Facility Present	Partial	Yes	Yes	Yes	Yes	
	Name	Various Local Roads	Quarry Rd. Bike Path	Various Local Roads	Various Local Roads	Grossmont College Bike Path and Various Local Roads	
	Location Description	Local Street Access	Junction SR-54 to Jamacha Rd.	Local Street Access	Local Street Access	Local Street Access	
	Facility Type	I, II, and III	I	II and III	II and III	I, II, and III	

Figure 1: Regional Corridor Classification System for Bikes⁶⁷

<p>Class I – Bike Path</p> <p>Bike paths are bikeways that are physically separated from vehicular traffic. Also termed shared-use paths, bike paths accommodate bicycle, pedestrian, and other non-motorized travel. Paths can be constructed in roadway right-of-way or independent right-of-way. Bike paths provide critical connections in the region where roadways are absent or are not conducive to bicycle travel.</p>	
<p>Class II - Bike Lanes</p> <p>Bike lanes are defined by pavement markings and signage used to allocate a portion of a roadway for exclusive or preferential bicycle travel. Within the regional corridor system, bike lanes should be enhanced with treatments that improve safety and connectivity by addressing site-specific issues. Such treatments include innovative signage, intersection treatments, and bicycle loop detectors.</p>	
<p>Class III - Bike Routes</p> <p>Bike routes are located on shared roadways that accommodate vehicles and bicycles in the same travel lane. Established by signs, bike routes provide continuity to other bike facilities or designate preferred routes through corridors with high demand. Within the regional corridor system, bike routes should be enhanced with treatments that improve safety and connectivity by addressing site-specific issues.</p>	

⁶⁷ Resource: 2010 SANDAG Regional Bicycle Master Plan, "Riding to 2050"
<http://www.sandag.org/index.asp?projectid=353&fuseaction=projects.detail>

PEDESTRIAN FACILITIES

Pedestrian oriented transportation facilities make walking trips easier for a wide range of our population. This includes people walking to a store, to school, and for recreation or exercise, as well as transit users who walk between their destinations and transit stops. Pedestrians include people with disabilities using walkers, wheelchairs, or other assistance devices. For most pedestrian trips, pedestrian activity is more likely in areas where destinations are within one-half mile of the origin. All development should include consideration of pedestrian-oriented facilities such as sidewalks, trails, bridges, ramps, and stairways. Implementation of good street lighting and safety measures are also needed to support pedestrian circulation.

Pedestrian improvements in areas with land uses that promote pedestrian activities can help to increase walking as a means of transportation and recreation, and assist walkers with disabilities to have more independence.⁶⁸ Land use and street design recommendations that benefit pedestrians also help promote the use of alternatives to automobile travel and contribute to the overall quality, vitality, and sense of community of neighborhoods. Policies designed to support walking and pedestrians are also intended to benefit overall accessibility, such as compact mixed-use neighborhoods linked by public transportation. Communities and cities should work toward achieving a complete, functional, and interconnected pedestrian network. The future goal is to provide convenient pedestrian connections between land uses. Segment 5 in the City of La Mesa⁶⁹ has proposed three future pedestrian sidewalks within the Caltrans right of way, but not on the freeway proper. They are individually acknowledged in the Corridor Concept section (page 67) of this report. Any future land use and transportation development should promote pedestrian activities and connectivity, along with upgrades to existing facilities.

Pedestrian facilities associated with SR-125 are identified in Table 7. All six segments are represented. Pedestrians are not allowed on the freeway roadway or shoulders, and sidewalks are not present along State freeway facilities. There are 16 major and 16 minor pedestrian junctions with an additional recreation trail/minor junction. All junctions with ramp connections, higher vehicle volume, and signalization are identified with a Major designation due to the multiple transportation modes present at those locations.

Table 7: SR-125 Pedestrian Facilities⁷⁰

Segment	Post Mile	Segment Description	Segment ID	Pedestrian Access Prohibited	Sidewalk Present	Facility Description	Junction		
							Location	Role	Type
1	L000.000-009.251	SR-905/Otay Mesa Road to SR-54 (Toll Road)	A	Yes	No	Freeway	Otay Mesa Road	Major	<ul style="list-style-type: none"> • Signalized • Crosswalks • Ped.⁷¹ Signal Heads

⁶⁸ ADA = Americans with Disabilities Act

⁶⁹ Resource: City of La Mesa, Bicycle Facilities and Alternate Transportation Plan (February 2012)
<http://www.cityoflamesa.com/DocumentCenter/Home/View/2477>

⁷⁰ D-11 Bicycle and Pedestrian Coordinator, April 2015

⁷¹ Ped. = Pedestrian

Segment	Post Mile	Segment Description	Segment ID	Pedestrian Access Prohibited	Sidewalk Present	Facility Description	Junction		
							Location	Role	Type
1	L000.000-009.251	SR-905/Otay Mesa Road to SR-54 (Toll Road)	A	Yes	No	Freeway	Birch Road	Major	<ul style="list-style-type: none"> • Signalized • Crosswalks • Ped. Signal Heads
1	L000.000-009.251	SR-905/Otay Mesa Road to SR-54 (Toll Road)	A	Yes	No	Freeway	Olympic Parkway	Major	<ul style="list-style-type: none"> • Signalized • Crosswalks • Ped. Signal Heads
1	L000.000-009.251	SR-905/Otay Mesa Road to SR-54 (Toll Road)SR-905/Otay Mesa Road to SR-54 (Toll Road)	A	Yes	No	Freeway	Otay Lakes Road	Major	<ul style="list-style-type: none"> • Signalized • Crosswalks • Ped. Signal Heads
1	L000.000-009.251	SR-905/Otay Mesa Road to SR-54 (Toll Road)	A	Yes	No	Freeway	East Lakes Drive	Minor	<ul style="list-style-type: none"> • Local Access
1	L000.000-009.251	SR-905/Otay Mesa Road to SR-54 (Toll Road)	A	Yes	No	Freeway	East H Street	Major	<ul style="list-style-type: none"> • Signalized • Crosswalks • Ped. Signal Heads
1	L000.000-009.251	SR-905/Otay Mesa Road to SR-54 (Toll Road)	A	Yes	No	Freeway	San Miguel Ranch Road	Major	<ul style="list-style-type: none"> • Signalized • Crosswalks • Ped. Signal Heads
1	L000.000-009.251	SR-905/Otay Mesa Road to SR-54 (Toll Road)	A	Yes	No	Freeway	San Miguel Road	Minor	<ul style="list-style-type: none"> • Local Access
1	L000.000-009.251	SR-905/Otay Mesa Road to SR-54 (Toll Road)	A	Yes	No	Freeway	Summit Meadow Road	Minor	<ul style="list-style-type: none"> • Local Access • Trail Connections
1	L000.000-009.251	SR-905/Otay Mesa Road to SR-54 (Toll Road)	A	Yes	No	Freeway	Sweetwater Summit Park Trail Crossing	Recreation Trail/Minor	<ul style="list-style-type: none"> • Trail Connections • Local Access
2	009.251-010.622	SR-54 to Jamacha Road	B	Yes	No	Freeway	Quarry Road Bike Path	Minor	<ul style="list-style-type: none"> • Multi-use Path Connection • Local Access
2	009.251-010.622	SR-54 to Jamacha Road	B	Yes	No	Freeway	Worthington Street	Minor	<ul style="list-style-type: none"> • Local Access
2	009.251-010.622	SR-54 to Jamacha Road	B	Yes	No	Freeway	Elkelton Boulevard	Minor	<ul style="list-style-type: none"> • Local Access
2	009.251-010.622	SR-54 to Jamacha Road	B	Yes	No	Freeway	Paradise Valley Road/Jamacha Boulevard	Major	<ul style="list-style-type: none"> • Signalized • Crosswalks • Ped. Signal Heads
3	010.622-012.999	Jamacha Road to SR-94 (Westbound Junction)	C	Yes	No	Freeway	Jamacha Road	Major	<ul style="list-style-type: none"> • Signalized • Crosswalks • Ped. Signal Heads

Segment	Post Mile	Segment Description	Segment ID	Pedestrian Access Prohibited	Sidewalk Present	Facility Description	Junction		
							Location	Role	Type
3	010.622-012.999	Jamacha Road to SR-94 (Westbound Junction)	C	Yes	No	Freeway	Blossom Lane	Minor	• Local Access
3	010.622-012.999	Jamacha Road to SR-94 (Westbound Junction)	C	Yes	No	Freeway	Troy Street	Minor	• Local Access
3	010.622-012.999	Jamacha Road to SR-94 (Westbound Junction)	C	Yes	No	Freeway	Sweetwater Road	Major	• Local Access
3	010.622-012.999	Jamacha Road to SR-94 (Westbound Junction)	C	Yes	No	Freeway	Broadway	Minor	• Local Access
4	012.967-R015.409	SR-94 (Eastbound Junction) to I-8	D	Yes	No	Freeway	Spring Street	Major	• Signalized • Crosswalks • Ped. Signal Heads
4	012.967-R015.409	SR-94 (Eastbound Junction) to I-8	D	Yes	No	Freeway	Panorama Drive	Minor	• Local Access
4	012.967-R015.409	SR-94 (Eastbound Junction) to I-8	D	Yes	No	Freeway	Mariposa Street	Minor	• Local Access
4	012.967-R015.409	SR-94 (Eastbound Junction) to I-8	D	Yes	No	Freeway	Lemon Avenue	Major	• Uncontrolled Intersection • No Marked Crosswalks
4	012.967-R015.409	SR-94 (Eastbound Junction) to I-8	D	Yes	No	Freeway	Grossmont Boulevard	Major	• Signalized • No Marked Crosswalks • No Ped. Heads
5	R015.409-022.301	I-8 to SR-52/Mission Gorge Road	E	Yes	No	Freeway	Murray Drive	Major	• Local Access
5	R015.409-022.301	I-8 to SR-52/Mission Gorge Road	E	Yes	No	Freeway	Wakarusa Street	Minor	• Local Access
5	R015.409-022.301	I-8 to SR-52/Mission Gorge Road	E	Yes	No	Freeway	Fletcher Parkway	Major	• Local Access
5	R015.409-022.301	I-8 to SR-52/Mission Gorge Road	E	Yes	No	Freeway	Dallas Street	Minor	• Local Access
5	R015.409-022.301	I-8 to SR-52/Mission Gorge Road	E	Yes	No	Freeway	Chatham Street	Minor	• Local Access
5	R015.409-022.301	I-8 to SR-52/Mission Gorge Road	E	Yes	No	Freeway	Navajo Road	Major	• Signalized • Crosswalks • Ped. Signal Heads

Segment	Post Mile	Segment Description	Segment ID	Pedestrian Access Prohibited	Sidewalk Present	Facility Description	Junction		
							Location	Role	Type
5	R015.409-022.301	I-8 to SR-52/Mission Gorge Road	E	Yes	No	Freeway	Navajo Road to Grossmont College Drive Bike Path	Minor	<ul style="list-style-type: none"> • Multi-use Path Connection • Local Access
5	R015.409-022.301	I-8 to SR-52/Mission Gorge Road	E	Yes	No	Freeway	Grossmont College Drive	Minor	<ul style="list-style-type: none"> • Signalized • Crosswalks • Ped. Signal Heads
5	R015.409-022.301	I-8 to SR-52/Mission Gorge Road	E	Yes	No	Freeway	Prospect Avenue	Minor	<ul style="list-style-type: none"> • Local Access • No Developed Pedestrian Facilities
5	R015.409-022.301	I-8 to SR-52/Mission Gorge Road	E	Yes	No	Freeway	Mission Gorge Road	Major	<ul style="list-style-type: none"> • Signalized • No Marked Crosswalks • Ped. Signal Heads
6	022.301-030.400	SR-52/Mission Gorge Road to Poway/Espola Road (unconstructed)	F	Unconstructed					

TRANSIT FACILITIES

The entire SR-125 corridor is within the service area of the San Diego Metropolitan Transit System (MTS). MTS provides traditional bus service, Light Rail Transit (LRT) service through its subsidiary San Diego Trolley, Inc., and Americans with Disabilities Act (ADA) paratransit service through MTS Access.

To evolve with changing technology, MTS provides real time transit information via the “MTS GO!” smartphone application or by sending a text/SMS⁷² message with the bus stop identification number to GOMTS (46687). There are also variable message signs installed at the LRT stations. In addition, SANDAG provides schedule, route, and fare information for all San Diego County public transit services, including MTS, via the 511 service. This service can be accessed by dialing 511 as a toll-free call or by accessing it on the Internet at www.511sd.com. Current public transit service in the vicinity of the SR-125 corridor includes MTS Bus Routes 1, 115, 703, 707, 709, 851, 854, 855, 856, 905, 936, and 962, with portions of Routes 115 and 854 directly accessing the freeway.

Although not directly in the corridor, below is a list of the nine Trolley stations in close proximity to SR-125. These stations are for the LRT Green and Orange Trolley lines which respectively provide service along the I-8 and SR-94 corridors. Both LRT lines have amenities that include:

- ❖ Lighting
- ❖ Shelter
- ❖ Seating
- ❖ Bike Lockers
- ❖ Real Time Transit Information

Seven stations offer connections to public bus services, and seven provide park and ride lots with free (no cost) spaces dedicated for transit users as shown in Table 8.

Table 8: SR-125 Light Rail Transit Facilities

LRT Trolley Station	LRT Trolley Line	MTS Bus Routes Connections	Parking Spaces
Lemon Grove Depot	Orange	856, 936	22
Spring Street	Orange	851, 855	324
La Mesa Boulevard	Orange	1, 7	None
Grossmont Transit Center	Orange and Green	1, 854	220
Amaya Drive	Orange and Green	None	236
El Cajon Transit Center	Orange and Green	115, 815, 816, 833, 848, 864, 870, 871, 872, 874, 875, 888, 891, 892, 894	469
Arnele Avenue	Green	115	65

⁷² SMS=Short Message Service (used in texting, limited to 160 characters to another device)

LRT Trolley Station	LRT Trolley Line	MTS Bus Routes Connections	Parking Spaces
Gillespie Field	Green	None	175
Santee Town Center	Green	832, 833, 834, 870	Limited

According to the adopted SANDAG Revenue Constrained Plan of the 2050 RTP (October 2011), future transit services in the SR-125 corridor will include Rapid buses. Between the future Otay Mesa Intermodal Transit Center and downtown San Diego via eastern Chula Vista, there is a planned Rapid bus service, known as the South Bay Rapid. It will directly access SR-125 from SR-905 to Birch Road. In addition, several bus routes will be enhanced to Rapid bus service. To continue developing transit as an integral connectivity component into the future, long range planning documents and a focus on the development review process must be enlisted. A list of the transit facilities on or near the SR-125 corridor is shown in Table 9 below.

