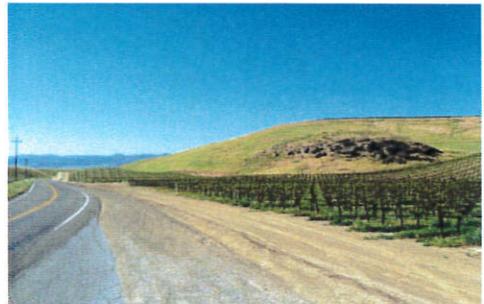




Transportation Concept Report

SR 198
District 5
February 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.

California Department of Transportation

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

Approvals:

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District Director

3/10/16
Date

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CHAPTER 1: 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 TCRs are 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.

ROUTE DESCRIPTION

SR 198 in Monterey County is a 2-lane conventional highway that is 26.2 miles in length. SR 198 begins at US 101 and travels easterly through flat and rolling terrain to the Fresno County Line. The route travels entirely through rural lands and connects to Coalinga in Fresno County.



Figure 1.1: SR 198 Location Reference Map
Source: Systems Planning Caltrans District 5

Corridor Performance Key Findings:

- 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.

System Operations: AADT volume in 2013 was 900-2,300 and projected to reach 1,300-3,100 by 2040.

Table 1.1: SR 198 Concept

Segments	Route Concept
Segment 1 MON (PM R0.111) to MON (PM 25.786)	Maintain two-lane conventional highway

Multimodal/Operational Improvements
<ul style="list-style-type: none"> • Increase shoulder width at strategic locations to accommodate bicyclists • Provide turnouts at strategic locations for maintenance

STAKEHOLDER PARTICIPATION

The TCR was provided to key stakeholders as an opportunity to review the existing conditions and the general overview of the corridor. The draft included preliminary modeling forecasts depicting 2040 conditions and shared Caltrans’ concept of the corridor with stakeholders to consider consistency with local/regional long-range land use planning efforts. Table 1.2 lists the key stakeholders of SR 198.

Table 1.2: SR 198 Key Stakeholders

Stakeholder	Role
Association of Monterey Bay Area Governments (AMBAG)	Metropolitan Planning Organization
Transportation Agency for Monterey County (TAMC)	Regional Transportation Planning Agency
Monterey County	County

CHAPTER 2: CORRIDOR OVERVIEW & PERFORMANCE

ROUTE DESCRIPTION

SR 198 in Monterey County is a 2-lane conventional highway that is 26.2 miles in length. SR 198 begins at US 101 and travels easterly through flat and rolling terrain to the Fresno County Line. The route travels entirely through rural lands and connects to Coalinga in Fresno County.

ROUTE SEGMENTATION

SR 198 consists of one segment due to low volumes and similarity of route features. Routes are broken into segments based on district boundaries, county boundaries, change in functional classification, significant changes in terrain, and changes in the function or use of the route. Table 2.1 provides the segmentation description and Figure 2.1 shows the segmentation map of SR 198.

Table 2.1: SR 198 Segmentation

Segment	Location Description	Co_Rte_Beg. PM	Co_Rte_End PM
1	US 101 in Monterey County to Monterey County/Fresno County Line	MON_198_R0.111	MON_198_25.786

