

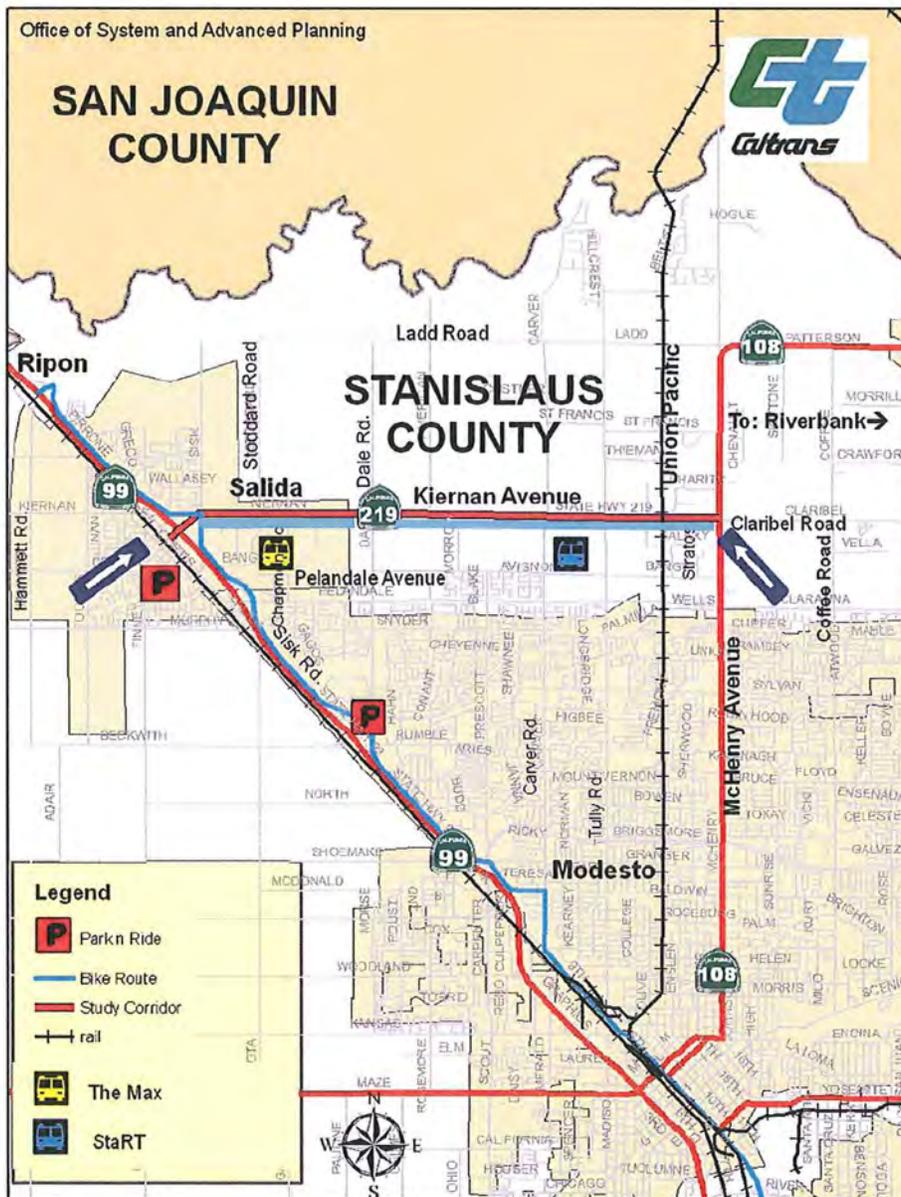
District 10

State Route 219

Corridor System Management Plan

Stanislaus County

STA 219 PM 00.10 through STA 219 PM 04.90



September 2008

**District 10
State Route 219
Corridor System Management Plan
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Recommend Approval:

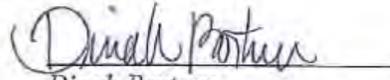
Recommend Approval:



Ken Baxter
Deputy District Director
Planning and Local Assistance
Caltrans - District 10

9/17/08

Date

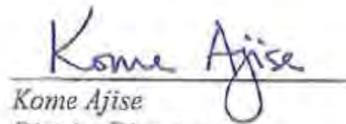


Dinah Bortner
Deputy District Director
Maintenance & Traffic Operations
Caltrans - District 10

9/18/08

Date

I approve this Corridor System Management Plan as the overall Policy Statement and Strategic Plan that will guide transportation decisions and investments for the State Route 219 Corridor.



Kome Ajise
District Director
Caltrans - District 10

9/30/08

Date



Vince Harris
Executive Director
Stanislaus Council of Governments

9/28/08

Date

Prepared in cooperation with:



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SECTION 1 INTRODUCTION

The State Route 219 (SR-219) Corridor System Management Plan (CSMP) provides for the integrated management of travel modes and roadways to facilitate the efficient and effective mobility of people and goods within one of the most congested transportation corridors in Stanislaus County. The CSMP presents an analysis of existing and future traffic conditions and proposes traffic management strategies and capital and operational improvements to maintain and enhance mobility within the corridor. The corridor system management planning strategy integrates system planning and system management addressing state highways, local parallel roadways, regional transit services and other regional modes pertinent to corridor mobility.

The SR-219 CSMP was developed in concert with State, local and regional transportation goals, and addresses existing and future local and regional mobility and transportation system connectivity. The CSMP incorporates regional blueprint planning, context sensitive transportation solutions and encourages the use of alternative transportation modes. It functions as a tool in which State and local partners can address future growth while maintaining individual and shared goals and objectives.

CSMPs are being developed throughout the State for corridors receiving Corridor Mobility Improvement Account (CMIA) and Highway 99 Bond Programs funds created by the passage of the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, approved by the voters as Proposition 1B on November 7, 2006.

The precise limit of the SR-219 CSMP has been determined through a collaborative cooperative process involving the major transportation planning organizations within the corridor. The SR-219 CSMP addresses segments along the corridor beginning at the junction of State Route 99 (SR-99) and ending at the junction of State Route 108 (SR-108).

1.0 Purpose and Need

Over the next 30 years, California's population is expected to increase by an average of 500,000 residents per year. This means by 2020, the State's population will reach nearly 44 million and, by 2030, nearly 48 million. The purpose of the CSMP is to reduce congestion within the SR-219 CSMP corridor limits, enhance safety, and to preserve the mobility gains of the CMIA investments. The preparation of this CSMP is a California Transportation Commission (CTC) requirement for the use of the Proposition 1B CMIA funds that have been allocated for the SR-219 widening projects within the corridor.

1.1 Corridor System Management Planning Strategy

The corridor system management strategy is based on the integration of System Planning and System Management. System Planning is the long-range transportation planning process of Caltrans that evaluates the current and future operating conditions and deficiencies on the State transportation system. Improvements are recommended to maintain mobility by minimizing or alleviating the identified deficiencies. The process considers the entire transportation system on and off the State Highway System (SHS), including the highways and local arterials, transit services, railroads, airports, non-motorized modes of transportation, such as bicycling and walking, goods movement, intelligent transportation systems (ITS) and local land use and environmental issues.

