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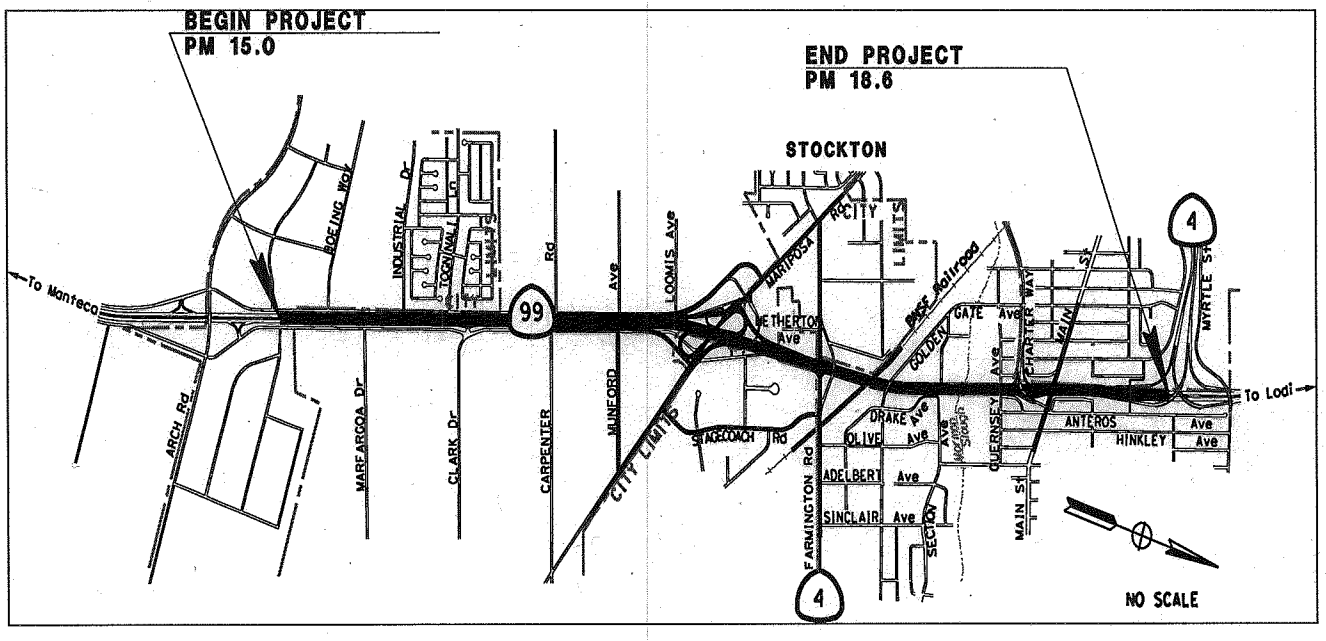
October 2008

PROJECT REPORT



On Route 99, in San Joaquin County, in Stockton, from 0.4 miles north of the Arch Road UC to 0.1 mile south of the Route 4 West/Route 99 North Connector.

I have reviewed the right-of-way information contained in this Project Report and the R/W Data Sheet attached hereto, and find the data to be complete, current, and accurate.

SPIROS KARIMBAKAS, Regional Division Chief, Right-of-way

APPROVAL RECOMMENDED:

JOY PINNE, Project Manager

APPROVED:

KOME AJISE, District Director

DATE 10/28/08

This Project Report has been prepared under the direction of the following Registered Civil Engineer. The Registered Civil Engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

Sean Pledger
REGISTERED CIVIL ENGINEER

10-1-08
DATE

TABLE OF CONTENTS

1. INTRODUCTION

It is proposed to improve State Route (SR) 99 in San Joaquin County, in the City of Stockton. Improvements include adding two lanes in the median, widening the outside shoulders to ten feet, constructing auxiliary lanes, modifying interchange configurations, constructing noise barriers, and reconstructing ramps within the project limits to current design standards. Overcrossing (OC) structures would be reconstructed to accommodate a future eight-lane facility with standard median width along SR-99. The project limits are from 0.4 miles north of the Arch Road Undercrossing (UC) to 0.1 miles south of the SR-4 West/SR-99 Connector (Crosstown Freeway). This project would reduce congestion, add capacity, improve traffic operational and safety conditions, and provide route continuity.

The construction estimate (escalated 4% per year to year 2012) for the preferred alternative totals $152,900,000; the right-of-way and utility relocation estimate (escalated 5% per year to year 2012) totals $56,700,000. Funding would come from the Regional Improvement Program (RIP) and the Interregional Improvement Program (IIP) in the 2006 State Transportation Improvement Program (STIP), as well as the SR-99 Bond, San Joaquin County Measure "K" funds, and Regional Traffic Impact Fees (RTIF). This project has been assigned the Project Development Processing Category 1 because it will require modification to existing access control, new right-of-way, a New Public Road Connection to be approved by the California Transportation Commission (CTC), and revised Freeway Agreements. The San Joaquin Council of Governments (SJCOG), in conjunction with the City of Stockton, San Joaquin County, and Caltrans, initiated the project.

2. RECOMMENDATION

It is recommended that the project be approved using the Preferred Alternative as described herein, and the project proceed to the design phase. The affected local agencies have been presented the features of the project, their views have been considered, and they are in general accord with the plan as presented. Caltrans, SJCOG, San Joaquin County, and the City of Stockton unanimously selected the Preferred Alternative on May 12, 2008.

3. BACKGROUND

A. Project History

A Project Study Report (Project Development Support), (PSR (PDS)), for this proposal was approved on December 21, 2000. Three build alternatives were considered, which would widen SR-99 to six lanes by widening in the median or to the outside, and would modify the Mariposa Road and Charter Way interchanges. This Project Report is consistent with the PSR (PDS) proposal to widen SR-99 to six lanes by adding two lanes in the median. However, it has been determined that the interchange modifications proposed in the PSR (PDS) would not adequately satisfy the need and purpose of the

project when considering the forecasted traffic volumes. In order to meet the traffic demands and satisfy the need and purpose of the project, this proposal has modified the interchange configurations accordingly.

Project EA 10-445404 was recently completed on SR-99 from the Crosstown Freeway to Hammer Lane, in Stockton. The project widened SR-99 to six lanes by adding two lanes in the median. This proposed Project Report would extend the six-lane freeway concept through the south portion of the City of Stockton.

A PSR (PDS), EA 10-0E610K, which proposes to widen SR-99 from four lanes to six from the SR-120 West Interchange to 0.4 miles north of the Arch Road UC (the beginning of this proposal), was approved in December 2006. The project is currently in the PA&ED phase; and is programmed and fully funded for 2012 delivery.

B. Community Interaction

A Public Information Meeting was held on July 26, 2000 at the Best Western Stockton Inn. The meeting was advertised through the Stockton Record. In addition, letters were sent to all potentially affected property owners and postcard mailers were distributed along the corridor. The purpose of the meeting was to introduce the project proposal, as described in the PSR (PDS) to the public and gather their input. Over 80 members of the public, including property owners and nearby residents attended the meeting. The consensus from the public was that the traffic congestion and related noise on this stretch of SR-99 was a problem that needed to be addressed.

An additional Public Information Meeting was held on May 3, 2007 at the San Joaquin County Fairgrounds in Stockton. As with the previous Public Information Meeting, the meeting was advertised through the Stockton Record, letters were sent to all potentially affected property owners, and postcard mailers were distributed along the corridor. The purpose of the meeting was to present the three viable project alternatives being studied in the environmental process to the public, and to gather their input. Over 140 members of the public, including property owners and nearby residents attended the meeting. As with the first public meeting, the consensus from the public was that the traffic congestion and related noise on this stretch of SR-99 was a problem that needed to be addressed. Property owners and residents were mainly concerned with how each alternative would affect their residence. Caltrans' staff encouraged those concerned to fill out comment cards voicing their individual concerns; the comment cards would then be compiled and presented to the Project Development Team when determining the Preferred Alternative.

A Public Hearing for this project was held on April 16, 2008. Details from the Public Hearing are fully described in Section 7, paragraph A, "Public Hearing Process," on page 26 of this report.

Public Outreach/Stakeholders/Community Based Organizations

The project planning team is made up of representatives from Caltrans functional units and representatives from the San Joaquin Council of Governments, the City of Stockton, and the San Joaquin County Public Works and Planning Departments. In coordination with the Public Information Department of the City of Stockton's Police Department, members of the planning team have conducted public outreach on behalf of the project. Multiple meetings have been held to present the project details and to obtain input from a number of interested parties. The following list of organizations have participated in these meetings: National Association for the Advancement of Colored People (NAACP), the Hispanic Chamber of Commerce, the South Stockton Merchant's Association, Visionary Home Builders of California, Leisure Manor Mobile Home Park, the Stockton Chamber of Commerce, the Stage Coach Business Group, the Stockton City Fire Department, the San Joaquin County Fire Department, the California Highway Patrol, the San Joaquin County Sheriffs Department, the San Joaquin County Board of Supervisors, and the San Joaquin Unified School District.

The planning team will continue to conduct community outreach throughout the PA&ED process. To meet this end, Caltrans has hired Parsons Inc. to assist with conducting these meetings and to gather input.