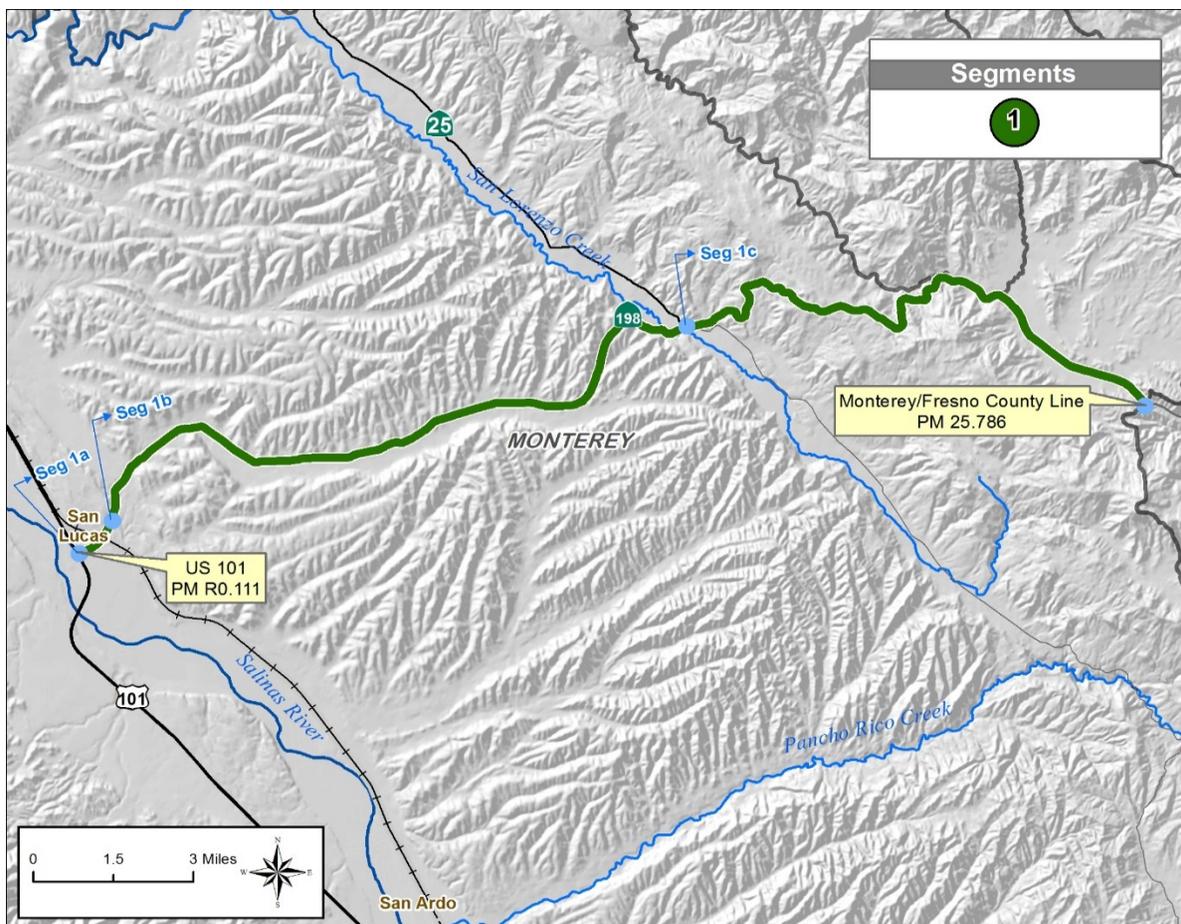


Figure 2.1: SR 198 Segmentation Map
 Source: Systems Planning Caltrans District 5

ROUTE DESIGNATIONS AND CHARACTERISTICS

Table 2.2: SR 198 Designations and Characteristics

Segment	1
Freeway & Expressway	No
Access Control	Conventional
National Highway System	No
Strategic Highway Network	No
Scenic Highway	No
Interregional Road System	No
Federal Functional Classification	Minor Arterial
Goods Movement Route	No
Truck Designation	Advisory - KPRA over 30 ft. not advised
Rural/Urban/Urbanized	Rural
Metropolitan Planning Organization	AMBAG
Regional Transportation Planning Agency	TAMC
Congestion Management Agency	TAMC
Local Agency	None
Tribes	None
Air District	Monterey Bay Unified Air Pollution Control District
Terrain	Flat with rolling hills

LAND USE

There is a direct nexus between land use and transportation; changes to one will inevitably impact the other. A better understanding of future development growth and transportation trends will help determine how to best plan for a transportation system that can accommodate future growth. The transportation system includes a network of local routes as well as state routes that serve different functions. Local routes are intended to serve transportation needs within a community.

The land use characteristics of the SR 198 corridor is primarily agricultural farmland, permanent grazing areas, and open space. There are a mix of land uses in San Lucas, near the intersection of SR 198 with the US 101 corridor. San Lucas is a census-designated place with a population of 269 (2010). Land uses in San Lucas include medium density residential, industrial, open space and low density commercial. *Figure 2.2* shows the existing land use surrounding SR 198.