System Management is the process of maximizing the efficiency and effectiveness of the existing transportation infrastructure through use of proven methods and technologies. A few examples include ramp metering, traffic information collection and dissemination, incident management, high occupancy vehicle (HOV) lanes, use of local arterial roadways that are parallel with the highway corridor and demand management strategies, such as transit and rideshare marketing, flexible work hour schedules and telecommuting. The strategy of this CSMP requires a commitment by Caltrans and applicable regional and local agencies to develop and implement the CSMP.

1.2 Consistency with the Governor’s Strategic Growth Plan

The Governor’s *Strategic Growth Plan* (see Figure 1.2 below) is designed to decrease congestion, improve traveler times and increase safety while accommodating future growth in population and the economy.

Corridor productivity can only be restored and maintained through a coordinated planning and management effort of all transportation partners. This CSMP identifies a number of elements essential to this goal. The “System Management Pyramid” can best visualize these elements. Each element, while represented separately, works as an essential part of the whole. The elements may be summarized as follows:



1.2.1 System Monitoring and Evaluation

System monitoring and evaluation is the foundation of this CSMP strategy. In order to reduce congestion and implement traffic management strategies, we must have knowledge of when and where congestion occurs. In order to identify when and where congestion occurs, improved detection is needed, the existing detection system needs to be maintained and gaps in the detection network need to be filled.

Understanding how a corridor performs and why it performs the way it does is critical to developing appropriate strategies. The first step in this effort is to analyze the system as it is available. This includes the identification of current bottlenecks (areas of congestion), their causes and the impact that these individual bottlenecks have on the whole corridor.

1.2.2 Maintenance and Preservation

Maintenance and preservation strategies are designed to protect the enormous public investment in the existing transportation system and to ensure a full return on system investments, as well as reduce future maintenance and replacement costs.

1.2.3 Smart Land Use, Demand Management/Value Pricing

Smart land use, demand management and value pricing strategies reduce travel demand, reduce delay, and increase transportation through sustainable and integrated land use decisions and innovative concepts to change traveler behavior. Smart land use and demand management has to do with reducing congestion by developing land uses that support shorter trips, increase the use of transit and alternative transportation modes and improved pedestrian access.

Land use decisions are the prerogative of local government. These decisions impact the transportation system. Appropriate planning can reduce this affect including preserving right-of-way to allow for future planned capacity enhancing projects and their overall price. Approving only those developments that are compatible with an adjacent or nearby transportation system, be it a freeway, airport or other transportation mode will help to protect the system.

1.2.4 Intelligent Transportation Systems, Traveler Information, Traffic Control, and Incident Management

ITS technology improves efficiency for the traveling public. Real time traveler information allows travelers to make more effective decisions regarding trip timing, route choices and mode selection. Traffic control reduces congestion through the use of technologies, such as system ramp metering, collision warning systems and advanced traffic management systems. Incidents are the primary cause of unexpected and variable delay. Improved incident management reduces congestion and traveler delay.

1.2.5 Operational Improvements

Operational improvements such as the use of auxiliary lanes, ramp improvements, improved signs and lights, and other system refinements reduce delay and enhance performance. The net result is improved traffic operations.

1.2.6 System Completion and Expansion

System completion and expansion provides the connectivity originally envisioned for the SHS and expands the overall capacity of the transportation system to accommodate growing demands. These projects include the addition of new highway or roadway lanes, transit facilities and other projects.

1.3 CSMP Development

Six milestones have been identified by the CTC and Caltrans in the development of the SR-219 CSMP, namely:

1. Define Corridor
2. Assemble Corridor Team
3. Develop Preliminary Corridor Performance Assessment
4. Comprehensive Corridor Performance Assessment
5. Identify Causality of Corridor Performance Degradation
6. Plan Completion/Adoption by Regional Transportation Planning Agency

SECTION 2 STAKEHOLDER PARTICIPATION

The development and successful implementation of this CSMP is dependant upon the close participation and cooperation of all major stakeholders. In the case of the SR-219 CSMP, both internal and external stakeholders participated in the development of this CSMP from the beginning of the CSMP development process. A project development team of key stakeholders was formed and met periodically to discuss, provide technical assistance, review and comment on the development of the CSMP.

The CSMP development team consists of representatives from Caltrans District 10: Planning, Traffic Operations, Safety and Maintenance, and Program and Project Management. Team members also include representatives from Stanislaus Council of Governments (StanCOG), California Highway Patrol (CHP), Stanislaus County, Modesto City Schools and the City of Modesto. StanCOG, Stanislaus County and the City of Modesto have provided a letter of intent that is included in the Appendix as Figure 1. This letter demonstrates their commitment and interest in actively participating in this collaborative effort.

SECTION 3 DEFINE CORRIDOR

A critical step in the CSMP process is the definition of the corridor transportation network, which will be the focus of CSMP corridor improvement and management activities. This section describes the individual modes and roadway components of this network and presents the rationale for their selection and inclusion.

3.0 CSMP Corridor Limits

The SR-219 CSMP includes the entire SR-219 corridor. The corridor is approximately 4.8 miles long and runs east and west from SR-99 to SR-108. SR-219 is located at the northern edge of the urban area of the City of Modesto.

3.1 Corridor Width - Sphere of Influence

In further defining the CSMP corridor, the corridor width must also be defined. Parallel facilities are included within a one-mile parameter. State highways and local roads connecting with SR-219 are also included, as well as transit, bike and pedestrian, and park and ride facilities serving the corridor.

Parallel facilities include Pelandale Avenue to the south of SR-219 and Ladd/Patterson Road to the north. SR-219 is currently classified as a Class III Bikeway. The current project to widen SR-219 does include a designated Class II bike facility which provides a striped lane to share the shoulder along the proposed roadway. A description of the land uses located within the SR-219 corridor sphere of influence and development projects impacting the CSMP corridor are provided in Section 3.6 on page 7.

3.2 Corridor Function

SR-219 serves agricultural and commercial trucks. It is also an important route used by commuters and local traffic in the City of Modesto, and is heavily used by residents in the cities of Riverbank and Oakdale as a travel corridor to and from SR-99. SR-219 provides access for employees and patients of Kaiser Hospital located approximately one quarter of a mile from the corridor. SR-219 has numerous commercial businesses along the highway. The CHP has a field office adjacent to the highway.

3.3 Corridor Inventory

SR-219 is classified as a minor arterial through most of its length, however, the first 0.2-miles of the route is classified as a principal arterial. With the exception of a short two-way left-turn lane located near the middle portion of the corridor, it is primarily a two-lane conventional highway. The existing highway is also known as Kiernan Avenue.

3.4 Corridor Designation and Functional Classification

SR-219 is identified as a Surface Transportation Assistance Act (STAA) Terminal Access Route for the National Truck Network. The highway is not included in the Interregional Road System (IRRS), and therefore is not a focus route or a high emphasis route. SR-219 is also not included in the National Highway System (NHS), Strategic Highway Network (STRAHNET), the Scenic Highway System, or the Freeway and Expressway System. Table 3.4 provides additional information regarding the SR-219 designation and functional classification.