C. Existing Facility

SR-99 is a major north/south arterial traversing the major cities throughout the Central Valley between I-5, south of Bakersfield, in Kern County, and Route 36, near Red Bluff, in Tehama County. SR-99 provides primary access for the movement of people, goods, and services; and is considered the main transportation route for agricultural products. SR-99 is also a major connector to all east/west routes throughout the Central Valley, providing linkages between the San Francisco Bay Area and the Sierra Nevada mountains. In Caltrans District 10, SR-99 serves the communities of Merced, Livingston, Delhi, Turlock, Keyes, Ceres, Modesto, Salida, Ripon, Manteca, Stockton, and Lodi; and the counties of Merced, Stanislaus, and San Joaquin.

Within the project limits, SR-99 was constructed in 1949. The Freeway Agreements for SR-99 within the project limits were executed on September 27, 1954, June 6, 1955, and October 10, 1962. All of the elements identified in the Freeway Agreements have been incorporated. The facility is currently a four-lane divided freeway with 12-feet wide travel lanes, 8-feet wide outside shoulders, and 5-feet wide inside shoulders. The outside shoulder width does not meet the current design standard. The median width is 46 feet from north of Arch Road to south of Mariposa Road, 36 feet from Mariposa Road to Charter Way, 26 feet from Charter Way to 0.2 miles north of Main Street OC, and 36 feet for the remainder of the project limits. The median width from Charter Way to 0.2 miles north of Main Street OC does not meet the current design standard. The median is paved from the Mariposa Interchange continuing north. The right-of-way width is 195 feet. The mainline pavement is Portland Cement Concrete (PCC), which has been overlaid with asphalt concrete over the years. The cross section of the roadway is crowned.

The adjacent southerly segment of SR-99 consists of 4 lanes with a 46-feet wide median (paved) that slopes in the same plane as the traveled way. Contiguous to the north of the project limits, SR-99 consists of 6 lanes with a 12-feet wide median (paved) that slopes in the same plane as the traveled way. The median barrier north and south of the project is concrete.

There are four closely spaced interchanges within the project limits. These interchanges include the following: Mariposa Road at PM 16.7, Farmington Road at PM 17.2, Charter Way at PM 18.0, and Crosstown Freeway at PM 18.6. The geometrics of the ramps associated each interchange, as well as the spacing between each interchange do not meet current design standards.

The following structures are located within the project limits: Bergs Canal, Br. #29-0014; Duck Creek, Br. #29-0012; Mariposa Road OC, Br. #29-0157; South Stockton OC, Br. #29-0156G; Farmington Road OC; Br. #29-0155; East Stockton UP, Br. 29-0115; Golden Gate Avenue OC, Br. 29-0103; Mormon Slough, Br. 29-0119; E26-N99 Connector OC (Charter Way OC), Br. 29-0120G; Main Street OC, Br. 29-0121; and Marsh Street POC, Br. 29-0307. With the exception of the Marsh Street POC, each OC structure does not meet current minimum vertical clearance standards.

The design speed for this segment of SR-99 is 70 miles per hour.

4. NEED AND PURPOSE

A. Problem, Deficiencies, Justification

The purpose of this project proposal is to construct a feasible project on SR- 99, between the Arch Road Interchange and the Crosstown Freeway, that will:

- Improve traffic operations
- Improve traffic safety
- Add capacity
- Provide route continuity

Within the project limits, SR-99 is a four-lane freeway with four closely spaced interchanges. Traffic in the project area is highly congested during peak hours, with a high demand from both regional and local traffic. These high traffic volumes, coupled with localized traffic weaving on SR-99, cause traffic to slow down to below acceptable levels. SR-99, between Arch Road and Mariposa Road, has a current Annual Average Daily Traffic (AADT) of 65,000 vehicles and operates at a Level of Service (LOS) of "D"; between Mariposa Road and the Crosstown Freeway, the ADT is 98,000 vehicles and the LOS is currently "E." By the year 2034, AADT is projected to increase to 131,000 vehicles and 128,000 vehicles respectively, resulting in a LOS of "F" throughout the project limits. The twenty-year concept LOS for this segment of SR-99 is "D."

Northbound SR-99, within the project limits, exhibits accident rates higher than similar state highways. If improvements are not made, it is expected that congestion will continue to increase and the accident rates will continue to be higher than the state average. The accident rates per million vehicles are shown below in Section C, "Traffic." This proposal would relieve traffic congestion, improve traffic safety conditions, and increase capacity by adding lanes in the median, constructing auxiliary lanes, reconfiguring ramps to geometric standards, widening the outside shoulders, replacing the existing thrie beam median barrier with a Type 60 concrete median barrier, and metering the ramps within the project limits. This proposal would also increase existing interchange spacing, thus increasing the lengths of the weaving sections between entrance and exit ramps.

The project limits define a gap in route continuity along SR-99. Contiguous north of the project limits, SR-99 has recently (November 2007) been widened to six travel lanes. A project to widen SR-99 to six lanes contiguous south of the project limits has been initiated. By adding two lanes in the median, this proposal upgrades the existing segment to six lanes, thereby providing route continuity in the vicinity along SR-99. All projects combined would result in over seventeen and a half miles of continuous 6-lanes on SR-99, between post miles 5.3 and 22.9, from the southern edge of the city of Manteca, north along the eastern edge of the city of Stockton.

It was determined that the proposed facility will satisfy the LOS "D" criteria 5 years after project completion (year 2019). In order to meet the 20-year design LOS "D" criteria (year 2034) the scope of the project would need to accommodate a ten-lane facility (five northbound lanes and five southbound lanes). However, due to right-of-way restrictions (as stated in the Route Concept Report), the ultimate concept is an eight-lane facility. This proposal is consistent with the ultimate concept.

B. Regional and System Planning

Most of SR-99, including the portion in Caltrans District 10, has been in the State Highway System (SHS) since 1909. It is on the 1959-established Freeway and Expressway System (F&E) in its entirety; and is a "High Emphasis" and "Focus Route" on the 1989 established Interregional Road System. SR-99, within the project limits, is on the National Highway System (NHS) and on the National Network for Surface Transportation Assistance Act (STAA) for trucks. SR-99 is functionally classified as a Principal Arterial for its entire length and is on the Strategic Highway Corridor Network (STRAHNET) south of SR-4 in Stockton.

The concept LOS for the 20-year planning horizon is LOS "D" for this segment of SR-99. The Ultimate Transportation Corridor (UTC) is an eight-lane freeway throughout San Joaquin County. A ten-lane freeway is needed from Charter Way to Hammer Lane to meet the concept LOS, but due to right-of way restrictions, the concept facility and UTC will remain an eight-lane freeway. Strong consideration of high occupancy vehicle (HOV) lanes should be studied at final build out. The improvements described as part of this proposal are fully compatible with the design concepts and scopes described in the

approved SJCOG Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP). Presently there are five planned projects and one programmed project that lie within and adjacent to the proposed project limits.

Planned projects within and adjacent to the project location:

Planned Projects

County	Route	PM	Description	Designation
San Joaquin	99	14.6/17.2	Widen 6 to 8 lanes (outside) Arch Rd. to Crosstown	SJCOG RTP 2007 Tier I
San Joaquin	99	17.2	SR-99 at SR-4 (Crosstown freeway) Reconstruct Freeway to Freeway I/C	SJCOG RTP 2007 Tier I
San Joaquin	99	18.0	Sr-99 at Charter Way, I/C improvements	SJCOG RTP 2007 Tier I
San Joaquin	99	12.3/16.6	Widen 6 to 8 lanes (outside) French Camp Rd. to Mariposa Rd.	SJCOG RTP 2007 Tier II
San Joaquin	99	16.6/20.8	Widen 6 to 8 lanes (outside) Mariposa Rd. to Cherokee Rd.	SJCOG RTP 2007 Tier II

Programmed projects within and adjacent to the project location:

Programmed Projects

County	Route	PM	Description	Designation
San Joaquin	99	5.3/15.0	Manteca 6-Lane EA-0E610	2008 STIP PA&ED SJCOG RTP 2007 Tier I

C. Traffic

The design designation for this proposed project, as defined by *Topic – 103, index 103.1* of the *Highway Design Manual,* is as follows:

Segment	Existing ADT (2006)	2014 ADT	2034 ADT
Beg project to Mariposa Interchange (PM 15.0/16.7)	65,000	75,000	131,000
Mariposa Interchange to Farmington Interchange (PM 16.7/17.2)	73,000	81,000	128,000
Farmington Interchange to Charter Way Interchange (PM 17.2/18.0)	79,000	85,000	126,000
Charter Way Interchange to Crosstown Freeway Interchange (PM 18.0/18.6)	89,000	98,000	125,000

Directional Split,	D = 55 %
Truck Traffic,	T = 20 %
Design Speed,	V = 70 mph
Traffic Index,	TI_{20} = 14.5
Equivalent Single Axle Loads,	ESAL = 128,000,000

Detailed information of existing and forecasted traffic is included in Traffic Operations Analysis Report, which is included as Attachment G of this report. The traffic operations analysis for each alternative includes components of the freeway system, ramp terminal intersections, and impacted local street intersections. The tables on the following pages summarize the mainline and ramp intersection LOS.