Figure 2.2: SR 198 Land Use Map
Source: Systems Planning Caltrans District 5

SYSTEM CHARACTERISTICS

Segment 1 starts at the interchange with US 101 south of King City and travels east, intersecting with SR 25 and ending at the Monterey/Fresno County line. **Table 2.3** shows the existing facility characteristics for SR 198.

Table 2.3: SR 198 Existing Facility Characteristics

Segment	1
Facility Type	Conventional
General Purpose Lanes	2
Lane Miles	52.374
Centerline Miles	26.187

BICYCLE FACILITY

There are no parallel bike facilities along the Route. A variety of shoulder widths exist along SR 198 with the majority measuring 0 ft (Figure 2.3). Bicycle access on US 101 is prohibited; however, near the junction of US 101 and SR 198 there are frontage roads that travel parallel along US 101 in the north and south directions providing connectivity for cyclists. There are no existing or planned local or regional bicycle route designations for SR 198 (TAMC, 2011). TAMC is currently re-evaluating their Bicycle and Pedestrian Master Plan and is recommending a proposed Class III bicycle path along Cattlemen Road parallel with U.S. 101 near San Lucas. Bicyclists' activity along SR 198 is perceived to be used for primarily recreational purposes.

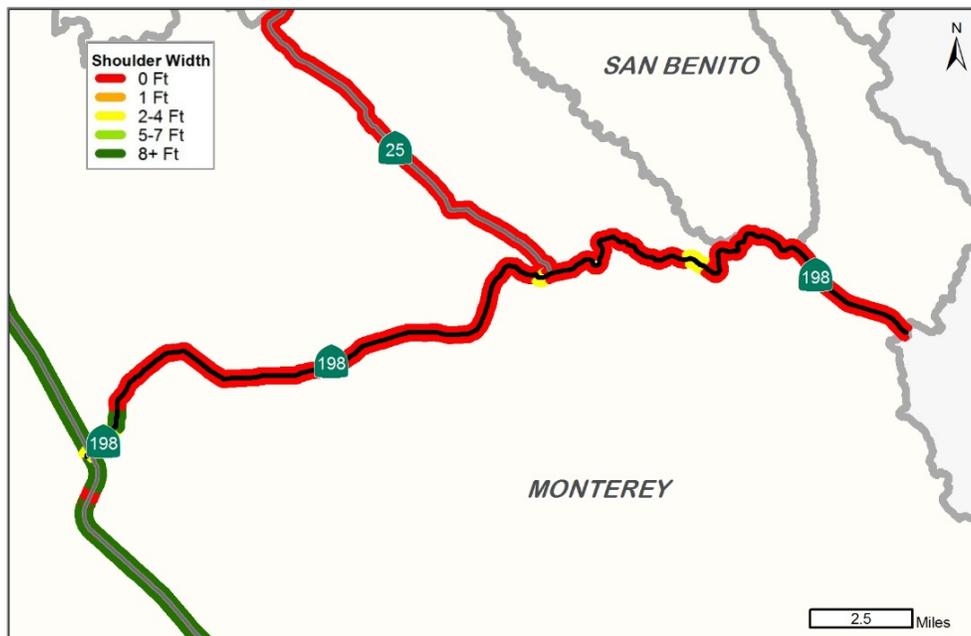


Figure 2.3: SR 198 Shoulder Width
Source: Systems Planning Caltrans District 5

PEDESTRIAN FACILITY

The areas that have pedestrian access are provided commonly in form of local streets and roads with sidewalks. SR 198 is rural in nature and has no sidewalks available for pedestrian access.

TRANSIT FACILITY

Currently, there are no public transit routes that run along SR 198.

FREIGHT

This Route serves agricultural land uses near US 101 and SR 25. The communities within Monterey County are major producers of agricultural products including related agricultural processing and warehousing. SR 198 is predominantly surrounded by graze land which is dependent for access to U.S. 101 a major freight corridor. SR 198 is also a minor east/west connector between US 101 and I-5. The route has an advisory for trucks kingpin-to-rear axle (KPR) over 30ft (*Figure 2.4*). SR 198, although it has low volumes of traffic, between 900 to 2,300 AADT for 2013, the Route does carry 25% truck traffic, or approximately 225 to 575 AADT trucks for 2013.



