



Transportation Concept Report

State Route 76

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 CA Gov. 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

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

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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, involving 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 document, Caltrans District 11 has coordinated with the jurisdictions located along the State Route 76 (SR-76) corridor. The local stakeholders include the San Diego Association of Governments (SANDAG), City of Oceanside, County of San Diego, and tribal partners. Obtaining internal and external input during the TCR development and reviewing the draft report are essential to validate data and the overall characterization of the route and obtain consensus on future needs and opportunities. 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 to our System Planning counterparts in Caltrans Headquarters and adjacent Caltrans Districts. 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, TCRs of adjoining Caltrans Districts, statewide planning tools and other related documents.

EXECUTIVE SUMMARY

The California Department of Transportation (Caltrans) has prepared this Transportation Concept Report (TCR) for State Route 76 (SR-76) in San Diego County. The TCR is a long term consensus-based vision intended to assist Caltrans, tribal governments, Metropolitan Transportation Planning Organizations (MPOs), cities, county governments and other public agencies serving San Diego County in managing the route. The report includes an assessment of both current and future operating conditions, and improvements that will be needed to meet identified operational goals on the route.

Concept Summary

In San Diego County, SR-76 traverses the City of Oceanside and the unincorporated communities of Bonsall, Fallbrook, Pala, Pauma Valley, Rincon, and Lake Henshaw, serving outlying rural communities and a number of Indian Reservations. The primary purpose of SR-76 is to provide for east-west movement of commuter, regional, and recreational traffic. The western, more urbanized portion of SR-76 is a major commuter route serving the City of Oceanside and the unincorporated communities of Bonsall and Fallbrook. The eastern portion of SR-76 between Interstate 15 (I-15) and State Route 79 (SR-79) is primarily a two-lane rural undivided roadway with one lane of travel in each direction providing access to the rural communities, the Indian Reservations, as well as mountain and desert recreational travelers. For the purpose of this TCR, the route has been divided into ten segments. The following table describes the existing facility and lays out the post-25 year concept for the route.

TABLE 1: SR-76 CONCEPT RATIONALE

Segment	Segment Description	Existing Facility	20-25 Year Capital Facility Concept	20-25 Year System Operations and Management Concept	20-25 Year Facility Concept	Post-25 Year Concept
1	I-5 to College Boulevard	4E ¹	4E	Highway Improvement	Highway Improvement	4E
2	College Boulevard to Vista Way	4E	4E	Highway Improvement	Highway Improvement	4E
3	Vista Way to South Mission Road	4C ²	4C	Highway Improvement	Highway Improvement	4C
4	South Mission Road to I-15	2C	4C	Highway Improvement	Highway Improvement	4C
5	I-15 to Horse Ranch Creek	4C	4C	Highway Improvement	Highway Improvement	4C/6C ³
6	Horse Ranch Creek to Pala Mission Road	2C	2C	Highway Improvement	Highway Improvement	2C
7	Pala Mission Road to County Road S16	2C	2C	Highway Improvement	Highway Improvement	2C
8	County Road S16 to Valley Center Road	2C	2C	Intersection and Highway Improvements	Intersection and Highway Improvements	2C
9	Valley Center Road to Palomar Mountain Road	2C	2C	Highway Improvement	Highway Improvement	2C
10	Palomar Mountain Road to Junction SR-79	2C	2C	Highway Improvement	Highway Improvement	2C

¹ Expressway

² Conventional Highway

³ SD Forward <http://www.sandag.org/index.asp?projectid=349&fuseaction=projects.detail>

Concept Rationale

A multi modal, access oriented approach is necessary in order to provide for the projected increased person-trips in the SR-76 corridor. The concept rationale for SR-76 is based on the route's primary purpose, which is to provide for east-west movement of commuter, regional, and recreational traffic.

The SR-76 TCR evaluates recent traffic conditions along the route using 2012 as a base year and the projected conditions for the route within the planning horizon year of 2040.

Proposed Strategies

The proposed projects and strategies for the SR-76 corridor are focused on safety, maintenance, operational improvements to relieve existing and future traffic congestion, and multimodal infrastructure development. Additionally, the projects and strategies are aimed to enhance transit facilities along the corridor.

Proposed Projects:

The San Diego Association of Governments (SANDAG) 2050 Regional Transportation Plan (RTP) proposes the following revenue constrained capital improvement projects on SR-76:

- From Melrose Drive to I-15 Improvement- Add two conventional highway lanes to the existing facility. The resulting four lane facility has an estimated cost of \$404 million dollars and is currently under construction with a completion date of 2018.
- From I-15 to Couser Canyon road- Add two to four highway lanes with operational improvement to the existing facility. The resulting two to four lane facility has an estimated cost of \$130 million dollars and a completion date of 2040⁴.



Four lane conventional highway west of I-15



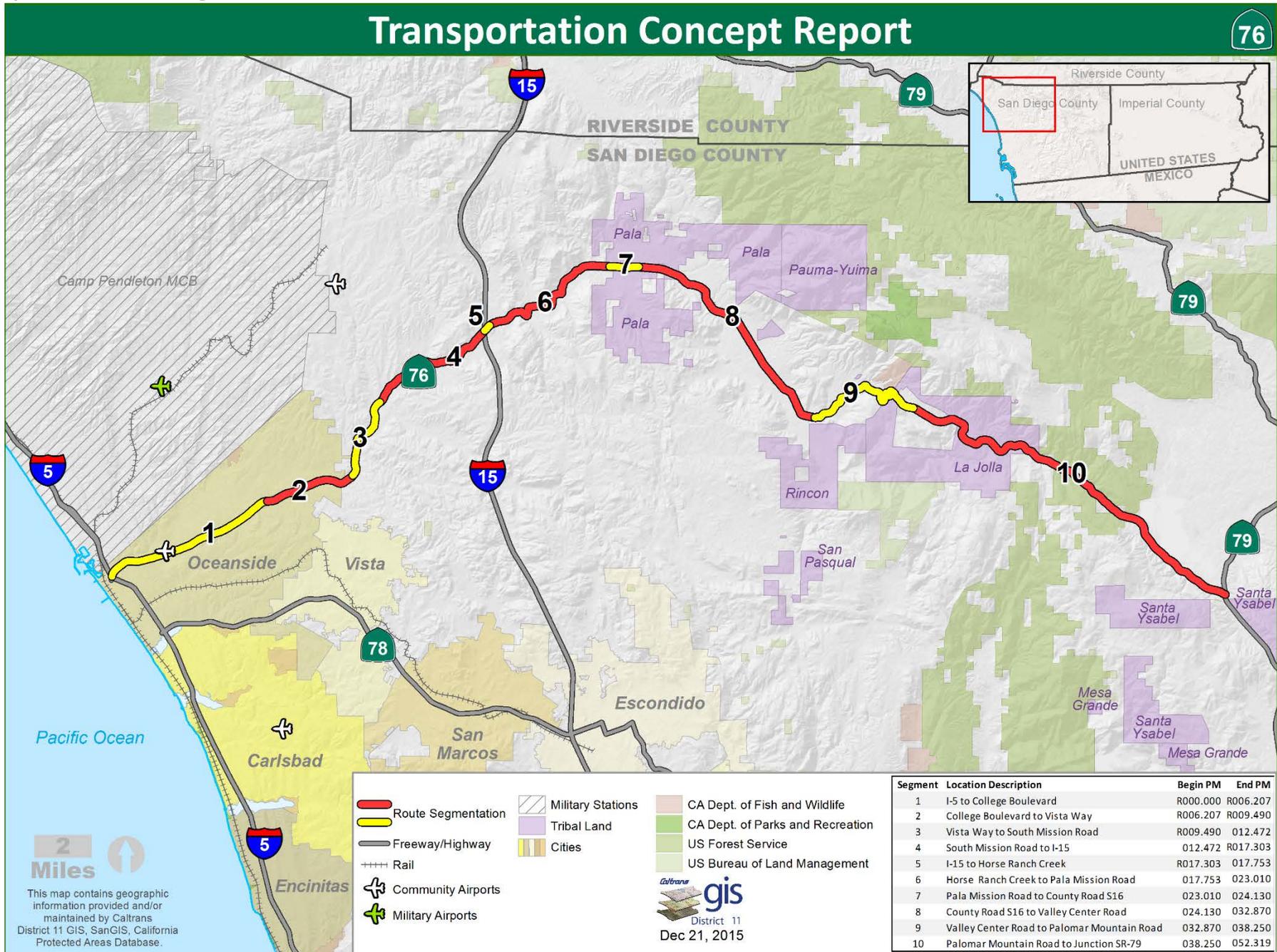
Two lane rural roadway east of I-15

Prior to this document being 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.sdfoward.com.⁵

⁴ <http://www.sandag.org/uploads/2050RTP/F2050rtpA.pdf>

⁵ San Diego Forward: The Regional Plan: <http://www.sdfoward.com>

Map 1: SR-76 Route Segmentation



CORRIDOR OVERVIEW

The attached Route segmentation in Table 2 includes the mostly urban roadway segments from the I-5 freeway to the I-15 freeway (segments 1-4), and the rural easterly segments from the I-15 freeway to SR-79 (segments 5-10). Information is provided in the summary on existing and future average weekday traffic volumes, general recommendations for future major road improvements, and potential operational improvements for the entire SR-76 Corridor.

TABLE 2: SR-76 ROUTE SEGMENTATION

Segment #	Location Description	County Route Beginning Post Mile	County Route End Post Mile
1	I-5 to College Boulevard	R000.000	R006.207
2	College Boulevard to Vista Way	R006.207	R009.490
3	Vista Way to South Mission Road	R009.490	012.472
4	South Mission Road to I-15	012.472	R017.303
5	I-15 to Horse Ranch Creek	R017.303	017.753
6	Horse Ranch Creek to Pala Mission Road	017.753	023.010
7	Pala Mission Road to County Road S16	023.010	024.130
8	County Road S16 to Valley Center Road	024.130	032.870
9	Valley Center Road to Palomar Mountain Road	032.870	038.250
10	Palomar Mountain Road to Junction SR-79	038.250	052.319

ROUTE DESCRIPTION

SR-76 is an east-west highway starting at I-5 on the west, traversing the City of Oceanside, and the unincorporated communities of Bonsall, Fallbrook, Pala, Pauma Valley, and Rincon, extending 052.319 miles to the east, terminating at State Route 79 near Lake Henshaw in San Diego County. SR-76 was added to the State Highway System in 1933. In 1959, the portion of the route from I-5 (Post Mile [PM] SD R000.000) to Interstate 15 (I-15) (PM SD R017.303) was added to the Freeway and Expressway (F&E) system. Much of SR-76 was originally designated as legislative route 195, and was not legally re-designated as SR-76 until the 1964. The freeway routing for this portion was adopted in 1963, and freeway agreements with the City of Oceanside and the County of San Diego were executed in 1964 and 1965. Caltrans is currently processing a denomination of the route to a conventional highway from East of Melrose Drive in the City of Oceanside in San Diego County to the I-15/SR-76 interchange.

Currently, SR-76 is a four lane expressway from I-5 to Vista Way, a four lane conventional highway from Vista Way to I-15 and a two-lane roadway with one lane of travel in each direction from I-15 to SR-79. Additional turn lanes are provided at key intersections along SR-76 to provide additional capacity at intersections. The posted speed limit varies from 40-55 miles per hour (mph), with warning signs at curves recommending speeds as low as 20 mph. There are four Park and Ride lots near or adjacent to SR-76 at the following locations: the I-15/SR-76 interchange, Maxson Street, Mission Avenue/Frontier Drive in Oceanside, and Sweetgrass Lane in Bonsall.