Mainline Level of Service

Year 2014 and 2034 Conditions– Design Hour (for applicable alternatives)

	Existing Condition		No Build Alternative				Alternative 1				Alternative 2				Alternative 3			
	2006		2014		2034		2014		2034		2014		2034		2014		2034	
Count Locations	Pk Hour Count	LOS	Pk Hour Count	LOS	Pk Hour Count	LOS	Pk Hour Count	LOS	Pk Hour Count	LOS	Pk Hour Count	LOS	Pk Hour Count	LOS	Pk Hour Count	LOS	Pk Hour Count	LOS
S/B N/o Arch	3,075	D	3,879	E	6,505	F	4,128	C	7,000	F	3,997	C	6,726	F	4,482	C	7,067	F
N/B N/o Arch	3,195	D	3,627	E	6,596	F	3,959	C	6,830	F	4,135	C	7,361	F	4,020	C	7,078	F
S/B N/o Mariposa	3,415	D	4,089	F	5,928	F	4,590	D	7,414	F	4,408	C	7,336	F	3,606	C	5,769	F
N/B N/o Mariposa	3,575	D	4,033	F	6,858	F	4,095	C	7,032	F	4,542	C	7,963	F	3,116	B	5,866	E
S/B N/o Farmington	3,715	E	4,232	F	6,297	F	4,590	D	7,414	F	4,408	C	7,336	F	4,684	D	7,367	F
N/B N/o Farmington	3,855	E	4,249	F	6,297	F	4,095	D	7,032	F	4,452	C	7,963	F	4,358	C	7,706	F
S/B N/o MLK Jr Blvd to Charter	4,300	E	4,875	E	6,256	F	4,590	D	7,414	F	4,671	D	7,724	F	4,684	D	7,773	F
N/B N/o MLK Jr Blvd to Charter	4,300	E	4,875	E	6,256	F	4,095	C	7,032	F	4,613	C	8,067	F	4,358	C	7,706	F

On-ramp Merge and Off-ramp Diverge Analysis – Year 2014

(for applicable alternatives)

Alternative	Street/Road	Merge	# Lanes	LOS 2014	Density*	Diverge	# Lanes	LOS 2014	Density*
ALT 1	Mariposa Rd	NB loop on-ramp	1	C	20.9	NB off-ramp	2	C	27.2
		NB on-ramp	1	B	15.2	SB off-ramp	2	D	31.7
		SB loop on-ramp	1	C	20.5				
		SB on-ramp	1	B	15.5				
ALT 2	MLK Jr Blvd	NB on-ramp	1	B	18.6	NB off-ramp	1	D	28.5
		SB on-ramp	1	C	24.8	SB off-ramp	2	D	29.5
	Mariposa Rd	NB loop on-ramp	1	C	24.4	NB off-ramp	1	C	27.1
		NB on-ramp	1	B	17.4	SB off-ramp	1	D	29.8
		SB on-ramp	1	B	14.6				
		SB loop on-ramp	1	B	19.4				
ALT 3	Farmington Rd	NB on-ramp	1	B	18.1	SB off-ramp	2	D	30.4
	Mariposa Rd	SB on-ramp	1	B	18.1	NB off-ramp	1	C	26.8

*Density = Passenger car per mile per lane (pc/mi/ln)

On-ramp Merge and Off-ramp Diverge Analysis – Year 2034

(for applicable alternatives)

Alternative	Street/Road	Merge	# Lanes	LOS 2034	Density*	Diverge	# Lanes	LOS 2034	Density*
ALT 1	Mariposa Rd	NB loop on-ramp	1	F	37.0	NB off-ramp	2	F	30.2
		NB on-ramp	1	F	33.7	SB off-ramp	2	F	37.5
		SB loop on-ramp	1	F	36.9				
		SB on-ramp	1	F	33.7				
ALT 2	MLK Jr Blvd	NB on-ramp	1	F	39.0	NB off-ramp	1	F	41.9
		SB on-ramp	1	F	41.1	SB off-ramp	2	F	29.1
	Mariposa Rd	NB loop on-ramp	1	F	43.8	NB off-ramp	1	F	41.0
		NB on-ramp	1	F	38.4	SB off-ramp	1	F	43.0
		SB on-ramp	1	F	31.8				
		SB loop on-ramp	1	D	33.7				
ALT 3	Farmington Rd	NB on-ramp	1	F	40.5	SB off-ramp	2	F	31.0
	Mariposa Rd	SB on-ramp	1	F	35.0	NB off-ramp	1	F	40.3

*Density = Passenger car per mile per lane (pc/mi/ln)

As shown in the tables above, the existing four-lane segment of SR-99 currently operates at LOS of "D" and "E" during the peak hour and will decline to LOS "E" and "F" by the construction year 2014 if no improvements are made. The tables also summarize the LOS of each ramp within the project limits for each build alternative.

Accident Rates:

The accident history for this segment of SR-99, within the project limits, for the most recent three-year period (from October 1, 2004 to September 30, 2007) is shown on Table B. As indicated in the table, actual total accident rates are higher than the statewide average total accident rates in the northbound direction; but lower than the statewide average in the southbound direction.

The accident rates in accidents per million-vehicle-miles (MVM) are:

Location	Actual			Average		
PM 15.0/18.6	Fatal	F+I	Total	Fatal	F+I	Total
Northbound	0.012	0.24	0.92	0.011	0.33	0.89
Southbound	0.012	0.15	0.51	0.11	0.33	0.89

There were 323 collisions (4-Fatal, 83-Injury, 236-Property Damage Only) reported within the three-year study. Of these 323 collisions, 205 occurred in the northbound direction. Rear-end collisions were the most prevalent, with speeding the primary collision factor. Forty seven of the collisions occurred during the morning peak hours (6:00 – 8:00 A.M.) and 111 collisions occurred during the evening peak hours (3:00 – 5:00 P.M.). There were no unusual roadway conditions reported for 301 of the total collisions.

This proposal would improve conditions by increasing the weaving lengths, widening the outside shoulders, reconfiguring ramps to geometric standards, providing ramp metering at entrance ramps, and adding capacity to SR-99 by adding two lanes.

Existing northbound SR-99 exhibits accident rates higher than other similar state highways, as indicated above. If improvements are not made, the accident rates may continue to be higher than average.

5. ALTERNATIVES

Five different alternatives, including the no-build alternative, have been considered. ***EACH*** of the four build-alternatives propose the following improvements:

- Widen SR-99 from four to six lanes by adding two twelve-foot wide lanes in the median.
- Correct cross slope of mainline SR-99 to 2 % by overlaying with asphalt concrete.
- Construct Type 60 concrete median barrier.
- Widen outside shoulders to ten feet.
- Remove access to SR-99 at Clark Drive.
- Remove ramps at Farmington Road.
- Remove and reconstruct Mariposa Road OC, Br. #29-0157, to accommodate future eight-lane facility with standard width median on SR-99.
- Remove South Stockton OC, Br. 29-0156G.
- Remove and reconstruct Main Street OC, Br. 29-0121, to accommodate future eight-lane facility with standard width median on SR-99.
- Remove and reconstruct Charter Way OC, Br. 29-0120, as a two-way roadway to accommodate future eight-lane facility with standard width median on SR-99.
- Provide ramp metering for each entrance ramp. High Occupancy Vehicle (HOV) lanes and California Highway Patrol enforcement areas/ maintenance vehicle pullouts would be constructed at these locations. The improvements would conform to the current

Ramp Meter Design Manual and the District 10 Ramp Meter Policy. The City of Stockton and San Joaquin County have given direction that the ramp meters not be activated upon project completion. Ramp terminal intersections would also be signalized.

- Improve Munford Road consistent with San Joaquin County standards for a local industrial road. Improvements would include widening the roadway to 40 feet; constructing curb and gutter; installing a drainage system; and acquiring right-of-way to accommodate 60 feet of right-of-way width.
- Construct sound walls at locations determined by the Noise Attenuation Decision Report (NADR) and presented in the Environmental Document.
- Construct drainage improvements as summarized in Attachment "J" of this document. The drainage improvements consist of adding drainage inlets, trunk lines, drainage ditches, and drainage infiltration basins.
- Remove butterfly overhead signs in gore areas.
- Provide rumble strips on outside shoulders.
- Improve SR-99 to SR-4 West exit to a two-lane exit.

Railroad Involvement

Each build alternative would require railroad involvement with the Burlington Northern and Santa Fe (BNSF) Railway Company. Caltrans' District Railroad Liaison has determined that a Construction and Maintenance Agreement (C & M Agreement) between Caltrans and BNSF Railway Company and a Railroad Right-of-Entry Agreement would be required in order to clear the project.

A Railroad Conceptual Plan Submittal was submitted to the BNSF Railway Structures Department on July 1, 2008. The submittal included the proposed underpass and shoofly structures included as part of the Preferred Alternative. The BNSF Railway Structures Department approved the concept on August 27, 2008. During the design phase of the project, design plans and specifications for proposed railroad structures would be submitted to the railroad company for approval, pursuant to BNSF Guidelines For Railroad Grade Separation Projects.