Table 9: SR-125 Transit Facilities⁷³

Segment	Mode and Collateral Facility	Name	Route End Points	Ridership FY14 ⁷⁴	Headway Minutes	Operating Period ⁷⁵	Stations		Bikes Allowed on Transit	Location Description	# of Parking
							Cities	Post Miles			
1	Traditional Bus	MTS 905 905B	Iris Ave. Transit Center / Otay Mesa Port of Entry	2,241 ⁷⁶ Average Wkdy ⁷⁷	30	4:20am-9:08pm	San Ysidro, Chula Vista, Otay Mesa	N/A ⁷⁸	Yes		
2	Traditional Bus	MTS 703	H St. Trolley / Otay Ranch Town Center	Not Available	60	6:31am-8:07pm ⁷⁹	Chula Vista	N/A	Yes		
2	Traditional Bus	MTS 707	Southwestern College / Otay Ranch Town Center	245 Average Wkdy	60	8:34am-7:26pm	Chula Vista	N/A	Yes		
2	Traditional Bus	MTS 709 709X ⁸⁰	H St. Trolley / Southwestern College	3,858 Average Wkdy	15	4:58am-11:54pm	Chula Vista	N/A	Yes		

⁷³ Regional Transit Map: www.sdmts.com/MTS/RegionalTransitMap.asp

⁷⁴ MTS Year End Operations Report, November 2014

⁷⁵ MTS Service Changes Effective January 2015

⁷⁶ Includes Route 905A, which is not in the vicinity of SR-125

⁷⁷ Average Wkdy = Average Weekday

⁷⁸ N/A = Not Applicable

⁷⁹ Route 703 operates on Sundays only

⁸⁰ Route 709X is an Express service (no stops) between H St Transit Center and Southwestern College, with a headway of 30 minutes while Southwestern College is in session

Segment	Mode and Collateral Facility	Name	Route End Points	Ridership FY14 ⁷⁴	Headway Minutes	Operating Period ⁷⁵	Stations		Bikes Allowed on Transit	Location Description	# of Parking
							Cities	Post Miles			
2	Traditional Bus	MTS 962	8 th St. Transit Center / Spring Valley Shopping Center	2,493 Average Wkdy ⁸¹	30	5:24am-10:47pm	San Diego, Spring Valley	N/A	Yes		
2,3	Traditional Bus	MTS 856	SDSU Transit Center / Cuyamaca College	2,598 Average Wkdy	30	4:28am-11:13pm	San Diego, Lemon Grove, Spring Valley, Rancho San Diego	N/A	Yes		
		MTS 936	SDSU Transit Center / Spring Valley Shopping Center	1,959 Average Wkdy	30	4:58am-10:14pm	San Diego, Lemon Grove, Spring Valley	N/A	Yes		
2,3,4	Traditional Bus	MTS 851	Spring Street Trolley / Spring Valley Shopping Center	373 Average Wkdy	30	5:18am-6:09pm	La Mesa, Spring Valley	N/A	Yes		
3,4,5	Light Rail	Orange Line Trolley	El Cajon Transit Center / Santa Fe Depot – Downtown	33,505 Average Wkdy	15	4:30am-1:41am	El Cajon, La Mesa, Lemon Grove	N/A	Yes	See Table 8	
4	Traditional Bus	MTS 855	Spring Street Trolley / Jamacha Blvd. and Doubletree Rd.	1,009 Average Wkdy	30	5:05am-10:54pm	La Mesa, Spring Valley, Rancho San Diego	N/A	Yes		
4,5	Traditional Bus	MTS 1	Grossmont Transit Center / 5th Ave. and Evans Place	4,981 Average Wkdy ⁸²	30	4:49am-12:28am	San Diego, La Mesa	N/A	Yes		
5	Light Rail	Green Line Trolley	Santee Town Center / 12th and Imperial – Downtown	39,966 Average Wkdy	15	4:53am-1:11am	La Mesa, El Cajon, Santee	N/A	Yes	See Table 8	

⁸¹ Includes Route 963, which is not in the vicinity of SR-125

⁸² Includes Route 1A, which is not in the vicinity of SR-125

Segment	Mode and Collateral Facility	Name	Route End Points	Ridership FY14 ⁷⁴	Headway Minutes	Operating Period ⁷⁵	Stations		Bikes Allowed on Transit	Location Description	# of Parking
							Cities	Post Miles			
5	Traditional Bus	MTS 115	SDSU Transit Center / El Cajon Transit Center	1,345 Average Wkdy	30	5:57am-10:34pm	San Diego, El Cajon	19.7-20.4	Yes		
5	Traditional Bus	MTS 834	Santee Town Center / West Hills HS	75 Average Wkdy		6:33am-3:30pm ⁸³	Santee	N/A	Yes		
5	Traditional Bus	MTS 854 854X ⁸⁴	Grossmont Transit Center / Grossmont College	730 Average Wkdy	60	6:15am-10:22pm	La Mesa, San Diego (Navajo)	18.6-20.4	Yes		
5	Traditional Bus	MTS 870	El Cajon Transit Center / Ruffin Rd. and Aero Dr.	57 Average Wkdy		6:03am-6:02pm ⁸⁵	El Cajon, San Diego	N/A	Yes		
5	Intercity Bus	Greyhound /Crucero	El Cajon Transit Center	N/A		7:00am-5:00pm		N/A	No	385 S. Marshall Avenue	

⁸³ Route 834 is a loop route that operates four times per weekday.

⁸⁴ Route 854X is an Express service (no stops) between Grossmont Transit Center and Grossmont College via SR-125, with a headway of 30 minutes while Grossmont College is in session

⁸⁵ Route 870 operates three times per weekday WB to Kearny Mesa, and four times per weekday EB to El Cajon

PARK AND RIDE FACILITIES

There are eight Park and Ride facilities on or near the SR-125 corridor. Table 10 below represents all six segments with Park and Ride facilities, the assigned lot number, how many parking spaces are available, and the approximate location of the Park and Ride lot. There are no long-term Park and Ride lots proposed. As ridership increases, more Park and Ride lots may be necessary to accommodate the diversity of future transportation needs.

Table 10: Park and Ride Facilities⁸⁶

SR-125 Segment	Post Miles	Lot Number	Spaces Available	Location/Description	Transit Connections
1				No Park and Ride Lots	
2	SR-125/ 009.900	40	22	8627 Jamacha Blvd. (Near Spring Valley Park and Community Center)	Bus Routes 851 and 962
3	SR-94/ 008.900	12	23	2885 Lemon Grove Avenue (VFW Post)	
4	SR-94/ 008.900	8	43	7675 High Street (off SR-94 at NW Corner of Lemon Grove Avenue)	
	SR-125/ 015.100	59	29	5230 Bancroft Drive (NE Quadrant SR-125/Grossmont Blvd.)	
	I-8/ 012.700	60	20	5480 Bancroft Drive/Severin Drive (Off I-8)	
5	I-8/ 012.400	22	65	8725 Murray Drive (Off I-8/Grossmont Center)	
	I-8/ 012.700	61	17	9307 Murray Drive/Severin Drive (Off I-8)	
	SR-52/ 013.800	70	36	Mission Gorge Road/Big Rock Drive (Off SR-52)	
6				Not Applicable	

⁸⁶ Park and Ride Lots: <http://www.dot.ca.gov/dist11/departments/planning/pages/parkandride.htm>

FREIGHT

National Freight Network Funding

“Moving Ahead for Progress in the 21st Century (MAP-21) includes a number of provisions to improve the condition and performance of the national freight network and support investment in freight-related surface transportation projects.” MAP-21 defines a National Freight Network (NFN) and sets the policy to improve the performance and condition of the network.⁹⁰

Based on criteria found in Section 1115 of Map-21, SR-125 is not part of the NFN. The purpose of the NFN is “to assist States in strategically directing resources toward improved system performance for efficient movement of freight on the highway portion of the Nation's freight transportation system”.⁹¹ The NFN consists of the Primary Freight Network (PFN), the portions of the Interstate System not designated as part of the PFN, and Critical Rural Freight Corridors (CRFC).

Truck Route Network

The SR-125 corridor is designated as the “Black” Californian Legal Route and “Green” National Truck Network for vehicle based freight as can be seen on Map 5, Truck Route Network. These designations allow the movement of freight in order to relay commodities from one location to another. The graphic below provides a visual understanding of the difference between the “Black” and “Green” truck requirements.⁹²

Segment 1 is designated as a “Black” California Legal (CL) Route for freight.⁹³ This designation means that “a California Legal truck has an overall maximum length of 65 feet, and a maximum king-to-rear-axle (KPRI) of 40 feet”.⁹⁴ California Legal trucks can travel on Surface Transportation Systems Act (STAA) network routes.

Segments 2, 3, 4, and 5 are designated as part of the interstate National Truck Network based STAA regulations. “A STAA truck is a truck with a 48-foot semitrailer, an unlimited overall length, and an unlimited kingpin-to-rear-axle (KPRI) distance. STAA trucks were made legal on the National Network by the 1982 federal Surface Transportation Assistance Act (STAA).”⁹⁵ SR-125 is a link to the National Network of federal interstates for freight movement.

Truck Category for Designated Truck Routes:

LENGTHS	"GREEN" STAA TRUCKS		"BLACK" CALIFORNIA LEGAL TRUCKS
			
OVERALL LENGTH	unlimited	unlimited	65 feet MAX
SEMITRAILER	53 feet MAX	48 feet MAX	unlimited
KPRI (kingpin-to-rear-most-axle distance)	40 feet MAX (for two-axle semitrailer); 38 feet MAX (for single-axle semitrailer)	unlimited	40 feet MAX (for two-axle semitrailer); 38 feet MAX (for single-axle semitrailer)

⁹⁰ Map 21 Factsheet: <http://www.fhwa.dot.gov/map21/factsheets/freight.cfm> (September 13, 2013)

⁹¹ National Freight Network: <http://ops.fhwa.dot.gov/freight/infrastructure/nfn/index.htm>

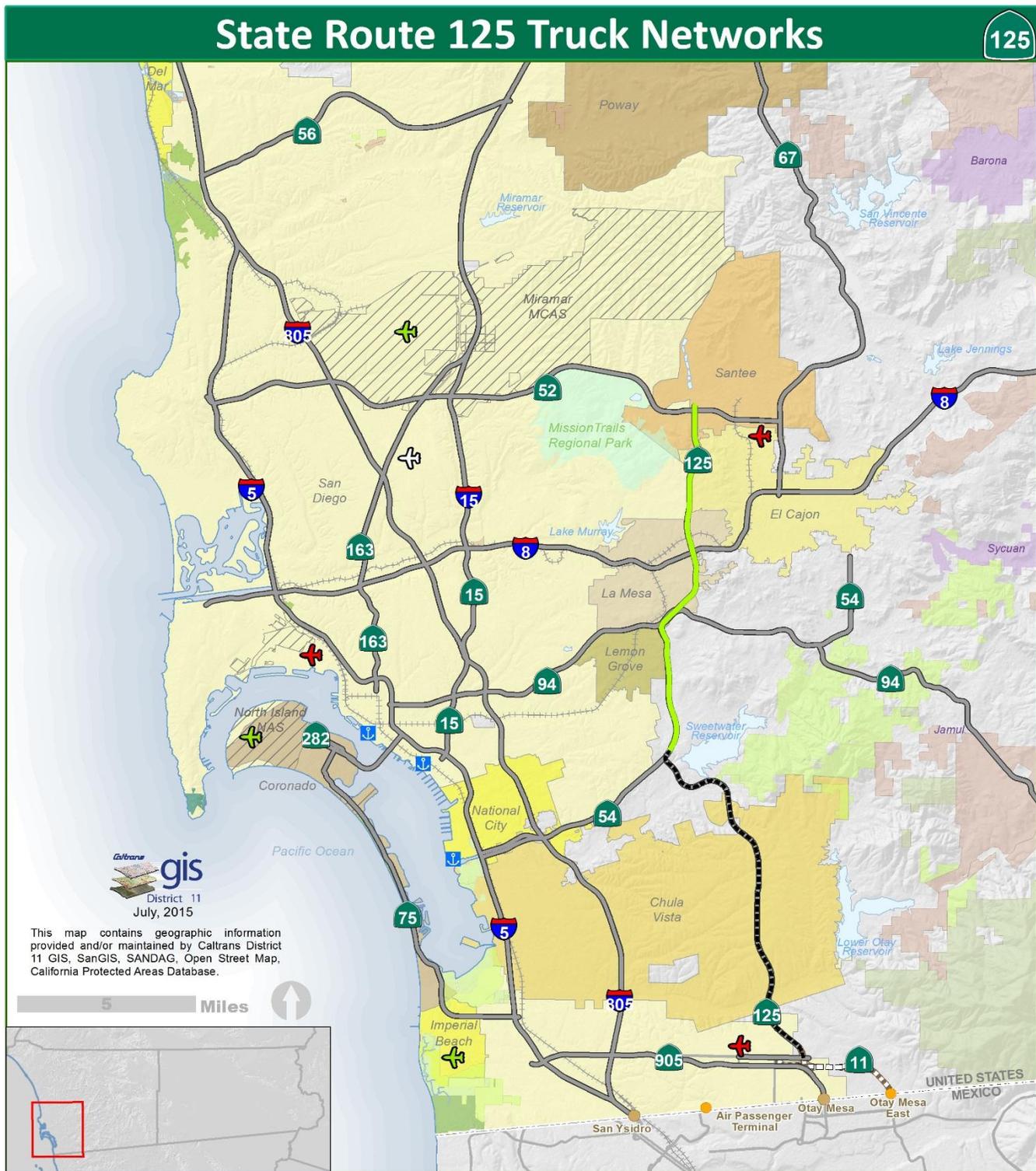
⁹² Resource: <http://www.dot.ca.gov/hq/traffops/engineering/trucks/truck-length-routes.htm>

⁹³ STAA (Surface Transportation Assistance Act): <http://www.dot.ca.gov/hq/traffops/engineering/trucks/routes/ta-process.htm>

⁹⁴ California Vehicle Code for California Legal Trucks: [CVC Section 35401](#)

⁹⁵ California Vehicle Code for STAA Trucks: [CVC Section 35401.5\(a\)](#)

Map 5: SR-125 Truck Route Network



- National Park Service
- CA Dept of Fish and Wildlife
- CA Dept of Parks and Recreation
- US Fish and Wildlife Service
- US Bureau of Land Management
- Tribal Land
- Military
- Seaport

- ✈ Community Airport
- ✈ Cargo/Passenger Airport
- ✈ Military Airport
- Existing Port of Entry
- Future Port of Entry
- Planned Highway
- Under Construction Highway

National Network (STAA)
 CA Legal Routes

Surface Transportation Assistance Act (STAA*) Network consists of the National Network (green) routes.
 California Legal Routes - California legal trucks can travel on STAA routes

Freight System

Freight vehicles using the SR-125 corridor are not limited to truck circulation. As can be seen in Table 11, other types of transportation generators are airports, United States and Mexico Ports of Entry, industrial complexes, short-line railroad, and a mining facility. Some of the SR-125 segments will have a more intensive freight impact than other segments. The future outlook is that the pockets of industrial areas will continue to grow and expand. Although many of the freight destinations either start or end in the Otay Mesa area, the products from these destinations create goods movement all along the SR-125 corridor and beyond.

