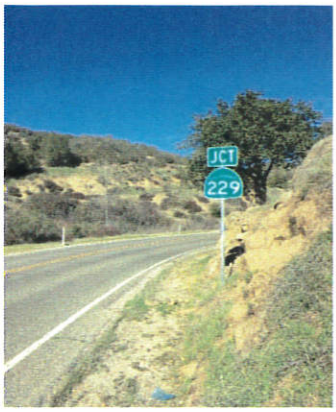
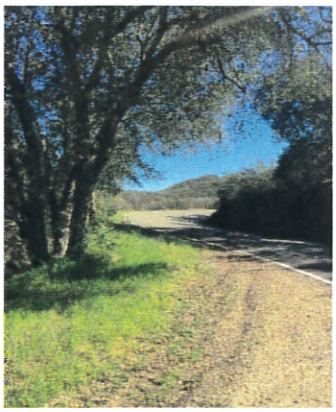
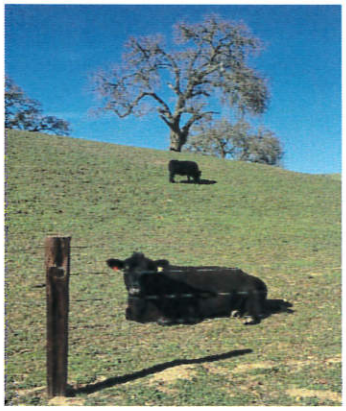
TRANSPORTATION CONCEPT REPORT

STATE ROUTE 229

DISTRICT 05

SEPTEMBER 2016




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 TCR is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, the District 5 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 and shall not be used as a substitute for project specific analysis, including but not limited to, traffic impact studies, that pertain to any private or public development proposal. Findings and/or conclusions may not be programmed do to various reasons, including but not limited to, engineering judgment and/or budget constraints.

Approvals:

TIMOTHY M. GUBBINS
District Director

10/10/16
Date

AILEEN K. LOE
Deputy District Director
Planning & Local Assistance

10/4/16
Date

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability

This page was intentionally left blank

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

Caltrans mission is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. Transportation Concept Reports (TCRs) play an active role in achieving this mission to serve the traveling public. The TCR is primarily a technical document that: (1) identifies trends and deficiencies within a transportation corridor, and (2) provides a basis for considering future actions to preserve the integrity of the corridor over the long-term. This information is valuable to Caltrans and its local and regional partners as they consider needs and priorities for future investments.

The TCR is unique and complementary to the Regional Transportation Plan/Metropolitan Transportation Plan – Sustainable Communities Strategy (RTP-SCS or MTP-SCS) developed by Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs). These documents guide decision making in support of transportation facilities that sustain mobility into the future. The TCR is a technical document, focused on one specific corridor, and identifies projected future corridor deficiencies. The scope provides an interregional perspective on travel. By contrast, the RTP-SCS is a policy element that interprets the land use and transportation interrelationship, evaluates future growth scenarios, considers overall transportation needs, and applies regional priorities and funding constraints to establish an action plan for implementing specific improvements.

Concept Summary

Segment Post Miles	Segment Description	Existing Facility	2040 Concept Capital Facility	2040 Concept System Operations & Management	Ultimate Facility Concept
1 0/9.16	From SR 58 to SR 41	2-lane, Conventional	2-lane, Conventional	Maintain and preserve	2-lane, Conventional

Projects and Strategies to Achieve Concept

Segment	Description	Location	Source	Purpose	Implementation Phase
1	Maintain and preserve the facility as a conventional highway corridor through preventative maintenance and implementation of regulatory mandates.	All	CT D5; SLOCOG RTP 2014*	Effectively manage transportation assets	Short Term through Long Term

*Strategy aligns with RTP objectives to maximize the efficiency of the existing transportation system.

The regional travel demand model from the approved San Luis Obispo Council of Governments (SLOCOG) 2035 Metropolitan Transportation Plan/Sustainable Communities Strategy (2014) and Caltrans historical data served as a basis for the technical analysis presented in the TCR. These projections forecast future demand on State Route 229 (SR 229) in a 2040 horizon year[2]. The model forecasts for SR 229 show little growth through the horizon year.

SR 229 CORRIDOR VISION

Caltrans' vision for the SR 229 corridor is to optimize the mobility of the existing facility for people and goods through Complete Streets strategies and preservation of the existing facility.