Figure 2.4: SR 198 Freight

Source: Systems Planning Caltrans District 5

CHAPTER 3: CORRIDOR PERFORMANCE

SYSTEM OPERATIONS

In 2013, Annual Average Daily Traffic (AADT) segment volume ranged from 900 to 2,300 vehicles per day. AADT volumes of 2,300 vehicles are observed in Segment 1a (*Figure 3.3*) adjacent to the intersection of SR 198 with US 101. In addition, AADT volumes are slightly higher in Segment 1c when compared with Segment 1b. This is expected as vehicles traveling westbound along the Route may potentially use SR 25 to access Pinnacles National Park located to the north. According to the National Park Service’s visitor use statistics (2015), Pinnacles visitation has been increasing over time, peaking in 2011 with 393,219 visitors. The increase in traffic volumes is not expected to significantly impact operations along SR 198 since the majority of visitors approaching from the north will likely use SR 25 to access Pinnacles’ east entrance; additionally, vehicles approaching from the south will likely use U.S. 101 connecting with SR 146 to Pinnacles’ west entrance.

Historic AADT data indicates an increase in volumes between 1992 and 2013 (*Figure 3.1*) for all locations except immediately east of US 101, which experienced higher growth rates between 2000 and 2007. According to the AMBAG regional model (corrected with counts), the segment volume will range from 1,300 to 3,100 vehicles per day by 2040. Table 3.1 shows the base year and horizon year daily system operations for SR 198. *Figure 3.1* shows the historical data by year from 1992 to 2013. *Figure 3.2* shows the historical data by location for years 2005, 2010 and 2013.

Table 3.1: SR 198 Daily System Operations¹

Segment	1
AADT Base Year 2013	900-2,300
AADT Horizon Year 2040	1,300-3,100
AADT: Growth Rate (Vehicles/Year)	10 to 30
VMT Base Year 2013	26,020
VMT Horizon Year 2040	36,820

¹ 2013 base year is established by Caltrans historic data and 2040 horizon year projections are based on the AMBAG ver1.4 regional traffic model.