Table 11: SR-125 Freight System

Facility Type/Freight Generator	Location	Mode	Name	Major Commodity/ Industry	Comments/Issues
Land Port of Entry	City of San Diego	Truck, Auto, Bus, Pedestrian	Otay Mesa POE	Electronics, Manufactured Products, Agriculture	-Congestion -Border wait time delays for trucks
Land Port of Entry	County of San Diego	Anticipated: Truck, Auto, Bus, Pedestrian	Otay Mesa East POE	Electronics, Manufactured Products, Agriculture	-Segment 1 of SR-11 is in construction but segments 2 and 3 (the POE) are not yet in construction.
Land Port of Entry	City of San Diego	Passenger Bridge	Cross Border Xpress	Tourism, Air Transportation	-First facility to directly connect the United States to a foreign airport terminal -Propensity for increased traffic volumes on SR-125 and SR-905
General Aviation Airport	City of San Diego	Airplane	Brown Field ⁹⁶	Private/ Corporate Business, Adventure Tours, Sky-Diving, Law Enforcement, Fire Rescue, Air Ambulance	-Considered a reliever airport for San Diego International, Lindbergh Field -In Foreign Trade Zone -Has 2 runways -Access to SR-125 toll road -Passengers benefit by experiencing fewer delays
General Aviation Airport	City of El Cajon	Airplane/Helicopter	Gillespie Field	Electronics, Manufactured Products, Flight School, Private/ Corporate Business, Air Taxi, Sky-Diving, Law Enforcement, Fire Rescue, Air Ambulance	-In 2010 46th busiest airport traffic control tower in the United States ⁹⁷ -Air and Space Museum at Gillespie Field Annex -Has 3 runways -Holds annual Air Show
Aggregate Mine	City of Chula Vista	Truck	Otay Valley Materials	Aggregate, Sand Erosion Control Products	-Aggregate Mine expected to remain open well into the future ⁹⁸

⁹⁶ Resource: <http://www.sandiego.gov/airports/brown/>

⁹⁷ Resource: http://www.faa.gov/about/office_org/headquarters_offices/aba/admin_factbook/media/201103.pdf

⁹⁸ Resource: San Diego Region Aggregate Study (January 2011) (SANDAG)

Facility Type/Freight Generator	Location	Mode	Name	Major Commodity/ Industry	Comments/Issues
Intermodal Freight Facility	From Mexico to City of Santee ⁹⁹	Short-Line Railroad, Class III	San Diego and Imperial Valley Railroad (SDIY)	Propane, Wood Pulp, Petroleum Gases, Corn Syrup, Malt, Plastics	-Rail lines are shared with the San Diego Trolley System -This Short-Line ends in the City of Santee
Freight Generator	County of San Diego, Otay Mesa (area south of Lonestar Road)	Truck	Otay Mesa Industrial Area	Brokers, Cargo, Cold Storage, Courier Service, Warehousing, Auto Salvaging, Distribution Center	-Industrial Area of Otay Mesa is expected to expand considerably in the future.
Freight Generator	City of San Diego, Otay Mesa (area between E Street and Otay Lakes Road)	Truck	Otay Mesa Industrial Area	Light/Heavy Industry, Warehousing, Public Storage, Industrial Parks	-Industrial Area does not change in the future. Boundaries are similar.
Freight Generator	County of San Diego, Spring Valley (South of Quarry Road)	Truck	Industrial Area - General	Light/Heavy Industry, Warehousing, Public Storage, Industrial Parks	-Industrial Area begins off Quarry Rd. -Future Industrial Area expands to include Paradise Valley Rd.
Freight Generator	County of San Diego, Spring Valley (East of SR-125 off Presioca Street)	Truck	Industrial Area - General	Light/Heavy Industry, Warehousing, Public Storage, Industrial Parks	-Industrial Area does not change in the future. Boundaries are similar.
Freight Generator	County of San Diego, Spring Valley (East of SR-125 on Bancroft Drive)	Truck	Industrial Area - General	Light Industry, Public Storage, Metal Works, Distribution	-Industrial Area does not change in the future. Boundaries are similar.
Freight Generator	City of El Cajon and City of Santee	Truck	Industrial Area	Light/Heavy Industry, Warehousing, Public Storage, Industrial Parks	-Industrial Area starts off around Gillespie Field Airport -Future Industrial Area expands to include undeveloped land west of Cuyamaca St.

United States-Mexico Border

Existing POEs experience 1-hour to 3-hours of cross-border delays due to operational and infrastructure issues. Border delays impact the competitiveness of the bi-national region. Long cross-border wait times impact goods movement as well as personal trips to and from Mexico. *“Because of delays experienced by trucks at the border, it is estimated that San Diego County and Imperial County lost \$248 million and \$40 million respectively in net revenue in 2008. When accounting for the indirect and induced effects of net revenue losses, the total impact amounts to a \$412 million loss in business output and 2,256 jobs lost in San Diego County and a \$58 million loss in business output and 276 jobs lost in Imperial County.”*

“At the state level, given that a large portion of U.S. trucks originate in the rest of California (i.e., in California but outside Imperial County or San Diego County), the combined direct revenue loss reaches

⁹⁹ Resource: http://www.gwrr.com/operations/railroads/north_america/san_diego_imperial_valley_railroad.be

\$477 million. When adding the indirect and induced effects, the total revenue loss amounts to \$943 million and the total job loss amounts to 4,892.” Detailed information on wait times and the impacts of border delays can be found in the consultant-prepared report entitled Economic Impacts of Wait Times at the California-Mexico Border Update 2009 (Final Report January 2010).¹⁰⁰

California and Baja California are taking steps to fund capital improvement projects at federal POEs. Both states have invested resources to expand the number of SENTRI (Secure Electronic Network for Travelers Rapid Inspection) and the Free and Secured Trade (FAST) lanes for pre-cleared users at each of the California and Baja California POEs.

Otay Mesa Port of Entry (POE)

The Otay Mesa Border Crossing (also known as Mesa de Otay) is the busiest commercial service port crossing on the California-Mexico border and handles the third highest dollar amount of trade among all U.S.-Mexico border crossings. It is located within two miles of the southern terminus of SR-125. Since the enactment of the 1994 North American Free Trade Agreement (NAFTA),¹⁰¹ the annual volume of trucks at Otay Mesa has increased substantially. Due to the volume, there is a recurring queue of southbound laden trucks into Mexico.

Virtually all of the cargo through the Otay Mesa crossing is transported by truck. Commercial imports through the Otay Mesa POE account for billions of dollars in freight. “In 2010, the total value of goods transported by truck through California-Baja California POEs was approximately \$41.8 billion USD.¹⁰² Otay Mesa-Mesa de Otay handled nearly three-quarters of the value of freight (\$30.7 billion). The volume of goods from Mexico into the United States was nearly 3.3 million metric tons.”¹⁰³

Opened in 1983, the Otay Mesa POE is one of three existing POEs in San Diego County and connects Otay Mesa in the City of San Diego with the Otay Centenario borough of Tijuana, Mexico. The original and primary purpose of this crossing was to move commercial truck traffic from the busy San Ysidro Port of Entry. Since its opening, significant passenger vehicle and pedestrian traffic has grown as development in the area around the crossing has grown. In 2013 this border crossing processed 6,235,300 personal vehicles, 769,886 trucks, and 3,289,778 pedestrians.¹⁰⁴ Within the POE, there are separate operations for processing cargo and passenger vehicles.

With SR-125 located a short distance from the Otay Mesa POE, there is an opportunity for freight to be transported on this route. In recent years, the South Bay Expressway portion of SR-125 positioned between SR-905 and SR-54, has decreased its tolling fees. Combined with decreased tolls and the future freeway to freeway connectors to SR-905 and State Route 11 (SR-11) with SR-125, the SR-125 could become more attractive to truck traffic thus creating better interregional connectivity.

¹⁰⁰ Resource: [Economic Impacts of Wait Times at California/Mexico Border](#) (January 2010)

¹⁰¹ NAFTA = North American Free Trade Agreement established between Mexico and the United States in 1994. This agreement allows Mexican factories that take in imported raw materials and produce goods for export ([Maquiladoras](#)) without the previous hurdles that impeded business between the two countries.

¹⁰² USD = United States Dollars

¹⁰³ Resource: [California-Baja California Border Master Plan](#) (July 2014)

¹⁰⁴ Resource: California Freight Mobility Plan, [B-5-1: Otay Mesa Port of Entry](#)

SR-11 and Otay Mesa East POE

The Otay Mesa East POE is located approximately two miles east of the existing Otay Mesa POE, and connected to the new SR-11 which, when completed, will be designated as a toll road. From the future SR-125/SR-905 interchange, SR-11 will extend approximately two miles southeast to connect with the proposed Otay Mesa East POE at the United States and Mexico border. This new POE is designed to serve both passenger and commercial vehicles. Multiple construction segments are being developed for this project. Segment 1 is currently in the construction phase, as seen on the February 2014 map below.¹⁰⁵

“This POE and the SR-11 four-lane toll highway will connect the United States-Mexico border to key regional, state, and international highways, including SR-125, SR-905 to I-805/I-5, and the Tijuana-Tecate and Tijuana-Ensenada free and toll roads.”¹⁰⁶ Better connectivity affords better movement of goods throughout the region. The existence of SR-125 enhances this regional connectivity.

SR-11 is expected to be completed between the years 2017 and 2020 with all local connections completed by year 2030.¹⁰⁷ When completed, the SR-11 toll road along with the new POE will provide shorter and more predictable border crossing times by using varying toll amounts to control traffic flows.



¹⁰⁵ Resource: California Freight Mobility Plan, B-5-2: Otay Mesa East (SR 11) Port of Entry (February 2014)

¹⁰⁶ Resource: California-Baja California Border Master Plan (July 2014)

¹⁰⁷ Resource: California-Baja California Border Master Plan (July 2014)

Airports

Cross Border Airport Facility

The graphic to the right is a “*rendering of the border facility at Otay Mesa that will connect via pedestrian bridge to Tijuana’s A.L. Rodriguez Airport.*”¹⁰⁸



The facility known as the “Cross Border Xpress” will be the first of its kind to connect the United States directly to a foreign air terminal.¹⁰⁹ It will be located approximately 2-miles southwest of SR-125. A cross-border pedestrian bridge will be constructed in Otay Mesa to join the United States with the Tijuana International Airport on the Mexican side of the border. The purpose of the Cross Border Xpress will be to provide direct access to local ticketed airline passengers traveling to destinations not typically served by other Southern California airports. The 390-foot long bridge is expected to be open by December 2015. United States Customs and Border Protection staff will provide security operations at the bridge. The design accommodates retail and food facilities, divided north-south corridors, indoor and outdoor waiting areas, and parking. There will be a toll associated with the usage of the bridge. With the interconnectivity of SR-905 and SR-125, this large project has the propensity to increase vehicle traffic to and from the Otay area in the future.

Brown Field Airport¹¹⁰

Brown Field Airport is one of San Diego County’s busiest general aviation airports. Located in the Otay Mesa community of the City of San Diego, this former military airport is 1.5 miles from the United States/Mexico border. Its functional class is Regional-Business/Corporate. The airport is located in heavily congested airspace that includes intensive military jet and helicopter operations, student pilot training, and parachuting both on and off the field. The airport is a POE and pilots flying to the field must clear customs upon arrival. Airport businesses include an Eco-Adventure Tour company, the Experimental Aircraft Association, a fixed base operator that provides a wide range of aircraft services, the San Diego Jet Center, a sky diving company, and a City of San Diego Fire Station. Airport services include both jet and aircraft fuel sales, aircraft maintenance, flight training, aircraft rental and sales, aircraft and vehicle parking, tie downs, hangers, search and rescue, law enforcement, emergency response, a restaurant, café and bar, banner towing, and car rental. 205 aircraft are based at the airport, and there were 89,885 operations for the period ending December 31, 2013.