TABLE 3.4: Corridor Classification

Segment	Functional Classification	National Highway System (NHS) (Y/N)	Freeway/ Expressway System (Y/N)	Regionally Significant (Y/N)	STRAHNET (Y/N)	IRRS (Y/N)	National Truck Network (NTN) (Yes: STAA, TA=Terminal Access) or No	Scenic (Yes: OD=Officially Designated E=Eligible) or No	ICES (Intermodal Corridor of Economic Significance) (Y/N)	General Plan/ RTP LOS Standard	Bike Use Allowed (Y/N)
1 SR-99 to Sisk	Minor Arterial	N	N	Y	N	N	TA	N	N	E	Y
2 Sisk to Morrow	Minor Arterial	N	N	Y	N	N	TA	N	N	E	Y
3 Morrow to Carver Rd.	Minor Arterial	N	N	Y	N	N	TA	N	N	E	Y
4 Carver Rd. to Tully Rd.	Minor Arterial	N	N	Y	N	N	TA	N	N	E	Y
5 Tully Rd. to SR-108	Minor Arterial	N	N	Y	N	N	TA	N	N	E	Y

3.5 Intelligent Transportation Systems

ITS technology is used for incident notification and freeway management, such as dynamic message and warning signs. Cameras monitor traffic and changeable message signs for verification of sign message and operation. Changeable message signs generally display road closure/road condition information. In addition to the cameras, traffic monitors are located in specific locations to feed traffic data to the TMC in each Caltrans district. Some traffic monitors are linked to the PeMS database for use in distribution of data to many users.

Deployment of ITS technology will enhance traveler information services, as well as the operational efficiency of the corridor by informing motorists of traffic congestion, inclement weather, such as fog, dust, incident management, emergency response, and highway construction and/or closings.

The following tables, 3.5.a, 3.5.b, and 3.5.c identify the existing and planned ITS elements along the corridor. Currently there are two traffic count stations on SR-219 near SR-99 and SR-108. There are two programmed ITS elements included in the CMIA widening projects, and there are two CMS/CCTV/TMS elements proposed for SR-108 and SR-99 to serve the SR-219 corridor.

TABLE 3.5.a: Existing ITS Elements

No.	Equipment	Route	PM	Location	Use
1	CMS	SR-219	00.01	SR-99/SR-219	Traffic Count
2	CMS	SR-219	04.85	SR-219/SR-108	Traffic Count

TABLE 3.5.b: Programmed ITS Elements

No.	EA/ ID RTP MPO	Route	PM	Location	Description
1	0A872	SR-219	02.50	Eastbound West of Morrow Road	CMS/CCTV/TMS
2	0A872	SR-219	04.50	Westbound West of Stratos Way	CMS/CCTV/TMS

TABLE 3.5.c: Planned ITS Elements

No.	EA/ ID RTP MPO	Route	PM	Location	Description
1	TBD	SR-99	00.10	SR-219/SR-99	CMS/CCTV/TMS on SR-99 to serve SR-219
2	TBD	SR-108	TBD	SR-108/SR-219	CMS/CCTV/TMS on SR-108 to serve SR-219

The major challenge to ITS deployment is funding. ITS elements are proposed through the SHOPP, which has minimal funding for ITS deployment. Caltrans District 10 requests the installation of ITS elements on State Transportation Improvement Program (STIP) projects, but more frequently than not, when project costs need to be reduced, ITS elements are the first to go. There needs to be more support from all project partners to keep ITS elements on STIP projects.

Technology advances are also a challenge for ITS deployment. Technology is always changing, which makes it very difficult to integrate with existing technologies, and the lack of power and communication in remote areas impedes implementation in rural areas. ITS operating, utility and maintenance expenses are costly along with high bandwidth communications for video. It is also a challenge to sustain the level of expertise that is needed to operate and maintain the complex ITS equipment.

3.6 Transportation Demand Management

Transportation demand management is designed to reduce vehicle trips during peak hours and is specifically targeted at the work force, commuters that generate the majority of peak hour traffic. Strategies include: rideshare programs; transit usage; flex hours; van pools; bicycling and walking; telecommuting; and mixed land uses (jobs/housing balance).

Incorporating these strategies would be part of land use decisions, the prerogative of local government. Transportation Demand Management programs could be required by local jurisdictions for any large commercial or office project and could be tied to incentives of some sort to encourage the development of such programs. Kaiser Permanente will be increasing their number of employees at the new hospital from 300 to 900. Kaiser Permanente will be providing transit and vanpooling incentives to employees in the near future.

3.7 Land Use

Housing needs in the San Francisco/San Jose Bay Area (and its surrounding communities) unfortunately have not kept up with Bay Area job growth. The shortage of affordable housing in the Bay Area has led to increased subdivision activity in Stanislaus County where lower land cost creates a profitable setting for new housing developments. This has led to an imbalance in the jobs/housing market, as well as an accelerated commuter-based residential growth pattern that has placed high burdens on the regional transportation system in Stanislaus County and neighboring San Joaquin County that collectively provide direct access to the Bay Area.

According to the 2007 StanCOG Regional Transportation Plan (RTP), the Stanislaus County regional population is expected to add 370,000 people by 2030, an increase of 84 percent. Projected increases in highway congestion and population growth will play a major role in the need for emphasizing alternative modes of travel between the San Joaquin Valley and the Bay Area.

Existing land use development patterns are beginning to seriously affect the quality of life in Stanislaus County. The symptoms are congestion and air pollution from an increased use of the automobile, the need for costly improvements to roads and public services, the loss of open space and the loss of a sense of community. With pressures from growth and intensified land use within and outside city and community urban growth boundaries, street and highway improvements, as well as public transit expansion will need to be implemented to accommodate trips generated by newly proposed developments.

The City of Modesto's General Plan shows the city will eventually grow north of SR-219. The General Plan map shows business park and village residential zones located on both sides of the corridor. Adequate access management needs to be addressed to preserve the corridor and to preserve access between SR-99 and SR-108.

Existing residential and commercial development on both sides of SR-219 are impacting the corridor. Kaiser Permanente has constructed a new hospital and teaching facility. A new high school will also be constructed as part of the north industrial area close to Salida and adjacent to Stoddard Road. In addition, there has been some growth in the industrial area off Pentecost Way and commercial parcels at the intersection of SR-219 and SR-108.

The Salida Community Plan provides land use planning and guidance for the development of approximately 4,600 acres of land in the Salida area, with approximately 1,259 acres of land designated as planned industrial. The majority of the land is located in the northeastern portion of the amendment area roughly bound by Ladd Road on the north, Dale Road on the east, Pelandale Expressway on the south, and Sisk Road on the west. The community plan also includes 490 acres designated business. This is concentrated largely in the eastern portion of the amendment area with two notable areas in the northwest portion near the Hammett Road/SR-99 interchange.

The community plan also includes 280 acres of land designated commercial. A major regional commercial area is planned in the northwest corner of the amendment area on the east side of SR-99 and at the southwest corner of the Covert Road/Tooms Road intersection and between Sisk Road and Stoddard Road. The amendment area includes 866 acres of low-density residential, 187 acres of medium-density residential, and 57 acres of high density residential for a total of 1,110 acres of new residential development.