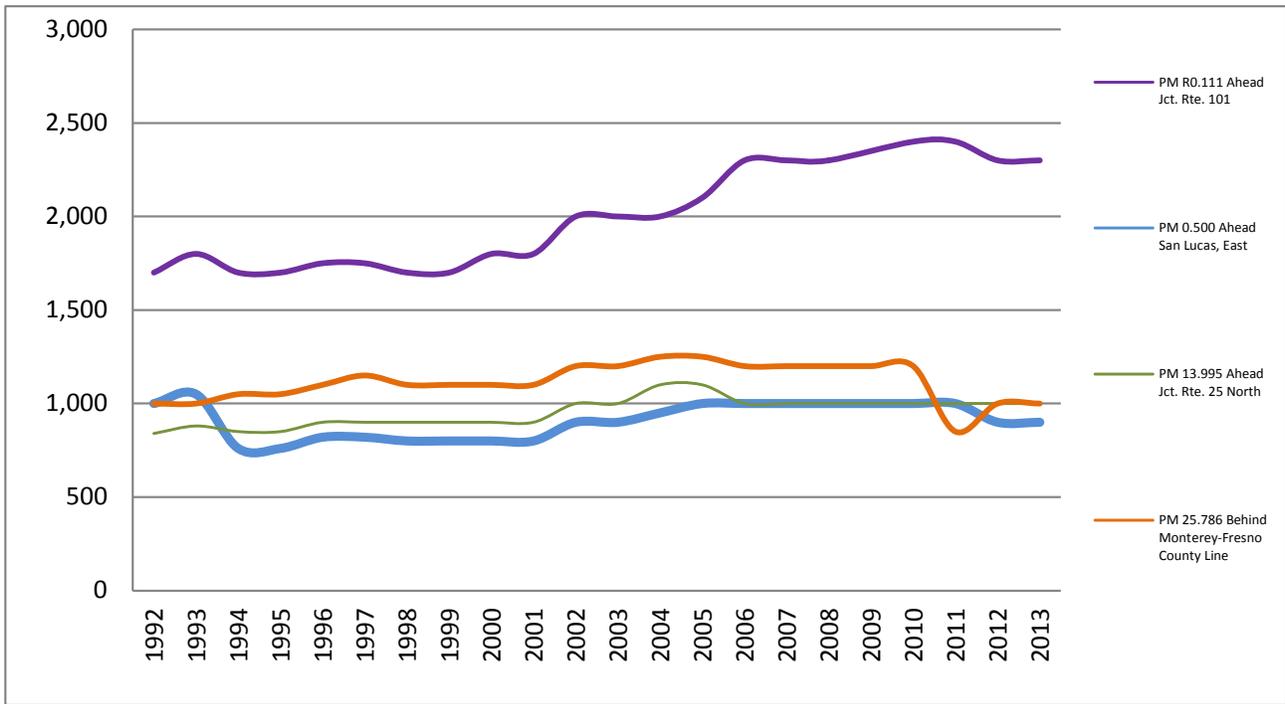


Figure 3.1: SR 198 Historical AADT by Year

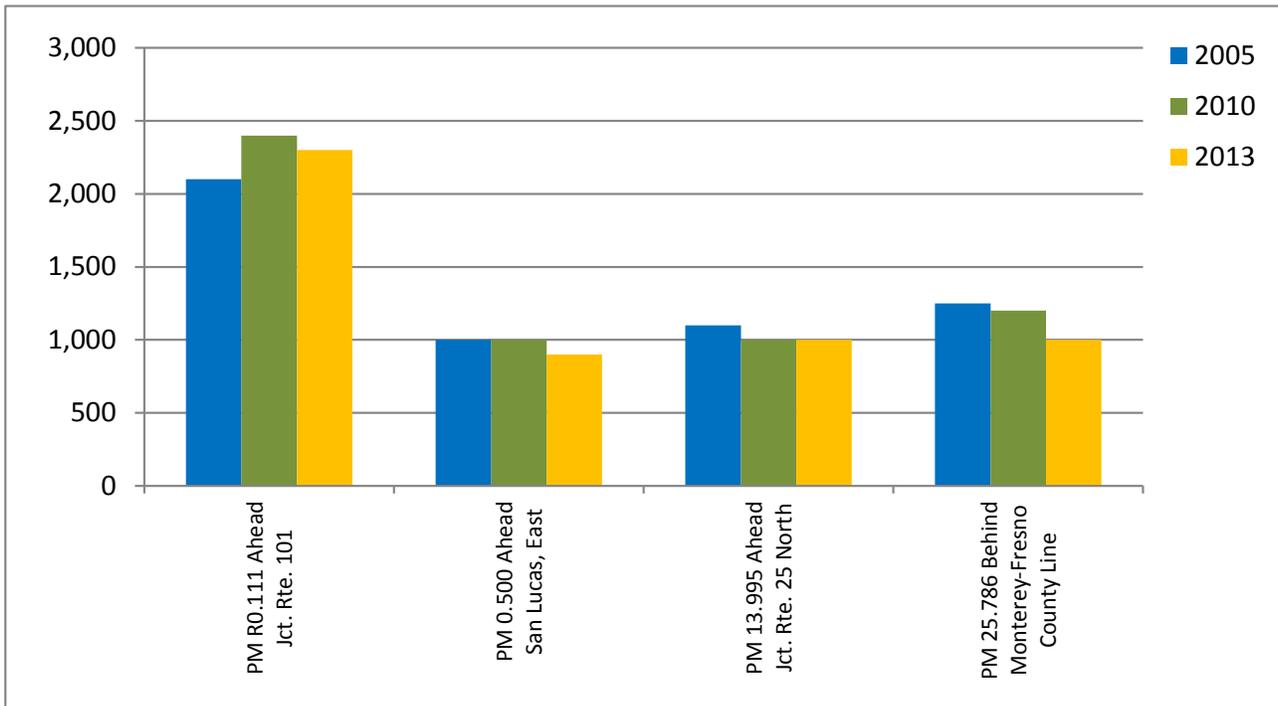


Figure 3.2: SR 198 Historical AADT by Location

PM PEAK HOUR DATA

In the base year and horizon year, congestion is low along the entire segment. **Table 3.2** details the peak hour traffic data in the eastbound and westbound directions for SR 198.