Highway Planting

It is anticipated that highway planting will be provided to replace plant material removed by the proposed project construction. Furthermore, highway planting will also be provided to address visual and aesthetic concerns described in the environmental document.

Highway planting work will be accomplished by separate contract pursuant to Caltrans policy for projects over $200,000 in cost (PDPM, Chapter 29). Funding for highway planting work must come from the South Stockton 6-Lane (EA: 3A100) parent project. The highway-planting project must begin construction within two years after the roadway contract (parent project) has been accepted.

Highway planting work will include the installation of plant material as well as the installation of an automatic irrigation system with a Remote Irrigation Control System (RICS). The highway-planting project will also include a 3-year plant establishment period to begin immediately after installation is completed.

Visual /Aesthetic Impacts

The visual impact assessment has determined that visual impacts will occur as a part of the proposed roadway construction project. Recommendations for visual mitigation measures are recorded in the associated environmental document.

Erosion Control

Erosion control treatment would be applied to any area of soil disturbance that will remain exposed to the elements and will not be receiving paving. Procedures for applying erosion control treatments would be done in accordance with the approved Erosion Control Plan recommended by the District Landscape Architect.

Non-Motorized and Pedestrian Features

Pedestrian access would be provided through the interchange areas, including sidewalks (on the structures and approaches) with curb ramps as appropriate. Each proposed alternative would also provide sufficient paved shoulder widths along widened and newly constructed local roads to accommodate bicyclists. The existing Class III bike routes at Main Street and Golden Gate Avenue would remain.

Park-and-Ride Facilities

SJCOG prepared and adopted a countywide Park-and-Ride Plan on June 22, 1993. Several potential Park-and-Ride (P&R) sites were identified in the Stockton area. With the increased local development in the project vicinity, it is necessary and beneficial to construct a P&R facility. A heavy commute location, such as this one, would benefit from a P&R because it decreases the number of vehicle trips onto the adjacent highway system. This is one of many transportation control measures that help reduce vehicle miles traveled, which in turn reduce congestion, as well as motor vehicle emissions.

Each alternative of this proposal provides for a P&R site consistent with SJCOG's plan. The P&R site would accommodate a minimum of 100 spaces and one acre of land near the Mariposa Road interchange. The proposed facility fulfills the P&R requirements outlined in Chapter 8 of the Project Development Procedures Manual.

Effect of Special Funded Proposal on State Highway

By increasing mainline capacity, eliminating and lengthening weaving sections, providing auxiliary lanes, improving ramp geometrics, signalizing ramp intersections, and providing ramp metering, this project would have a beneficial effect on SR-99 by improving mainline and ramp terminal operations.

The details differentiating each alternative are described in detail below.

A. Preferred Alternative

Alternative #2 – The Dr. Martin Luther King Jr. Blvd. Alternative

The Project Development Team selected Alternative #2 – The Martin Luther King Alternative – as the Preferred Alternative on May 12, 2008. The rationale for selecting this alternative as the Preferred Alternative is as described:

- From an environmental perspective, all three alternatives were similar in terms of air quality, biology, water quality, and landscaping. Alternative #2, however, impacted less land area.
- Alternative #2 provides the best traffic operational performance of the viable alternatives. It results in minimal re-routing of traffic to local streets, works well with future growth, and provides the best route continuity connection to SR-4.
- Alternative #2 was the least expensive of the viable alternatives.
- Alternative #2 provides more access points to SR-99 than the other viable alternatives, which results in less traffic on the local streets. Currently, there are 16 on/off ramps within the project limits. Alternative #2 would provide 18 on/off ramps, as opposed to the 10 on/off ramps Alternatives #1 and #3 each provide.
- Emergency responders (i.e. fire dept. and police dept.) prefer Alternative #2. Out of the viable alternatives, they indicate that Alternative #2 is the only alternative which would allow for acceptable emergency response times.

In addition to the common features discussed in the previous section, this alternative proposes to relocate the existing Charter Way Interchange approximately 3,200 feet to the south on SR-99. The proposed interchange would be configured as a combination Type L-7/L-8 two-quadrant cloverleaf, located just south of the existing Golden Gate Avenue OC. The new interchange would be named the Dr. Martin Luther King Jr. (Dr. MLK Jr.) Interchange. The existing Golden Gate OC would subsequently be removed. Specific design features of the proposed interchange include the following: embankment slopes would be at a 2:1 slope, ramps would be constructed to current design standards, intersections at the local streets would be designed with appropriate curb return radii to maintain STAA movements, and the OC structure and ramps would be configured to accommodate the future eight-lane facility with standard width median on SR-99.

The proposed Dr. MLK Jr. Interchange would improve route continuity for SR-4 East. Local access to the interchange from the east and west would be from realigned Golden Gate Avenue (to be renamed Dr. MLK Jr. Blvd./Golden Gate Ave.) and from realigned SR-4, respectively.

This alternative would also reconfigure the Mariposa Interchange to a Type L-9, partial cloverleaf interchange. Specific design features of the proposed interchange include the following: embankment slopes would be at a 2:1 slope, ramps would be constructed to current design standards, intersections at the local streets would be designed with

appropriate curb return radii to maintain STAA movements, and the OC structure and ramps would be configured to accommodate the future eight-lane facility with standard width median on SR-99.

Auxiliary lanes would be provided on NB and SB SR-99 between the Crosstown Freeway and the Dr. MLK Jr. Blvd Interchange; and between the Dr. MLK Jr. Blvd Interchange and the Mariposa Road Interchange. The median width from south of the Mariposa Interchange to south of the Main Street OC would be widened to the standard width of 22 feet.

Local intersection improvements for this proposal are shown in detail in "Attachment C – Layouts" of this report. Improvements would include adding turn lanes and traffic signals. Specifically, the following intersections would be improved:

- Munford Road at Mariposa Road.
- Mariposa Road at Stagecoach Road.
- Mariposa Road at West Frontage Road.
- The north and southbound SR-99 off-ramps at Mariposa Road.
- Dr. MLK Jr. Blvd./Golden Gate Ave. at Dr. MLK Jr. Blvd./Charter Way.
- The southbound SR-99 off-ramp at Dr. MLK Jr. Blvd/Golden Gate Ave.
- The northbound SR-99 off-ramp at SR-4 (new alignment).
- SR-4 (Farmington Road) at SR-4 (new alignment).
- Charter Way at Main Street.

The existing Charter Way/Main Street intersection would be modified to accommodate the two-way traffic circulating over the proposed Charter Way Overcrossing. In addition, the existing Main Street/Anteros intersection would be modified to a right in/right out intersection due to the close proximity to the Charter Way/Main Street intersection.

A Park-and-Ride facility is proposed at the northwest quadrant of the Mariposa Road interchange. Details of the design would be developed during the design phase of this proposal.

This alternative would require new structures, as well as modifications to existing structures. The proposed structural work includes the following: widen Duck Creek Bridge #29-0012, provide a new structure spanning Duck creek at the northbound SR-99 off-ramp; widen the existing box culvert on Mariposa Road; remove and replace the Mariposa Road Overcrossing Bridge #29-157, remove the South Stockton Overcrossing Bridge #29-156G, remove and replace the East Stockton UP Bridge #29-0115, construct new Dr. MLK Jr. Blvd. OC north of East Stockton UP Bridge, remove the Golden Gate Avenue OC Bridge #29-103, widen the existing box culvert spanning Mormon Slough at ML King Jr. Blvd./Golden Gate Ave. Bridge #29-C0087, widen the Mormon Slough Bridge #29-0119 at SR 99, remove and replace the Charter Way Overcrossing Bridge # 29-120, and remove and replace the Main Street Overcrossing Bridge #29-121. The proposed Dr. MLK Jr. Blvd. OC would serve as a railroad shoofly during construction.

The primary right-of-way impacts associated with this alternative result from the revised interchange configuration at Mariposa Road and the proposed interchange configuration at Golden Gate Avenue (to be renamed Dr. ML King Jr. Blvd.). Right-of-way acquired on the local streets would be relinquished back to the City of Stockton and San Joaquin County. In addition to the acquisition of right-of-way, this proposal involves utility relocation. Utilities to be relocated include poles with 12-kv PG&E overhead electrical power lines, Comcast cable television lines, and AT&T communication telephone lines. For additional information on utility impacts, see Section 6.,D, "Right-of-way Issues" of this report.

Nonstandard Mandatory Design Features
This alternative deviates from the following mandatory design standards:

1. *HDM Chapter 200-Geometric Design and Structure Standards, Topic 201-Sight Distance, Table 201.1 Sight Distance Standards, Stopping Sight Distance.*
2. *HDM Chapter 300-Geometric Cross Section, Topic 302-Shoulder Standards, Index 302.1 Width, Left Shoulders.*
3. *HDM Chapter 300-Geometric Cross Section, Topic 305-Median Standards, Index 305.1 Width, (3)(a).*
4. *HDM Chapter 300-Geometric Cross Section, Topic 309-Clearances, Index 309.1 Horizontal Clearances, (3)(a).*
5. *HDM Chapter 300-Geometric Cross Section, Topic 309-Clearances, Index 309.2 Vertical Clearances, (1)(a).*
6. *HDM Chapter 500-Traffic Interchanges, Topic 501-General, Index 501.3 Spacing*

Decisions regarding nonstandard mandatory features are contained in a Fact Sheet approved on September 24, 2008.