The east-west expressway North County Corridor currently programmed in the project approval and environmental document (PA&ED) phase is expected to accommodate planned growth in the area. The new alignment facility will provide connectivity to SR-99, SR-219, SR-108, and SR-120, and separate regional traffic from local traffic providing operational benefits to the cities of Modesto, Riverbank and Oakdale, and Stanislaus County. The corridor extends through the Salida Community Plan area from the SR-99/ Hammett Road interchange to east of the City of Oakdale. This project proposes approximately 24 miles of new expressway.

3.8 Environmental Scan

A scan of potential environmental impacts has been completed along the corridor. The scan reveals that the corridor traverses 100-year flood plains. There are low to moderate degrees of impacts due to leaking underground tanks. There is a low degree of impact to wetlands and special status species, and there is a high degree of impact to cultural resources. There are moderate to high degrees of impacts to possible hazardous waste from lead. Stanislaus County is non-attainment for the 1-hour/8 hour ozone standards, particular matter and carbon monoxide. See Table 3.8 for further details on the environmental scan. The Union Pacific (UP) Railroad crosses SR-219 near the eastern end of the corridor.

Table 3.8: Environmental Scan - Degree of Impact

Postmile	Description	Flood Plains	Wet-lands	Special Status Species	Cultural Resources	Leaking Underground Tanks	Possible Hazardous Waste	Air Quality		
								Ozone	Particulate Matter	Carbon Monoxide
00.10/00.35	From Highway 99 to Sisk Rd.	100 yr	low	low	high	low	mod/high lead	1hr/8hr Non-Attainment	Non Attainment	Unclassified /Attainment
00.35/03.36	Sisk Rd. to Carver Rd.	100 yr	low	low	high	low	mod/high lead	1hr/8hr Non-Attainment	Non Attainment	Unclassified /Attainment
03.36/03.88	Carver Rd. to Tully Rd.	100 yr	low	low	high	low/mod	mod/high lead	1hr/8hr Non-Attainment	Non Attainment	Unclassified /Attainment
03.88/04.85	Tully Rd. to Highway 108 End of Route	100 yr	low	low	high	low/mod	mod/high lead	1hr/8hr Non-Attainment	Non Attainment	Unclassified /Attainment

The National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) and other related federal and state environmental laws and regulations require environmental studies and public participation for all projects for which a public agency has a discretionary action. Resources and issues requiring environmental study may include historical structures, protected animals and plants, social and economic impacts, wildlife refuges and public parks, archaeological sites, hazardous waste, paleontological sites, air and water quality, and noise.

Appropriate environmental studies would need to be conducted whenever any of the CSMP improvements are implemented if state or federal funding is involved. Project level analysis may be required and depending on the funding source may involve compliance with the NEPA and/or CEQA. Projects that may potentially cause an increase in traffic may require air quality and noise impact studies to determine if effects of increased traffic would cause a significant reduction of air quality and/or substantial increase in noise level. Hazardous waste studies may be indicated if the project area would include gas stations or other businesses that use or generate potential hazardous waste.

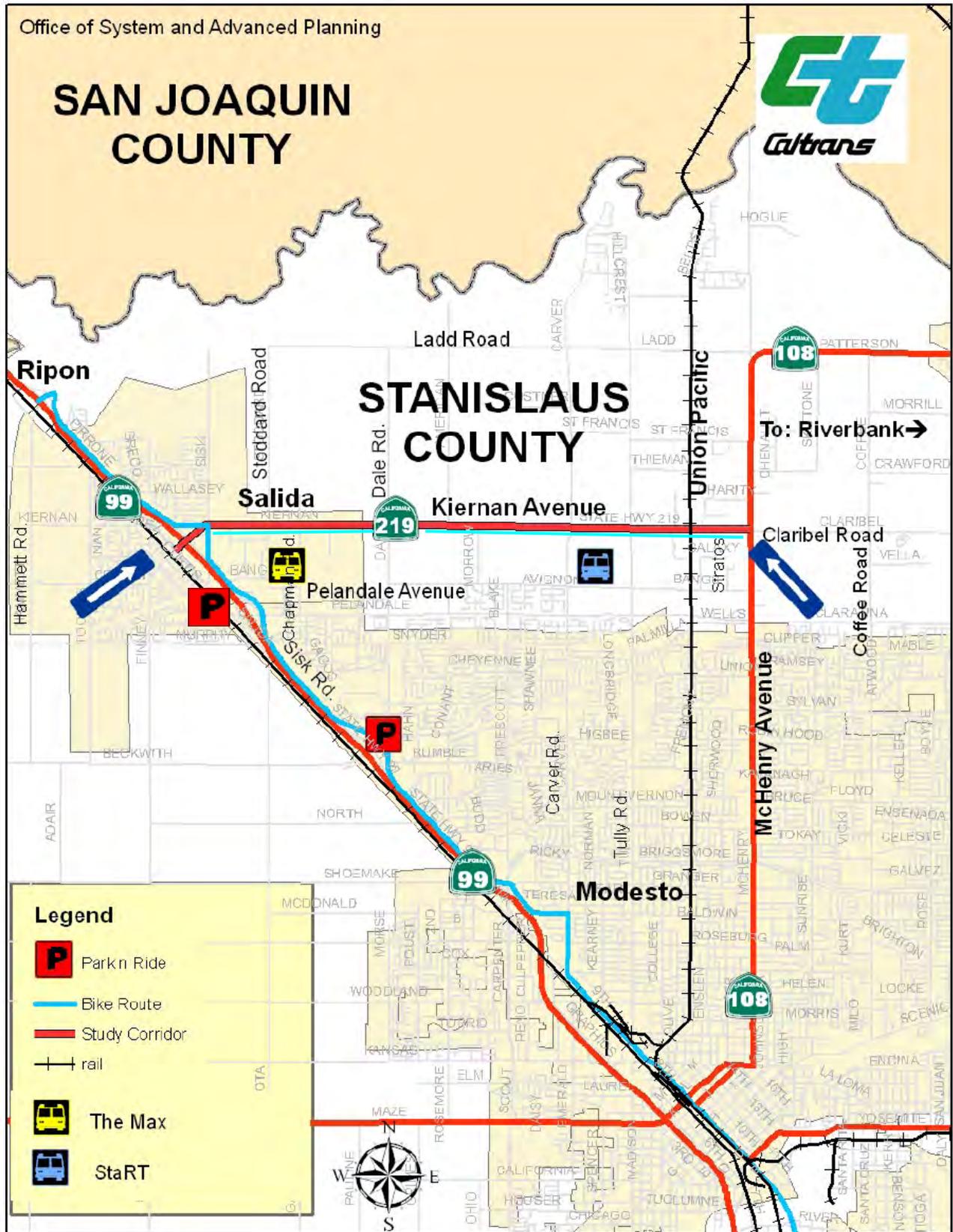
3.9 CSMP Transportation Network

The CSMP transportation network includes all modes of transportation. The network includes the State highway system, major arterials and parallel roads, rail and transit, park and ride lots, and bike routes. Table 3.9 and Figure 3.9 illustrate the transportation network that serves the SR-219 corridor.