¹⁰⁸ Resource: <http://www.utsandiego.com/news/2014/jul/14/cross-border-bridge-airport-tijuana-san-diego/> (July 14, 2014, Union Tribune Newspaper, article by Sandra Dibble)

¹⁰⁹ Resource: <http://www.sdbj.com/news/2014/jul/15/groundbreaking-kicks-local-work-cross-border-airpo/> (July 16, 2014, San Diego Business Journal, article by Lou Hirsh)

¹¹⁰ Resource: Aviation Coordinator

Gillespie Field Airport¹¹¹

Gillespie Field is San Diego County's busiest general aviation airport and is located at the northwest corner of the City of El Cajon. It generates over \$400 million dollars a year to the local economy, provides roughly 3,200 jobs, and generates enough income to pay all expenses for the other County general aviation (GA) airports. The airport has a large amount of undeveloped land inside its boundaries, and the East County Economic Development Council wants to build a transportation and business economic development hub on some of its 757 acres. The airport has multiple access points to four major freeways: SR-52, I-8, SR-67, and SR-125. Its functional class is Regional-Business/Corporate, and it's also a FAA national reliever airport. Aviation services include: air traffic control tower, aircraft fuel sales, disaster/emergency services, aero medical emergency flights, sport flying, aircraft rental and sales, search and rescue, fire and law enforcement, major aircraft repair facilities, flight training, oxygen, charter service, an airport restaurant, and an aviation museum. 732 based aircraft, 28 helicopters, and 5 gliders are based at the airport. There were 184,895 operations for the 12 month period ending December 31, 2012. The airport is to the east of the Gillespie Field Trolley station, which is located near Marshall Avenue and is served by the Green Line.

¹¹¹ Resource: Aviation Coordinator

ENVIRONMENTAL CONSIDERATIONS¹¹²

The purpose of this environmental section is to conduct a high level identification of environmental factors that may need future analysis in the project development process. This information does not represent all possible environmental considerations that may exist within the area surrounding the route. As seen in Table 12, the environmental factors have been categorized based on a scale of high-medium-low probability of environmental resource issues established by district staff. Resources with a greater than “low” environmental sensitivity are explained below:

Recreational and Protected Land (Section 4(f)): SR-125 traverses numerous Park and Recreation facilities. These include Sweetwater Regional Park, Big Rock Park, and Mission Trails Regional Park, as well as several neighborhood parks and large open space areas in close proximity to the freeway.

Environmental Justice: There are two mobile home parks, as well as a number of lower income neighborhoods, located in close proximity to SR-125 within Segment 3. Efforts would be made to include lower income and minority populations during public outreach to ensure their participation in transportation planning efforts within the corridor.

Cultural Resources: Cultural resources are best assessed on a case-by-case basis, as significance can be determined by soils, sites, or even individual buildings. Due to the potential for the presence of at least one of these factors in each segment of SR-125, most segments received at least a “Medium” designation.

Visual/Aesthetics: Visual concerns would include keeping with the nature of existing communities, and ensuring that the existing views to the east and west of the roadway are maintained. As discussed in the corridor overview, Segment 4 is officially designated as part of the State Scenic Highway System. Review of proposed changes would require consideration of this designation and measures for resource protection in conformance with applicable state laws that govern the Scenic Highway Program.

Seismic/Geology/Soils: None of the segments of SR-125 lie upon or are adjacent to fault lines. However, many segments are adjacent to steeper slopes with moderate to severe erosion hazards. Soil types adjacent to SR-125 include but are not limited to Fallbrook Sandy Loam, Diablo Clay, and Salinas Clay Loam.

Hazardous Materials and Naturally Occurring Asbestos: Segments 1, 2, 3, and 5 are relatively new facilities therefore; do not constitute a concern for hazardous materials related to built structures or aerially deposited lead in soils. However, Segments 4 and 5a, which pre-date 1990, may constitute hazardous material or asbestos risks if construction occurs. Naturally Occurring Asbestos is typically generated from naturally occurring soil or rock with high asbestos concentrations. Naturally Occurring Asbestos is considered a low risk for all segments.

Air Quality: Most of California’s transportation air quality requirements come from the Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA). The FCAA sets nationwide standards called National Ambient Air Quality Standards (NAAQS) managed by the U.S. Environmental Protection Agency (EPA). As such, the U.S. EPA has set both primary (health) and secondary (welfare) standards for the six "criteria pollutants"— carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and particulates (PM₁₀ and PM_{2.5}).

¹¹² District 11 Environmental Coordinator

The California Clean Air Act, managed by the California Environmental Protection Agency (Cal EPA), sets California's vehicle emission control and fuel standards at more stringent levels than Federal standards. This often results in differing air quality designations for the same region within California. Both federal and state designations are provided in the table for San Diego area pollutants. Ozone, particulate matter, and carbon dioxide are the remaining criteria pollutants that have non-attainment designations within the San Diego Air Basin.

Noise: The proximity of SR-125 to schools, recreational facilities, open space, and residential development constitutes a potentially high noise impact to these local facilities. Therefore, noise impacts should be strongly considered for future development in those areas.

Waters and Wetlands: SR-125 crosses the Otay River and the San Diego River, and passes adjacent to the Sweetwater Reservoir. Any work within these areas would require permits from the California Department of Fish and Wildlife, and possibly the Army Corps of Engineers and Regional Water Quality Control Board.

Special Status Species: Special status species within the SR-125 corridor include the federally listed (Endangered) Quino checkerspot butterfly (*Euphydryas editha quino*), Least Bell's vireo (*Vireo bellii pusillus*), and San Diego fairy shrimp (*Branchinecta sandiegonensis*), and the federally listed (Threatened) Coastal California gnatcatcher (*Polioptila californica*) and Otay Tarplant (*Deinandra conjugens*).

Habitat Connectivity: SR-125 runs primarily north to south, bisecting riparian habitat and limiting wildlife movement. SR-125 crosses the Johnson Canyon and the Otay River, and runs adjacent to the Sweetwater Reservoir, the Sycamore Canyon, and several large open space areas in Segments 1 and 6. Segments 2 through 5 are more urban and constitute lower habitat connectivity risks.

Table 12: SR-125 Environmental Considerations

Segment Number	1	2	3	4	5a	5b	5c	6
Post Miles	L000.000 -009.251	009.251- 010.622	010.622- 012.999	012.967 - R015.40 9	R015.409- 018.663	018.663- 020.393	020.393- 022.301	022.301- 030.400
Section 4(f) Land	High		Med ¹¹³		Low	Med	High	
Coastal Zone	Low							
Farmland/Timberland	Low							
Environmental Justice	Low	Med		Low				Med
Cultural Resources	Med-High	High	Med	Low-Med	Low	Med-High	High	
Visual Aesthetics	High	Med			Low	Med	High	
Geology/Soils/Seismic	Med				Low		Med	
Floodplain	Low							
Climate Change and Sea Level Rise Vulnerability	Low							
Hazardous Materials	Low			Med		Low		
Naturally Occurring Asbestos	Low							
Air Quality	Ozone		State: Non-Attainment Federal: Marginal (8-hour)/Nonattainment					
	PM ¹¹⁴	2.5	State: Non-Attainment Federal: Unclassified					
		10	State Non-Attainment Federal: Unclassified					
	CO		State: Attainment Federal: Maintenance/Unclassified					
Noise	Med	High				Low	Med	High
Waters and Wetlands	Med	Low					High	
Wild and Scenic Rivers	Low							
Special Status Species	Med-High	Low				Med	High	
Fish Passage	Low							Med
Habitat Connectivity	Med-High	Low					High	

¹¹³ Med = Medium

¹¹⁴ PM = Particulate Matter

AIR QUALITY

SAN DIEGO COUNTY TRANSPORTATION CONFORMITY

San Diego County is located in the southwest corner of California, bordering Mexico to the south, Orange County to the north, the Pacific Ocean to the west, and Imperial County to the east.

Transportation conformity is required under the federal Clean Air Act (CAA) to ensure that federally supported highway and transit project activities conform to the purpose of the State Implementation Plan (SIP). Conformity to the purpose of the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant National Ambient Air Quality Standard (NAAQS). Conformity applies to non-attainment and maintenance areas for the following transportation-related criteria pollutants: ozone (O₃), particulate matter (PM_{2.5} and PM₁₀), carbon monoxide (CO), and nitrogen dioxide (NO₂).

Ozone (O₃)

San Diego County is classified as maintenance for the 1997 Eight-Hour ozone standard of 0.08 parts per million (ppm). San Diego County submitted a Redesignation Request and Maintenance Plan for the 1997 Eight-Hour Ozone Standard in December 2012. Effective July 5, 2013, United States Environmental Protection Agency (U.S. EPA) approved California's request to redesignate the San Diego County ozone non-attainment area to attainment for the 1997 Eight-Hour Ozone Standard and the Maintenance Plan for continuing to attain this standard for ten years beyond redesignation.

On May 21, 2012, the U.S. EPA designated the San Diego air basin as a non-attainment area for the new 2008 Eight-Hour Ozone Standard of 0.075 ppm and classified it as a marginal area with an attainment date of December 31, 2015. This designation became effective on July 20, 2012. SANDAG determined conformity to the new standard on May 24, 2013, using the model approved by the U.S. EPA to forecast regional emissions (EMFAC 2011). The U.S. DOT, in consultation with the U.S. EPA, made its conformity determination on June 28, 2013.¹¹⁵ For this nonattainment designation, tribal areas that were previously excluded are now included as part of the San Diego region nonattainment designation. However, one small piece of tribal land (approximately 119 acres) was purchased within the northern portion of San Diego County from the Pechanga Band of Luiseno Indians, and was excluded from the San Diego region 2008 Eight-Hour ozone nonattainment designation. All other tribal lands within San Diego County were included in the designation. As of July 20, 2013, the 1997 ozone standard was revoked and replaced with the 2008 ozone standard.

Particulate Matter (PM₁₀)

San Diego County is classified as attainment for PM₁₀.

Particulate Matter Fine (PM_{2.5})

San Diego County is classified as attainment for the Annual and the 2006 PM_{2.5} standard.

Carbon Monoxide (CO) and Nitrogen Dioxide (NO₂)

San Diego County is classified as a Maintenance area for CO, and attainment for NO₂.

¹¹⁵ Resource: Letter may be found at: sandag.org/uploads/projectid/projectid_410_16214.pdf

CORRIDOR PERFORMANCE

Traffic volume attributes on SR-125 vary according to the segment being observed. As shown below, Table 13 identifies five segments on SR-125 and each segment has data distributed into five separate categories: 1) Basic System Operations, 2) Truck Traffic, 3) Bottlenecks, 4) Peak Hour Traffic Data, and 5) Managed Lanes Performance. Data analyses are centered on Base Year (BY) 2012 and the Horizon Year (HY) 2040.¹¹⁶ To manage congestion during peak periods and mitigate environmental impacts, Transportation Demand Management (TDM) and Transportation Management Systems (TMS) strategies can be implemented. As travel demand increases, various suggested strategies include, but are not limited to, use of public transportation, carpooling, teleworking, managed lanes, ramp metering, and alternative work hours. For a more expanded list of proposed projects and strategies refer to the System Characteristics (see page 30) and Planned and Programmed Projects and Strategies (see page 68) sections of this report.

Segment 1 is the portion of SR-125 between SR-905/Otay Mesa Road and SR-54 in Spring Valley. The portion of Segment 1 between SR-905/Otay Mesa Road and San Miguel Road is the Southbay Expressway toll road (SBX). The SBX is constructed as a four lane toll road. Segment 1 serves as a major commuter route for the developing Otay Mesa and Eastlake communities and the City of Chula Vista. The northern end of Segment 1 is at the junction of SR-54 and has freeway to freeway connectors to and from SR-125. The SANDAG 2050 RTP revenue constrained plan has projected that by the year 2050 the tolls will be removed thus the toll road reverts to a public freeway. The peak hour traffic volumes on this segment are very distinctive. Northbound traffic volumes peak in the AM and southbound traffic volumes peak in the PM.

The southerly end of Segment 1 begins at the signalized intersection of Otay Mesa Road. In the future, it is anticipated that this southern termini will have direct freeway to freeway connectors with SR-905 and SR-11. The SR-905 and SR-11 connectors to northbound SR-125 are scheduled to begin construction in late 2015. The design of the SR-905 and SR-11 connectors to southbound SR-125 are funded, with funding for the project's construction expected in the future. These connectors will provide direct access for passenger vehicles from SR-125 to the Otay Mesa POE and improved access for commercial vehicles. Otay Mesa is currently the only commercial POE within the western San Diego region. Today, State Route 11 (SR-11) is being constructed just north of this POE. The construction of SR-11's segment 1, between SR-905 and Enrico Fermi Drive, will be completed in the fall of 2015. In the future, the completion of SR-11 is expected to provide better connectivity with Mexico, by connecting to the anticipated new Otay Mesa East POE. SR-11 will be directly connected to SR-905 thus expanding the utilization of SR-125 potentially as a trade and goods movement corridor.

Segments 2 and 3 are comprised of six freeway lanes from SR-54 to SR-94. The respective jurisdictions of this urbanized area are the community of Spring Valley and the City of Lemon Grove. This section of freeway has been divided into two segments due to the Jamacha Road interchange. The Jamacha Road under-crossing is a major roadway connection to the growing community of Spring Valley and a major back road connection to the expanding south eastern section of San Diego County. These connections contribute to a substantial traffic volume increase between Segments 2 and 3.

¹¹⁶ 2040 Horizon Year forecast includes all proposed improvements in the SANDAG series 12 Revenue Constrained Transportation Model

The freeway link between SR-54 and SR-94 provides a southern linkage to I-805, a western linkage to I-5 and SR-15, and an eastern linkage to I-8 and SR-52. This linkage validates the SR-125 as a needed internal regional connection within San Diego County. AM and PM peak hour directional splits are close in value but the peak definitions are still recognizable. Northbound peak is in the AM and southbound peak is in the PM.

At the northern end of *Segment 3*, there is intermittent traffic delay when the northbound SR-125 traffic merges with eastbound SR-94. The traffic delay is due to the reduction from four to three freeway lanes just north of the Spring Street undercrossing (UC)¹¹⁷ on SR-125 in Segment 4.