Figure 1: SR 229 Location

[2] *The SLOCOG regional travel demand model developed for the RTP-SCS sets 2035 as the horizon year. For this analysis, District 5 Advanced Planning extrapolated using the SLOCOG model to develop forecasts for horizon year 2040; this was completed according to standard modeling practices. The 2040 horizon year is used to align with the 2040 California Transportation Plan. Additional information about technical methodology and performance measures are provided in SR 229 Corridor Data Sheet.*

This page was intentionally left blank

CORRIDOR OVERVIEW

ROUTE DESCRIPTION

SR 229 is a conventional highway that begins at the intersection of SR 58 approximately six miles from the town of Santa Margarita in San Luis Obispo County. From SR 58, the highway continues northerly through mountainous terrain for a mile and half until it transitions for approximately eight miles into a flat and open area characterized by very low urban density and agricultural land. Eventually SR 229 passes through the town of Creston and ends at the SR 41 intersection. The 2010 United States Census reported that Santa Margarita had an estimated population of 1,259 and Creston had an estimated population of 94.

SR 229 SEGMENTATION

SR 229 consists of one segment. Segments are based on District boundaries, county boundaries, functional classification, significant changes in terrain, and changes in the function or use of the route.

Table 1: SR 229 Segmentation:

Segment #	Location Description	County_Route_ Begin Postmile	County_Route_ End Postmile
1	From SR 58 to SR 41	SLO_229_0.00	SLO_229_9.16

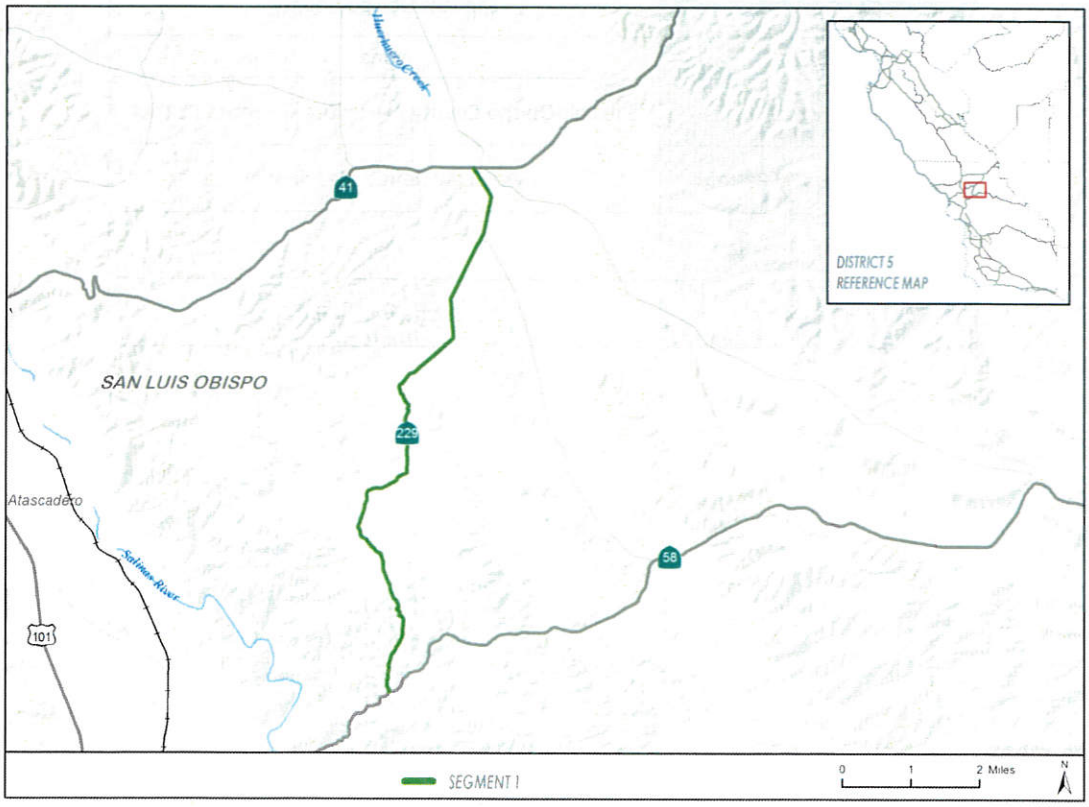


Figure 2: SR 229 Segmentation

Table 2: Major Route Designations and Characteristics

Segment	1
Freeway & Expressway	No
Facility Type	Conventional
National Highway System	No
Strategic Highway Network	No
Scenic Highway	No
Interregional Road System	No
Federal Functional Classification	Major Collector
Goods Movement Route	No
Truck Designation	Advisory - KPRA (kingpin-to-rearmost-axle distance) over 30 ft. not advised
Primary & Secondary System	Secondary
Rural/Urban/Urbanized	Rural
Metropolitan Planning Organization	San Luis Obispo Council of Governments
Regional Transportation Planning Agency	San Luis Obispo Council of Governments
Congestion Management Agency	San Luis Obispo Council of Governments
Local Agency	San Luis Obispo County
Tribes	None
Air District	San Luis Obispo County Air Pollution Control District
Land Use & Travel Patterns	Very Low Density Residential
Multimodal Facilities	N/A
Terrain	Mountainous/Flat

Figures 3 through 5 below depict additional characterisitics pertaining to the route and the surrounding area, including pavement condition, flood zone data, and critical habitat data.