Route Location:

In San Diego County, SR-76 traverses the City of Oceanside and the unincorporated communities of Bonsall, Fallbrook, Pala, Pauma Valley, Rincon, and Lake Henshaw, serving outlying rural communities and a number of Indian Reservations. SR-76 East extends from I-15, (PM 017.303 to 052.319 miles) to the east, terminating at SR-79 (PM 052.319) near Lake Henshaw in San Diego County.

SR-76 is a principal east-west route that carries intraregional, interregional, commuter, and recreational travel. The western portion of SR-76 from Oceanside to I-15 serves as a major commuter route. The remainder of the route from I-15 to the eastern end at SR-79 serves outlying rural communities and a number of Indian Reservations. SR-76 also serves as a recreational travel route for access to mountain and desert recreational areas. SR-76 intersects a number of State routes, including I-5, I-15, and SR-79. The closest parallel State Route to SR-76 in San Diego County is State Route 78 (SR-78).

Route Designation:

SR-76 was added to the State Highway System in 1933. In 1959, the portion of the route from I-5 (PM SD R000.000) to I-15 (PM R017.303) was added to the Freeway and Expressway (F&E) System. The freeway routing for this portion was adopted in 1963, and expressway agreements with the City of Oceanside and the County of San Diego were executed in 1964 and 1965.

Major Route Features:

SR-76 has a federal functional classification of Other Principle Arterial–Freeway or Expressway (Urban) from I-5 to Jeffries Ranch Road. SR-76 is classified as an Other Principal Arterial (Urban) from Jeffries Ranch Road to Olive Hill Road. The remainder of the route from Olive Hill Road to SR-79 is classified as a Minor Arterial (Rural). SR-76 is not included as a part of the Interregional Road System (IRRS).

From I-5 (PM SD R000.000) to Mission Road (PM SD 012.472), SR-76 is designated as a State Terminal Access (STAA) Route providing a connection to the National Network for Surface Transportation Assistance Act trucks. From Mission Road to I-15 (PM SD R017.303) SR-76 is California Legal for trucks with 40 foot kingpin to rear axle lengths. From I-15 to Pala Mission Road (PM SD 023.010), trucks with kingpin to rear axle lengths over 30 feet are not advised. From Pala Mission Road to Valley Center Road (PM SD 032.870), trucks with kingpin to rear axle lengths over 30 feet are not advised. The entire length of SR-76 is on the California State Scenic Highway System and is eligible to be designated as an official State Scenic Highway.

For maintenance programming purposes, the State Highway System has been classified as Class 1, 2, and 3 highways based on the Maintenance Service Level (MSL) descriptive definitions. MSL 1 contains route segments functionally classified as rural Principal Arterials (PA) and their urban extension (P1P). MSL 2 contains route segments classified as principal arterials not in MSL 1, route segments functionally classified as minor arterials not in MSL 3, and route segments with a route concept of maintain and improve. MSL 3 indicates a route or route segment with the lowest maintenance priority. Typically, MSL 3 contains route segments with a route concept of maintain only, route segments functionally classified as collectors and local roads, route segments with relatively low traffic volumes, and route segments being considered for relinquishment, rescission, or where a new alignment will replace the existing facility. Furthermore, route segments where the District does not anticipate spending money and route

segments where route continuity is necessary are also assigned an MSL 3 designation. SR-76 is classified as an MSL 2 route for its entire length.



Pala Mission Road



SR-76 near La Jolla Indian Reservation

TABLE 3: SR-76 ROUTE DESIGNATIONS AND CHARACTERISTICS

Segment #	1	2	3	4	5	6	7	8	9	10
Freeway and Expressway	Yes	Yes	No							
National Highway System	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Strategic Highway Network	No	No	No	No	No	No	No	No	No	No
Scenic Highway	Eligible	Eligible	Eligible	Eligible	Eligible	Eligible	Eligible	Eligible	Eligible	Eligible
Interregional Road System	No	No	No	No	No	No	No	No	No	No
High Emphasis	No	No	No	No	No	No	No	No	No	No
Focus Route	No	No	No	No	No	No	No	No	No	No
Federal Functional Classification	Other Principal Arterial	Other Principal Arterial	Other Principal Arterial	Other Principal Arterial	Other Principal Arterial	Other Principal Arterial	Other Principal Arterial	Other Principal Arterial	Other Principal Arterial	Other Principal Arterial
Goods Movement Route	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Truck Designation	Terminal Access (STAA ⁶)	National Network (STAA)	National Network (STAA)	National Network (STAA)	National Network (STAA)	No	No	No	No	No
International Border Trade Corridors	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
Rural/Urban/Urbanized	Urban	Urban	Urban	Urban	Urban	Urban/Rural	Rural	Rural	Rural	Rural
Metropolitan Planning Organization	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG
Regional Transportation Planning Agency	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG
County Transportation Commission	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG	SANDAG
Regional Transit Agency	NCTD ⁷	NCTD								
Local Agency	Oceanside	Oceanside	County of San Diego							
Tribes	None	None	None	None	None	Pala	Pala	Pauma	La Jolla	La Jolla
Air District	San Diego County APCD ⁸	San Diego County APCD								
Terrain	Flat & Rolling	Flat	Flat	Flat	Flat	Flat	Rolling	Flat & Rolling	Moderate	Flat & Rolling

⁶ STAA State Terminal Access Route

⁷ NCTD North County Transit District

⁸ APCD Air Pollution Control District

COMMUNITY CHARACTERISTICS AND LAND USE

The communities along the SR-76 corridor have unique characteristics and varied land uses. The western portion of SR-76 is mostly urban with commercial centers, industrial development, residential housing, and open space. Land use along the eastern portion of SR-76 is more rural, composed of agricultural and equestrian facilities, residential homes, tribal lands, open space, and hilly topography, all connected by winding two-way roads.

TABLE 4: SR-76 LAND USE

Segment	Place Type
1	<i>Residential, commercial, Industrial, open space</i>
2	<i>Residential, industrial, open space,</i>
3	<i>Residential, open space, agricultural facilities</i>
4	<i>Residential, open space, agricultural facilities,</i>
5	<i>Residential, open space, agricultural facilities, undeveloped land</i>
6	<i>Residential, open space, agricultural facilities, undeveloped land</i>
7	<i>Residential, open space, agricultural facilities, undeveloped land</i>
8	<i>Residential, open space, agricultural facilities, undeveloped land</i>
9	<i>Residential, open space, agricultural facilities, undeveloped land</i>
10	<i>Residential, open space, agricultural facilities, undeveloped land</i>

Following are the communities located along SR-76:

CITY OF OCEANSIDE⁹: SR-76 is an east-west highway starting at I-5 on the west in the City of Oceanside. Located just 35 miles north of San Diego and 83 miles south of Los Angeles, Oceanside is the third largest city in San Diego County. Bounded by the Pacific Ocean to the west, the San Luis Rey River to the north and Buena Vista Lagoon to the south, the city is home to the largest of the California missions: **MISSION SAN LUIS REY**. During the past two decades the population of Oceanside has increased from about 128,000 to approximately 170,000 in 2012. The regional growth forecast projects that Oceanside’s population will increase by 33% during the 50-year period between 2000 and 2050.

⁹ <https://www.ci.oceanside.ca.us/civica/filebank/blobdload.asp?BlobID=29704>
<http://www.ci.oceanside.ca.us/civica/filebank/blobdload.asp?BlobID=30381>



Mission San Luis Rey, City of Oceanside

In addition to being well-connected to the regional roadway network, Oceanside is also well-served by bus and rail service. Rail service through Oceanside includes the Amtrak Pacific Surfliner as well as the COASTER and SPRINTER by the North County Transit District (NCTD). The COASTER provides north-south service between Oceanside and downtown San Diego, while the SPRINTER, which began service in 2008, roughly parallels SR-78 and provides a North County east-west mass transit link between the Cities of Oceanside, Escondido, San Marcos, and Vista. NCTD bus service in Oceanside includes high-frequency headways between the Oceanside and Vista Transit Centers along the Mission Avenue and Vista Way commercial corridors, as well as half-hour service between Oceanside and the University Town Center area of San Diego along Highway 101.

College Boulevard has consistently high traffic volumes as it travels in a north-south direction from SR-76 to Lake Boulevard. The Average Daily Traffic (ADT) for College Boulevard is regularly above 30,000. Other major arterials with ADTs above 20,000 are El Camino Real, Mission Avenue, Oceanside Boulevard, Douglas Boulevard and Coast highway¹⁰.

¹⁰ City of Oceanside: Circulation Element <https://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?blobid=29697>

Bonsall¹¹:



Bonsall Bridge

The County of San Diego community planning area of Bonsall encompasses approximately 32.8 square miles, or approximately 21,042 acres. It is located in the foothills of the Penninsular Mountain Range in the unincorporated area of northern San Diego County. The southern boundary of Bonsall is approximately 40 miles north of downtown San Diego, bordered by the community of Fallbrook to the north, the City of Oceanside to the west, the community of Valley Center to the east, and the North County Metropolitan Subregion and City of Vista to the south. The community of Bonsall is characterized by a series of hills, valleys, and drainage areas. This hill and valley topography has resulted in a predominance of low density estate type residential lots and agricultural land uses. Also characterizing the Bonsall area is its golf courses and equestrian facilities. Commercial activity in Bonsall is centered in the Mission Road/Olive Hill Road and Highway 76 area.

¹¹ <http://www.sdcounty.ca.gov/pds/gpupdate/comm/bonsall.html>

Fallbrook¹²:

The County of San Diego community planning area of Fallbrook consists of 36,000 acres and is located south of Riverside County and east of Camp Pendleton. Its neighboring communities are Bonsall to the south, Pala to the east and Rainbow to the northeast.

Most of the area is characterized by rolling hills covered in avocado and citrus orchards. However, as the topography changes, it creates natural buffers that separate Fallbrook from its neighbors. The Santa Margarita River crosses through the rugged terrain in the northern portion of the planning area and the San Luis Rey River runs along the southern boundary that Fallbrook shares with Bonsall. The eastern portion is dominated by steep slopes and Interstate 15 (I-15).



Community of Fallbrook

The town center of Fallbrook has a mix of high density residential uses such as apartments and townhouses, along with single family dwellings that are intertwined with light manufacturing and retail businesses. The original segment of the downtown area, now designated “Historic Fallbrook,” reflects the early architectural character of the community and the rural ambiance. This historic section of town originally served the area’s agricultural base with three packing plants and retail stores. As more and more newcomers arrived who were not involved in agriculture, Fallbrook gradually became a bedroom community, with residents who commuted long distances to jobs in neighboring communities. In recent years, the downtown area has developed into an active arts community with galleries, workshops, art schools, and similar art-related enterprises.

The character of the Fallbrook community is wide ranging. It has retained its family farm oriented culture, while adding an influx of young families fleeing urban life, retirees venturing into country life, and farm workers that supply labor. For many, the character of Fallbrook is defined by their change from big city indifference to small town friendliness, interdependence, and traditional family-community values.

¹² http://www.sdcounty.ca.gov/pds/docs/CP/Fallbrook_CP.pdf
<http://www.sdcounty.ca.gov/pds/gpupdate/comm/fallbrook.html>

Circulation and mobility are currently impacted by limited east/west connections and increased pass-through traffic. Planned State and County road construction could help to relieve the current problem. In the meantime, major connector roads are heavily impacted by the fact that Fallbrook is a bedroom community requiring hours of long distance commuting to workplaces outside the community.