TABLE 3.9: SR-219 Existing CSMP Transportation Network

Seg	From (PM)	To (PM)	No. Lanes/Facility Tyne	Bike Access	Roadway	From	To	Bus Operator Service	From	To
1	SR-99 (PM-00.10)	Sisk Road (PM-0.35)	2	Class III	Pelandale Avenue	SR-99	SR-108	MAX	Sisk Road/ SR-219	Dale Road /SR-219
2	Sisk Road (PM 0.35)	Morrow Road (PM 2.9)	2	Class III	Ladd Road	Stoddard Road	SR-108	StaRT	Dale Road/ SR-219	SR-219 /SR-108
3	Morrow Road. (PM 02.90)	Carver Road (PM 03.36)	2	Class III	Pelandale Avenue	Stoddard Road	SR-108	StaRT	Dale Road/ SR-219	SR-219 /SR-108
4	Carver Road (PM 03.36)	Tully Road (PM 03.88)	2	Class III	Ladd Road	Stoddard Road	SR-108	StaRT	Dale Road/ SR-219	SR-219 /SR-108
5	Tully Road (PM 03.88)	SR-108 (PM 04.85)	2	Class III	Ladd Road	Stoddard Road	SR-108	StaRT	Dale Road/ SR-219	SR-219 /SR-108

FIGURE 3.9: CSMP Transportation Network Map



3.9.1 SR-219 CSMP Transportation Network, State Highway System

SR-219 begins at SR-99 and travels east to SR-108. It serves agricultural and commercial trucks, and is heavily traveled by commuters and local traffic. Travelers from the cities of Modesto, Riverbank, Oakdale and neighboring communities use SR-108 as a connecting route to SR-99. In 2006, traffic volumes on SR-219 ranged from 13,800 to 28,000 with the highest volumes near the SR-99/SR-219 junction.

3.9.2 SR-219 CSMP Transportation Network, Major Parallel Roads

There are two parallel facilities that serve as alternate routes for SR-219. Pelandale Avenue serves as the closest parallel arterial to the south of SR-219, and Ladd Road is the closest parallel arterial to the north of SR-219. Pelandale Avenue begins at the junction of SR-99 and runs east to SR-108 within the CSMP corridor. Ladd Road begins at the junction of Stoddard Road and runs east to SR-108 within the CSMP corridor. Traffic may use these parallel facilities in order to avoid any potential congestion on SR-219. Dale, Carver and Tully Road are major north-south arterials along the SR-219 corridor.

3.9.3 SR-219 CSMP Transportation Network, Transit, Rideshare, Park and Ride, Bicycle/Pedestrian Routes

3.9.3.1 Transit

Bus service in Modesto is provided by Modesto Area Express (MAX) and Stanislaus Regional Transit (StaRT). StaRT serves Stanislaus County with Fixed Route, Dial-A-Ride and Runabouts. Route 60 has a limited service in SR-219 corridor connecting Vintage Fair Mall from Dale Road to SR-219 and SR-108. The MAX bus route (Route 28) operates between Vantage Fair Mall and the intersection of Sisk Road and Pelandale Avenue with an extension to Salida Boulevard. This route has a stop about one half mile from the site at the Dale Road/Pelandale Avenue intersection. Service is provided from 6:15 a.m. to 7:30 p.m. Monday through Friday, and from 8:15 a.m. to 7:00 p.m. on Saturdays. No service is available on Sundays. MAX operates the Modesto Altamont Commuter Express shuttle to transfer passengers from Modesto (at the Vintage Fair Mall) to Lathrop/Manteca Altamont Commuter Express (ACE) train station. ACE provides passenger rail service between the San Joaquin Valley and as far as the Santa Clara Valley. MAX also operates the Modesto Bay Area Rapid Transit Express, connecting Modesto (at the Vintage Fair Mall) to the Bay Area Rapid Transit (BART) station in Dublin. BART also provides commuter rail service to Oakland and San Francisco (including service to the San Francisco International Airport).

The Modesto city school system provides transit services for Gregori High School located on Stoddard Road. There are eight buses running 7:00-7:30 a.m. and 2:00-2:30 p.m. Monday through Friday traveling east on SR-219 turning north onto Stoddard toward the school. A new Modesto City school will be built on Stoddard in the near future and the school administration has expressed the need for a transit stop at the school. The Kaiser Permanente hospital facility on Dale Road near SR-219 will be expanding their work force by 300 to 900 employees. There are fixed route transit services currently serving Kaiser Permanente and services will be expanded to serve the new school. Fixed route transit services will also be extended to serve existing and future students, staff, and faculty at Gregori High and existing

vocational schools operating on Stoddard Road. These services are seen as necessary to address future traffic growth along the corridor.

3.9.3.2 Rideshare

San Joaquin Council of Governments (SJCOG) administers a rideshare program known as Commute Connection which serves the San Joaquin and Stanislaus counties by promoting alternative modes of transportation in an effort to reduce traffic congestion and improve air quality.

This rideshare program includes carpool matching, vanpool matching and assistance, media promotion of ridesharing, distribution of brochures at employment sites and other locations as necessary, program monitoring and recording, public education and community outreach.

3.9.3.3 Park and Ride

Presently, there are no park and ride facilities along SR-219. The Caltrans 2004 Park and Ride Plan does identify the potential for a park and ride facility at SR-219/SR-99. There are two park and ride facilities in close proximity to the SR-219 corridor. The first is located at the Denny's restaurant on Salida Boulevard west of SR-99 near Pelandale, and the second is located at the Vintage Fair Mall, which includes a shuttle operated by MAX. MAX has bus services to connect to ACE, BART and AMTRAK.

3.9.3.4 Bicycle and Pedestrian

The entire length of SR-219 is currently classified as a Class III Bikeway, and will be upgraded to a Class II bikeway as part of the CMIA widening project. The 2001 StanCOG Regional Bicycle Plan identifies future plans for a Class I facility. In addition, there is a programmed project to construct a class 1 bike path on Claribel Road from the SR-108 (McHenry Avenue)/SR-219 (Kiernan Avenue)/Claribel Road intersection to Oakdale Road. Class I bikeways provide a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized. Class II bikeways provide a striped lane for one-way bike travel on a street or highway. Class III bikeways provide for shared use with pedestrian or motor vehicle travel.

Stanislaus County identifies the need to provide the non-motorized transportation needs of the Salida Community Plan Amendment Area by providing integrated pedestrian trails and sidewalks and bicycle trails and lanes that connect to schools parks, public facilities, retail centers, employment centers and river recreational resources. The Environmental Impact Report for Gregori High School states that Modesto City Schools in coordination with the Stanislaus County Department of Public Works shall pursue development of an all weather pedestrian/bicycle connection from Sisk Road to the project site.