Segment 4 starts at the junction of SR-94 and extends to the interchange of the I-8 freeway. This urbanized area is comprised of the cities of Lemon Grove and La Mesa. One challenge for this SR-125 segment is that it carries the route's highest traffic volume while it carries the constraint of being a Scenic Highway. As a Scenic Highway, roadway improvements, land use, and density of development adjacent to the highway, are regulated. Identified in Segment 3, the northbound direction has intermittent delays when northbound SR-125 traffic merges with eastbound SR-94 traffic volumes. In Segment 4 northbound, that intermittent delay becomes a bottleneck between the junction of SR-94 and the Lemon Avenue UC due to lane reductions and increased traffic volumes. This bottleneck is strongest during the PM peak hour, but it occasionally occurs in the AM peak hour of travel.

In the southbound direction of Segment 4, a PM peak hour bottleneck occurs due to many contributing factors. The first factor is the merging of two lanes of traffic volume from the I-8 freeway to freeway connector ramps with two through lanes of traffic already traveling on southbound SR-125. By the Lemon Avenue UC, a short distance away, the four lanes of travel are then reduced to three lanes. The lane reduction is followed by a curve in the roadway just north of the Mariposa Street OC.¹¹⁸ An analysis to provide interim widening concluded that the Mariposa Street OC had bridge abutments right next to the roadway; therefore, restriping the freeway to add a lane was not possible. A final bottleneck factor is the lack of a direct freeway to freeway connector ramp from southbound SR-125 to eastbound SR-94 at Spring Street. Currently, Spring Street is a high volume off-ramp with a controlled signal at the bottom and the only access to eastbound SR-94 from southbound SR-125. This is by far a substantial contributor to the bottleneck. Beyond Spring Street to the west, traffic is frequently delayed due to the divergence of traffic onto the SR-125 southbound freeway connector and the merge of the SR-94 westbound traffic.

An additional area of concern is the connection of northbound SR-125 to westbound I-8. During the AM peak hours this connector on-ramp to westbound I-8 is metered thus creating delay in the slow lane. Even with this delay, the other lanes of travel on SR-125 northbound are not heavily impacted. This intermittent delay may need further study in the future.

Based on the SANDAG 2050 RTP (2011), future plans for Segment 4 are to build the missing freeway to freeway connectors between SR-125 and SR-94; along with, the expanding the freeway lanes to ten lanes with two managed lanes (ML).

¹¹⁷ UC = Bridge Undercrossing Freeway

¹¹⁸ OC = Bridge Overcrossing Freeway

Segment 5 starts at the freeway to freeway interchange of I-8 and ends just north of the junction with SR-52 at Mission Gorge Road in Santee. The jurisdictions surrounding this segment are the cities of La Mesa, El Cajon, San Diego, and Santee. At the junction to I-8, the urbanized areas are along the edge of the freeway right of way. By the conclusion of this segment, there are open lands and green space skirting the right of way. The roadbed in Segment 5 has wide lanes and open median spacing. In addition to the interchange at I-8, this segment has gentle curves in the roadway and many auxiliary lanes for major connectors joining the freeway at Fletcher Parkway, Navajo Road, and Grossmont College. From the beginning to the end, the lanes of travel vary anywhere from six to eight lanes with the majority of the segment having six lanes of travel. Opened in 2001, this segment is one of the newer additions to SR-125.

At the junction of SR-125 northbound to SR-52 westbound, there is recurring traffic delay during the AM peak hours. This new connector did not alleviate the existing AM peak hour congestion due to lane configurations already established on westbound SR-52. Two lanes of through traffic volumes on westbound SR-52 and two lanes of connector traffic volumes from northbound SR-125 merge together into three lanes of westbound travel. The three lanes on westbound SR-52 are immediately decreased to two lanes in conjunction with the merging traffic from the Mission Gorge Road on-ramp. Effectively, five lanes of westbound travel are decreased to two lanes of travel in a short distance. Based on this lane configuration, a delay is created on northbound SR-125 as well as SR-52. Further study of this junction will be necessary in the future.

As reflected in Table 13, there are no existing managed lanes on SR-125 from beginning to end. The SANDAG 2050 RTP (2011)¹¹⁹ has a different configuration for future managed lanes on this route. Segment 4 is projected to add one managed lane in each direction by the year 2040. On Segments 1 and 5 there are no anticipated future managed lanes but Segments 2 and 3 show the addition of two new managed lanes by the year 2050. Table 13 represents a horizon year of 2040; therefore, it does not reflect the year 2050 from the 2050 SANDAG RTP (October 2011) projections.

At this point, future revenue constrained SANDAG 2050 RTP (October 2011) lane changes should be noted. The projections are:

- ❖ 2050: Segment 1 upgrades from four existing toll/freeway lanes to eight future freeway lanes.
- ❖ 2030: Segment 4 upgrades to ten future freeway lanes.

On all segments, truck traffic is approximately 4.00-4.40 percent of the AADT. This percentage would be inclusive of all 2 axle to 5+ axle trucks. Segment 1 is within 2 miles of the Otay Mesa POE linking the United States to Mexico. This is a full service POE serving both commercial, passenger vehicles, and pedestrian crossing. Segment 1 is designated as a California Legal Route for freight.¹²⁰ In addition, the border connection contributes to this route's connection to the National Network of federal interstates for freight movement. SR-125 is a north/south connection for the interregional transport of products from the POE to San Diego County and other parts of California. Due to close proximity to the Otay Mesa and Otay Mesa East ports of entry, SR-125 has the propensity to have increased truck traffic in the future. For more details refer to the Freight Section (page 46) of this report.

¹¹⁹ SANDAG 2050 RTP (released October 2011), Revenue Constrained Plan Focus

¹²⁰ Surface Transportation Assistance Act (STAA)- <http://www.dot.ca.gov/hq/traffops/engineering/trucks/routes/ta-process.htm>

Table 13: Corridor Performance¹²¹

Segment #	1		2		3		4		5	
Direction	North	South	North	South	North	South	North	South	North	South
Location Description	SR-905 to SR-54 (Toll Road)		SR-54 (Toll Road) to Jamacha Road		Jamacha Road to SR-94 (Westbound Junction)		SR-94 (Eastbound Junction) to I-8		I-8 to SR-52/Mission Gorge Road	
Post Miles	Begin	End	Begin	End	Begin	End	Begin	End	Begin	End
	L000.000	009.251	009.251	010.622	010.622	012.999	012.967	R015.409	R015.409	022.301
Basic System Operations¹²²										
AADT¹²³ (BY)¹²⁴ 2012 5-Day¹²⁵	16,800	14,800	45,654	44,346	55,292	53,708	80,656	78,344	45,555	42,354
AADT (HY)¹²⁶ 2040	26,400	25,000	64,036	64,636	94,540	92,953	117,939 + 3,506 (HOV ¹²⁷)	125,396 + 3,441 (HOV)	60,559	67,541
AADT: Growth Rate Per Year	2.24%	2.24%	1.53%	1.53%	2.57%	2.57%	2.00%	2.00%	1.64%	1.64%
Peak Hour Volumes (BY) AM/PM¹²⁸	2,280/ 990	820/ 1,760	2,944/ 3,277	2,434/ 3,283	3,565/ 3,969	2,948/ 3,976	5,215/ 5,805	4,331/ 5,827	3,678/ 3,526	2,722/ 3,455
Peak Hour Volumes (HY) AM/PM	3,583	1,385	4,164/ 4,443	4,188/ 4,292	6,132/ 8,234	5,340/ 6,395	8,048/ 8,896 + 110/176 (HOV)	7,621/ 8,851 + 149/148 (HOV)	5,114/ 3,912	3,853/ 5,562
LOS¹²⁹ Method	HCM ¹³⁰	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM
Segment LOS (BY)	LOS C / AM	LOS B / PM	LOS B / PM	LOS C / PM	LOS C / PM	LOS C / PM	LOS E / PM	LOS E / PM	LOS B / AM	LOS C / PM

¹²¹ Segment 6 is not included in the Corridor Performance table since it is unconstructed.

¹²² Source: and Caltrans Travel Forecasting Branch

¹²³ AADT = Annual Average Daily Traffic

¹²⁴ BY = Base Year 2012

¹²⁵ 5-Day = Compiled traffic data does not include Saturday, Sunday, or Holidays is used throughout Table 12.

¹²⁶ HY = Horizon (future) Year 2040

¹²⁷ HOV = High Occupancy Vehicle with 2 or more occupants per vehicle

¹²⁸ AM/PM = Peak Hour for the morning (AM) and evening (PM)

¹²⁹ LOS = Level of Service on the freeway

¹³⁰ HCM = Highway Capacity Manual

Segment #	1		2		3		4		5	
Direction	North	South	North	South	North	South	North	South	North	South
Segment LOS (HY)	LOS E / AM	LOS C / PM	LOS C / PM	LOS D / PM	LOS F / PM	LOS F / PM	LOS E / PM	LOS D / PM	LOS C / AM	LOS D / PM
VMT ¹³¹ (BY)	155,417	136,915	62,592	60,798	131,429	127,664	196,962	191,316	313,965	291,904
VMT (HY)	244,226	231,275	88,793	88,616	224,722	220,949	288,007	306,217	417,373	465,493
Vehicle Occupancy Rate ¹³² (BY)	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Vehicle Occupancy Rate (HY)	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Daily Vehicle Hours of Delay (35 MPH) ¹³³ (BY)			NB AM = 123 Daily Vehicle Hours of Delay ¹³⁴ SB PM = 71 Daily Vehicle Hours of Delay							
Daily VHD ¹³⁵ (35 MPH) Method			PeMS ¹³⁶	PeMS						
Daily Vehicle Hours of Delay (60 MPH)(BY)			NB AM = 294 Daily Vehicle Hours of Delay SB PM = 170 Daily Vehicle Hours of Delay							
Daily VHD (60 MPH) Method			PeMS	PeMS	PeMS	PeMS	PeMS	PeMS	PeMS	PeMS
Truck Traffic										
Total Average Annual Daily Truck Traffic (AADTT) (BY)	1,264		3,960		4,796		6,996		3,868	

¹³¹ VMT = Vehicle Miles Traveled

¹³² Source: SANDAG 2006 Vehicle Occupancy and Classification Survey Technical Report, November 2006

¹³³ MPH = Miles Per Hour

¹³⁴ Analyzed data for years 2011, 2012, and 2013 from PeMS data and decided data from 2011 is best to use for 35 and 60 MPH.

¹³⁵ VHD = Vehicle Hours of Delay

¹³⁶ PeMS = Caltrans Performance Measurement System <http://pems/>

Segment #	1		2		3		4		5	
Direction	North	South	North	South	North	South	North	South	North	South
Total Average Annual Daily Truck Traffic (AADTT) (HY)	2,056		5,662		8,250		10,707		5,636	
Total Trucks (% of AADT) (BY)	4.0%		4.4%		4.4%		4.4%		4.4%	
Total Trucks (% of AADT)(HY)	4.0%		4.4%		4.4%		4.4%		4.4%	
5+ Axle AADTT (BY)	291		911		1,103		1,609		890	
5+ Axle AADTT (HY)	473		1,302		1,898		2,463		1,296	
5+ Axle Trucks (as % of AADT) (BY)	23.0%		23.0%		23.0%		23.0%		23.0%	
5+ Axle Trucks (as % of AADT) (HY)	23.0%		23.0%		23.0%		23.0%		23.0%	
Bottlenecks										
Bottleneck Existing	No	No	No	No	No	No	Yes	Yes	No	No
Bottleneck Location							Between Junction SR-94/ SR-125 and Lemon Avenue Off-Ramp	Between Junction I-8/SR-125 and Junction SR-125/ SR-94		
Bottleneck Queue (length)							1.557 Miles	2.577 Miles		

Segment #	1		2		3		4		5	
Direction	North	South	North	South	North	South	North	South	North	South
Bottleneck Causality							Merging traffic and all travel lanes decreased to 2 lanes north of Spring Street U.C. ¹³⁷	Merging traffic from I-8 and lack of a direct connector from southbound SR-125 to eastbound SR-94		
Peak Hour Traffic Data										
Peak Period Length	A.M. 3-hours P.M. 3-hours		A.M. 3-hours P.M. 3-hours		A.M. 3-hours P.M. 3-hours		A.M. 3-hours P.M. 3-hours		A.M. 3-hours P.M. 3-hours	
Peak Hour Direction	NB – AM	SB – PM	NB – AM	SB – PM	NB – AM	SB – PM	NB – AM	SB – PM	NB AM and PM	
Peak Hour Time of Day	7-8 AM	5-6 PM	7-8 AM	5-6 PM	7-8 AM	5-6 PM	7-8 AM	4-5 PM	7-8 AM	5-6 PM
Peak Hour Directional Split (BY) AM%/PM%	74/36	26/64	55/45	49.9/50.1	55/49.9	45/50.1	55/49.9	45/50.1	57/51	43/49
Peak Hour Directional Split (HY) AM%/PM%	72/37	28/63	49.9/51	50.1/49	53/56	47/44	51/50.2	49/49.8	57/41	43/59
Peak Hour VMT (BY)	21,092	16,282	4,493	4,501	9,434	9,451	14,168	14,230	25,349	23,812
Peak Hour VMT (HY)	33,146	24,228	6,091	5,884	19,572	15,201	22,154	21,976	35,246	38,333
Peak Hour V/C¹³⁸ (BY)	0.57	0.44	0.46	0.55	0.66	0.66	0.97	0.97	0.40	0.54
Peak Hour V/C (HY)	0.90	0.66	0.62	0.72	1.37	1.07	0.89	0.89	0.56	0.87

¹³⁷ U.C.= Bridge Under Crossing

¹³⁸ V/C = The ratio of demand to capacity which measures the extent to which capacity is exceeded during the analysis period.