SR-76 will continue to experience Level of Service (LOS) E conditions, even with an expansion to four lanes, between the Fallbrook/Bonsall Community Planning Area (CPA) boundary and Old Highway 395. Environmental constraints dictate that this road segment should be classified as a four-lane Major Road, and an LOS E is deemed acceptable.

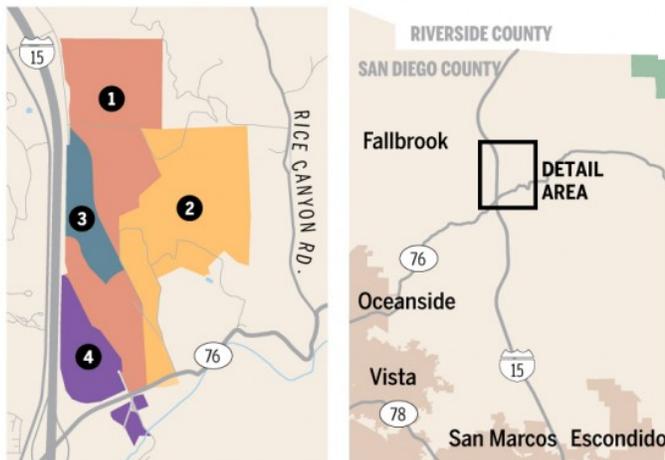
The Interstate 15/Highway 76 Master Specific Plan Area (MSPA)¹³ contains approximately 1,178 acres of land located within the four quadrants of the I-15/SR 76 interchange area. Because of its location at the intersection of an interstate highway and a major state highway, it is anticipated that this area will become a logical node for new land developments. Large-scale land development projects east of I-15 and north of SR-76 (Palomar College, Campus Park, Meadowood, and Campus Park West)¹⁴ are currently being planned and have gone through the local environmental review process.

¹³ INTERSTATE 15/ STATE ROUTE 76 INTERCHANGE MASTER SPECIFIC PLAN http://www.sdcounty.ca.gov/pds/docs/CP/Bonsall_CP.pdf

¹⁴ http://www.sdcounty.ca.gov/pds/docs/CP/Fallbrook_CP.pdf

⁸http://www.sdcounty.ca.gov/pds/docs/pc_jul06_c_fallbrook.pdf

GROWTH HEADED FALLBROOK'S WAY



- ❶ **Campus Park:** 230 multifamily, 521 single-family homes, approved May 2011
- ❷ **Meadowood:** 844-886 homes, approved January 2012
- ❸ **Palomar College:** 8,500-student campus, under construction
- ❹ **Campus Park West:** 355 multi-family homes, under review

Source: SanGIS, San Diego County

NCT/CAL

NATIVE AMERICAN TRIBAL RESERVATIONS

SR-76 is an important tribal lands transportation corridor. San Diego County has 18 Federally-recognized Native American tribes and Reservations, more than any other county in the U.S. Five of these tribes have Reservations near SR-76 – Pala, Rincon, San Pasqual, Pauma-Yiuma and the La Jolla Band of Luiseño Indians. Four of the five tribal Reservations have gaming and resort facilities which operate private tour shuttles for visitors. While these gaming facilities are among the largest employers along SR-76 and in Northern San Diego County, most of the jobs are held by commuters from neighboring communities in Riverside and Imperial Counties. The four tribes with gaming facilities: Pala, Pauma-Yiuma, Rincon and San Pasqual currently have agreements with the County of San Diego to mitigate traffic impacts to local streets and state highways along the corridor depending on expansion of their gaming facilities.

Caltrans, along with these tribes, collaborate cooperatively on transportation issues within the region via SANDAG's Interagency Technical Working Group on Tribal Transportation Issues. Activities impacting tribal rights or trust resources are implemented in a knowledgeable, sensitive manner respectful of tribal sovereignty. Tribes may enact ordinances which require all employers operating within tribal jurisdiction to provide Indian preference in employment and the application of a Tribal Employment Rights Ordinance (TERO) fee to fund the administration of the ordinances.

In 2007 the Reservation Transportation Authority (RTA), with funding provided by Caltrans, prepared a study to investigate traffic operations and identify achievable proposed operational and near term improvements for the SR- 76 corridor. In addition, the study identified the approximate projected cumulative traffic effects of proposed development along the corridor. The emphasis of the study was focused on the development of partnerships with Native American Tribal Governments, the County of San Diego, local community planning groups, SANDAG, resource agencies, developers, and the public.¹⁵ The RTA study resulted in proposed curve realignments along the corridor and various operational improvement such as signalization, turn pockets, passing lanes and pull outs.



Casino at Pauma Indian Reservation



La Jolla Indian Reservation

¹⁵ http://www.dot.ca.gov/dist11/departments/planning/pdfs/corridor/07_SR76_East_Corridor_Study.pdf

In July 2014, the La Jolla Band of Luiseño Indians in consultation with the Federal Highway Administration (FHWA), the Bureau of Indian Affairs (BIA), the National Indian Justice Center (NIJC), the Tribal Technical Assistance Program, local law enforcement, and Caltrans conducted a Road Safety Audit/Assessment (RSA) on the seven mile stretch of highway at the eastern end of SR-76. This RSA gave members of the La Jolla Band of Luiseño Indians an opportunity to address the safety concerns of their community. The study area is utilized by many modes of transportation including cars, trucks, Recreational Vehicles (RVs), bicyclists, motorcycles, and pedestrians. The RSA team conducted site observations at various locations within the study limits, listed the challenges faced by the tribal community, and brainstormed a list of near term and long term solutions to address these challenges. For a detailed analysis of the challenges and recommendations along this segment of SR-76, please refer to the Road Safety Audit¹⁶

Based on the RSA, the La Jolla Band of Luiseño Indians suggested that SR-76 be designated as a “Safety Corridor” since there are no passing lanes on this stretch of highway. Members of the tribe discussed the possibility of a gateway treatment to alert motorists that they are entering a residential area with driveways, bus stops, bicyclists and pedestrians. They recommended better signage for school bus stops and better bicycle and pedestrian access. The tribes were concerned that most accidents that occur on tribal lands are not documented by law enforcement hence the California Highway Patrol (CHP) is in the process of updating their policies and procedures to include accidents that occur on tribal lands. These findings have been documented in the RSA and it’s expected to be finalized in the near future.

¹⁶ RSA Draft in circulation

SYSTEM CHARACTERISTICS

TABLE 5: SR-76 SYSTEM CHARACTERISTICS

Segment #	1	2	3	4	5	6	7	8	9	10
Existing Facility										
Facility Type	Expressway	Expressway	Expressway	Expressway	Conventional Highway					
General Purpose Lanes	4E ¹⁷	4E	4C ¹⁸	2C	4C	2C	2C	2C	2C	2C
Lane Miles	24.828	13.132	11.928	9.662	1.800	10.514	2.400	17.480	10.760	28.138
Centerline Miles	6.207	3.283	2.982	4.831	.450	5.257	1.120	8.740	5.380	14.069
Median Width	9.25	6.8	9.5	9.5	0	0	0	0	0	0
Median Characteristics	Divided	Divided	Divided	Divided	Undivided	Undivided	Undivided	Undivided	Undivided	Undivided
Auxiliary Lanes	0	0	0	0	0	0	0	0	0	0
Passing Lanes	0	0	0	0	0	0	0	0	0	0
Truck Climbing Lanes	0	0	0	0	0	0	0	0	0	0
Distressed Pavement Miles	.528	2.264	1	1.054	0	.374	4.116	5.602	3.5	5.016
Concept Facility										
Facility Type	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway
General Purpose Lanes	4E	4E	4C	4C	4C	2C	2C	2C	2C	2C
Lane Miles	24.828	13.132	11.928	19.324	1.800	10.514	2.240	17.480	10.760	28.138
Centerline Miles	6.207	3.283	2.982	4.831	.450	5.257	1.120	8.740	5.380	14.069
Passing Lanes	0	0	0	0	0	0	0	0	0	0
Truck Climbing Lanes	0	0	0	0	0	0	0	0	0	0
Post 25 Year Facility										
Facility Type	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway	Conventional Highway
General Purpose Lanes	4E	4E	4E	4E	4C/6C	2C	2C	2C	2C	2C
Lane Miles	24.828	13.132	11.928	19.324	1.800	10.514	2.240	17.480	10.760	28.138
Centerline Miles	6.207	3.283	2.982	4.831	.450	5.257	1.120	8.740	5.380	14.069
TMS Elements										
TMS Elements (BY)	Signals	Signals	Signals	Signals	N/A	N/A	N/A	N/A	N/A	N/A
TMS Elements (HY)	Signals	Fiber Optic Location, CCTV	Fiber Optic Location	Fiber Optic Location	N/A	N/A	N/A	N/A	N/A	N/A

¹⁷ Expressway

¹⁸ Conventional Highway

Pedestrian and Bicycle Transportation

Caltrans and the United States Department of Transportation (U.S. DOT) recognize the importance of non-motorized transportation. The U.S. DOT Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations (PSBPARR) states that, “Increased commitment to and investment in bicycle facilities and walking networks can help meet goals for cleaner, healthier air; less congested roadways; and more livable, safe, cost-efficient communities. Walking and bicycling provide low-cost mobility options that place fewer demands on local roads and highways.”¹⁹ The PSBPARR also states that the success of non-motorized transportation options depends heavily on state Departments of Transportation embracing the policy.

In California, bicyclists and pedestrians have the legal right to use almost all of Caltrans’ conventional highways²⁰ and expressways²¹ and bicyclists are allowed on 25 per cent of the freeway²² system. SR-76 is included in this network. Bicycle travel on SR-76 is allowed for the entire length of the route. Portions of SR-76 contain bicycle lanes.

Caltrans Active Transportation Policies

A “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. Caltrans “Complete Streets” policy, Deputy Directive (DD) 64-R2, 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 (SHS).

Implementing “Complete Streets” supports local agencies’ efforts required by the California Complete Streets Act of 2008 (Assembly Bill 1358). The “Complete Streets” policy also supports the goal of reducing greenhouse gas emissions, laid out in the California Global Warming Solutions Act of 2006 (Assembly Bill 32) and Senate Bill 375, which requires development of Sustainable Communities Strategies (SCS). The SCS integrate land use, housing, and transportation planning to provide a regional policy foundation that local governments may build upon to create a more sustainable California.

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. It is Caltrans policy to address the mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding.²³ Caltrans strives to integrate multimodal projects in balance with community goals, plans, and values.