Figure 3: SR 229 Pavement Condition

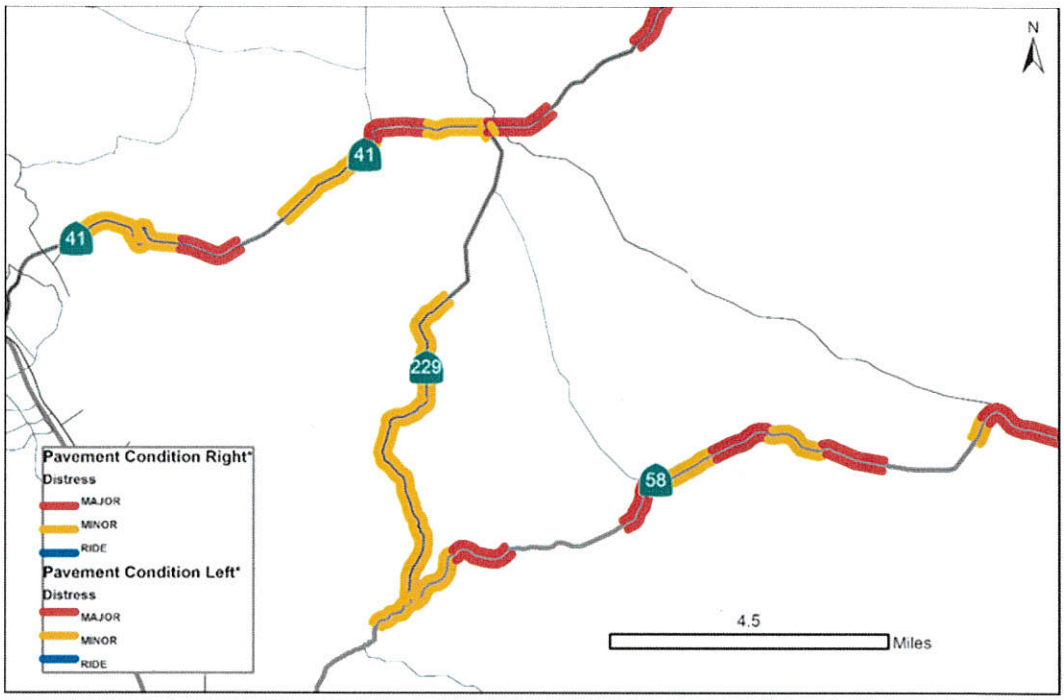


Figure 4: Flood Zone

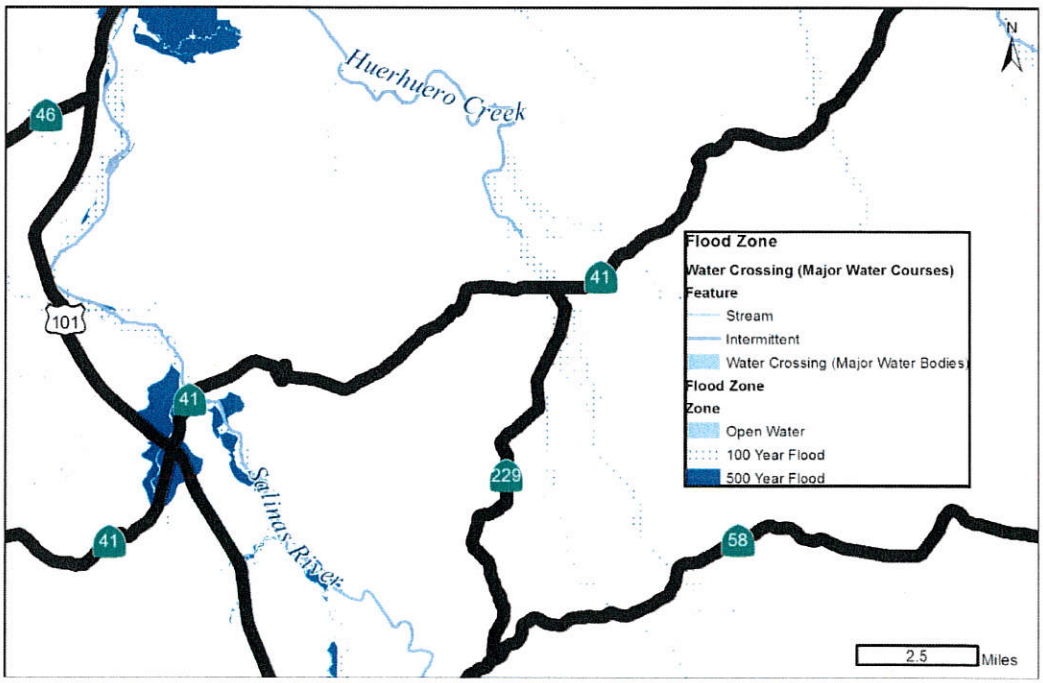
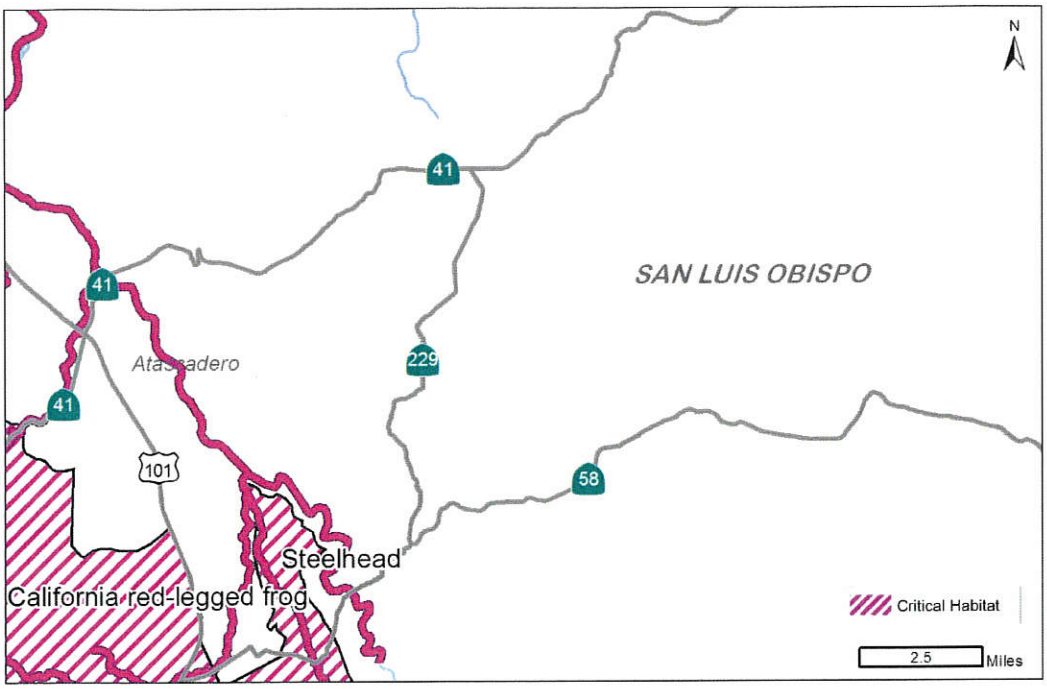


Figure 5: Critical Habitat



COMPLETE STREETS

PEDESTRIAN CONDITIONS

There are no sidewalks, crosswalks, curb ramps, or any other pedestrian facilities on SR 229. SR 229 functions as a main street for the town of Creston. The area is predominately rural, and does not include pedestrian-oriented land uses.

SLOCOG and San Luis Obispo County do not list pedestrian improvements in their long range plans for SR 229. The priority for local agencies is focused on pedestrian access on the urban road network near pedestrian-oriented resources, and not necessarily on low density rural areas like the SR 229 corridor.