Nonstandard Advisory Design Features
This alternative deviates from the following advisory design standards:

1. *HDM Chapter 200-Geometric Design and Structure Standards, Topic 201-Sight Distance, Table 201.7 Decision Sight Distance.*
2. *HDM Chapter 300-Geometric Cross Section, Topic 304-Side Slopes, Index 304.1 Side Slope Standards.*
3. *HDM Chapter 300-Geometric Cross Section, Topic 305-Median Standards, Index 305.1 Width, (1)(a).*
4. *HDM Chapter 300-Geometric Cross Section, Topic 309-Clearances, Index 309.1 Horizontal Clearances, (2).*
5. *HDM Chapter 500-Traffic Interchanges, Topic 504-Interchange Design Standards, Index 504.3 Ramps, (3) Location and Design of Ramp Intersections on the Crossroads.*
6. *HDM Chapter 500-Traffic Interchanges, Topic 504-Interchange Design Standards, Index 504.4 Freeway-to-Freeway Connections, (6) Branch Connections, Figure 504.4 Diverging Branch Connections.*

Decisions regarding nonstandard advisory features are contained in a Fact Sheet approved on September 30, 2008.

Total cost for this alternative is $206,680,000, which includes $56,700,000 (escalated to 2012) for right-of-way acquisition and utility relocation.

B. Viable Alternatives

Alternative #1 – The Mariposa Alternative

In addition to the common features discussed in the previous section, this alternative proposes to reconfigure the Mariposa Interchange to a Type L-9, partial cloverleaf interchange. Specific design features of the proposed interchange include the following: embankment slopes would be at a 2:1 slope, ramps would be constructed to current design standards, intersections at the local streets would be designed with appropriate curb return radii to maintain STAA movements, and the OC structure and ramps would be configured to accommodate the future eight-lane facility with standard width median on SR-99.

Auxiliary lanes would be provided on NB and SB SR-99 contiguous to the Crosstown Freeway connector ramps and the Mariposa Interchange ramps. The median width from south of the Mariposa Interchange to south of the East Stockton UP would be widened to the standard width of 22 feet.

Improvements are also proposed at Farmington Road, Stagecoach Road, Mariposa Road, and SR-4 in order to accommodate increased traffic demand. The improvements include widening the roadways, providing left /right-turn channelization, and installing traffic signals at intersections. The intersections that warranted traffic signals include the following:

- Munford Road at Mariposa Road.
- Mariposa Road at Stagecoach Road.
- Mariposa Road at West Frontage Road.
- The north and southbound SR-99 off-ramps at Mariposa Road.
- SR-4 (Farmington Road) at Stagecoach Road.
- Charter Way at Main Street.

With the removal of the ramps at Farmington Road, SR-4 would now be realigned to connect to the Mariposa Road Interchange via Stagecoach Road. Stagecoach Road and Farmington Road would be reconstructed to State Highway standards in order to maintain route continuity between WB and EB SR-4. Ten feet wide sidewalks would be included on realigned SR-4.

The Farmington Road OC would be removed and replaced with a structure aligned with Farmington Road and SR-4. The structure would be constructed to accommodate a future eight-lane facility on SR-99. The proposed widening of Farmington Road at the existing

Burlington Northern and Santa Fe Railway (BNSF) crossing would require construction of an Overhead structure. Embankment slopes at this location would be at a 2:1 slope.

The ramps at Charter Way would be removed. The existing overcrossing structure at Charter Way would be replaced with a structure accommodating two-way traffic. Consequently, the existing Charter Way/Main Street intersection would be modified to accommodate the two-way traffic circulating over the proposed Charter Way Overcrossing. In addition, the existing Main Street/Anteros intersection would be modified to a right in/right out intersection due to the close proximity to the Charter Way/Main Street intersection.

A Park-and-Ride facility is proposed at the northwest quadrant of the Farmington Road interchange. Details of the design would be developed during the design phase of this proposal.

This alternative would require new structures, as well as modifications to existing structures. The proposed structural work includes the following: widen Duck Creek Bridge #29-0012, provide a new structure spanning Duck creek at northbound SR-99 off-ramp, widen the existing box culvert on Mariposa Road, widen the existing box culvert on Stagecoach Road, remove and replace Mariposa Road Overcrossing Bridge #29-157, remove South Stockton Overcrossing Bridge #29-156G, provide a new Overhead structure to span the at-grade BNSF railroad crossing at Farmington Road, remove and replace the Farmington Road Overcrossing Bridge #29-155, remove and replace the Charter Way Overcrossing Bridge # 29-120, and remove and replace the Main Street Overcrossing Bridge #29-121.

The primary right-of-way impacts associated with this alternative result from the revised interchange configuration at Mariposa Road, the widening of Stagecoach Road, and the raised profile at Farmington Road as a result of the Overhead structure at the railroad crossing. Right-of-way acquired on the local streets would be relinquished back to the City of Stockton and San Joaquin County. In addition to the acquisition of right-of-way, this proposal involves utility relocation. Utilities to be relocated include poles with 12-kv PG&E overhead electrical power lines, Comcast cable television lines, and AT&T communication telephone lines.

Nonstandard Mandatory Design Features

This alternative deviates from the following mandatory design standards:

1. *HDM Chapter 200-Geometric Design and Structure Standards, Topic 201-Sight Distance, Table 201.1 Sight Distance Standards, Stopping Sight Distance.*
2. *HDM Chapter 300-Geometric Cross Section, Topic 302-Shoulder Standards, Index 302.1 Width, Left Shoulders, Right Shoulders.*
3. *HDM Chapter 300-Geometric Cross Section, Topic 305-Median Standards, Index 305.1 Width, (3)(a).*
4. *HDM Chapter 300-Geometric Cross Section, Topic 309-Clearances, Index 309.1 Horizontal Clearances, (3)(a)&(b).*

5. *HDM Chapter 300-Geometric Cross Section, Topic 309-Clearances, Index 309.2 Vertical Clearances, (1)(a).*
6. *HDM Chapter 500-Traffic Interchanges, Topic 501-General, Index 501.3 Spacing*
7. *HDM Chapter 500-Traffic Interchanges, Topic 504-General, Index 504.3 Ramps, (3) Location and Design of Ramp Intersections on the Crossroads.*

Nonstandard Advisory Design Features
This alternative deviates from the following advisory design standards:

1. *HDM Chapter 300-Geometric Cross Section, Topic 304-Side Slopes, Index 304.1 Side Slope Standards.*
2. *HDM Chapter 300-Geometric Cross Section, Topic 305-Median Standards, Index 305.1 Width, (1)(a).*
3. *HDM Chapter 300-Geometric Cross Section, Topic 309-Clearances, Index 309.1 Horizontal Clearances, (2).*
4. *HDM Chapter 500-Traffic Interchanges, Topic 504-Interchange Design Standards, Index 504.3 Ramps, (3) Location and Design of Ramp Intersections on the Crossroads.*
5. *HDM Chapter 500-Traffic Interchanges, Topic 504-Interchange Design Standards, Index 504.4 Freeway-to-Freeway Connections, (6) Branch Connections, Figure 504.4 Diverging Branch Connections.*

Total cost for this alternative is $245,730,000, which includes $68,900,000 (escalated to 2012) for right-of-way acquisition and utility relocation.

Alternative #3 – The Couplet Alternative

In addition to the common features discussed in the previous section, this alternative proposes to reconfigure the existing Mariposa Road and Farmington Road/SR-4 interchanges to a split spread diamond interchange connected with couplet ramps. Specific design features of the proposed interchange include the following: embankment slopes would be at a 2:1 slope, ramps would be constructed to current design standards, intersections at the local streets would be designed with appropriate curb return radii to maintain STAA movements, and the OC structure and ramps would be configured to accommodate the future eight-lane facility with standard width median on SR-99.

This alterative also proposes to remove the ramps at Charter Way. The existing overcrossing structure at Charter Way would be replaced with a structure accommodating two-way traffic. Consequently, the existing Charter Way/Main Street intersection would be modified to accommodate the two-way traffic circulating over the proposed Charter Way Overcrossing. In addition, the existing Main Street/Anteros intersection would be modified to a right in/right out intersection due to the close proximity to the Charter Way/Main Street intersection.

The Farmington Road OC would be removed and replaced with a structure aligned with Farmington Road and SR-4, similar to "Alternative #1." Also similar to "Alternative

#1," the proposed widening of Farmington Road at the existing Burlington Northern and Santa Fe Railway crossing would require the construction of an Overhead structure.

Improvements are also proposed at Farmington Road, Mariposa Road, and SR-4 in order to accommodate increased traffic demand. The improvements include widening the roadways, providing left /right-turn channelization, and installing traffic signals at intersections. The intersections that warranted traffic signals include the following:

- Munford Road at Mariposa Road.
- Mariposa Road at Netherton/West Frontage Road.
- Southbound SR-99 on-ramp/West Couplet Road at Mariposa Road.
- Northbound SR-99 off-ramp/East Couplet Road at Mariposa Road.
- Mariposa Road at Stagecoach Road.
- Southbound SR-99 off-ramp/West Couplet Road at Farmington Road.
- Northbound SR-99 on-ramp/East Couplet Road at Farmington Road.
- SR-4 (Farmington Road) at Adelbert Road.
- Charter Way at Main Street.