¹⁹ FHWA, 2010, *U.S. Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations*, Retrieved from: http://www.fhwa.dot.gov/environment/bicycle_pedestrian/overview/policy_accom.cfm

²⁰ A Highway is defined as “a general term denoting a public way for the transportation of people, materials, goods, and services but primarily for vehicular travel. Includes the entire area within the right of way”

²¹ An Expressway is defined as “An arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections”

²² A Freeway is defined as “A divided arterial highway with full control of access and with grade separations at intersections”

²³ Caltrans Deputy Directive 64-R1, *Complete Streets - Integrating the Transportation System*

Caltrans Role in Non-Motorized Transportation

In addition to Caltrans DD 64-R2, state and federal laws require Caltrans and local agencies to promote and facilitate increased bicycling and walking. California Vehicle Code (CVC) (Sections 21200-21212), and Streets and Highways Code (Sections 890–894.2) identify the rights of bicyclists and pedestrians, and establish legislative intent that people of all ages using all types of mobility devices are able to travel on roads. The Caltrans Highway Design Manual states that: “The needs of non-motorized transportation are an essential part of all highway projects. Mobility for all travel modes is recognized as an integral element of the transportation system.”²⁴ Caltrans Strategic Management Plan 2015 calls for a three-fold increase in the bicycling mode share and a doubling of walking mode share by the year 2020²⁵

Caltrans, through the Division of Local Assistance, administers the Active Transportation Program (ATP), among other programs. The ATP is the consolidation of the Transportation Enhancements Program, Bicycle Transportation Account, and the State Safe Routes to School program. The goals of the ATP are to increase the proportion of trips accomplished by biking and walking, increase the safety of non-motorized users, advance the active transportation efforts of regional agencies to achieve greenhouse gas reduction goals, enhance public health, combat childhood obesity, ensure that disadvantaged communities fully share in the benefits of the program, and provide a broad spectrum of projects to benefit many types of active transportation.²⁶

TABLE 6: SR-76 BICYCLE FACILITIES

Segment	State Bicycle Facility								Parallel Bicycle Facility			
	Post Mile	Location Description	Bicycle Access Prohibited	Facility Type	Outside Paved Shoulder Width	Facility Description	Distressed Shoulder	Posted Speed Limit	Parallel Facility Present	Name	Location Description	Facility Type
1	0.00-6.207	I-5 to College Blvd.	No	Class II/ Class III	10 feet	Urban Expressway	No	55	Yes	San Luis Rey Bike Path	I-5 to College	Class I Bike Path
2	6.207-9.490	College Blvd. to Vista Way	No	Class II/ Class III	10 feet	Urban Expressway	No	55	Partial	San Luis Rey Bike Path	College Blvd. to N. Santa Fe Dr.	Class I Bike Path
3	9.490-12.472	Vista Way to South Mission Rd.	No	Class III	10 feet	Conventional Highway	No	55	No			
4	12.472-17.303	South Mission Rd. to I-15	No	Class II/ Class III	10 feet	Conventional Highway	No	55	No			

²⁴ Caltrans Highway Design Manual, *Bicycle Transportation Design*, 1000-1

²⁵ <http://www.dot.ca.gov/perf/>

²⁶ Caltrans, *Active Transportation Program*, <http://www.dot.ca.gov/hq/LocalPrograms/atp/index.html>

5	17.303-17.753	I-15 to Horse Ranch Creek	No	Class II/ Class III	10 feet	Conventional Highway	No	55	No			
6	17.753-23.010	Horse Ranch Creek to Pala Mission Rd.	No	Shared Facility	Varies	Conventional Highway	No	55	No			
7	23.010-24.130	Pala Mission Rd. to County Rd. S16	No	Shared Facility	Varies	Conventional Highway	No	55	No			
8	24.130-32.870	County Rd. S16 to Valley Center Rd.	No	Shared Facility	Varies	Conventional Highway	No	55	No			
9	32.870-38.250	Valley Center Rd. to Palomar Mountain Rd.	No	Shared Facility	Varies	Conventional Highway	No	55	No			
10	38.250-52.319	Palomar Mountain Rd. to Junction SR-79	No	Shared Facility	Varies	Conventional Highway	No	55	No			

Bicycle access on SR-76 is allowed on the entire route. Class II and III bicycle facilities exist from I-5 (segment 1) to Horse Ranch Creek (segment 5), while the rest of the route is a shared facility. The rural sections of SR-76 are a popular route for bicyclists. Opportunities exist in the future to improve and enhance bicycle access on this route by extending Class II and/or III bicycle facilities and by constructing shoulders where they currently do not exist from Horse Ranch Creek (segment 6) to Junction SR-79 (segment 10).

The San Diego County Community Trails Master Plan²⁷ accommodates pedestrians, equestrians and bicyclists through trail alignments in the SR-76 corridor. The existence of trail facilities, especially along the more rural segments 6-10 help the corridor achieve a higher level of multi-modality and meet the intent of DD-64-R2²⁸

Rumble strips can be an effective tool in the prevention of Run-Off-Road (ROR) collisions, but they can be difficult for bicyclists to negotiate. Caltrans' objective to be a multimodal transportation department dictates that all users of the transportation system must be accommodated in all functions that Caltrans performs on the SHS. Two recent projects on SR-76 installed rumble strips at inappropriate locations and prompted complaints from the bicycling community because they impeded the bicyclist's path of travel. These rumble strips will be filled in through a Minor project. This case provides an example of the importance of proper placement of rumble strips. It is imperative that the placement of rumble strips be assessed for proper placement and care taken to assure that bicycle mobility is not compromised by rumble strip placement. Caltrans TOPD 11-14, current FHWA guidelines, and the League of American Bicyclists all have guidelines for the proper methods to accommodate

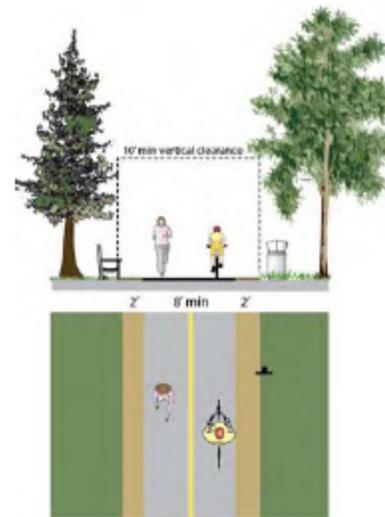
²⁷ http://www.sandiegocounty.gov/reusable_components/images/parks/doc/tocrev.pdf
²⁸ http://www.dot.ca.gov/hq/tpp/offices/ocp/docs/dd_64_r2.pdf

bicyclists on roadways that may require rumble strip installation. The District Bicycle Coordinator should be consulted to assist in the determination of rumble strip locations²⁹.

²⁹ Caltrans Traffic Operations Policy Directive (TOPD)11-14 FHWA, Rumble Strips and Rumble Stripes, Accommodating All Users; http://safety.fhwa.dot.gov/roadway_dept/pavement/rumble_strips/accommodating-all-users.cfm
League of American Bicyclists, Bicycling and Rumble Strips, Problems for Bicyclists; www.advocacyadvance.org/docs/rumble_strips.pdf

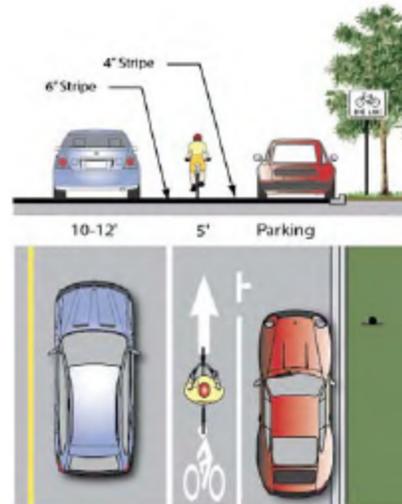
Class I – Bike Path

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.



Class II - Bike Lanes

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.



Class III - Bike Routes

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.

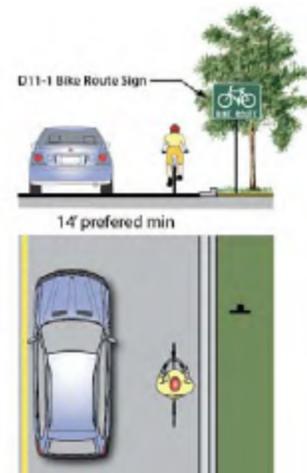


TABLE 7 : SR-76 PEDESTRIAN FACILITIES

Segment	Post mile	Location Description	Ped. Access Prohibited	Sidewalk Present	Sidewalk Width	Crossing Distance	Facility Description	Role	Vol.	Junction				Alt. Facility
										Location	Role	Type	Large Corner	
1	000.000-006.207	I-5 to College Blvd.	No	No	n/a	115-160 feet	Urban Expressway			N. Canyon Dr.		Unmarked crosswalk, sidewalk on west side of street	Y	Y
										Benet Rd.		Marked crosswalk, sidewalks on both sides of street	Y	
										Airport Rd.		Marked crosswalk, sidewalk on east side of street	Y	
										Foussat Rd.		Marked Crosswalk, sidewalk only south of SR-76 on east side of street	Y	
										Douglas Dr.		Marked crosswalk, sidewalk on east side of street	Y	
										Rancho Del Oro Dr.		Marked Crosswalk all four legs, sidewalks on both sides of street	Y	
										Old Grove Rd.		Marked crosswalks on three legs, sidewalks on both sides of street	Y	
										Frazee Rd.		Marked Crosswalk all four legs, sidewalks on both sides of street	Y	
										College Dr.		Marked Crosswalk all four legs, sidewalks on both sides of street	Y	
2	006.207-009.490	College Blvd. to Vista Way	No	No	n/a	120-175 feet	Urban Expressway			N. Santa Fe Dr.		Marked crosswalk, sidewalk on west side of street	Y	N
										Guajome Lake Rd		Marked crosswalk, sidewalk on both sides north of SR-76, west side of street only south of SR-76	Y	
										Melrose Dr.		Marked Crosswalk all four legs, sidewalks on both sides of street	Y	

2	006.207-009.490	College Blvd. to Vista Way	No	No	n/a	120-175 feet	Urban Expressway			E. Vista Way		Unmarked crosswalks at three legs, west leg prohibits pedestrian crossing, no local sidewalks	Y	
3	009.490-012.472	Vista Way to South Mission Rd.	No	No	n/a	105-175 feet	Expressway			N. River Rd.		Marked Crosswalk at one leg of SR-76 and at N. River Rd., no local sidewalks	Y	N
										Via Montellano		Marked Crosswalk at one leg of SR-76 and at Via Montellano, no local sidewalks	Y	
										Olive Hill Rd.		Marked Crosswalk at one leg of SR-76 and at Olive Hill Rd., no local sidewalks	Y	
										S. Mission Rd.		Marked crosswalk on east leg, Marked crosswalk on north leg, no local sidewalks	Y	
4	012.472-017.303	South Mission Rd. to I-15	No	No	n/a	30-195 feet	Conventional Highway			Via Montserrat		Unmarked crosswalk on north leg, unmarked crosswalk on west leg, no local sidewalks, connects to local trail network south of SR-76	Y	N
										Gird Rd.		Unmarked crosswalk on west and north legs, no local sidewalks	Y	
										Old Hwy. 395		Marked crosswalk on west, south, and north legs, no local sidewalks	Y	
5	017.303-017.753	I-15 to Horse Ranch Creek	No	No	n/a		Conventional Highway			SR-76		5-6 foot sidewalk Old Hwy. 395 through I-15 interchange. Marked crosswalks across I-15 ramps. Sidewalks end east of interchange	Y	
6	017.753-023.010	Horse Ranch Creek to Pala Mission Rd.	No	No	n/a		Conventional Highway			Road X		Marked crosswalk on west, south, and north legs, no local sidewalks	Y	

TRANSIT FACILITIES



RTA Bus stop on Caltrans Park & Ride at SR-76 and I-15



SR-76: East of I-15

Northern San Diego County, encompassing the entire SR-76 corridor, is served predominantly by North County Transit District (NCTD), which operates COASTER commuter rail service, SPRINTER light rail transit (LRT) service, BREEZE bus system, FLEX rural and on-demand service, and LIFT Americans with Disabilities Act (ADA) paratransit service. The vast majority of transit service is located in the more heavily developed western end of the SR-76 corridor, though no bus routes actually travel on SR-76 west of east Vista Way.

The SPRINTER LRT corridor runs parallel to, but 1-2 miles south of SR-76 from the western terminus until approximately Melrose Drive (PM R007.700), where the train turns south. Though the SPRINTER is somewhat distant from SR-76, people tend to be willing to travel further to access rail transit, as opposed to bus transit, so it is likely that the SPRINTER facilitates some trips that would otherwise be made on SR-76. At the western terminus of the SPRINTER light rail, passengers can connect to regional commuter rail service on the Coaster and Metrolink and interregional rail service on Amtrak.