BICYCLE CONDITIONS

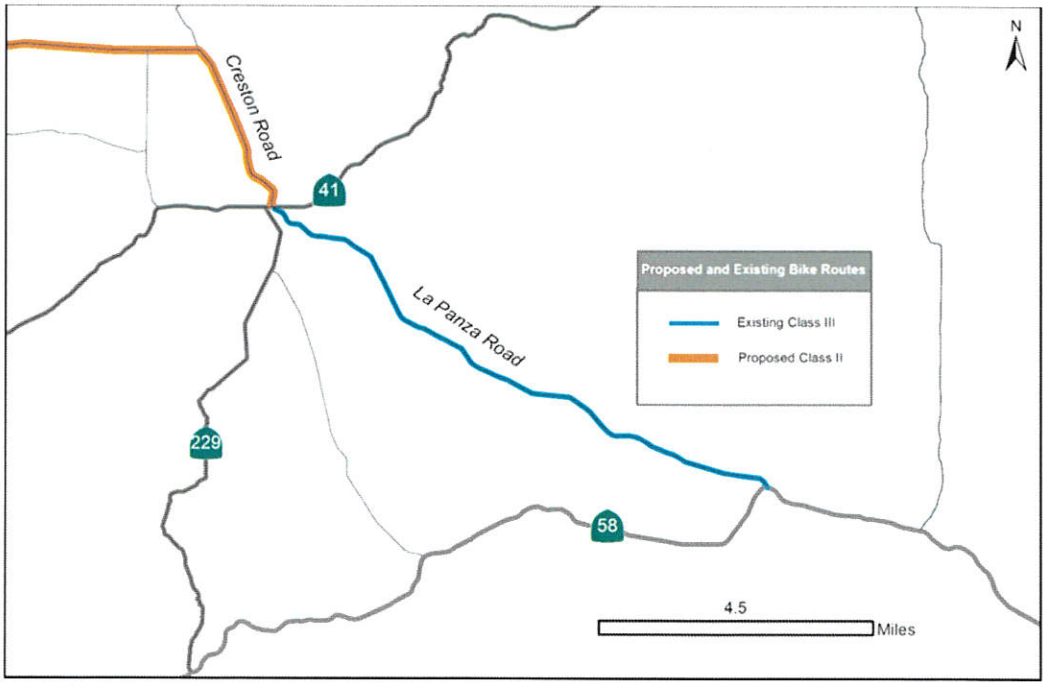
SR 229 is a popular route for bicyclists. Bicycle access exists through utilization of a lane; there are no designated bikeways along the corridor and existing shoulder widths are narrow. Vehicular volumes are low for the route.

SLOCOG and San Luis Obispo County do not list bicycle improvements in their long range plans for SR 229. The priority for local agencies is to expand bike access on the local road network and not on SR 229. San Luis Obispo County is currently developing proposed Class II and existing Class III bike routes on Creston Road and La Panza Road located parallel to SR 229. Creston Road and La Panza Road are contiguous bike routes that connect community residents and local businesses in the area.

For additional reference, Bike SLO County provides bicycle maps and other resources for bicycling on SR 229 and other county roads at https://bikeslocounty.org/.

Figure 6: Existing Shoulder Widths

Figure 7: Local Network Bike Routes



TRANSIT CONDITIONS

The San Luis Obispo Regional Transit Authority (RTA) provides intercommunity public transportation in the communities near SR 229. RTA does not operate bus service on the SR 229 corridor. The nearest RTA bus service connection is located at the Atascadero Transit Center on SR 41, approximately ten miles west of the SR 41/SR 229 intersection.

This page was intentionally left blank

CORRIDOR PERFORMANCE

EVALUATION

Performance of the SR 229 corridor is analyzed by the following characteristics:

System Operation is evaluated through regional traffic models and Caltrans historical data. The base year Annual Average Daily Traffic (AADT) is based on Caltrans historical data. Horizon year AADT projections are based on regional traffic model data.

Peak Hour analysis evaluated congestion during the PM Peak period, as congestion is typically higher than during the AM Peak period. With commute traffic, when one direction is heavy in the morning commute, the opposite direction is typically heavy during the afternoon commute.

Note that the SLOCOG regional travel demand model developed for the 2035 MTP/SCS sets 2035 as the horizon year. For this analysis, data was extrapolated using the SLOCOG model to develop forecasts for horizon year 2040; this was completed according to standard modeling practices. The 2040 horizon year is used for this TCR to align with the 2040 California Transportation Plan. Additional information about technical methodology and performance measures is provided in SR 229 Corridor Data Sheet.

ANALYSIS

System Characteristics

SR 229 extends nine miles from SR 58 to SR 41 in San Luis Obispo County. The majority of the route travels through a rural environment with rolling terrain. Trucks make up 5.3 percent of total traffic on SR 229. Truck provide services to local residents. SR 229 connects the towns of Santa Margarita and Creston.

System Operations

The 2013 AADT volume is 1,080 vehicles per day (Table 4). Historical AADT data indicates little change in traffic volumes near SR 58, and an increase near SR 41 (Figure 8). Traffic volumes are expected to rise slightly to 1,210 by 2040, based on model growth forecasts. Volumes are lowest near SR 58 at 150 vehicles per day and increase to 2,000 vehicles per day in Creston (Figure 9).

PM Peak Hour Data

In the base and horizon year, congestion is low along the route (Figure 10).

Bottlenecks

There are no existing bottlenecks, and no bottlenecks expected.