Segment #	1		2		3		4		5	
Direction	North	South	North	South	North	South	North	South	North	South
Peak Hour Average Speed (MPH)(BY)			NB AM = 53 MPH Peak Hour Average Speed SB PM = 58 MPH Peak Hour Average Speed							
Peak Hour Vehicle Hours of Delay (35 MPH) (BY)			NB AM = 41 Average Peak Hour Vehicle Hours of Delay SB PM = 18 Average Peak Hour Vehicle Hours of Delay							
Peak Hour Vehicle Hours of Delay (35 MPH) Method			PeMS	PeMS	PeMS	PeMS	PeMS	PeMS	PeMS	PeMS
Peak Hour Vehicle Hours of Delay (60 mph) (BY)			NB AM = 105 Average Peak Hour Vehicle Hours of Delay SB PM = 45 Average Peak Hour Vehicle Hours of Delay							
Peak Hour VHD (60 MPH) Method			PeMS	PeMS	PeMS	PeMS	PeMS	PeMS	PeMS	PeMS
Managed Lanes Performance										
AADT (BY)							None	None		
AADT (HY)							3,506	3,441		
AADT Method							SANDAG ¹³⁹	SANDAG		
LOS Method							HCM	HCM		
VMT (BY)							Not Applicable	Not Applicable		
VMT (HY)							8,562	8,403		

¹³⁹ SANDAG-Series 12 Transportation Model <http://www.sandag.org/>

KEY CORRIDOR ISSUES

The following are key corridor issues for the SR-125 corridor that have been identified in this TCR. The key corridor issues should be acknowledged and be part of the analysis for any projects that will impact or affect the SR-125.

- ❖ Additional improvements may be needed in the SR-125 corridor to provide for the efficient movement of people and freight. Higher future traffic volumes will put a strain on many segments of the existing travel way. The managed lanes proposed in Segments 2, 3, and 4 along with additional general purpose lanes in Segments 1 and 4 can assist in carrying the additional traffic volumes. These lanes are all proposed between 2030 and 2050. In addition, the installation of ramp metering is expected in Segments 4 and 5. If demand expands faster than expected, these projects will need to be reevaluated and possibly have their timelines moved forward. When these projects are analyzed, consideration should also include additional transit facilities to support an integrated multimodal approach to handling future travel demand.
- ❖ The addition of freeway to freeway connector ramps between SR-905, SR-11, and SR-125 have the potential to add additional travel demand on the SR-125 corridor. Funding for this project is being provided from several sources. SANDAG is supplying funds for design. The construction funding package is comprised of funds provided from SANDAG, anticipated from Caltrans' SHOPP, and being applied for from the Federal TIGER program. The connectors will improve San Diego County's ability to connect with the United States and Mexico border area and play a role in improved freight movement. In addition, new growth and infrastructure development in Segment 1 will increase the demand on SR-125. With the cost of the tolls acting as a constraint at this end of the corridor, the additional travel demand and tolling fees should be monitored.
- ❖ Rapid bus travel, pedestrian accessibility, bicycling interconnectivity, and light rail convenience needs to become a stronger focus throughout this corridor to accommodate improved multimodal transportation needs. In all projects, operational and safety improvements should be considered for all segments.
- ❖ Near term plans show freeway to freeway connectors from SR-125 to SR-94 in Segment 4. Currently there is a southbound SR-125 PM peak period bottleneck from traffic coming from southbound SR-125, east and westbound I-8, and westbound SR-94 (to Spring Street). This is caused by a reduction in lanes on southbound SR-125 and large traffic volumes exiting at the Spring Street off-ramp to access the eastbound SR-94 on-ramp. The signal controlled ramp exit contributes to the bottleneck. The new freeway to freeway connectors should assist in alleviating this problem. Future studies should be done to analyze widening this section of SR-125 to alleviate the lane reduction. It should also be noted that this portion of the route is designated as a Scenic Highway.
- ❖ At the junction of SR-125 northbound and SR-94 eastbound in Segment 4, the lanes are reduced from 5 lanes to 3 lanes within a short distance. Because of this reduction, there is intermittent traffic delay. Once the traffic reaches Lemon Avenue the freeway widens back out and the bottleneck is relieved. Future studies should be done to analyze widening this section of SR-125

to alleviate the lane reduction. It should also be noted that this portion of the route is designated as a Scenic Highway.

- ❖ Segments 4 and 5 have an additional area of concern at the connection of northbound SR-125 to westbound I-8. During the AM peak hours this connector on-ramp to westbound I-8 is metered thus creating delay in the SR-125 northbound slow lane. Even with this delay, the other lanes of travel on SR-125 northbound do not appear to be heavily impacted. This intermittent delay may need further study and evaluation in the future.
- ❖ At the junction of northbound SR-125 to westbound SR-52, there is intermittent traffic delay during the AM peak hours. Two lanes of through traffic volumes on westbound SR-52 and two lanes of northbound SR-125 connector ramp traffic volumes merge together into three lanes of westbound travel. The three lanes on SR-52 are immediately decreased to two lanes in conjunction with the merging vehicles from the Mission Gorge Road on-ramp. Effectively, five lanes of westbound travel are decreased to two lanes of travel in a short distance. Based on this lane configuration, a delay is created on northbound SR-125. Further study of this junction will be necessary in the future.
- ❖ The legal description of SR-125 still contains the route link between the Cities of Santee and Poway, and the County of San Diego. This report recommends discussions with the City of Santee, the City of Poway, the County of San Diego, SANDAG, and Caltrans to take legislative steps to eliminate Segment 6 from State Highway System and the formal description in Section 425 of the California Streets and Highways Code.

CORRIDOR CONCEPT

CONCEPT RATIONALE

SR-125 is a route that has the distinction of providing vehicles a link to other major routes within San Diego County. With its completion from the South Bay area to the City of Santee, SR-125 has provided interregional connectivity that was previously lacking. Future system operations and management concepts need to be further developed for this transportation corridor due to increased future facility usage and additional needs placed on the transportation system. The focus on these future operations and management should include corridor preservation and new technologies. The completion of State Route 11 (SR-11) at the United States and Mexico international border has the potential to add additional future stress to the SR-125 corridor and adjacent areas due to its proximity to SR-125 and should be monitored. The SANDAG 2050 Regional Transportation Plan (2011) describes the long-term (beyond the 20 year planning period) requirements for particular segments. Long term needs are determined by investigation and analysis of Community Plans, General Plans, Transportation Plans, Land Use Plans, Environmental Documents, and other planning documents. This TCR has already described in detail many of the existing and future needs for SR-125. Horizon Year (2040) needs could include the construction of additional general purpose lanes, the addition of High Occupancy Vehicle (HOV) lanes or Managed Lanes (ML), and/or interchange improvements.

To meet future responsibilities for interregional connectivity, system operations and management concepts need to be further developed along with planned capital capacity increasing projects for the

corridor. With technology constantly changing, provisions need to be updated and expanded to allow the traveling public to make informed decisions for their traveling needs. Among the projects and strategies that need to be included in these updates are:

- ❖ Transportation Demand Management Strategies.
- ❖ Intelligent Transportation Systems.
- ❖ Transportation Management System.
- ❖ Multi-modal (highway, bicycle, pedestrian, transit, freight) capital project strategies.

PLANNED AND PROGRAMMED PROJECTS AND STRATEGIES TO ACHIEVE CONCEPTS

Transportation planning is a dynamic process; therefore, the corridor concept for SR-125 is subject to change based on future transportation studies. Some future projects and strategies have already been planned and programmed for the SR-125 corridor. These projects are identified in Table 14, Planned and Programmed Projects and Strategies to Achieve Concepts, below.

Table 14: Planned and Programmed Projects and Strategies to Achieve Concepts

Segment	Segment Description	Description	Planned or Programmed	Location	Source	Purpose	Implementation Phase
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	Add 4 Freeway Lanes (8F)	Planned	SR-905 to San Miguel Road	SANDAG 2050 RTP ¹⁴⁰	System Expansion	Revenue Constrained Plan – Phased Highway Projects 2050
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	Add 4 Freeway Lanes (8F)	Planned	San Miguel Road to SR-54	SANDAG 2050 RTP	System Expansion	Revenue Constrained Plan – Phased Highway Projects 2050
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	Add East and West to North (3 Freeway Connectors)	Programmed	EB SR-905 to NB SR-125; WB SR-905 to NB SR-125; WB SR-11 to NB SR-125	SANDAG RTIP ¹⁴¹	System Management	Phased Highway Projects 2020
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	Add South to East (2 Freeway Connectors)	Planned	SB SR-125 to EB SR-905 and SB SR-125 to EB SR-11	SANDAG RTIP	System Management	Phased Highway Projects 2022

¹⁴⁰ RTP = Regional Transportation Plan (October 2011)

¹⁴¹ RTIP = Regional Transportation Improvement Program (September 2014)

Segment	Segment Description	Description	Planned or Programmed	Location	Source	Purpose	Implementation Phase
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	South Bay Bus Rapid Transit	Programmed	Otay Ranch to Downtown San Diego	SANDAG RTIP	Transit System Expansion	Phased Highway Projects 2018
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	New Interchange	Conceptual Planned	SR-125/Main Street (Rock Mountain Road)	City of Chula Vista General Plan and DIF	System Management	To Be Determined (TBD)
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	New Interchange	Conceptual Planned	SR-125/Otay Valley Road	City of Chula Vista General Plan and DIF ¹⁴²	System Management	TBD
1	SR-905/Otay Mesa Road to SR-54 (Toll Road) PM: L000.000-009.251	New Interchange	Conceptual Planned	SR-125/Lone Star Road	2014 Border Master Plan ¹⁴³	System Management	TBD
2	SR-54 to Jamacha Road PM: 009.251-010.622	Add slope/gore paving,.mvp, ¹⁴⁴ gates/fencing; relocate appurtenances away from traffic	Planned	San Diego and Lemon Grove from 0.1 mile south of Elkeltion Place U.C. to SR-125/SR-94	2013 10-Year SHOPP ¹⁴⁵	System Management	TBD
2	SR-54 to Jamacha Road PM: 009.251-010.622	Add median barrier.	Planned	In and near Lemon Grove, from Elkeltion Boulevard to Troy Street	2013 10-Year SHOPP	System Management	TBD
2	SR-54 to Jamacha Road PM: 009.251-010.622	Median erosion repair.	Planned	In San Diego and Lemon Grove from Paradise Valley Road O.C.	2013 10-Year SHOPP	System Preservation	TBD

¹⁴² Resource: City of Chula Vista General Plan (Land Use), <http://www.keepsandiegomoving.com/Documents/SouthBay-BRT/Chula%20Vista%20SB%20BRT%20Gen%20Plan%20Sections.pdf>

¹⁴³ Resource: [California-Baja California Border Master Plan](#) (July 2014)

¹⁴⁴.mvp = maintenance vehicle pullout

¹⁴⁵ SHOPP = State Highway Operation and Protection Program

Segment	Segment Description	Description	Planned or Programmed	Location	Source	Purpose	Implementation Phase
2	SR-54 to Jamacha Road PM: 009.251-010.622	Add 2 Managed Lanes to 6 Freeway lanes (6F + 2 ML)	Planned	SR-54 to SR-94	SANDAG 2050 RTP	System Management	Revenue Constrained Plan – Phased Highway Projects 2050
3	Jamacha Road to SR-94 (Westbound Junction) PM: 010.622-012.999						
3	Jamacha Road to SR-94 (Westbound Junction) PM: 010.622-012.999	Add NB Auxiliary Lane	Planned	Jamacha Road Entrance Ramp to the SR-94/SR-125 Connector Ramps	2013 10-Year SHOPP	System Management	TBD
3	Jamacha Road to SR-94 (Westbound Junction) PM: 010.622-012.999	Add slope/gore paving,.mvp, gates/fencing; relocate appurtenances away from traffic	Planned	San Diego and Lemon Grove from 0.1 mile south of Elkelton Place UC to SR-125/SR-94	2013 10-year SHOPP	System Management	TBD
3	Jamacha Road to SR-94 (Westbound Junction) PM: 010.622-012.999	Add median barrier	Planned	In and near Lemon Grove, from Elkelton Boulevard to Troy Street	2013 10-year SHOPP	System Management	TBD
3	Jamacha Road to SR-94 (Westbound Junction) PM: 010.622-012.999	Median erosion repair	Planned	In San Diego and Lemon Grove from Paradise Valley Road Overcrossing	2013 10-Year SHOPP	System Preservation	TBD
3	Jamacha Road to SR-94 (Westbound Junction) PM: 010.622-012.999	Add pavement Rehabilitation	Planned	In San Diego County from Jamacha Road to SR-125/SR-94	2013 10-Year SHOPP	System Preservation	TBD
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	South to East (Freeway Connector)	Programmed	SB SR-125 to EB SR-94	SANDAG 2050 RTIP	System Management	Phased Highway Projects 2020
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	West to North (Freeway Connector)	Planned	WB SR-94 to NB SR-125	SANDAG 2050 RTP	System Management	Revenue Constrained Plan – Phased Highway Projects 2030

Segment	Segment Description	Description	Planned or Programmed	Location	Source	Purpose	Implementation Phase
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add 2 Freeway Lanes	Planned	SR-94 to I-8	SANDAG 2050 RTP	System Expansion	Revenue Constrained Plan – Phased Highway Projects 2030
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add 2 Managed Lanes	Planned	SR-94 to I-8	SANDAG 2050 RTP	System Management	Revenue Constrained Plan – Phased Highway Projects 2040
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add ramp meters	Planned	Connector from SR-94 Westbound to SR-125 Northbound	2013 10-Year SHOPP	System Management	TBD
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add sidewalk	Planned	North side of Mariposa Street Overcrossing	City of La Mesa Bicycle Facilities and Alternate Transportation Plan ¹⁴⁶	System Enhancement	TBD
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add Class II - Spring Street Bike Lanes-Share Facility	Planned	Fresno Avenue to SR-94	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add Class II - La Mesa Boulevard Bike Lanes-Share Facility	Planned	Grossmont Boulevard to Grossmont Center Drive	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add Class II - Grossmont Boulevard Bike Lanes-Share Facility	Planned	Lake Murray Boulevard to Bancroft Drive	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add Class II - Bancroft Drive Bike Lanes-Share Facility	Planned	Grossmont Drive and Severin Drive	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD

¹⁴⁶ Resource: City of La Mesa, Bicycle Facilities and Alternate Transportation Plan (February 2012)
<http://www.cityoflamesa.com/DocumentCenter/Home/View/2477>