Current NCTD bus service in the vicinity of the SR-76 corridor includes BREEZE Bus Routes 303, 306, 309, 311, 313, 315, and 388/389, with portions of Routes 306, 313, and 388/389 directly accessing SR-76. The Metropolitan Transit Services (MTS) also provides bus service on SR-76 with Rural Route 892 on the eastern end of the corridor, while the Riverside Transit Agency operates CommuterLink Express Bus Route 202 along SR-76 between the Oceanside Transit Center and the cities of Murrieta and Temecula in neighboring Riverside County. Route 388 serves the areas of Pala, Pauma Valley, Rincon, Valley Center, and Escondido. Route 388 runs on SR-76 from County Route 16 to Valley Center Road. Route 388 is vital to the Tribal Reservations, it provides service three times daily on both weekdays and weekends.

Other mass transit options such as commuter rail and Trolley LRT do not serve SR-76, but transfers to the NCTD COASTER commuter rail are available at the Oceanside Transit Center, while transfers to MTS Express bus services bound for Downtown San Diego are available at the Escondido Transit Center served by NCTD BREEZE Routes 388/389 and the SPRINTER LRT.

Four of the five tribal Reservations near SR-76 have gaming and resort facilities which operate private tour shuttles for visitors. A number of private tour companies offer private tour shuttle service from Los Angeles and Orange County to the gaming and resort facilities.



The basic California length law for vehicles is 40 feet unless specifically exempted; the law exempts buses up to 45 feet, but only on certain routes. In recent years, the tour bus manufacturing industry increased its standard bus length from 40 feet to 45 feet to increase capacity, and to accommodate ADA requirements. These longer buses can operate safely on many highways, but may encounter problems on narrow two-lane roads with tight curves or without shoulders. Therefore, Caltrans restricts certain State Route segments to buses over 40 feet long.

In 2007, the Reservation Transportation Authority (RTA) in partnership with Caltrans, completed the SR-76 East Corridor Study. The study examined sharp roadway curves and speed warning areas along the eastern portion of SR-76. It was found that the existing speed warning signs were appropriate for the roadway curves within these segments of SR-76.³⁰ As of 2010, there are two segments of SR-76 where buses over 40 feet, including public transit and private tour shuttle buses, are restricted: 1) from I-15 to Pala Mission road (PM 023.010) and 2) from Valley Center road (PM 032.870) to SR-79.

TABLE 8 : SR-76 TRANSIT FACILITIES

Segment	Mode & Collateral Facility	Name	Route End Points	Ridership ³¹	Headway	Operating Period	ITS & Technology	Stations		Association	Bikes Allowed on Transit	Location Description	# Parking Spaces
								Cities	Postmiles				
1	Light Rail	NCTD SPRINTER	Oceanside to Escondido	8,300 Avg Wkdy	30 mins	4:30 am-9:30 pm		Oceanside	R1		Y		
1	Light Rail	NCTD SPRINTER	Oceanside to Escondido	8,300 Avg Wkdy	30 mins	4:30 am-9:30 pm		Oceanside	R3		Y		
1	Light Rail	NCTD SPRINTER	Oceanside to Escondido	8,300 Avg Wkdy	30 mins	4:30 am-9:30 pm		Oceanside	R4		Y		
1	Light Rail	NCTD SPRINTER	Oceanside to Escondido	8,300 Avg Wkdy	30 mins	4:30 am-9:30 pm		Oceanside	R5		Y		
1	Traditional Bus	NCTD BREEZE 303	Oceanside -Vista Via Mission	4,335 Avg Wkdy	15 mins	4:03 am-12:11 am		Oceanside			Y		
1	Traditional Bus	NCTD BREEZE 313	Oceanside -Town Center N via Mesa Dr	231 Avg Wkdy	45 peak/90 base mins	5:52 am-7:39 pm		Oceanside	R6.2		Y		

³⁰ http://www.dot.ca.gov/dist11/departments/planning/pdfs/corridor/07_SR76_East_Corridor_Study.pdf

³¹ NCTD Comprehensive Strategic, Operating, and Capital Plan, 2013

1	Park & Ride	Mission Avenue/Frontier Drive (New Hope Church)						Oceanside	M2.9				50
2	Light Rail	NCTD Sprinter	Oceanside to Escondido	8,300 Avg Wkdy	30 mins	4:30 am-9:30 pm		Oceanside	R7		Y		
3	Traditional Bus	NCTD Breeze 306	Fallbrook - Vista via Mission	895 Avg Wkdy	60 mins	5:11 am-9:53 pm		Unincorporated	R10.0 R10.2 R10.7 R12.1 R12.4		Y		
3/4	Traditional Bus	RTA Commuter Link Express 202	Murrieta-Oceanside Transit Center	87 Avg Wkdy	7 SB and 4 NB Peak trips	4:00 am-8:09 pm		Unincorporated	R12.4 R17.1				
4	Park & Ride	NW Corner of I-15/SR-76							R17.1				163
5/6	Traditional Bus	NCTD Breeze 389	Escondido -Pala	483 Avg Wkdy	120 mins	5:03 am-10:31 pm			R17.4		Y		
7/8	Traditional Bus	NCTD Breeze 388	Escondido -Pala	537 Avg Wkdy	120 mins	6:03 am-9:13 pm			24.4 24.5 26.3 27.9 28.3 28.6 29.1 29.6 29.1 29.6 29.9 31.2 32.1 32.8		Y		
10	Traditional Bus	MTS 892	Borrego Springs- El Cajon	17 Avg Wkdy	1 R/T Thursdays Only	7:50 am-5:26 pm		Unincorporated	48.6				



Map 2: SR-76 NCTD System Map Crop West

<http://www.gonctd.com/system-map>



Map 3: SR-76 NCTD System Map Crop East

<http://www.gonctd.com/system-map>

FREIGHT

The 1982 Surface Transportation Assistance Act (STAA) includes National Network (NN) and Terminal Access (TA) routes. SR-76 is designated as a Terminal Access (TA) route from I-5 to I-15, providing a connection to NN routes. TA routes allow trucks to travel between NN routes to reach a truck’s operating facility or freight terminal. SR-76 is also classified as a California Legal Advisory Route³² from I-15 to Pala Mission Road, and from Valley Center Road near the Rincon Indian Reservation to SR-79. Additionally, SR-76 from Pala Mission Road (west junction) near Pala, 5.7 miles east of I-15 to Valley Center Road near the Rincon Indian Reservation, is classified as a California Legal Network³³ (see Map 4).

National Freight Network

The future National Freight Network (NFN) will consist of a Primary Freight Network (PFN), the portions of the Interstate System not designated as part of the PFN, and Critical Rural Freight Corridors (CRFC). Based on criteria found in Section 1115 of MAP-21 (Moving Ahead for Progress in the 21st Century), SR-76 will not be part of the proposed NFN. SR-76 does not meet the criteria of the proposed PFN, it isn’t an interstate and it doesn’t meet the criteria of the CRFC.

<http://www.fhwa.dot.gov/map21/factsheets/freight.cfm>

According to FHWA, 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”.

<http://ops.fhwa.dot.gov/freight/infrastructure/nfn/index.htm>

TABLE 9 : SR-76 FREIGHT

Facility Type/Freight Generator	Location	Mode	Name	Major Commodity/ Industry	Comments/Issues
Air Cargo Airport	Oceanside	Airplane	Bob Maxwell Memorial Field/Oceanside Municipal Airport	Aircraft fuel, search and rescue, disaster/emergency services, aero medical emergency, recreation	Noise Air Quality
Casinos	Pala, Pauma, Rincon	Truck	Pala, Pauma, Rincon	Food, Entertainment, water	Congestion, safety, access
Quarry/Mine	Fallbrook: 1.3 miles East of I-15	Truck	Rosemary’s Mountain	Crushed rock, Sand, Construction aggregate	Congestion, safety, access

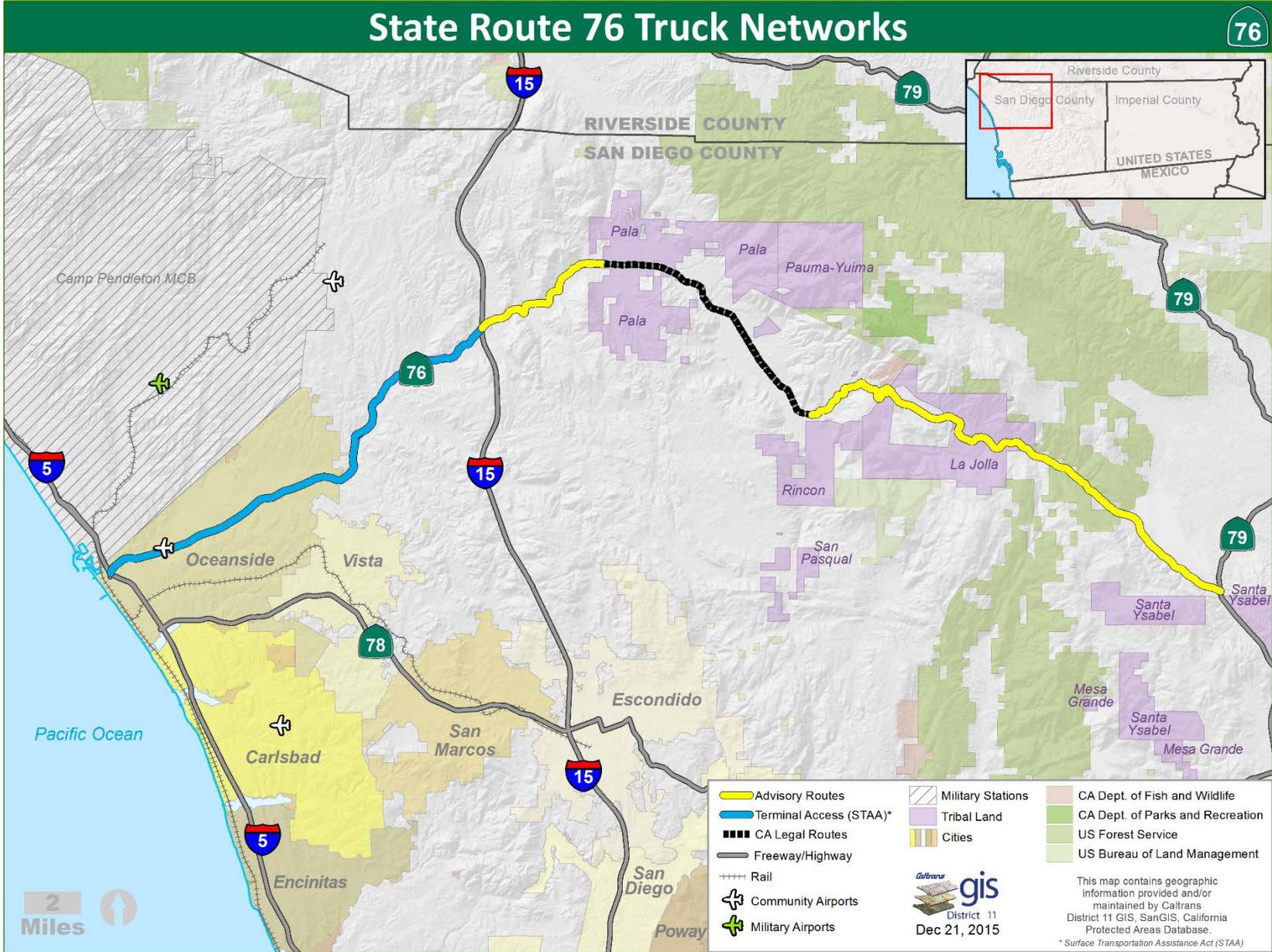
Freight trains in San Diego County move along corridors shared with multiple transit agencies. BNSF freight trains share the heavily utilized LOSSAN corridor³⁴ with the commuter rail Coaster and Metro link and with the intercity passenger rail operated by Amtrak. BNSF also shares tracks with the light rail service SPRINTER train between Oceanside and Escondido which runs parallel to the SR-76 corridor.