Table 3.2: SR 198 Peak Hour Traffic Data

	Eastbound	Westbound
Segment Length (Miles)	26.187	
PM Peak Hour Directional Split Base Year 2013	55.8% to 60.1%	39.9% to 44.2%
PM Peak Hour Directional Split Horizon Year 2040	60.2% to 60.7%	39.3% to 39.8%
PM Peak Hour Volume Base Year 2013	110 to 270	
	60 to 160	50 to 50
PM Peak Hour Volume Horizon Year 2040	150 to 340	
	90 to 210	60 to 140
PM Peak Hour Growth Rate (vehicles/year)	1 to 3	
PM Peak Hour VMT Base Year 2013	1,910	1,440
PM Peak Hour VMT Horizon Year 2040	2,740	1,780
PM Peak Hour VHT Base Year 2013	35	26
PM Peak Hour VHT Horizon Year 2040	50	32
PM Peak Hour V/C Base Year 2013	0.040 to 0.106	0.029 to 0.070
PM Peak Hour V/C Horizon Year 2040	0.058 to 0.136	0.038 to 0.090
PM Speed (mph) Base Year 2013	55.0 to 55.0 mph	55.0 to 55.0 mph
PM Speed (mph) Horizon Year 2040	55.0 to 55.0 mph	55.0 to 55.0 mph

BOTTLENECKS

In both the base year and horizon year, there are no bottlenecks.

CORRIDOR PERFORMANCE KEY FINDINGS:

- 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.