Table 3: Daily System Operations

AADT Base Year 2013	1,080
AADT Horizon Year 2040	1,210
AADT: Growth Rate (Vehicles/Year)	5
VMT Base Year 2013	9,850
VMT Horizon Year 2040	11,050

Figure 8: Historical AADT by Year

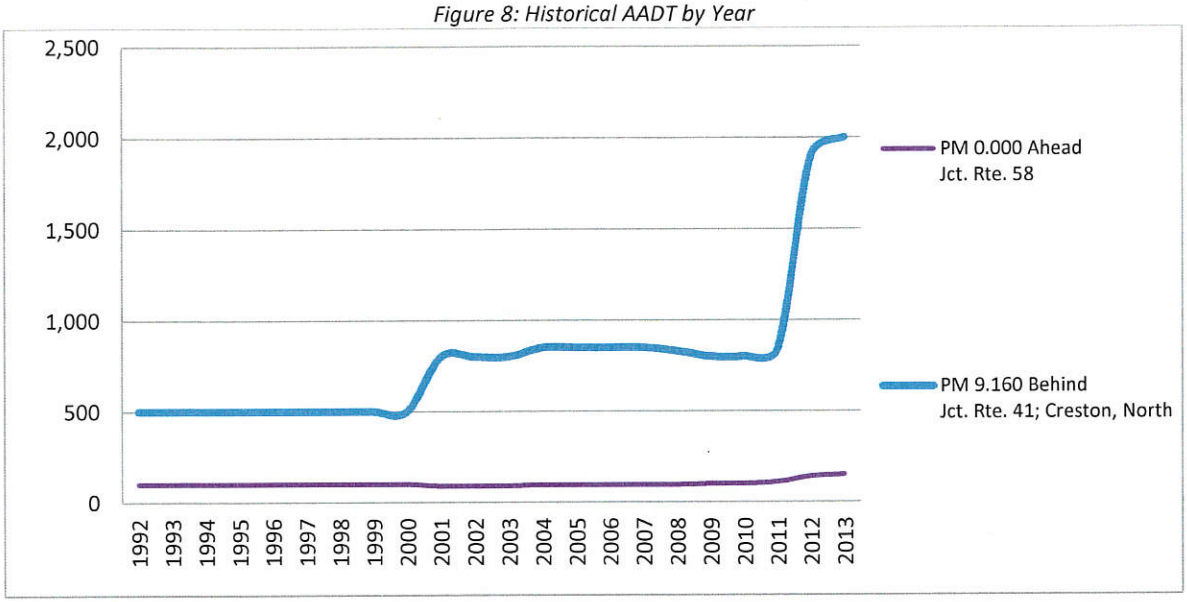


Figure 9: Historical AADT by Location

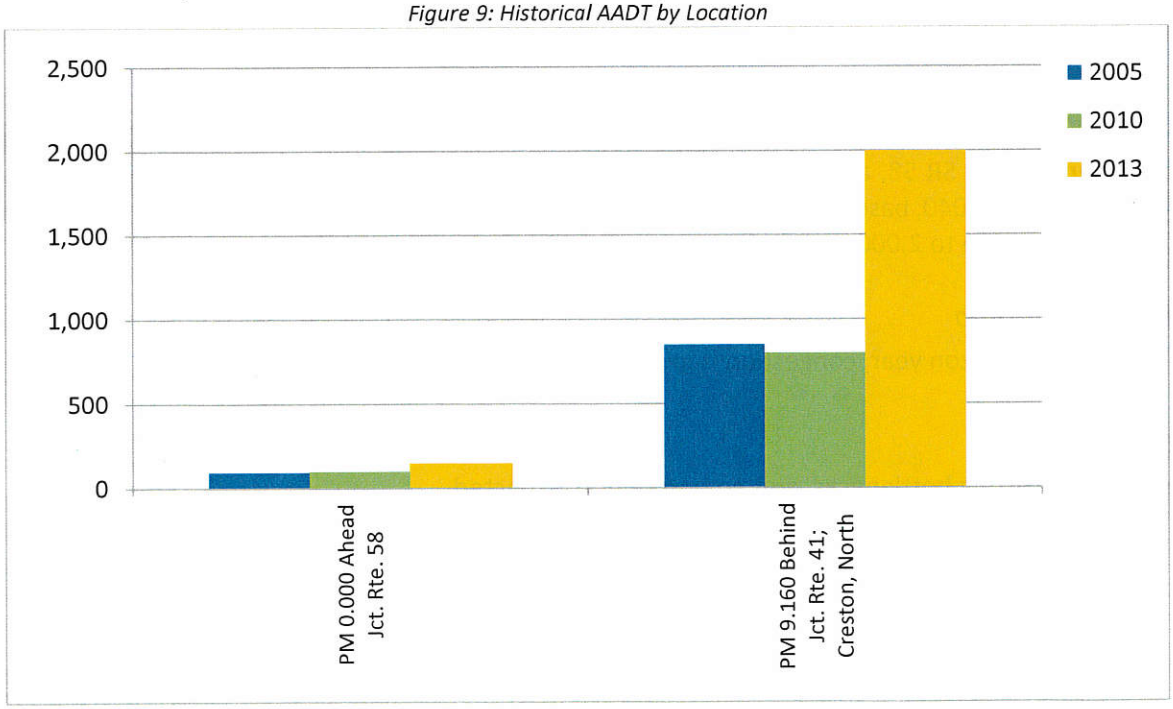


Figure 10: Base Year and Horizon Year Congestion

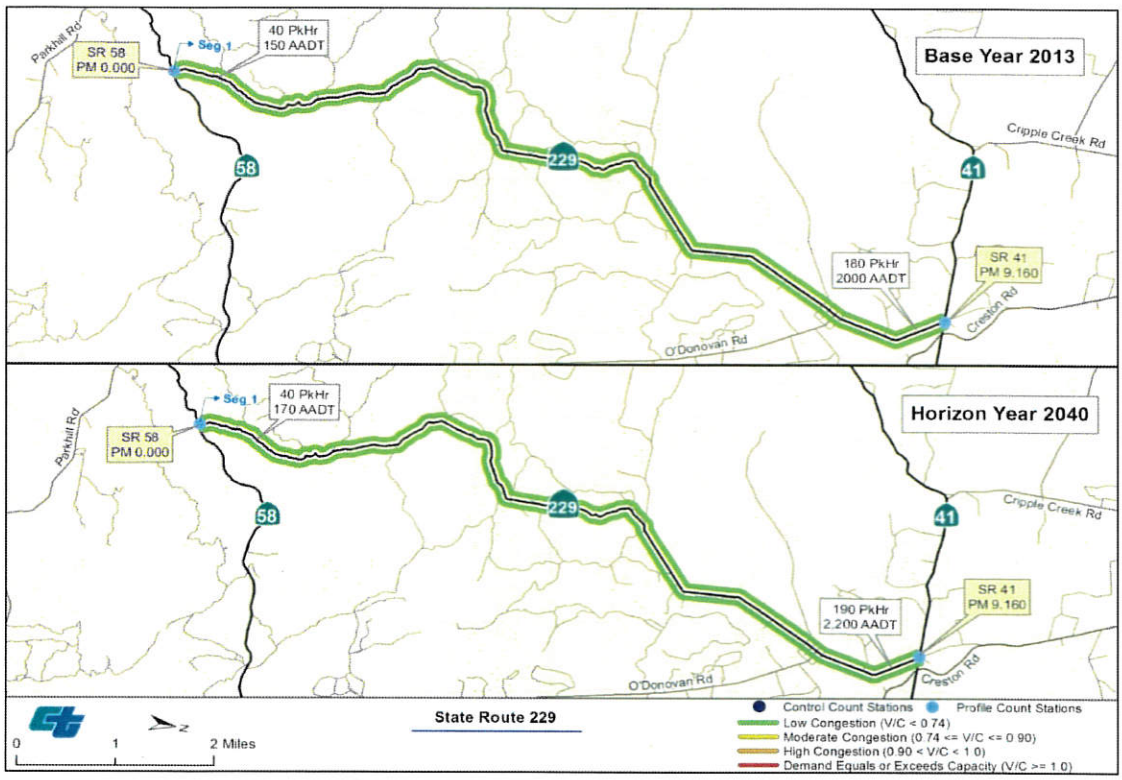


Table 4: Peak Hour Traffic Data

	Northbound	Southbound
Segment Length (Miles)	9.16	
PM Peak Hour Directional Split Base Year 2013	53.1%	46.9%
PM Peak Hour Directional Split Horizon Year 2040	53.2%	46.8%
PM Peak Hour Volume Base Year 2013	110	
	60	50
PM Peak Hour Volume Horizon Year 2040	120	
	60	50
PM Peak Hour Growth Rate (vehicles/year)	0.2	
PM Peak Hour VMT Base Year 2013	540	470
PM Peak Hour VMT Horizon Year 2040	560	490
PM Peak Hour VHT Base Year 2013	14	12
PM Peak Hour VHT Horizon Year 2040	15	13
PM Peak Hour V/C Base Year 2013	0.102	0.090
PM Peak Hour V/C Horizon Year 2040	0.107	0.094
PM Speed (mph) Base Year 2013 (Model Data)	38.3 mph	38.3 mph
PM Speed (mph) Horizon Year 2040 (Model Data)	38.3 mph	38.3 mph

KEY FINDINGS: CORRIDOR PERFORMANCE

- Base Year (2013) Conditions: Congestion is low throughout the corridor in both directions.
- Horizon Year (2040) Conditions: Congestion is low throughout the corridor in both directions.