³² A California Legal Advisory Route allows California Legal trucks, which are allowed a maximum KPRA length of 40 feet; however, truckers are advised not to use advisory routes unless their KPRA (Kingpin to Rear Axle) is less than 40 feet. The advised length is posted on the sign, and could be 30, 32, 34, 36, or 38 feet. The most common KPRA advisory is 30 feet. <http://www.dot.ca.gov/hq/traffops/engineering/trucks/routes/truck-routes.htm>

³³ California Legal trucks can use all State highways in California except those with special restrictions such as for weight or length. <http://www.dot.ca.gov/hq/traffops/engineering/trucks/routes/truck-routes.htm>

³⁴ The 351-mile Los Angeles – San Diego – San Luis Obispo Rail Corridor (LOSSAN Corridor)

Map 4: SR-76 Route Truck Network



AVIATION



There is one airport located in close proximity to the corridor, and is directly accessed via SR-76: the Bob Maxwell Memorial Field at Oceanside Municipal Airport (OKB)³⁵. The Bob Maxwell Memorial Field at Oceanside Municipal Airport is a general aviation airport featuring one runway and fuel services and its functional class is regional. The airport serves a vibrant coastal community with numerous tourist attractions such as coastal sports, parachuting on the north end of the field, the Mission San Luis Rey, several museums, and other tourist attractions. Airport services include: aircraft fuel sales, search and rescue, disaster/emergency services, aero medical emergency, sport flying, parachuting, and car rental. There were 61 based aircraft, and 11,848 annual operations for the period ending December 31, 2013. The airport is 2 miles from the City of Oceanside, but is not served by transit. The airport is owned by the City of Oceanside and operated and managed by Airport Property Ventures, LLC pursuant to lease and operating agreements.

Park and Ride:

There are currently four Park and Ride lots near or adjacent to SR-76³⁶ at the following locations: the I-15/SR-76 interchange, Sweetgrass Lane in Bonsall, Mission Avenue/Frontier Drive in Oceanside and Maxson Street/Barnes Avenue. The park and ride facility at the intersection of I-15/SR-76 is currently on the north side of the intersection and has an RTA bus stop that was funded by a Federal Transit Administration (FTA) grant. It is in the process of being reconfigured and will be temporarily relocated to the south side. The park and ride facility on 4980 Sweetgrass Lane at the River View Church in Bonsall currently has 50 spaces available for parking. Mission Avenue/Frontier Drive in Oceanside was declared as excess land in early 2015 and the park and ride facility will be decommissioned through the Caltrans excess land process. The park and ride facility at the intersection of Maxson Street and Barnes, off Mission Avenue is owned by the City of Oceanside and provides 43 parking spaces.

³⁵ <https://nfdc.faa.gov/nfdcApps/airportLookup/airportDisplay.jsp?airportId=OKB>

³⁶ <http://www.dot.ca.gov/dist11/departments/planning/pages/parkandride.htm>

ENVIRONMENTAL CONSIDERATIONS



Lake Henshaw



Orange groves along SR-76 near Pauma Indian Reservation

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 SR-76. 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-76 is in the vicinity of park and recreation facilities and numerous schools in the western segments where residential development exists at higher densities. Parks include Ivey Ranch Park, Guajome Regional Park, Gopher Canyon, and Bonsall Preserve. Eastern segments have large open space areas in close proximity to the highway.

Farmland/Timberland: Segments 4 through 10 all have agricultural land uses. Segments further east (5 through 10) have agricultural land adjacent to the roadway. Eastern segments also show a combination of land use that involves primarily agricultural land and open space along with low density residential development. The land uses adjacent to the highway are more rural in character in the eastern segments.

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 presence of at least one of these factors in each segment of SR-76, 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 from the roadway are maintained. This becomes a greater concern with eastern segments that are rural and have more open space and agricultural lands.

Seismic/Geology/Soils: None of the segments of SR-76 lie upon active fault lines. However, many segments are adjacent to steeper slopes with moderate to severe erosion hazards. The majority of earthquakes in San Diego County have been under 4.0 on the Richter scale. There is potential for higher magnitude earthquakes on the eastern end of the county. Unconsolidated soil types in coastal and flood plain areas can result in damage to buildings and structures due to ground shaking in the event of a larger magnitude earthquake.

Floodplain: Portions of SR-76 are located in the Federal Emergency Management Agency (FEMA) flood zones with the following designations: AE, A³⁷ and 0.2 PCT³⁸ Annual Chance Flood Hazard.

Climate Change and Sea Level Rise Vulnerability: Segment 1 is located in close proximity to the San Luis Rey River and is also located at a distance close enough to the Pacific Ocean to elevate the probability for this category. Climate change has also been attributed to an increase in wildfires and in the length of wildfire seasons. The SR-76 corridor has been prone to wildfires, including the Old Highway 395 fire in May 2014 that resulted in the temporary closure of SR-76 in both directions.

Hazardous Materials: All segments are within relatively new facilities and do not constitute a concern for Aerially Deposited Lead (ADL). All segments have probability for having asbestos related to existing guardrails and ADL related to existing paint striping.

Noise: The proximity of SR-76 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. Additionally, low density residential areas located in eastern segments would potentially have residents accustomed to lower noise levels who might be opposed to an increase in noise levels.

Waters and Wetlands: SR-76 is adjacent to the San Luis Rey River, and passes near Gomez Creek, Pala Creek, Frey Creek, and Aqua Tibia Creek. SR-76 also passes near Lake Henshaw in Segment 10. Any work within areas considered as waters of the U.S. or waters of the state would require permits from the U.S. Army Corps of Engineers or California Department of Fish and Wildlife and Regional Water Quality Control Board respectively.

Special Status Species: Special status species within the SR-76 corridor include the Federally listed (Endangered) Arroyo Toad (*Anaxyrus californicus*), Least Bell's vireo (*Vireo bellii pusillus*), Southwestern willow Flycatcher (*Empidonax trailli extimus*), and the Federally listed (Threatened) Coastal California gnatcatcher (*Poliophtila californica*).

Fish Passage: Segment 1 is adjacent to the San Luis Rey River which could provide opportunity for fish passage. Creeks located further east may provide riparian habitat; however, it appears that seasonal flows for these creeks are much lower and not likely to provide fish passage opportunities.

Habitat Connectivity: SR-76 runs primarily east-west, adjacent to riparian habitat in some locations and through/adjacent to open space as it extends further east. In the vicinity of open space SR-76 limits wildlife movement. SR-76 is adjacent to the San Luis Rey River in Segment 1 and is near smaller rivers and creeks to the east (Gomez Creek, Pala Creek, and Agua Tibia Creek). Several large open space areas exist throughout segments 2 through 10 with areas of open space appearing progressively larger moving eastward. Segments 1 through 4 are more urban and constitute lower habitat connectivity risks. To address the limitation of wildlife movement, the SR-76 East Project will include the installation of several wild animal crossings along Segment 4 - this project is further described in the Key Corridor Issues section.

³⁷ A and AE zones are considered Special Flood Hazard Area (SFHA) and flood insurance is typically required for residences in these areas <https://www.fema.gov/floodplain-management/zone>

³⁸ Percent-annual-chance floor event (base flood or 100-year flood)

Air Quality Conformity

Transportation conformity is required under the U.S. 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 8-hour ozone standard of 0.08 parts per million (ppm). San Diego County submitted a Redesignation Request and Maintenance Plan for the 1997 Nation Ozone Standard in December 2012. Effective April 4, 2013, USEPA found that the motor vehicle emissions budgets for ozone for the years 2020 and 2025 are adequate for transportation conformity purposes.

USEPA has promulgated the 2008 ozone standard of 0.075 ppm. On May 21, 2012 the USEPA classified San Diego County as marginal nonattainment. For this nonattainment designation, tribal areas that were previously excluded are now included as part of the San Diego region nonattainment designation. All 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.

The Maintenance Plan for PM₁₀ approval by the U.S. Environmental Protection Agency was published in the Federal Register on March 19, 2013.

Fine Particulate Matter (PM_{2.5})

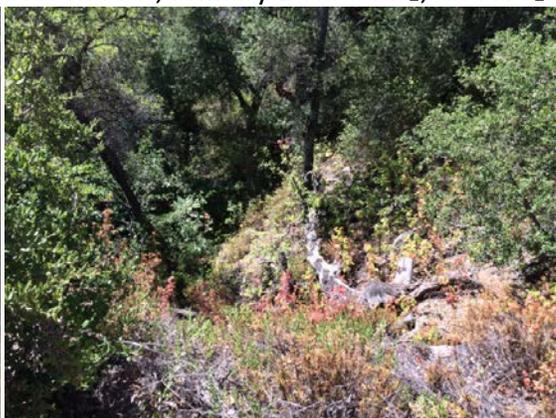
San Diego County is classified as attainment for the Annual and the 2006 PM^{2.5} standard.

Carbon Monoxide (CO) and Nitrogen Dioxide (NO₂)

San Diego County is classified as attainment for the CO, Primary 1-Hour SO₂, and NO₂.



Near La Jolla Indian Reservation Campgrounds



Culvert near La Jolla Indian Reservation

TABLE 10: SR-76 ENVIRONMENTAL CONSIDERATIONS

Segment		1	2	3	4	5	6	7	8	9	10
Section 4(f) Land	High	High	Med	High	High	Med	Med	High	High	High	High
Coastal Zone	Low										
Farmland/ Timberland	Low										
Env. Justice	Med-High										
Cultural Resources	Med										
Visual Aesthetics	Med										
Seismic	Med/High										
Geo/Soils	Med										
Floodplain	Med										
Climate Change and Sea Level Rise Vulnerability	Med										
Hazardous Materials	Low										
Naturally Occurring Asbestos	Non-attainment										
Air Quality	Ozone	Non-attainment									
	2.5	Non-attainment									
	PM 10	Non-attainment									
CO	Attainment										
Noise	High										
Waters and Wetlands	High										
Wild and Scenic Rivers	Low										
Special Status Species	Med										
Fish Passage	High										
Habitat Connectivity	Med										

CORRIDOR PERFORMANCE

The SR-76 Corridor Performance Table 8 displays traffic volumes for Base Year (BY) 2012 and Horizon Year (HY) 2040. Corridor performance on SR-76 varies greatly by segment. At the west end of the route, in the City of Oceanside from I-5 to College Boulevard, the Annual Average Daily Traffic (AADT) is 26,000 East Bound (EB) which is the highest AADT on the route. College Boulevard has the most consistent high traffic volumes as it travels in a north-south direction from SR-76 to Lake Boulevard. Other major arterials within the corridor with high AADT are El Camino Real, Mission Avenue, Oceanside Boulevard, Douglas Boulevard, and Coast Highway. AADT is significantly lower on the segments to the east of I-15 with an AADT of 2,050 from Palomar Mountain Road to Junction SR-79 at the eastern end of SR-76.

Segment 1 currently operates at a Level of Service (LOS) “F” with the highest congestion at the western end of the route in the morning. LOS improves significantly east of I-15. Current LOS for the rest of the corridor segments range between LOS “C” to LOS “A” as you travel east from I-15 to SR-79.

Based on the future concept for SR-76, the addition of general purpose lanes will help relieve congestion and improve the LOS. The new four-lane highway from South Mission Road to I-15 will be a key transportation improvement to help meet future travel demand.