Currently, there is a planned SHOPP project to reconstruct the interchange at SR-219 and SR-99. There is a need for bike lanes to serve the SR-219 corridor on the SR-99/SR-219 interchange. It is recommended that existing and planned bike lane connectivity on SR-219 be considered when reconstructing the interchange.

The City of Modesto Updated 2006 Non-Motorized Transportation Master Plan (Table 3.8.3.4) identifies the following planned bike facilities that will connect with or cross SR-219:

TABLE 3.9.3.4: City of Modesto 2006 Non-Motorized Transportation Master Plan

Route	From	To	Classification
SR-219	Sisk	SR-108	Class I
MJC Connector	SR-219	TRRP	Class I
Chapman Road	Pelandale	SR-219	Class III
Dale Road	Standiford	SR-219	Class II
Canal Mid Lateral No 6	Carver	SR-219	Class I
Tully Road	Pelandale	SR-219	Class II
Virginia Railroad Trail	SR-219	MJC Class I	Class I

3.10 Goods Movement

SR-219 serves the “farm to market” and agricultural and commercial related industries. SR-219 is identified as a STAA Terminal Access Route and is also used by trucks as a connector to and from SR-99 and SR-108. Based on 2006 data, the segment with the highest truck activity on SR-219 was from SR-99 to Sisk Road. The truck traffic through this segment accounted for 9% of the ADT; of 2,520 trucks through this segment, 1,280 were five axle trucks. With the increase in agricultural and commercial products destined for world markets, this trend will increase truck demand and goods movement on this corridor.

SECTION 4 PRELIMINARY PERFORMANCE, MANAGEMENT, AND MAINTENANCE ASSESSMENT

The Preliminary Performance, Management, and Maintenance Assessment is based on existing data from various sources, and addresses corridor-wide performance measures and identification of bottlenecks or causes of delay. The performance measures address several outcomes including mobility, reliability, productivity and preservation. Several measures are useful for each outcome, including:

- ❖ Mobility – Delay, Travel Time
- ❖ Reliability – Variation of Travel Time
- ❖ Safety – Accidents, Accident Rates
- ❖ Productivity – Lost Lane Miles
- ❖ Preservation – Number and Locations of Distressed Lane Miles

In general, the delays on conventional highways or expressways are due to too much traffic on a two-lane facility or due to signalization. Improvements can be addressed through operational improvements on the corridor, and where appropriate, corridor completion strategies to bring the existing conventional highway facility to expressway standards.

4.0 Existing Corridor Performance

4.0.1 Traffic Volumes

The 2006 Average Annual Daily Traffic (AADT) ranges from 13,800 to 28,000 along the entire length of the corridor. The 2006 peak hour volumes range from 1,380 to 2,210.

Truck Volumes

Trucks account for 9% of the AADT on SR-219. Many of the trucks on this highway are “farm-to-market” business and serve the agriculture-related industries in this region. There are also many trucks on SR-219 that serve commercial-related businesses. Table 4.0.1 provides additional information regarding traffic/truck volumes on SR-219.

TABLE 4.0.1: SR-219 Traffic Volumes

Seg.	Co.	Post Mile	Description	2006 AADT	2015 AADT	2030 AADT	2006 Peak Hour Volume	2015 Peak Hour Volume	2030 Peak Hour Volume	Truck Volume (2006)	5+Axle Truck Volume (2006)	Truck Volume Peak Hour %	Truck Volume % of Total ADT
1	STA	00.10/00.35	SR-99 to Sisk Road	28,000	45,000	74,000	2,210	3,555	5,845	2,520	1,280	6.8	9.0
2	STA	00.35/02.90	Sisk Road to Morrow Road	21,000	36,500	62,200	1,890	3,285	5,600	1,890	960	6.8	9.0
3	STA	02.90/03.36	Morrow Road to Carver Road	13,800	25,600	45,300	1,380	2,560	4,530	1,240	630	6.8	9.0
4	STA	03.36/03.88	Carver Road to Tully Road	14,400	25,800	44,700	1,440	2,580	4,470	1,300	660	6.8	9.0
5	STA	03.88/04.85	Tully Road to SR-108	16,200	29,300	51,000	1,780	3,220	5,610	1,460	740	6.8	9.0

4.0.2 Level of Service

The concept level of service (LOS) for SR-219 is ‘D’. Based on 2006 data, the entire existing two lane corridor is currently operating at a deficient LOS ‘E’ and will eventually degrade to LOS ‘F’ before 2015. Based on 2006 data, with the CMIA widening project expected to go to construction in 2008 (Phase I, four lane widening from SR-99 to Morrow Road with Dale Road improvements) and 2010 (Phase II, four lane widening from Morrow Road to Tully Road, six lanes to Carver Road, and four lanes to SR-108), the corridor will be operating at acceptable LOS ‘A’ and ‘B’. By 2015, the corridor will be operating at acceptable LOS ‘B’, ‘C’, and ‘D’. By 2030, the segment of the corridor from Tully Road to SR-108 is expected to operate at deficient LOS ‘E’, and the segment from SR-99 to Morrow Road is expected to be operating at deficient LOS ‘E’ and ‘F’. Table 4.0.2 provides additional information regarding existing and future LOS on SR-219.

TABLE 4.0.2: SR-219 CSMP Corridor Level of Service

Seg. No	Postmile	Description	Current LOS (2006) Existing 2-Lane	LOS w/4 Lane Improvement (2006)	LOS w/4 Lane Improvement (2015)	LOS w/4 Lane Improvement (2030)	Concept Facility	LOS w/Concept Facility Improvements (2030)
1	00.10/00.35	SR-99 to Sisk Road	E	B	D	F	6 Lane Expressway	D
2	00.35/02.90	Sisk Road to Morrow Road		B	C	F		
3	02.90/03.36	Morrow Road to Carver Road		A	B	D		
4	03.36/03.88	Carver Road To Tully Road		A*	B*	D*		
5	03.88/04.85	Tully Road to Highway 108 (end of route)		A	C	E		

*w/6 Lane Improvement

4.0.3 SR-219 CSMP Corridor LOS, Connecting Highways

A preliminary performance assessment has been completed for highway connections along SR-219 to evaluate existing and projected connecting highway LOS. Based on 2006 data, SR-99 from Pelandale Avenue to Hammett Road is operating at deficient LOS ‘F’, SR-108 from Union Avenue to SR-219 is operating and deficient at LOS ‘E’ and will be operating at deficient LOS ‘F’ by 2030. SR-108 from SR-219 to Ladd Road is operating at adequate LOS ‘B’ and will be operating at adequate LOS ‘C’ in 2015 and ‘D’ in 2030. Table 4.0.3 provides AADT and LOS information on the SR-219 connecting highways.