CORRIDOR CONCEPT

CONCEPT RATIONALE

The corridor concept identifies the long range vision of SR 229 for the next 20-25 years and beyond. The corridor concept serves as a guide for long range planning of route improvements. It functions to protect the state's investment in SR 229, while recognizing the financial and environmental constraints which will not allow the programming of extensive improvements for all transportation facilities.

Table 5: Route Concept

Segment Post Miles	Segment Description	Existing Facility	2040 Concept Capital Facility	2040 Concept System Operations & Management	Ultimate Facility Concept
1 0/9.16	From SR 58 to SR 41	2-lane, Conventional	2-lane, Conventional	Maintain and preserve	2-lane, Conventional

The concept for SR 229 is based on state, regional, and local goals that embrace a fix-it-first philosophy for transportation investments. SR 229 is located within a small-scale, rural community. Most daily travelers are local resident commuters. Caltrans and key stakeholders share a common vision to preserve the SR 229 community. SLO County Land Use & Circulation Element states that it is *focusing future growth away from rural areas and limited resources...closer to existing public facilities where sustainable resources are available*. Likewise, SLOCOG's 2014 RTP says it *discourages* growth in rural areas.[7] Several local project proposals (*Templeton to Atascadero Pathway, Juan Bautista de Anza, and Salinas River Trail Project*) are designed for multi-use trail systems that are all in dense urban areas and away from precious agricultural resources (over 10 miles away from SR 229)[8]. With key stakeholders working together, Caltrans' mission to provide a safe, sustainable, integrated and efficient transportation system in California can become a reality.

PROJECTS AND STRATEGIES TO ACHIEVE CONCEPT

Moving forward, District 5 will coordinate with its regional and local partners to assure that the highway will be a community asset as well as provide for the safe movement of motorized and non-motorized traffic. This proactive strategy includes potential for relinquishment, if desired by the county.

Table 7: Projects and strategies to achieve concept

Segment	Description	Location	Source	Purpose	Implementation Phase
1	Maintain and preserve the facility as a conventional highway corridor through preventative maintenance and implementation of regulatory mandates.	All	CT D5; SLOCOG RTP 2014*	Effectively manage transportation assets	Short Term through Long Term

*Strategy aligns with RTP objectives to maximize the efficiency of the existing transportation system.

[7] Refer to Appendices for SLO County Land Use & Circulation Element and SLOCOG 2014 RTP.

[8] Refer to Appendices for project proposals by Templeton Community Services District Park and Recreation.

APPENDICES AND RESOURCES

Appendix A (SR 229 Data Sheet); Appendix B (About the TCR); Appendix C (Additional Corridor Data) can be accessed at: http://www.dot.ca.gov/dist05/planning/system_planning.htm#TCRs.

SOURCES

2014 Regional Transportation Plan/Sustainable Communities Strategy (2014 RTP/SCS)
http://www.slocog.org/programs/regional-planning/2014-rtpscs

California Energy Commission - Preliminary Climate Change Vulnerability Assessment for Social
www.energy.ca.gov/.../CEC.../CEC-500-2012-054.pdf

Caltrans: District System Management Plan (DSMP)
http://www.dot.ca.gov/dist05/planning/dsmp.htm

City of Atascadero - General Plan
http://www.atascadero.org/index.php?option=com_content&view=article&id=648&Itemid=1070

San Luis Obispo County Energy Wise Plan (Climate Action Plan)
http://www.slocounty.ca.gov/planning/CAP

San Luis Obispo County Air Pollution Control District (APCD or District)
http://www.slocleanair.org/who/about/mission.php

San Luis Obispo County Bike Plan
http://www.slocounty.ca.gov/PW/Bicycles/Bike_Plan.htm

San Luis Obispo County Land Use & Circulation Element (LUCE)
HTTP://WWW.SLOCOUNTY.CA.GOV/PLANNING/LANDPLANNING.HTM

Templeton Community Services District Park and Recreation Master Plan
HTTP://TEMPLETONCSD.ORG/INDEX.ASPX?NID=170

United State Census 2010
http://www.census.gov/2010census/popmap/ipmtext.php?fl=06

CONTRIBUTORS

Brandy Rider – Senior Transportation Planner
Fifteen years of experience in preparing TCRs, CSMPs, and environmental documents for CEQA/NEPA. Responsible for supervision and review of this document.

Jeff Berkman - Transportation Modeler
Ten years of experience in transportation demand modeling. Responsible for analyzing existing and future traffic conditions.

Gustavo Alfaro Jr. – Associate Governmental Program Analyst
Responsible for overall preparation and management of SR 229 TCR.