TABLE 11: SR-76 CORRIDOR PERFORMANCE

Segment #	1		2		3		4		5	
	E	W	E	W	E	W	E	W	E	W
	I-5 to College Blvd.		College Blvd. to Vista Way		Vista Way to South Mission Road		South Mission Road to I-15		I-15 to Horse Ranch Creek	
Basic System Operations										
AADT³⁹ (BY⁴⁰) 2012 (5 Day)	26,000	26,000	20,250	20,250	18,250	18,250	11,000	11,000	6,250	6,250
AADT (HY⁴¹) 2040	31,000	31,000	29,000	29,000	28,500	28,500	21,500	21,500	8,000	8,000
AADT: Growth Rate/Year	0.63 %	0.63 %	1.29%	1.29%	1.60%	1.60%	2.42%		0.89%	
Peak Hour Volumes (BY)	2,391	1,404	1,863	1,094	1,679	986	869	803	494	456
Peak Hour Volumes (HY)	2,604	1,736	2,436	1,624	2,394	1,596	1,806	1,204	672	448
LOS Method	HCM ⁴²	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM
Segment LOS (BY)	F	C	D	C	C	C	B	B	A	A
Segment LOS (HY)	F	C	F	C	E	C	D	B	A	A
VMT⁴³ (BY)	16,1200	16,1200	64,800	64,800	54,750	54,750	53,900	53,900	2,812	2,812
VMT (HY)	192,200	192,200	92,800	92,800	85,500	85,500	105,350	105,350	3,600	3,600
Vehicle Occupancy Rate (BY)	1.22	1.22	1.22	1.22	1.22	1.22	1.19	1.19	1.19	1.19

³⁹ Annual Average Daily Traffic (AADT)

⁴⁰ Base Year (BY)

⁴¹ Horizon Year (HY)

⁴² Highway Capacity Manual

⁴³ Vehicle Miles Travelled (VMT)

Vehicle Occupancy Rate (HY)	1.24	1.24	1.24	1.24	1.24	1.24	1.21	1.21	1.21	1.21
Truck Traffic										
Total Average Annual Daily Truck Traffic (AADTT) (BY)	1,144	1,144	1,013	1,013	1,351	1,351	814	814	875	875
Total Average Annual Daily Truck Traffic (AADTT) (HY)	1,364	1,364	1,450	1,450	2,109	2,109	1,591	1,591	1,120	1,120
Total Trucks (% of AADT) (BY)	1,144	1,144	1,013	1,013	1,351	1,351	814	814	875	875
Total Trucks (% of AADT)(HY)	1,364	1,364	1,450	1,450	2,109	2,109	1,591	1,591	1,120	1,120
5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY)	148	148	240	240	420	420	253	253	121	121
5+ Axle Average Annual Daily Truck Traffic (AADTT)(HY)	176	176	344	344	656	656	495	495	155	155
5+ Axle Trucks (as % of AADT)(BY)	0.57%	0.57%	1.19%	1.19%	2.30%	2.30%	2.30%	2.30%	1.93%	1.93%
5+ Axle Trucks (as % of AADT)(HY)	0.57%	0.57%	1.19%	1.19%	2.30%	2.30%	2.30%	2.30%	1.93%	1.93%

Segment #	6		7		8		9		10	
	E	W	E	W	E	W	E	W	E	W
	Horse Ranch Creek to Pala Mission Road		Pala Mission Road to County Road S16		County Road S16 to Valley Center Road		Valley Center Road to Palomar Mountain Road		Palomar Mountain Road to Junction SR-79	
Basic System Operations										
AADT (BY) 2012 5 Day	6,250	6,250	3,250	3,250	5,250	5,250	2,025	2,052	1,025	1,025
AADT (HY) 2040	7,500	7,500	4,500	4,500	6,600	6,600	4,000	4,000	2,000	2,000
AADT: Growth Rate/Year	0.89%		1.17%		0.82%		2.46%		2.42%	
Peak Hour Volumes (BY)	494	456	299	176	459	423	166	162	84	82
Peak Hour Volumes (HY)	630	420	378	252	554	396	336	224	168	112
LOS Method	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM
Segment LOS (BY)	E	E	C	C	D	D	C	C	B	B
Segment LOS (HY)	C	A	B	B	C	C	B	B	A	A
VMT (BY)	32812	32812	3640	3640	5250	5250	2025	2025	1025	1025
VMT (HY)	39375	39375	5040	5040	57420	57420	21600	21600	28200	28200
Vehicle Occupancy Rate (BY)	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Vehicle Occupancy Rate (HY)	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
Truck Traffic										

Total Average Annual Daily Truck Traffic (AADTT) (BY)	875	875	653	653	1087	1087	419	419	105	105
Total Average Annual Daily Truck Traffic (AADTT) (HY)	1,050	1,050	904	904	1,366	1,366	828	828	204	204
Total Trucks (% of AADT) (BY)	875	875	653	653	1,087	1,087	419	419	105	105
Total Trucks (% of AADT)(HY)	1,050	1,050	904	904	1,366	1,366	828	828	204	204
5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY)	121	121	69	69	83	83	32	32	13	13
5+ Axle Average Annual Daily Truck Traffic (AADTT)(HY)	145	145	95	95	104	104	63	63	26	26
5+ Axle Trucks (as % of AADT)(BY)	1.93%	1.93%	2.11%	2.11%	1.57%	1.57%	1.57%	1.57%	1.30%	1.30%
5+ Axle Trucks (as % of AADT)(HY)	1.93%	1.93%	2.11%	2.11%	1.57%	1.57%	1.57%	1.57%	1.30%	1.30%

KEY CORRIDOR ISSUES

Some of the rural developments along the eastern segment of SR-76 are not connected to water district lines, therefore well water supplied by trucks are common along the east of SR-76. Water trucks are a major freight concern in the corridor because some trucks exceed the permitted 40 foot length limit⁴⁴. In addition to water trucks, some tour buses, casino shuttles, motor-homes, etc. also exceed the 40 foot length limit.

Bicycle and Pedestrian facilities along SR-76 are limited but access is not prohibited. Shoulders and bike lanes along the rural segments are narrow creating conflicts with motorists and other users along the route. Though there is transit service, there are no bus stops along the eastern section of the route (segments 6-10). Pedestrians do not have paved shoulders or sidewalks.

Community members along the eastern segments of the route expressed concern regarding visibility for first responders who have in some cases been struck or injured while responding to incidents along the corridor.

SR-76 is a popular route for recreational motorcycles riders. Community members expressed concerns that recreational motorcyclists unfamiliar with the route tend to create conflicts with frequent users.

Since the eastern portion of SR-76 is a two lane highway, turning and passing conflicts can affect the flow of traffic on the route. Operational improvements such as passing lanes, curve realignments, pull outs and turn pockets are strategies that can improve traffic flow.

SR-76 serves a significant number of trips for recreation and tourism resulting in traffic concerns for users along this route. Since most of the residents along the eastern section of this rural route have driveways directly off the state highway, they are often concerned about conflicts from entering and exiting their private property. These additional roadway conflicts cause traffic impacts along the eastern segments of the route.

⁴⁴ http://www.dot.ca.gov/dist11/departments/planning/pdfs/corridor/07_SR76_East_Corridor_Study.pdf

Planned and Programmed Projects and Strategies

With continued growth in southwestern Riverside County, the addition of a north satellite campus of Palomar College, 800 new homes across the I-15 freeway, and the increasing growth of nearby casinos, Caltrans projects the daily traffic volume along Highway 76 will reach 46,000 vehicles by 2040. In order to meet this demand along the SR-76 corridor, following are the planned and programmed projects and strategies:



❖ SR-76 Planned and Programmed Projects:

On the western section of SR-76, improvements were constructed in three segments: the West, Middle and East. Within the City of Oceanside, between I-5 and Melrose Drive, the SR-76 West Segment has already undergone widening and realignment, and was completed in 1999.

• **Middle Segment (Completed 2012)**

The SR-76 Middle Segment is located between Melrose Drive and South Mission Road and serves a mixture of local, regional, and interregional traffic. Construction started in January 2010 to expand the existing highway from two lanes to four and was completed at the end of 2012. Construction of the Middle Segment widened and realigned SR-76 to a four lane conventional highway to meet present travel needs and accommodate future growth.

The project has been designed to meet three goals that will benefit the public. They are: 1) relieve existing and future traffic congestion; 2) improve motorist safety; and 3) protect and enhance the natural environment.



- **East Segment (Proposed completion Fall 2017)**

The SR-76 East Segment is located between South Mission Road and I-15. Construction of the East Segment will widen and realign SR-76 to a four-lane highway to meet present travel needs and accommodate future growth. The project will also modify and upgrade the SR-76/I-15 interchange. The project goals are to improve travel, increase motorist safety, and protect and enhance the natural environment.

Construction at the SR-76/I-15 interchange began in October 2012, as Phase 1 of the segment, and was completed in summer 2013. Phase 2 of the project will widen and realign the roadway began in fall 2014. It is anticipated that Phase 2 construction will take about three years. The SR-76 East Segment is the final segment in a series of three improvement projects to the SR-76 corridor located between I-15 and I-5. The East Segment stretches 5.2 miles from South Mission Road to I-15 and serves local, intra-regional, and interregional traffic.

Construction of the East Segment will widen and realign SR-76 to a four-lane highway to meet present travel needs and accommodate future growth. The project will also modify and upgrade the SR-76/I-15 interchange. The project goals are to improve travel, increase motorist safety, and protect and enhance the natural environment.

Improvements to the East Segment include:

Physical Improvements:

- Widening and upgrading the SR-76/I-15 interchange, including improvements to existing on- and off-ramps and the addition of two loop on-ramps to I-15, to improve traffic operations and efficiency (open to traffic August 2013)
- Modifying and expanding the Park & Ride at SR-76 and its access to Old Highway 395
- Widening the roadway from South Mission Road to Old Highway 395 to create a four-lane highway

Safety Enhancements:

- Creating a median barrier to separate oncoming traffic
- Realigning curves to improve sight and stopping distances
- Providing new standard width shoulders in each direction to accommodate bicycles, pedestrians, and emergency parking

Environmental Benefits:

- Facilitating wildlife movement by constructing animal undercrossings and directional fencing
- Improving water quality by mitigating storm water run-off through the implementation of biofiltration swales/strips and new drainage systems
- Creating, restoring, and re-vegetating habitat areas
- Supporting San Luis Rey River Park plans
- The improvements to the SR-76 corridor are part of the American Recovery and Reinvestment Act and the voter approved half-cent sales tax program, *TransNet*, which funds San Diego Region transportation projects. The new four-lane highway will be a key transportation asset to help meet future travel demand.⁴⁵

SR-76 East of I-15 Operational Improvements (Appendix C):

- Realign curves/Improve Shoulders
- Intersection improvements
- Access/intersection channelization

http://www.dot.ca.gov/dist11/departments/planning/pdfs/corridor/07_SR76_East_Corridor_Study.pdf

❖ SR-76/Valley Center Road Intersection Improvements (Proposed Completion Spring 2019)



Existing Valley Center Road intersection looking west

Valley Center Road (VCR) is a north-south road, which terminates at SR-76 at approximately 15.4 miles east of Interstate 15 (I-15). VCR is part of the San Diego County road system, and has a posted limit of 50 mph.