A Park-and-Ride facility is proposed at the northwest quadrant of the Farmington Road interchange. Detail of the design would be developed during the design phase of this proposal.

This alternative would require new structures, as well as modifications to existing structures. The proposed structural work includes the following: widen Duck Creek Bridge #29-0012, provide a new structure spanning Duck creek at northbound SR-99 off-ramp, widen the existing box culvert on Mariposa Road, remove and replace the Mariposa Road Overcrossing Bridge #29-157, remove South Stockton Overcrossing Bridge #29-156G, provide a new Overhead structure to span at-grade railroad crossing at Farmington Road, remove and replace the Farmington Road Overcrossing Bridge #29-155, remove and replace East Stockton UP Bridge #29-0115, construct a shoofly structure as a temporary railroad detour, remove and replace the Golden Gate Avenue OC Bridge #29-103, remove and replace the Charter Way Overcrossing Bridge # 29-120, and remove and replace the Main Street Overcrossing Bridge #29-121.

The primary right-of-way impacts associated with this alternative result from the revised interchange configurations at Mariposa Road and Farmington Road, the inclusion of couplet ramps between Farmington Road and Mariposa Road, and the raised profile at Farmington Road as a result of the Overhead structure at the railroad crossing. Right-of-way acquired on the local streets would be relinquished back to the City of Stockton and San Joaquin County. In addition to the acquisition of right-of-way, this proposal involves utility relocation. Utilities to be relocated include poles with 12-kv PG&E overhead electrical power lines, Comcast cable television lines, and AT&T communication telephone lines

Nonstandard Mandatory Design Features
This alternative deviates from the following mandatory design standards:

1. *HDM Chapter 200-Geometric Design and Structure Standards, Topic 201-Sight Distance, Table 201.1 Sight Distance Standards, Stopping Sight Distance.*
2. *HDM Chapter 300-Geometric Cross Section, Topic 302-Shoulder Standards, Index 302.1 Width, Left Shoulders.*
3. *HDM Chapter 300-Geometric Cross Section, Topic 305-Median Standards, Index 305.1 Width, (3)(a).*
4. *HDM Chapter 300-Geometric Cross Section, Topic 309-Clearances, Index 309.1 Horizontal Clearances, (3)(a).*
5. *HDM Chapter 500-Traffic Interchanges, Topic 501-General, Index 501.3 Spacing*
6. *HDM Chapter 500-Traffic Interchanges, Topic 504-General, Index 504.3 Ramps, (3) Location and Design of Ramp Intersections on the Crossroads*

Nonstandard Advisory Design Features
This alternative deviates from the following advisory design standards:

1. *HDM Chapter 300-Geometric Cross Section, Topic 304-Side Slopes, Index 304.1 Side Slope Standards.*
2. *HDM Chapter 300-Geometric Cross Section, Topic 305-Median Standards, Index 305.1 Width, (1)(a).*
3. *HDM Chapter 300-Geometric Cross Section, Topic 309-Clearances, Index 309.1 Horizontal Clearances, (2).*
4. *HDM Chapter 500-Traffic Interchanges, Topic 504-Interchange Design Standards, Index 504.4 Freeway-to-Freeway Connections, (6) Branch Connections, Figure 504.4 Diverging Branch Connections.*

Total cost for this alternative is $245,430,000, which includes $68,600,000 (escalated to 2012) for right-of-way acquisition and utility relocation.

C. Rejected Alternatives

Alternative #4 – The Mariposa-Braid Alternative

This alternative is identical to Alternative #1 except for the work at the Charter Way interchange. The existing ramps at Charter Way would be removed and replaced with ramps configured to current geometric design standards. The Charter Way interchange would subsequently remain open. In order to eliminate the existing weaving problem on southbound SR-99, between the Crosstown Freeway and Charter Way, a grade separation for the freeway entrance and exit ramps would be provided. Providing grade-separated ramps (i.e. braided ramps) would involve the following parameters:

1. The existing entrance ramp to SR-99 from SR-4 would be realigned to allow the proposed exit ramp from SR-99 to Charter Way to cross under. The existing sound wall at this location would be removed and replaced.

2. The proposed grade separation structure would require outrigger girders to provide support for the longer span that results from the small skew angle between ramps. The cost for a structure of this type would be over twice as much as for a conventional structure.
3. SR-99 would be shifted east approximately 40 feet in order to avoid impacting Roosevelt Elementary School and allow room for the proposed southbound exit ramp to Charter Way. Shifting the freeway alignment would require complete reconstruction of the structural section of SR-99 for approximately 1 and ½ miles. Shifting the freeway alignment would also result in a significant amount of additional right-of-way acquisition. Right-of-way takes from 76 additional parcels resulting in over 19 additional acres would be required.
4. The reconfiguration of the Charter Way Interchange would result in an isolated off-ramp at Main Street.

Total cost for this alternative is $305,560,000, which includes $103,600,000 (escalated to 2012) for right-of-way acquisition and utility relocation.

This alternative was studied as an attempt to keep the existing Charter Way interchange open. However, due to excessive construction costs, associated safety issues relevant to the proposed isolated off-ramp at Main Street, and significant right-of-way impacts, the alternative was rejected by the Project Development Team (PDT) during a PDT meeting on October 24, 2006.

No-Build Alternative

The no-build alternative would consist of no improvements to SR-99. Traffic congestion would continue to be a problem between Arch Road and the Crosstown freeway and would soon reach unacceptable levels. The closely spaced interchanges would remain, which wouldn't solve the existing traffic weaving problem. The accident rate would likely continue to be above average.

6. CONSIDERATIONS REQUIRING DISCUSSION

A. Hazardous Waste

An Initial Site Assessment (ISA) was completed in November 2007, which identified 43 potential hazardous waste sites within the Environmental Study Area for all three proposed alternatives. Following identification of the Preferred Alternative, the number of sites were reduced to 20. Upon further research of the 20 properties it will be determined if any of the sites will require Preliminary Site Investigations (PSI's) to determine the location, type, and scope of the contamination. Once studies are completed, a Report of Findings would be prepared to clearly define the type waste material, the limits of any contamination, and a remediation plan to be implemented during construction in accordance with regulatory requirements. Specific hazardous waste concerns could include underground storage tanks, aboveground storage tanks, asbestos

containing material on bridge rails, and soil containing aerially deposited lead. The findings would also include identification of potential responsible party liability and costs to the project.

B. Value Engineering

In compliance with Federal requirements, a formal Value Analysis Study for this project was conducted by a multi-disciplinary team, from June 4 to June 8, 2007, in Fresno, California. Recommendations from the Value Analysis have been implemented into this proposal. The recommendations are summarized below.

- Construct 2:1 embankment slopes in lieu of 4:1 embankment slopes throughout the project limits in order to reduce right-of-way impacts. This concept applies to all alternatives.

- Construct mechanically stabilized earth (MSE) retaining walls in order to reduce the amount of imported borrow and right-of way acquisition in the vicinity of Stagecoach Road and SR-4. This concept would be used in conjunction with using 2:1 embankment slopes and would apply only to "Alternative 1" and "Alternative 3."

- Realign East Frontage Road to connect to Mariposa Road via Munford Road. STAA truck turning movements would be maintained at intersections. This concept would avoid impacts to a large concrete products company. This concept applies to all the alternatives.

C. Resource Conservation

This proposal minimizes the amount of required right-of-way take and reconstruction of local frontage roads by widening in the existing median. The configuration of ramps and overcrossing structures within the proposal have been designed to be compatible with the future 8-lane facility on SR-99, which would reduce future construction impacts. The top layer of asphalt of the structural section of the mainline and ramps, for each alternative, consists of 0.2 foot of rubberized asphalt concrete.

The Preferred Alternative of this proposal would utilize the railroad shoofly as the permanent overcrossing structure for the proposed ML King Jr. Blvd. interchange. This would result in a significant savings in both construction materials and construction cost. The Preferred Alternative also minimizes the amount of right-of-way take by locating the proposed ML King interchange as close to the existing railroad right-of-way as practical.

It is recommended that removed AC be recycled for use on the job where practical (i.e. shoulder backing and embankment).

Each alternative of this proposal would require a significant amount of embankment material. In order to minimize the amount of imported borrow, it is recommended that

the roadway excavation from the proposed drainage basins be utilized as embankment material.

D. Right-of-Way Issues

Right-of-way acquisition and utility relocation would be required. The proposed right-of-way encompasses nine different zoning designations. These zones include the following: commercial, general; commercial, large-scale; commercial, neighborhood; industrial, general; industrial, light; public facilities (Montezuma School); residential, low density; residential medium density; and residential, high density. The proposed right-of-way also crosses the boundary lines between the City of Stockton and San Joaquin County. RAP assistance would be required for all the alternatives. The table below summarizes the right-of-way impacts for the Preferred Alternative.

R/W Acquisition (acres)	Total Number of RAP Displacements			Total R/W Cost
	Single family	Multi family	Business/nonprofit	
53.0	68	10	8	$49,400,000

Note: The numbers in this table are from a recent update following environmental studies, and show a lower impact than what is indicated in the FED.