TABLE 4.0.3: SR-219 CSMP Corridor LOS, Connecting Highways

State Route 219 Corridor		Connecting Highway		Connecting Corridor AADT 2006	Existing Facility LOS 2006	Connecting Corridor AADT 2015	Existing Facility LOS 2015	Connecting Corridor AADT 2030	Existing Facility LOS 2030
Segment/PM	Description	PM	Description						
Seg. 1/00.10	SR-219 and JCT 99	21.74/22.55	SR-99 Pelandale Avenue IC to JCT SR-219	115,000	F	152,200	F	198,900	F
Seg. 1/00.10	SR-219 and JCT 99	22.55/24.27	SR-99 JCT SR-219 to Hammett Road IC	119,000	F	158,000	F	209,300	F
Seg. 5/04.85	SR-219 and JCT 108	26.35/27.62	SR-108 Union Avenue to JCT SR-219	22,400	E	14,000	E	20,700	F
Seg. 5/04.85	SR-219 and JCT 108	27.62/29.15	SR-108 JCT SR-219 to Ladd Road	28,500	B	37,000	C	57,200	D

4.0.4 Corridor Concept Facility

The current programmed CMIA funded projects will widen the entire SR-219 from a two-lane conventional highway to a four-lane expressway from SR-99 to Carver Road, a six-lane expressway to Tully Road, and four-lane expressway to SR-108. Traffic analysis indicates that with four and six lanes the corridor will be operating at adequate LOS ‘B’ and ‘C’ through 2015. Without additional widening to six lanes, segments of the corridor will be operating at deficient LOS ‘E’ and ‘F’ by 2030. In order to

meet concept LOS 'D' in 2030, the concept facility is a six-lane expressway. The concept facility is consistent with the 2007 StanCOG RTP.

In order to manage the performance of the corridor, the concept facility includes strategies to expand incident management, traveler information, traffic surveillance and detection, advanced traffic signals, and operational improvements. It is also recommended that local jurisdictions consider the connectivity of existing and construction of new frontage roads in future commercial and residential development along SR-219. Other strategies include construction of new and expansion of existing parallel facilities to reduce congestion, and preserve the mobility gains of the SR-219 Proposition 1B CMIA investment.

4.0.5 Ultimate Transportation Corridor

Identification of the Ultimate Transportation Corridor (UTC) will ensure adequate right-of-way will be preserved to accommodate facility improvements beyond 2030. The UTC for the SR-219 corridor is a six-lane expressway. The concept facility and UTC will be reevaluated at the next updates of the SR-219 TCR and SR-219 CSMP.

4.1 Corridor Collisions and Incidents

The Traffic Accident Surveillance and Analysis System (TASAS) is a reasonable measure of safety along the corridor. TASAS contains specific data for collisions on State highways. Table 4.1 provides data regarding traffic collisions on the corridor.

TABLE 4.1: Corridor Collision and Incidents

SR-219 Segment	Description	Traffic Collision Rate (Per Million Vehicle Miles Traveled) TASAS Table B <i>January 1, 2004 – December 31, 2006</i>		
		Actual Total No. Of Collisions	Collision Rate	Statewide Average Rate
1	SR-99 to Sisk Road PM 0.10/0.35	33	4.44	1.46
2	Sisk Road to Morrow Road PM 0.35/2.90	101	1.53	1.50
3	Morrow Road to Carver Road PM 2.90/3.36	4	.40	1.50
4	Carver Road to Tully Road PM 3.36/3.88	17	1.59	1.50
5	Tully Road to SR-108 (McHenry Avenue) PM 3.88/4.85	48	2.67	1.50

4.2 Programmed and Planned Projects

The SR-219 CSMP includes improvements directly or indirectly impacting the proposed CSMP transportation network that are under development or in construction. These improvement projects are

either fully or partially programmed (funded), planned (usually without specific funding sources identified). Programmed and planned projects are identified in Tables 4.2.1 and 4.2.2.

4.2.1 Programmed Capacity Increasing Projects

Currently, the only programmed capacity increasing project on the SR-219 corridor is the CMIA funded capacity increasing project to widen SR-219 from SR-99 to SR-108 in three phases. Phase I will widen SR-219 to four lanes from SR-99 to Morrow Road, Phase IA will complete intersection improvements at Dale Road (locally funded), and Phase II will widen SR-219 to four lanes from Morrow Road to Carver Road, six lanes to Tully Road, and four lanes to SR-108. Phase I and IA began construction in August of 2008, and Phase II will begin construction in the December of 2010.

The following projects are currently programmed to widen state and local parallel facilities serving SR-219: The North County Corridor new alignment will construct a four to eight lane Class A expressway with interchanges, at grade intersections, grade separated railroad crossings, irrigation district crossings, frontage road and street realignments that will run north of SR-219 from the SR-99/Hammett Road interchange to east of the State Route 120/108 junction near Oakdale in Stanislaus County. This project is currently in the PA&ED phase.

There is also a project programmed to widen McHenry Avenue from Ladd/Patterson roads to the Stanislaus River Bridge (1.7 miles) from two to five lanes with a center turn lane, and replace Dry Slough Bridge with a four lane structure. There is also a project programmed to widen Claribel Road from two to five lanes (two lanes in each direction and a center turn lane), signalize the Claribel/Coffee Road intersection, and replace the Modesto Irrigation District (MID) Lateral No. 6 Bridge. The projects will ease traffic on SR-219, as well as preserve an east-west corridor for eastern Stanislaus County to access SR-99. Table 4.2.1 lists the programmed capacity increasing projects on and serving SR-219.

TABLE 4.2.1: SR-219 CSMP Programmed Capacity Increasing Projects

Primary Funding Source	RTP Y/N Tier I Tier II	EA/RTP MPO ID	Post Mile	Location	Description	Total Cost (\$1,000)	Begin Const.
RIP/CMIA	Tier I	0A870	00.10/02.90	SR-219 from SR-99 to Morrow Lane SR-219	CMIA Project 4-Lane Widening, Phase I	\$49,780	Aug 2008
RIP/CMIA/ Demo	Tier I	0A872	02.90/04.90	SR-219 from Morrow Lane to SR-108	CMIA Project 4-Lane Widening, Phase II including six lanes from Tully Road to Carver Road	\$50,500	Dec 2009
TBD	Tier I	Not Assigned	TBD	SR-108 from the Modesto City limits to east of Oakdale via SR-108 or Claribel Road (State Highway designation not determined)	North County Corridor – two to eight lane expressway on new alignment	\$40,951	2025
TBD	Tier I	Not Assigned	TBD	McHenry Avenue widening from Ladd/Patterson Roads to the Stanislaus River Bridge (1.7 miles)	Widen from two lanes to five lanes with center turn lane. Replace Dry Slough Bridge with four lane structure.	\$12,000	Apr 2010
STIP	Tier I	Not Assigned	TBD	Claribel Road from SR-108/SR-219 to Oakdale Road (2.0 miles).	Widen from two to five lanes (two lanes each direction and center turn lane), signalize the Claribel/Coffee Road intersection, replace the MID Lateral No. 6 Bridge.	\$9,905	2010

4.2.2 Planned Capacity Increasing Projects

Currently, the 2007 StanCOG RTP identifies long term plans to widen the entire SR-219 corridor to six lanes by 2025. There are also plans to widen the following connecting state and local parallel facilities serving SR-219: Pelandale Avenue from a four to six lane expressway from SR-99 to SR-108, Ladd Road from two to four lanes from SR-99 to Dale Road, and Ladd/Patterson Road from two to four lanes from Riverbank to SR-99.