Segment	Segment Description	Description	Planned or Programmed	Location	Source	Purpose	Implementation Phase
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add Class III - Fresno Avenue/Upland Street/Mariposa Street Bike Lanes-Share Facility	Planned	Spring Street to Bancroft Drive	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add Class III - Panorama Street/Terrace Drive Bike Lanes-Share Facility	Planned	Bancroft Drive to Mariposa Street	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
4	SR-94 (Eastbound Junction) to I-8 PM: 012.967-R015.409	Add Class III - Lemon Avenue/Grant Avenue Bike Lanes-Share Facility	Planned	Bancroft Drive to La Mesa Boulevard	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
5	I-8 to SR-52/Mission Gorge Road PM: R015.409-022.301	Add slope/gore paving, mvp, gates/fencing; address NPDES deficiencies, vegetative transient habitat/fire hazard, inert material/sustainable landscape rehab, RICS/irrigation upgrade for worker safety; relocate appurtenances	Planned	In La Mesa, El Cajon, and Santee from Amaya Drive OC to SR-125/SR-52 separation	2013 10-Year SHOPP	System Preservation	TBD
5	I-8 to SR-52/Mission Gorge Road PM: R015.409-022.301	Add ramp meters	Planned	Southbound ramps at Grossmont, Navajo, and Amaya Drive	2013 10-Year SHOPP	System Management	TBD
5	I-8 to SR-52/Mission Gorge Road PM: R015.409-022.301	Add sidewalk	Planned	South side of Murray Drive Undercrossing	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
5	I-8 to SR-52/Mission Gorge Road PM: R015.409-022.301	Add sidewalk	Planned	North side of Fletcher Parkway Undercrossing	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
5	I-8 to SR-52/Mission Gorge Road PM: R015.409-022.301	Add Class II - Grossmont Center Drive Bike Lanes-Share Facility	Planned	La Mesa Boulevard and I-8 off-ramp	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD

Segment	Segment Description	Description	Planned or Programmed	Location	Source	Purpose	Implementation Phase
5	I-8 to SR-52/Mission Gorge Road PM: R015.409-022.301	Add Class II - Murray Drive Bike Lanes-Share Facility	Planned	Severin Drive/I-8 and Grossmont Center Drive	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
5	I-8 to SR-52/Mission Gorge Road PM: R015.409-022.301	Add Class III - Wakarusa Street/Center Street Bike Lanes-Share Facility	Planned	Grossmont Center Drive to Murray Drive	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
5	I-8 to SR-52/Mission Gorge Road PM: R015.409-022.301	Add Class III - Dallas Street Bike Lanes-Share Facility	Planned	Lake Murray Boulevard to Fletcher Parkway	City of La Mesa Bicycle Facilities and Alternate Transportation Plan	System Enhancement	TBD
5	I-8 to SR-52/Mission Gorge Road PM: R015.409-022.301	Add Class II - Prospect Drive Bike Lanes-Share Facility	Planned	Fanita Drive to Mesa Road	City of Santee Bicycle Plan ¹⁴⁷	System Enhancement	TBD
6	SR-52/Mission Gorge Road to Poway/Espola Road PM: 022.301-030.400	Unconstructed					

¹⁴⁷ Resource: City of Santee Bicycle Master Plan (October 2009), <ftp://sntbberry.cityofsanteeca.gov/PlanDocs/SNTBMP2009Final.pdf>

APPENDIX

APPENDIX A GLOSSARY OF TERMS AND ACRONYMS

AADT	Annual Average Daily Traffic
AADTT	Annual Average Daily Truck Traffic
ADA	Americans with Disabilities Act of 1990
ADT	Average Daily Traffic
BY	Base Year (2010)
Cal EPA	California Environmental Protection Agency
CALTRANS	California Department of Transportation
CCAA	California Clean Air Act
CCTV	Closed Circuit Television
CEQA	California Environmental Quality Act
CL	California Legal Route
CMS	Changeable Message Sign
CO	Carbon Monoxide
CPA	Community Planning Association
CPG	Community Planning Group
CRFC	Critical Rural Freight Corridors
CSMP	Corridor System Management Plan
CTC	California Transportation Commission
DSMP	District System Management Plan
E (EB)	Eastbound
FAST	Free and Secured Trade
FCAA	Federal Clean Air Act
FHWA	Federal Highway Administration
GA	General Aviation
GHG	Green House Gases
GSA	United States General Service Administration
GP	General Purpose Lanes
HCM	Highway Capacity Manual
HOT	High Occupancy Toll Lane
HOV	High Occupancy Vehicle
HY	Horizon Year (2035)
IGR	Inter-governmental Review
INRMP	Integrated Natural Resources Management Plan
IRRS	Interregional Route System
ITS	Intelligent Transportation System
KPRA	King-to-rear-axle
LOS	Level of Service
LRT	Light Rail Transit
MAP-21	Moving Ahead for Progress in the 21 st Century
MCAS	Marine Corps Air Station
ML	Managed Lanes
MPH	Miles Per Hour
MPO	Metropolitan Planning Organization
MTS	Metropolitan Transit System
MVP	Maintenance vehicle pullout
N (NB)	Northbound

NAFTA	North American Free Trade Agreement
NFN	National Freight Network
NOA	Naturally Occurring Asbestos
NAAQS	National Ambient Air Quality Standard
NEPA	National Environmental Policy Act
NHS	National Highway System
NO ₂	Nitrogen Dioxide
OC	Overcrossing
O ₃	Ozone
PeMS	Caltrans Performance Measurement System
PFN	Primary Freight Network
PM	Post Mile
PM	Particulate Matter
POE	Port of Entry
PSR	Project Study Report
"RAPID" (BRT)	SANDAG defined Term Rapid for Bus Rapid Transit
RM	Ramp Metering
ROW	Right-of-Way
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program
S (SB)	Southbound
SANDAG	San Diego Association of Governments
SBX	South Bay Expressway
SENTRI	Secure Electronic Network for Travelers Network Inspection
SCS	Sustainable Community Strategy
SHOPP	State Highway Operation and Protection Program
SHS	State Highway System
SIP	State Implementation Plan
SMS	Short Message Service
STIP	State Transportation Improvement Program
STAA	Surface Transportation Assistance Act
SVAC	Sweetwater Valley Civic Association
TBD	To Be Decided
TCR	Transportation Concept Report
TIS	Traffic Impact Study
TMS	Transportation Management System
TransNet	Half-cent regional sales tax of local transportation projects
TSN	Transportation System Network
UC	Undercrossing
USEPA	United States Environmental Protection Agency
V/C	Ratio of Demand to Capacity
VDS	Vehicle Detection Station
VHD	Vehicle Hours of Delay
VMT	Vehicle Miles Traveled
W (WB)	Westbound

DEFINITIONS

AADT – Annual Average Daily Traffic - The total traffic volume for the year divided by 365 days. The traffic count year runs from October 1st through September 30th. Traffic counting is generally performed by electronic counting instruments moved to locations throughout the state in a program of continuous traffic count sampling. The resulting counts are adjusted to an estimate of the annual average daily traffic by compensating for seasonal influence, weekly variation and other variables which may be present. Annual ADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways and other purposes.

Base year – The year of the most current data available to Caltrans District Offices.

Bikeway Class I (Bike Path) – Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.

Bikeway Class II (Bike Lane) – Provides a striped lane for one-way bike travel on a street or highway.

Bikeway Class III (Bike Route) – Provides for shared use with pedestrian or motor vehicle traffic.

Bottlenecks – A location where traffic demand exceeds the effective carrying capacity of the roadway. In most cases, the cause of a bottleneck relates to a sudden reduction in capacity, such as a lane drop, merging and weaving, driver distractions, a surge in demand, or a combination of factors.

Capacity – The maximum sustainable hourly flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, environmental, traffic, and control conditions.

Capital Facility Concept – The 20-25 year vision of future capital facility investments on the route. The capital investment can include capacity increases, bicycle, pedestrian, and transit facilities, grade separations and managed lanes.

Complete Streets - A transportation facility that is planned, designed, operated, and maintained, appropriate to the function and context of the facility, to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists. (See Caltrans Deputy Directive number DD-64-R1).

Concept LOS – The minimum acceptable Level of Service over the next 20-25 years.

Conceptual Project– An improvement or action needed to maintain mobility or to serve multimodal users that is not currently included in a fiscally constrained plan and is not currently programmed. It could be included in a General Plan or in the unconstrained section of a long-term plan.

Corridor – A broad geographical band that follows a general directional flow connecting major sources of trips that may contain a number of streets, highways, bicycle, pedestrian, and transit route alignments. Off system facilities are included for informational purposes and are not analyzed in the TCR.

Environmental Justice – The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. <http://www.epa.gov/environmentaljustice/>.

Goods Movement Corridor – Port-to-border transportation corridors that constitute the State's goods movement backbone. The four corridors identified in California's Goods Movement Action Plan are: Los Angeles-Long Beach-Inland Empire, Bay Area, San Diego/Border, and Central Valley.

Facility Concept – Description of a Facility and strategies that may be needed within 20-25 years. The concept can include capacity increasing, State Highway, bicycle facility, pedestrian facility, transit facility, non-capacity increasing operational

improvements, new managed lanes, conversion of existing managed lanes to another managed lane type or characteristic, TMS field elements, Transportation Demand Management, and Incident Management.

Facility Type – Describes the State Highway. The facility could be freeway, expressway, conventional, or one-way city street.

Federal Functional Classification - The Federal-Aid Highway Act of 1973 required the use of functional highway classification to update and modify the Federal-aid highway systems by July 1, 1976. This legislative requirement is still effective today. http://www.fhwa.dot.gov/planning/processes/statewide/related/functional_classification/fc01.cfm

Focus Route – A phrase specific to the Interregional Transportation Specific Plan. Focus Routes are a subset of the 34 High Emphasis Routes. The routes represent 10 Interregional Road System (IRRS) corridors that should be of the highest priority for completion to minimum facility standards in the 20-year period. Completion of the Focus Routes to minimum facility standards (for most routes freeway or expressway) will assure a statewide trunk system is in place and complete for higher volume interregional trip movements.

Freight Generator – Any facility, business, manufacturing plant, distribution center, industrial development, or other location (convergence of commodity and transportation system) that produces significant commodity flow, measured in tonnage, weight, carload, or truck volume.

Headway – The time between two successive vehicles as they pass a point on the roadway, measured from the same common feature of both vehicles.

High Emphasis Route - Due to the large number of routes and capacity improvements needed on the Interregional Road System, the 1990 IRRS Plan identified 13 of the 87 routes as being the most critical IRRS routes and identified them by the term “High Emphasis Routes”.

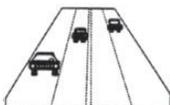
Horizon Year – The year that the future (20-25 years) data is based on.

Intermodal Freight Facility – A freight facility where different transportation modes and networks connect. The freight is transferred (or “transloaded”) from one mode, such as rail, to another, such as a truck.

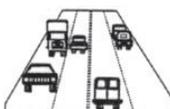
IRRS - Interregional Road System - Consists of State Routes located outside the boundaries of urbanized areas exceeding a population of over 50,000. In some cases, routes have been continued through urban areas to provide connections for continuations of the IRRS routes. Routes in urbanized areas are not eligible for IRRS funding.

ITS – Intelligent Transportation System - Improves transportation safety and mobility and enhances productivity through the integration of advanced communication technologies with the transportation infrastructure and vehicles. Intelligent transportation systems encompass a broad range of wireless and wired communication-based information and electronics technologies to collect information, process it, and take appropriate actions.

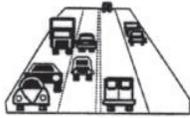
LOS – Level of Service - A qualitative measurement of the perceptions of motorists to operational conditions within a traffic stream. A LOS generally describes the conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort, and convenience. The six levels of service can generally be categorized as follows:



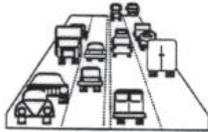
LOS A describes free flowing conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway.



LOS B is also indicative of free-flow conditions. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.



LOS C represents a range in which the influence of traffic density on operations becomes marked. The ability to maneuver with the traffic stream is now clearly affected by the presence of other vehicles.



LOS D demonstrates a range in which the ability to maneuver is severely restricted because of the traffic congestion. Travel speed begins to be reduced as traffic volume increases.



LOS E reflects operations at or near capacity and is quite unstable. Because the limits of the level of service are approached, service disruptions cannot be damped or readily dissipated.



LOS F a stop and go, low speed conditions with little or poor maneuverability. Speed and traffic flow may drop to zero and considerable delays occur. For intersections, LOS F describes operations with delay in excess of 60 seconds per vehicle. This level, considered by most drivers unacceptable often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection.

Multi-modal – The availability of transportation options using different modes within a system or corridor, such as automobile, subway, bus, rail, or air.

Peak Hour – The hour of the day in which the maximum volume occurs across a point on the highway.

Peak Hour Volume – Amount of traffic counted during the hour of the day in which the maximum volume occurs across a point on the highway. It is generally between 6 percent and 10 percent of the ADT. The lower values are generally found on roadways with low volumes.

Peak Period – The part of the day during which traffic congestion on the road is at its highest. Normally, this happens twice a day, once in the morning and once in the evening; the time periods when the most people commute. Peak Period is defined for individual routes, not a District or statewide standard.

Planned Project – An improvement or action in a fiscally constrained section of a long-term plan, such as an approved Regional or Metropolitan Transportation Plan (RTP or MTP), Capital Improvement Plan, or measure.

Post-25 Year Concept – This dataset may be defined and re-titled at the District's discretion. In general, the Post-25 Year concept could provide the maximum reasonable and foreseeable roadway needed beyond a 20-25 year horizon. The post-25 year concept can be used to identify potential widening, realignments, future facilities, and rights-of-way required to complete the development of each corridor.

Post Mile – A post mile is an identified point on the State Highway System. The milepost values increase from the beginning of a route to the next county line. The milepost values start over again at each county line. Milepost values usually increase from south to north or west to east depending upon the general direction the route follows within the state. The milepost at a given location will remain the same year after year. When a section of road is relocated, new mileposts (usually noted by an alphabetical prefix such as "R" or "M") are established for it. If relocation results in a change in length, "milepost equations" are introduced at the end of each relocated portion so that mileposts on the remainder of the route within the county will remain unchanged.