Utilities to be relocated include approximately 102 utility poles with PG&E, SBC, and Comcast cable television aerial lines. Underground utilities that may be affected include high-pressure PG&E gas lines, fiber optic AT&T telephone lines, Stockton Water Company water lines, Stockton Irrigation District irrigation lines, fire hydrants, and City of Stockton storm drains. Potholing would be required to positively locate the high-pressure PG&E gas lines and the fiber optic AT&T telephone cable lines. Up to 110 potholes would be required.

Railroad involvement with the Burlington Northern & Santa Fe Railway will require consultation with the Caltrans District Railroad Liaison, the Burlington Northern and Santa Fe Railway Company, and the California Public Utilities Commission would be required to determine what documents or agreements are needed to clear the proposed project.

A Right-of-way Datasheet and Final Relocation Impact Study/Statement (FRIS) have been prepared for this project. The results of the FRIS are summarized below for the Preferred Alternative.

Parcels impacted by this alternative are diversified, with a mix of residential parcels, businesses and industrial developed areas. The reconfiguration of the Mariposa Interchange would require the acquisition of several industrial parcels and businesses, along with the acquisition of a trailer park with 41 trailers. The proposed Dr. Martin Luther King Jr. Interchange would require the acquisition of strips off the frontage of several parcels and the full acquisition of single family housing that would require relocation assistance.

For further details about the relocation of a residence, see the Relocation section of the attached Environmental Document.

E. Environmental Issues

The Environmental Impact Report/Environmental Assessment (EIR/EA) has been prepared in accordance with Caltrans' environmental procedures, as well as state and federal environmental regulations. The attached EIR/EA is the appropriate document for this proposal.

Water Quality and Stormwater Runoff
Short-term but less than significant impacts to surface water quality could occur during the construction of this project. The potential surface water quality impacts are increases in sediments, turbidity, total dissolved solids, and toxicity due to chemical substances originating from construction activities.

The primary reasons for these impacts would be from exposing loose soil during excavation as well as grading and filling activities. Suspended solids, dissolved solids, and organic pollutants in surface water runoff could increase while nearby soils are disturbed and dust is generated.

The State Water Resources Control Board currently requires all jobs involving more than 0.4 hectares (1.0 acres) of soil disturbance to file a Notification of Construction (NOC) and have an approved 'Storm Water Pollution Prevention Plan'(SWPPP) before construction may proceed to ensure changes in storm water drainage would not affect water quality during construction.

The Departments' design policy requires that all projects shall include critical Construction Site Best Management Practices (BMPs) in the Plans, Specifications & Estimate (PS&E) documents. This would include BEES Items, Standard Specifications and details for each critical Construction Site (temporary) BMP included in the PS&E. This project will be constructed under a SWPPP, and include appropriate, critical Construction Site and Permanent Treatment BMPs, where necessary, in the PS&E contract documents.

Cultural Resources
Environmental studies have been conducted for sensitive archaeological, historic, and architectural resources. No historic properties were identified; therefore there is no significant affect to historic resources from this project.

Noise
A detailed Noise Study was conducted as part of the environmental review process for this project. The study consisted of measurements of existing noise levels, calibration of a noise prediction model, and development of noise projections based on changes to traffic due to the project and cumulative development. Technical data from the Noise Study was used in preparation of the NADR, which presented the preliminary noise abatement decision. The noise abatement decision was included in the Draft

Environmental Document for public circulation. The final noise abatement decision was determined by the PDT and is presented in the Final Environmental Document. The following is a summary of the recommended preliminary sound wall locations for the Preferred Alternative:

- On the east side of SR-99, from Marfargoa Drive to Clark Drive: about 2300 feet long and 12 feet high.
- On the east side of SR-99, from south of Carpenter Road Drive to the proposed northbound off-ramp at the Mariposa interchange: about 3480 feet long and 12 feet high.
- On the east side of SR-99, from the Farmington Road OC to the BNSF railroad: about 620 feet long and 16 feet high.
- On the east side of the Dr. ML King Jr. northbound on-ramp, for the entire length of the ramp and extending along the east side of SR-99 to Mormon Slough: about 2500 feet long and 12 feet high.
- On the east side of SR-99, from Mormon Slough to Main Street, east of Charter Way: about 1800 feet long and 12 feet high.
- On the west side of SR-99, from Main Street to Charter Way: about 880 feet long and 14 feet high.
- On the west side of SR-99, from south of the Charter Way OC to the proposed ponding basin adjacent to Mormon Slough: about 830 feet long and 16 feet high.
- On the west side of the Dr. ML King Jr. southbound off-ramp, for the entire length of the ramp: about 1420 feet long and 12 feet high.

The final noise abatement decision would be determined during PS&E.

Biology
Informal consultation with the U.S. Fish and Wildlife Service and the Army Corps of Engineers resulted in requirements to conduct stream restoration for a portion of Duck Creek where the project proposes replacing structures and adding new structures. The restoration work would be included in the landscape plan.

F. Air Quality Conformity

The improvements described herein are fully compatible with the design concepts and scopes described in the approved SJCOG Regional Transportation Plan (RTP) and Transportation Improvement Plan (TIP), which were prepared for air quality conformity for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), suspended particulate matter (PM_{10} & $PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb). Therefore, this project meets federal air quality conformity requirements.

G. Title VI Agreements

The California State Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, sex and national origin be excluded from participation in, be

denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

7. OTHER CONSIDERATIONS AS APPROPRIATE

A. Public Hearing Process

A Public Hearing was held on Wednesday, April 16, 2008 at the San Joaquin County Fairgrounds, Building 3, from 4:00 p.m. to 8:00 p.m. The hearing was part of Caltrans' process to circulate the Draft EIR/EA to the public. The hearing was held in the middle of the 45-day public circulation period that began on March 17, 2008 and ended on May 1, 2008.

The purpose of the hearing was to provide an update of any changes to the three project alternatives that were incorporated since the public information meeting held on March 3, 2007, and to answer any questions and gather comments from anyone who had input. An additional purpose of the meeting was to provide copies of the Draft EIR/EA and display the environmental technical studies that contain the technical details and results of the individual environmental studies.

One hundred and eighteen people attended the hearing. Caltrans staff representing the departments of project management, design, traffic, environmental, and right-of-way were in attendance to answer questions and gather comments about the project. A court reporter was also onsite to enable attendees to have their comments recorded for the official record. Attendees were given the opportunity to submit written comments on comment cards provided at the meeting. Comments received during the hearing and 45-day public circulation period are included in the attached EIR/EA.

B. Permits

This project would require work within Bergs Canal, Duck Creek, and Mormon Slough; consequently, a Section 404 permit from the U.S. Army Corps of Engineers and a 1601/1603 streambed alteration agreement from the California Department of Fish and Game would be required. A waiver or certification from the Regional Water Quality Control Board would also be required. Permits also would be required from the San Joaquin County Flood Control Agency the State Lands Commission, and the State Reclamation Board for the structure widening at these locations.

C. Cooperative Agreements

A Cooperative Agreement (CA) between the State and SJCOG for the activities required to deliver the PS&E and right-of–way for this proposal was approved on August 21, 2008. The CA is included in this proposal as Attachment K. Another CA for the construction phase of this project would be executed between the State and SJCOG during PS&E.

D. Maintenance Agreements

An electrical Maintenance Agreement (MA) exists between the State, San Joaquin County, and the City of Stockton. The traffic signals and safety lighting will be added to the MA. The MA identifies the responsibilities, and it also defines the shared maintenance and electrical energy costs for the intersections. A MA would also be required between the State, San Joaquin County, and the City of Stockton to determine responsibilities for maintaining the proposed drainage basins throughout the project. A MA would also be required for determining responsibilities for maintaining the proposed sound walls. These MA's would be processed during the Design phase of the project.

E. Freeway Agreements

This proposal would require revision of the existing Freeway Agreements (FA) with the City of Stockton and San Joaquin County. Superseding FA would address the closure of Clark Road, Farmington Road and Charter Way entrance/exit ramps to SR 99.

In addition, the FA would provide for the implementation of any new public road connections to SR 99. Prior to the FA being implemented, California Transportation Commission (CTC) approval would be necessary for any new public road connections. CTC approval for the new public road connection would be covered in the Route Adoption process.

The FA would provide for the relinquishment of local roads improved and constructed as part of the proposal. Costs for the proposed relinquishment work have been included in the cost estimate.

F. Route Matters

This proposal would require a New Public Road Connection (NPRC) to be approved by the CTC for the Dr. ML King Jr. Blvd./Golden Gate Ave. connection to SR-99. The NPRC would be presented for approval following approval of the FA.

G. Involvement with a Navigable Waterway

There are no navigable waterways (i.e. any body of water that would require a US Coast Guard permit to cross over) within the limits of the proposal.

H. Transportation Management Plan

This proposal can be constructed without significant or long-term lane closures. However, a Transportation Management Plan (TMP) would be required to minimize traffic disruptions without compromising public or worker safety during construction.