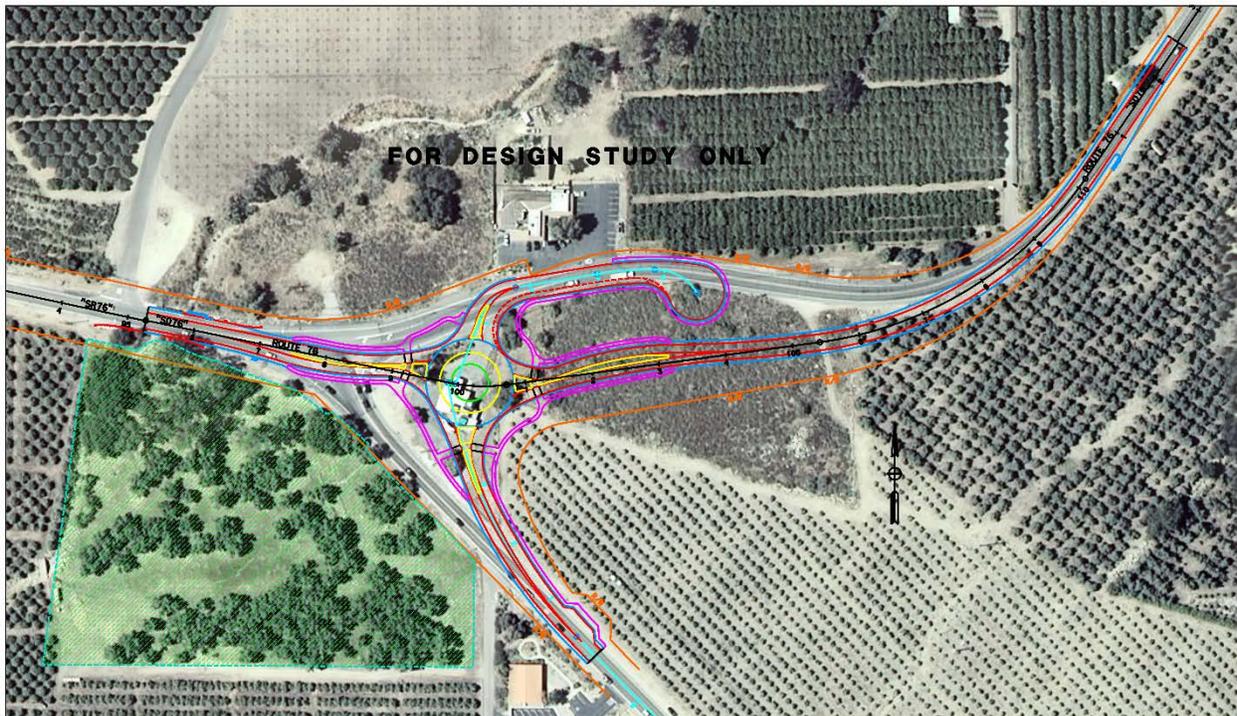
The primary objective of this project is to reduce the number and severity of accidents along this segment of SR-76. In order to reduce the number and severity of accidents, Caltrans Traffic Project Development branch proposed the construction of a roundabout as the preferred alternative for this intersection.

⁴⁵ <http://www.keepsandiegomoving.com/SR-76-Corridor/SR76-intro.aspx>

A roundabout is a type of circular intersection with counterclockwise traffic circulation, yield control, a center island with a mountable truck apron, and splitter islands at entrance and exit points.

The roundabout alternative will realign VCR and SR-76, construct a roundabout at the new intersection, realign the curve on SR-76 just east of the intersection, construct access to the businesses on the northeast quadrant of the intersection, construct a bus pull out on the northbound and southbound side of VCR, construct sidewalks and curb ramps, and apply high friction surface treatment to the roadbed.

The existing posted speed limits within the project limits are 55 mph for SR-76 and 50 mph on VCR. This alternative will maintain those speeds, however, vehicles circulating through the roundabout will travel at speeds ranging from 20- 25 mph due to advance warning signing, delineation and with the geometric features associated with the roundabout design. Construction of this project is tentatively scheduled to begin in 2017. The Roundabout alternative will include stage construction, temporary traffic control, earthwork, paving, modification of the drainage system, lighting, traffic signing and striping, installation of an alternative flared terminal systems and new bridge rails, and landscaping and irrigation.



Proposed Valley Center Road intersection aerial

TABLE 12: SR-76 PLANNED AND PROGRAMMED PROJECTS AND STRATEGIES

Segment	Description	Planned or Programmed	Location	Source	Purpose	Implementation Phase
1	Add slope/gore paving, Maintenance Vehicle Pullouts (MVP), gates/fencing. Address NPDES deficiencies, vegetative fire hazard, inert material; Relocate appurtenances	Planned	In Oceanside from Airport Road to 0.5 mi west of Melrose Drive	2013 10 Year SHOPP	System Preservation	Long Term
1	Add Channelization Improvements	Planned	Rancho Del Oro Drive	City of Oceanside	System Management	Long Term
1 and 2	Add 4 Express lanes	Planned	I-5 to Melrose Drive	SANDAG 2050 RTP	System Expansion	Long Term
2	Add Median Barrier	Planned	Rancho Del Oro to West of Melrose Drive	2013 10 Year SHOPP	System Management	Near Term
5	Add new Intersection improvements and connections	Planned	Pankey Road and Horse Ranch Creek Road	County of San Diego	System Management	Long Term
6	Realign curves, install 8-foot shoulders and add channelization	Planned	Gomez Creek Bridge	2013 10 Year SHOPP	System Management	Long Term
6	Add acceleration and deceleration lanes	Planned	P.M. 21.0	County of San Diego	System Management	Long Term
6	Add 2 Conventional Highway Lanes/4 Conventional Highway Lanes and Operational Lanes (4C/6C+Operational)	Planned	I-15 to Couser Canyon	SANDAG 2050 RTP	System Expansion	Long Term
Various Locations	Add Bridge Rail upgrades	Planned	Various	2013 10 Year SHOPP	System Preservation	Long Term

In addition to the projects listed in Table 9, there is an opportunity to incorporate Complete Streets strategies along SR-76. Caltrans' Complete Streets Implementation Action Plan 2.0⁴⁶ defines a Complete Street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Complete street concepts apply to all roadways in all contexts including local roads and state highways in rural, suburban, and urban areas. These concepts can be applied to create bicycle and pedestrian enhancements along SR-76 and provide safe mobility for all users on this route. These concepts can particularly be applied to the western segments in Oceanside, Fallbrook and Bonsall as well as the communities of Pala, Valley Center and La Jolla along the Eastern segments of SR-76.

⁴⁶ http://www.dot.ca.gov/hq/tpp/offices/ocp/docs/CSIAP2_rpt.pdf

APPENDIX A
GLOSSARY OF TERMS AND ACRONYMS

AADT	Annual Average Daily Traffic
AADTT	Annual Average Daily Truck Traffic
AB	Assembly Bill
ADA	Americans with Disabilities Act of 1990
ADT	Average Daily Traffic
APCD	Air Pollution Control District
BIA	Bureau of Indian Affairs
BY	Base Year
Cal EPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCTV	Closed Circuit Television
CDD	Caltrans Deputy Directive
CEQA	California Environmental Quality Act
CMA	Congestion Management Agencies
CMS	Changeable Message Sign
CO	Carbon Monoxide
CRS	California Road System
CSMP	Corridor System Management Plan
CSS	Context Sensitive Solutions
CTP	California Transportation Plan
DSMP	District System Management Plan
EMS	Extinguishable Message Signs
EO	Executive Order
EPA	Environmental Protection Agency
FHWA	Federal highway Administration
FSP	Freeway Service Patrol
FSR	Feasibility Study Report
FSTIP	Federal Statewide Transportation Improvement Program
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse Gas
GIS	Geographic Information System
HCP	Habitat Conservation Plan
HOT	High occupancy toll lane
HOV	High occupancy vehicle lane
HY	Horizon Year
IGR	Intergovernmental Review
IRRS	Interregional Road System
ITS	Intelligent Transportation System
KPRA	Kingpin to Rear Axle
LOS	Level of Service
MPO	Metropolitan Planning Organizations
MSPA	Master Specific Plan Area

MTS	Metropolitan Transit System
MVP	Maintenance Vehicle Pullouts
NIJC	National Indian Justice Center
NOA	Naturally Occurring Asbestos
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NN	National Network
PeMS	Freeway Performance Measuring System
PID	Project Initiation Document
PM	Particulate Matter
PSR	Project Study Report
RTA	Reservation Transportation Authority
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program
RTPA	Regional Transportation Planning Agencies
SANDAG	San Diego Association of Governments
SAFETEA-LU	Safe, Accountable, Flexible and Efficient Transportation Equity Act, a Legacy for Users
SB	Senate Bill
SCS	Sustainable Community Strategies
SHOPP	State Highway Operation Protection Program
SHOS	Solano Highways Operations Study
SHS	State Highway System
STAA	Surface Transportation Assistance Act
STIP	State Transportation Improvement Program
SR	State Route
TCR	Transportation Concept Report
TEA-21	Transportation Equity Act for the 21st Century
TERO	Tribal Employment Rights Ordinance
TEU	Twenty Foot Equivalent Unit
TDM	Transportation Demand Management
TMS	Transportation Management System
TOS	Traffic Operation System
TSDP	Transportation System Development Plan
TSN	Transportation System Network
V/C	Volume-to-Capacity (ratio)
VMT	Vehicle Miles Traveled

APPENDIX B

Definitions

AADT – Annual Average Daily Traffic is the total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th. Traffic counting is generally performed by electronic counting instruments moved from location throughout the state in a program of continuous traffic count sampling. The resulting counts are adjusted to an estimate of 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 that the most current data is available to the Districts

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 bottleneck is 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 development on the route to the capital facility. The capital facility can include capacity increasing, State Highway, bicycle facility, pedestrian facility, transit facility (Intercity Passenger Rail, Mass Transit Guideway etc.), grade separation, and new managed lanes.

Concept LOS – The minimum acceptable LOS over the next 20-25 years

Conceptual Project – A conceptual improvement or action is a project that is needed to maintain mobility or serve multimodal users, but 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 as informational purposes and not analyzed in the TCR.

Facility Concept – Describe the Facility and strategies that may be needed within 20-25 years. This 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 – The facility type describes the State Highway facility type. The facility could be freeway, expressway, conventional, or one-way city street.

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.

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

Intermodal Freight Facility – Intermodal transport requires more than one mode of transportation. An intermodal freight facility is a location where different transportation modes and networks connect and freight is transferred (or “transloaded”) from one mode, such as rail, to another, such as truck.

ITS – Intelligent Transportation System improves transportation safety and mobility and enhances productivity through the integration of advanced communications technologies into the transportation infrastructure and in vehicles. Intelligent transportation systems encompass a broad range of wireless and wire line communications-based information and electronics technologies to collect information, process it, and take appropriate actions.

Large Radii Corner – A corner radii allowing faster vehicle corner speeds reducing access and safety to pedestrians.

LOS – Level of Service is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. A LOS definition generally describes these conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort, and convenience. Six levels of LOS 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, air, bicycle or walking.

System Operations and Management Concept – Describe the 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. express lane to toll lane), TMS Field Elements, Transportation Demand Management, and Incident Management.

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

Peak Hour Volume – The hourly volume during the highest hour traffic volume of the day traversing a point on a highway segment. 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 – Is a 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– A planned improvement or action is a project 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 within a county 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 milepost (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– A programmed improvement or action is a project 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 – A route’s designation is adopted through legislation and identifies 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 Segment – A portion of a facility between two points.

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.

TMS – Transportation Management System is 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.

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 – Is the total number of miles traveled by motor vehicles on a road or highway segments.

APPENDIX C PROPOSED KEY OPERATIONAL IMPROVEMENT ON SR-76