Programmed Project – An improvement or action in a near-term programming document identifying funding amounts by year, such as the State Transportation Improvement Program or the State Highway Operations and Protection Program.

Railroad Class I – The Surface Transportation Board (STB) defines a Class I railroad in the U.S. as a carrier having annual operating revenues of \$250 million or more. This class includes the nation's major railroads. In California, Class I railroads include Union Pacific Railroad (UP) and Burlington Northern Santa Fe Railway (BNSF).

Railroad Class II – STB defines a Class II railroad in the U.S. as having annual carrier operating revenues of less than \$250 million but more than \$20 million. Class II railroads are considered mid-sized, freight-hauling railroad in terms of operating revenues. They are considered "regional railroads" by the Association of American Railroads.

Railroad Class III – Railroads with annual carrier operating revenues of \$20 million or less. The typical Class III is a short line railroad, which feeds traffic to or delivers traffic from a Class I or Class II railroad.

Route Designation – Adopted through legislation to identify what system the route is associated with on the State Highway System. A designation denotes what design standards should apply during project development and design. Typical designations include but not limited to National Highway System (NHS), Interregional Route System (IRRS), Scenic Highway System,

Rural – Fewer than 5,000 in population designates a rural area. Limits are based upon population density as determined by the U.S. Census Bureau

Scenic Highway - When a city or county nominates an eligible scenic highway for official designation, it must identify and define the scenic corridor of the highway. These local agencies must also adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. These ordinances make up the scenic corridor protection program. Landscape Architecture advises the local jurisdictions of the processes and procedures involved in preparing and presenting the applications for scenic highway designations to the California Department of Transportation for approval.

Section 4(f) – Department of Transportation Act "Section 4(f)" [49 USC § 303] – defines protected resources as publicly-owned public parks, recreational areas of national, state or local significance, wildlife or waterfowl refuges; or lands from a historic site of national, state or local significance. Recreational areas include formal and informal facilities, including after-school public use of school playgrounds and recreational facilities.

Segment – A portion of a facility between two points.

Special Route (Truck) Restrictions – A Caltrans list of restrictions on routes pertaining to truck weight, number of axles, or carrying of hazardous materials, etc.

Special Status Consideration - Species of Special Concern Includes fish, amphibians, reptiles, birds, and mammals that the Department of Fish and Game (DFG) has determined are potentially at risk to become threatened or endangered.

Strategic Highway Network (STRAHNET) - Routes that provide defense access, continuity, and emergency capabilities for movement of personnel and equipment in both peace and war. In addition, STRAHNET connectors link important military installations and ports to STRAHNET.

System Operations and Management Concept – Descriptions of system operations and management elements that may be needed within 20-25 years. This can include non-capacity increasing operational improvements (Aux. lanes, channelization's, turnouts, etc.), conversion of existing managed lanes to another managed lane type or characteristic (e.g. HOV land to HOT lane), TMS Field Elements, Transportation Demand Management, and Incident Management.

TASAS - Traffic Accident Surveillance and Analysis System (TASAS) is a source for highway data and collision data. The highway data is updated via construction plan reviews and District TASAS Coordinators. The accident data is provided by the California Highway Patrol (CHP) from their SWITRS database. Caltrans is responsible for coding the accident location and CHP is responsible for coding all other accident information.

TDM – Transportation Demand Management - Programs designed to reduce or shift demand for transportation through various means, such as the use of public transportation, carpooling, telework, and alternative work hours. Transportation Demand Management strategies can be used to manage congestion during peak periods and mitigate environmental impacts.

Terrain – Caltrans documents two types of terrain; the topography of the route corridor and the profile of the roadway. The terrain data in the TCR describes the topography of each route segment and is obtained from TASAS and is characterized subjectively as "Flat," "Rolling," or "Mountainous." The Highway Design Manual defines maximum grades for types of highways and terrain conditions. The types of terrain are categorized as "Level," "Rolling," and "Mountainous." The grade percentage chart can be found in Chapter 200, Table 204.3.

TMS – Transportation Management System - The business processes and associated tools, field elements and communications systems that help maximize the productivity of the transportation system. TMS includes, but is not limited to, advanced operational hardware, software, communications systems and infrastructure, for integrated Advanced Transportation Management Systems and Information Systems, and for Electronic Toll Collection System.

Truck Designation - The California "Truck Network" Route List provides the state route segments and their truck access designations (such as National Network, Terminal Access, California Legal, Advisory, or Restricted) with each segment's beginning and ending Post Miles, and beginning and ending cross streets.

Urban – 5,000 to 49,999 in population designates an urban area. Limits are based upon population density as determined by the U.S. Census Bureau.

Urbanized – Over 50,000 in population designates an urbanized area. Limits are based upon population density as determined by the U.S. Census Bureau.

VMT – Vehicle Miles of Travel - The total number of miles traveled by motor vehicles on a road or highway segment.

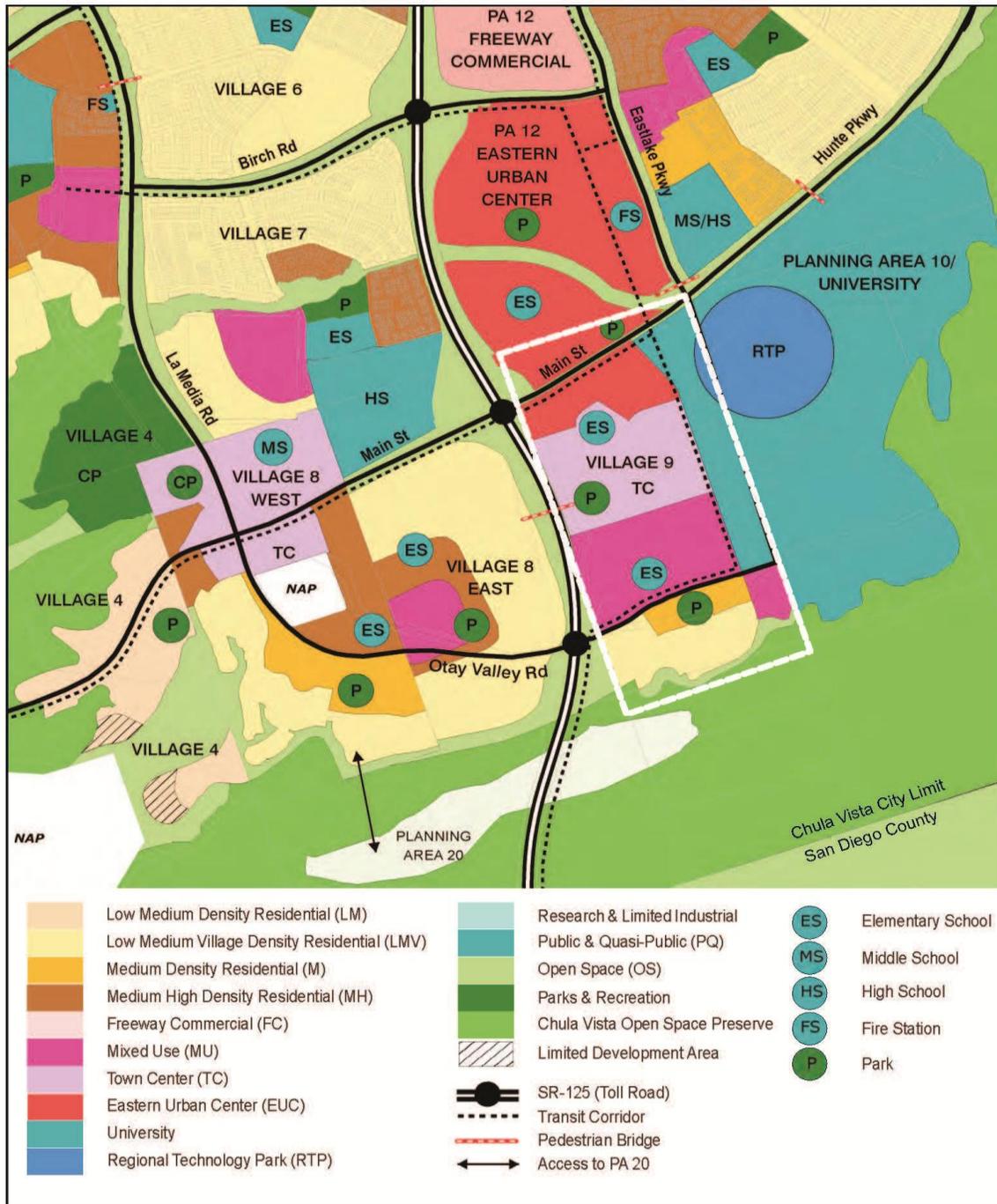
**APPENDIX B
ADDITIONAL CORRIDOR DATA**

South Bay Rapid Map



Source: SANDAG, http://www.keepsandiegomoving.com/SouthBayRapid/south_bay_rapid.aspx (February 2015)

Otay Ranch Villages Map



Source: William Hezmalhalch Architects, Inc. 2012

Not to Scale



EXISTING AND PLANNED LAND USES IN THE PROJECT VICINITY
FIGURE 3-2

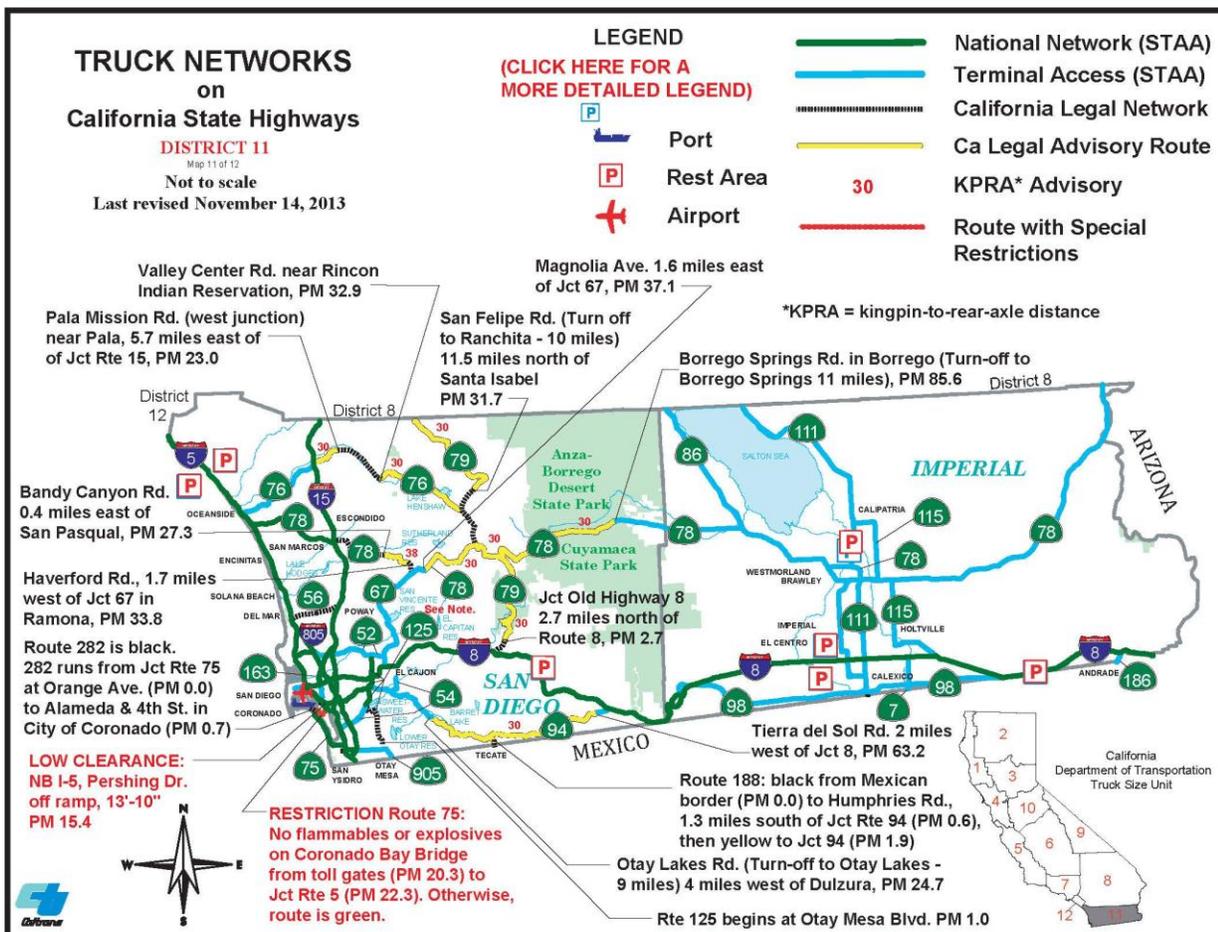
OTAY RANCH VILLAGE 9 EIR

Source: Otay Ranch Village 9 Environmental Impact Report

Caltrans Truck Route and Network Maps: The on-line color-coded "Caltrans Truck Route Map" for State highways is the official government source for truck route information.

CALTRANS TRUCK ROUTE MAP (Click on the red numbers to open each regional map.)	ROUTE COLORS	ROUTE TYPE	SIGNS	"GREEN" STAA TRUCKS	"BLACK" CALIFORNIA LEGAL TRUCKS
	Green	Primarily Interstates	None	YES	YES
	Blue	State routes		YES	YES
	Black-Dashed	State routes	Usually none	NO!!!	YES
	Yellow (KPRA Advisory Routes)	State routes		NO!!!	YES -- However, we advise you not to travel on an advisory route unless your KPRA is no more than the posted length, which is 30 feet on most routes.
	Red	Varies		The restriction may or may not apply to you. Read the restriction on the map to determine whether it applies. See also the " Special Route Restrictions " web page.	

Source: Caltrans-<http://www.dot.ca.gov/hq/traffops/trucks/truck-length-routes.htm>



Source: Caltrans-<http://www.dot.ca.gov/hq/traffops/trucks/truckmap/truckmap-d11.pdf>