Stage construction/traffic handling plans would be coordinated with the City of Stockton and San Joaquin County during project design. Work areas adjacent to traffic lanes would be protected with temporary railing (Type K), where feasible. Interchange ramp traffic can be maintained during construction by proper construction sequencing. Temporary detour connections would be required during the following operations: the removal and reconstruction of the Mariposa Road interchange, the removal and reconstruction of the east Stockton UP, the removal of the Golden Gate Avenue OC, the construction of the Dr. ML King Jr. interchange, the removal of Charter Way interchange, and the removal and reconstruction of the Main Street OC.

Traffic lane closures are allowed when contractor operations are actively in progress as designated by the TMP Lane Closure Charts. Maximum permitted length of closure is 1.6 km (1 mile). The media would be used to disseminate project information to the motoring public.

Two permanent changeable message signs shall be installed to provide motorists with advanced information and alternative routes.

I. Stage Construction

A meeting between Caltrans Construction, Design, and Traffic Management took place on March 8, 2007 to discuss construction staging. The following construction staging strategies were recommended:

- Short-term detours, where required, should be constructed first (i.e. frontage road to mainline tie-ins). Existing structures, ramps, and local roads could also be used as detours. Detours should be located as close to mainline as possible.

- When replacing a structure, new structures should be constructed adjacent to the existing structures, in order to minimize conflicts with existing foundations and to allow existing structures to carry traffic. Existing structures would remain in place until new structures are open for traffic.

- Construction of interchanges should be staged to avoid conflicts with traffic handling. This usually would entail constructing the interchanges one at a time, not concurrently. However, there could be a scenario where it makes sense to work on different interchanges simultaneously.

The strategies above should be considered in the design phase during preparation of the construction staging plans.

J. Accommodation of Oversized Loads

Improvements to the ramps and widening of the structures within the project limits would improve traffic operations and increase capacity, and thus reduce disruption to traffic caused by oversized loads. Oversized loads will be accommodated through construction where possible.

K. Graffiti Control

Sound walls and retaining walls adjacent to and within freeway right-of-way are prone to graffiti. The following graffiti control measures are proposed to reduce potential for graffiti and to provide for easier cleanup:

- Sound walls would be constructed primarily from masonry block; the aesthetic concepts include consideration for split face or rougher textures to discourage "taggers". During design it is recommended to consider the use of graffiti-resistant coating and vine planting where feasible as forms of graffiti abatement.

- Retaining walls would also include textured surfaces through the use of form liners. Additionally, during design it is recommended to consider the use of graffiti-resistant coating.

8. PROGRAMMING

The programmed total project cost as shown in the Route 99 Bond Program project Fact Sheet is described in the table below.

COST BREAKDOWN: (Capital Cost Estimate)-
Capital and Support Cost Summary - Programmed

Project Cost Component	Fiscal Years						TOTAL
	Prior	2007/08	2008/09	2009/10	2010/11	2011/12	
PA & ED	3,081						3,081
R/W Capital			72,000				72,000
Construction Capital						159,000	159,000
PS&E Support		3,319					3,319
R/W Support			2,600				2,600
Construction Support						10,500	10,500
TOTAL	**3,081**	**3,319**	**74,600**			**169,500**	**250,500**

Funding is from the Regional Improvement Program (RIP) and the Interregional Improvement Program (IIP) in the 2006 State Transportation Improvement Program (STIP), as well as the SR-99 Bond, San Joaquin County Measure "K" funds, and Regional Traffic Impact Fees (RTIF).

COST BREAKDOWN: (Capital Cost Estimate)-
Capital and Support Cost Summary – Proposed Funding

Project Cost Component	Fiscal Years						TOTAL
	Prior	2007/08	2008/09	2009/10	2010/11	2011/12	
PA & ED	3,081		3,419				6,500
R/W Capital			57,000				57,000
Construction Capital						153,000	153,000
PS&E Support		3,319	5,681				9,000
R/W Support			8,500				8,500
Construction Support						16,500	16,500
TOTAL	**3,081**	**3,319**	**74,600**			**169,500**	**250,500**

Project support is being updated as needed in coordination with the local funding partner. The appropriate programming amendments will be processed in accordance with the STIP Guidelines based on updated workplan estimates (support and capital) according to the table above. Any increases to the approved baseline agreement need to be concurred with by local partners. The proposed funding is under 25% support to capital ratio in comparison to the programmed funding which is less than 10% support to capital ratio.

The currently programmed funding sources are summarized in the tables below.

Route 99 Bond Program (Program Code 722.000)

Project Cost Component	Fiscal Years						TOTAL
	Prior	2007/08	2008/09	2009/10	2010/11	2011/12	
PA & ED							
R/W Capital			37,300				37,300
Construction Capital						106,100	106,100
PS&E Support							
R/W Support							
Construction Support						10,500	10,500
TOTAL			**37,300**			**116,600**	**153,900**

RIP Funds (Programmed) (Program Code 075.600)

Project Cost Component	Fiscal Years						TOTAL
	Prior	2007/08	2008/09	2009/10	2010/11	2011/12	
PA & ED	1,523						1,523
R/W Capital			11,500				11,500
Construction Capital							
PS&E Support							
R/W Support							
Construction Support							
TOTAL	**1,523**		**11,500**				**13,023**

IIP Funds (Programmed) (Program Code 025.700)

Project Cost Component	Fiscal Years						TOTAL
	Prior	2007/08	2008/09	2009/10	2010/11	2011/12	
PA & ED	1,558						1,558
R/W Capital							
Construction Capital							
PS&E Support							
R/W Support							
Construction Support							
TOTAL	**1,558**						**1,558**

Measure K (Local Funds)

Project Cost Component	Fiscal Years						TOTAL
	Prior	2007/08	2008/09	2009/10	2010/11	2011/12	
PA & ED							
R/W Capital			23,200				23,200
Construction Capital						47,900	47,900
PS&E Support		3,319					3,319
R/W Support			2,600				2,600
Construction Support							
TOTAL		**3,319**	**25,800**			**47,900**	**77,019**

Regional Traffic Impact Fees (Local Funds)

Project Cost Component	Fiscal Years						TOTAL
	Prior	2007/08	2008/09	2009/10	2010/11	2011/12	
PA & ED							
R/W Capital							
Construction Capital						5,000	5,000
PS&E Support							
R/W Support							
Construction Support							
TOTAL						**5,000**	**5,000**

Note: All costs X$1,000. Construction Capital escalated by 4% and Support Costs escalated by 2.7% per year. Right-of-way Capital costs escalated at 5% per year.

The milestone schedule is as follows:

Milestone	Month/Year
PA&ED	December 2008
Begin PS&E	December 2008
Start of R/W Acquisition	December 2008
R/W Certification	January 2012
Ready to List	February 2012
Construction Contract Acceptance	June 2015

9. REVIEWS

Ken Cozad (Headquarters Design Coordinator) and Mike Janzen (Headquarters Design Reviewer) have been involved with the development of the project alternatives and have participated in reviews during the design exception approval process. The Mandatory Design Exception Fact Sheets pertaining to the Preferred Alternative were approved on September 24, 2008. There has also been several Project Development Team (PDT) meetings held as a part of this overall project development process.

Jose Alicea, Caltrans District 10 Traffic Engineering Branch Chief, completed a Safety Analysis on February 13, 2007. All recommendations from the Safety Analysis have been incorporated into this proposal.

10. PROJECT PERSONNEL

JOY PINNE Project Manager, Acting	(209) 948-7854
MARTIN NISHIKAWA Design Engineer	(559) 230-3122
SEAN PLEDGER Project Engineer	(559) 243-3886
LOREN E. VINSON Project Engineer	(559) 243-3886
JOSE A. GONZALEZ Project Engineer	(559) 230-3124
GAIL MILLER Environmental Manager	(559) 243-8274
RAYCHEL SKEEN Environmental Branch	(559) 243-8266
ANTHONY DORN Right-of-way Branch	(209) 948-3858
VU NGUYEN Traffic Operations Branch	(209) 603-5126
ARMANDO SORIA Traffic Operations Branch	(209) 948-7184

11. ATTACHMENTS

A. Location Map
B. Typical Sections
C. Layout Plans
D. Cost Estimate
E. Right-of-Way Data Sheet
F. Environmental Document
G. Traffic Operations Analysis Report
H. Supplemental Traffic Operations Analysis Report
I. Transportation Plan Management Plan Checklist
J. Hydraulic Study
K Storm Water Datasheet (Cover Sheet only)
L Cooperative Agreement
M. Risk Management Plan

CC:

HQ Division of Design (2)
HQ Environmental – Bob Pavlik
HQ Maintenance – Patti-Jo Dickinson
HQ Traffic Ops/Traffic Safety - Janice Benton
Project Manager – Joy Pinne
Design Engineer (3) - Original + 2 copies
Resident Engineer - (held by Design Engineer)
District Maintenance – Alvin Mangindin
Region Traffic Management - Laurie Jurgens
Region Materials - Dave Dhillon
Region Environmental – David Hyatt
Region R/W - Michael Rodrigues
District Planning – Jane Perez
District SFP - Dennis T. Agar
PPM - Sarah Lesnikowski
District Surveys – Howard Brunetti (electronic copy only)
DES/OPPM – Peggy Lim (Structures)
District Records – Allison Johnson
Region Records – Victoria Pozuelo