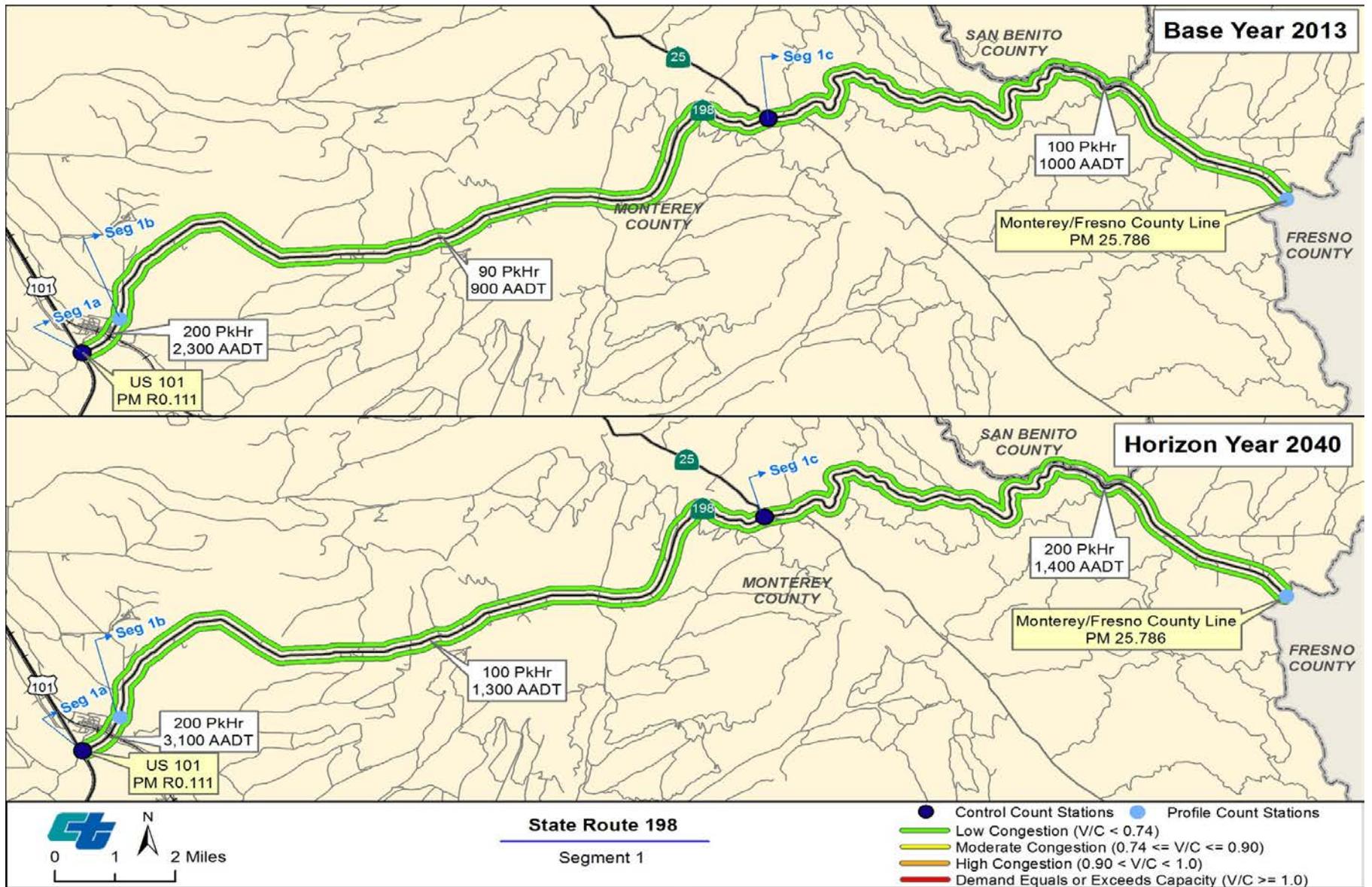


Figure 3.3: SR 198 Base Year/ Horizon Year Congestion
 Source: Systems Planning Caltrans District 5

CHAPTER 4: CORRIDOR CONCEPT

CONCEPT RATIONALE

The primary purpose of the SR 198 TCR is to develop strategies to manage the corridor and sustain existing transportation investments. Within the 20-25 year planning horizon, the following table identifies management strategies that should be pursued to manage SR 198.

CORRIDOR PERFORMANCE KEY FINDINGS

Corridor Performance Key Findings:

- System Operations: AADT volume in 2013 is 900 to 2,300.
- System Operations: AADT volume in 2040 is 1,300 to 3,100.
- 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.

Table 4.1: Route Concept

Segments	Route Concept
Segment 1 MON (PM R0.111) to MON (PM 25.786)	Maintain two-lane conventional highway

Multimodal/Operational Improvements
<ul style="list-style-type: none">• Increase shoulder width at strategic locations to accommodate bicyclists• Provide turnouts at strategic locations for maintenance

RESOURCES

LIST OF PREPARERS

The following people contributed directly and significantly to the production of this document and the project in general and were instrumental in managing the project through to the preparation of this document.

Rider, Brandy – Senior Transportation Planner

Sixteen years of experience in preparing TCRs, CSMPs, and environmental documents for CEQA/NEPA. Responsible for supervision and review of this document.

Espino, Claudia – PE Senior Transportation Engineer

Seventeen years of experience in Project Development in addition to nine years in Advanced Planning and Technical Support. Responsibilities include overseeing the technical input of this TCR.

Berkman, Jeff - Transportation Modeler

Ten years of experience in transportation demand modeling. Responsible for analyzing existing and future traffic conditions in Chapter 5.

Monroy-Ochoa, Orchid – Associate Transportation Planner

Four years of experience in preparing concept reports and TCRs. Responsible for preparation and management of TCR.

Coles, Charlie – Student Assistant

Master of City and Regional Planning and Civil Engineering with a specialization in Transportation Planning Candidate at California Polytechnic, San Luis Obispo. Responsible for preparation of TCR.

SOURCES

Transportation Agency for Monterey County (TAMC). (Adopted 2011, December). Bicycle and Pedestrian Master Plan. Retrieved from:

http://www.tamcmonterey.org/programs/bikeped/pdf/TAMC_BPMP_December_2011.pdf

National Park Service. (2015). National Park Service Visitor Use Statistics. Park Reports. Pinnacles NP (PINN) Reports. Retrieved from: <https://irma.nps.gov/Stats/Reports/Park/PINN>

APPENDICES

The following appendices can be accessed at: http://www.dot.ca.gov/dist05/planning/system_planning.htm#TCRs

Appendix A: SR 198 Data Sheet

Appendix B: About the TCR