In addition, there are plans to widen the following local roads that connect and serve local traffic along SR-219: Sisk Road from Pirrone Road to Pelandale Avenue, Stoddard Road from Kiernan Road to Ladd Road, Dale Road from Ladd Road to Standiford Road, and Tully Road from Kiernan Road to Ninth Street. Table 4.2.2 lists the planned capacity increasing projects on SR-219 and those connecting and parallel to SR-219.

TABLE 4.2.2: SR-219 CSMP Planned Capacity Increasing Projects

Primary Funding Source	RTP Y/N Tier I Tier II	RTP MPO ID	Post mile	Location	Description	Total Cost (1,000)	Begin Const.
TBD	Tier I	Not Assigned	00.10/04.90	SR-219 from SR-99 to SR-108	Widen SR-219 to six lanes	\$89,500	2025
TBD	Tier I	Not Assigned	TBD	Pelandale Avenue from SR-99 to McHenry Avenue	Complete 6 lane expressway	\$26,799	2010
TBD	Tier I	Not Assigned	TBD	Ladd Road from SR-99 to Dale Road	Widen 2 to 4 lanes	\$9,051	2015
TBD	Tier II	Not Assigned	TBD	Ladd/Patterson Road from Riverbank to SR-99	Widen and Construct 4 lane expressway	\$44,000	TBD
TBD	Tier I	Not Assigned	00.35	Sisk Road from Pirrone Road to Pelandale Avenue	Widen 2 to 4 lanes	\$1,591	2015
TBD	Tier I	Not Assigned	00.85	Stoddard Road from Kiernan Avenue to Ladd Road	Widen 2 to 4 lanes	\$1,410	2015
TBD	Tier I	Not Assigned	01.85	Dale Road from Ladd Road to Standiford Road	Widen 2 to 4 lanes	\$24,588	2015
TBD	Tier I	Not Assigned	03.88	Tully Road from Kiernan Avenue to Pelandale Avenue	Widen 4 to 6 lanes	\$8,654	2025
TBD	Tier I	Not Assigned	03.88	Tully Road from Pelandale Avenue to Ninth	Widen 4 to 6 lanes	\$12,132	2015
TBD	Tier I	Not Assigned	TBD	Claribel Road from Claus Road to Albers Road	New 6 lane expressway	\$21,200	2010

4.3 Corridor Rehabilitation and Maintenance Strategy

The current rehabilitation strategy is to maintain and rehabilitate the existing facility with plans to improve various interchanges and widen the roadway where feasible. Projects from the State Highway Operations and Protection Program (SHOPP) are prioritized by the needs of the State highway. These projects maintain or improve the condition, safety, and operation of the highway, and protect the investment that has been made on the facility. The SHOPP program includes six types of projects that would affect State Route 219:

- a) Collision Reduction;
- b) Roadway Preservation;
- c) Bridge Preservation;
- d) Roadside Preservation;
- e) Mobility Improvements; and
- f) Mandates (storm water requirements and emergency type projects).

Nominated projects within each category compete for available dollars with other projects on a statewide basis. Collision reduction improvements that meet certain thresholds of cost-benefit criteria are funded first from the SHOPP before other needs are addressed.

The 10-year State Highway Operations and Protection Program Plan includes investments in projects in both the rehabilitation and preventive maintenance categories.

4.3.1 Programmed Operational Improvement Projects

In addition to the Phase IA locally funded Dale Road intersection improvements, there is one SHOPP operational improvement currently programmed to improve the SR-99/219 interchange. The project will reconstruct the northbound/southbound off-ramps, relocate maintenance vehicle pullout and modify existing signals at SR-99 and SR-219 that will be in construction late 2008. There is also a programmed SHOPP project to construct left-turn channelization with new signals at SR-108 and 1.1-miles north of SR-219 (signals at McHenry Avenue/Ladd Road intersection). This project will be going to construction in January 2010. Table 4.3.1 lists the programmed operational improvement projects on SR-219.

TABLE 4.3.1: SR-219 CSMP Programmed Operational Improvement Projects

Primary Funding Source	RTP Y/N Tier I Tier II	EA/RTP MPO ID	Post Mile	Location	Description	Total Cost (1,000)	Begin Const.
RIP/Local Demo	Tier 1	0N000	01.85	SR-219 at Dale Road	Intersection Improvements	\$26,507	Aug 2008
SHOPP	TBD	0K700	00.10	SR-219/SR-99	Reconstruct NB/SB off-ramps, relocate maintenance vehicle pullout/modify signals	\$1,626	Oct 2008
SHOPP	TBD	0N440	28.70/29.30	McHenry Avenue/Ladd Road Signals	Left turn channelization with new signals	\$2,036	Jan 2010

4.3.2 Planned Operational Improvement Projects

There is one operational improvement project planned to reconstruct the SR-99/SR-219 interchange. This is a locally funded operational improvement project with Caltrans providing oversight. Table 4.3.2 lists the operational improvement planned for SR-219.

TABLE 4.3.2: SR-219 CSMP Planned Operational Improvement Projects

Primary Funding Source	RTP Y/N Tier I Tier II	EA/RTP MPO ID	Post Mile	Location	Description	Total Cost (1,000)	Begin Const.
Local Candidate	Tier I	0L330	00.10	SR-219/SR-99	Reconstruct SR-99/SR-219 Interchange	\$59,300	TBD

4.3.3 Pavement Conditions

The Caltrans Division of Maintenance conducts a Pavement Condition Survey (PCS) annually to identify pavement distress. Based on the most recent survey, the SR-219 corridor exhibits structural distress needing pavement rehabilitation. The PCS is used to identify needs in the roadway preservation programs (Roadway Rehabilitation and Pavement Preservation).

Based on 2005 maintenance pavement condition data, 10 corridor lane miles are identified for rehabilitation strategies. Table 4.3.3 lists the segments identified for rehabilitation strategies along the SR-219 CSMP corridor.

TABLE 4.3.3: Existing Corridor Pavement Distress

SR-219 Segment	Description	2005 Maintenance Conditions	
		Pavement Condition	# of Distressed Lane Miles
1	SR-99 to Sisk Road PM 0.10/0.35	Major Structural Problem	0.5
2	Sisk Road to Morrow Road PM 0.35/2.90	Major Structural Problem	4.0
3	Morrow Road to Carver Road PM 2.90/3.36	Major Structural Problem	1.5
4	Carver Road to Tully Road PM 3.36/3.88	Major Structural Problem	1.0
5	Tully Road to SR-108 (McHenry Avenue) PM 03.36/4.85	Major Structural Problem	3.0
Total			10.0

4.3.4 Bridge Conditions

The Office of Structures Maintenance and Investigations of the Engineering Service Center (OSM&I-ESC) conducts periodic inspections of all State structures. The Structures Replacement and Improvement Needs (STRAIN) report is used to identify needs for the Bridge Preservation Programs (bridge replacement/rehabilitation, scour mitigation, rail replacement/upgrade, seismic restoration and widening). There is currently one separation bridge structure on SR-219 at SR-99. Although, it is currently not on the STRAIN report, there is a planned SHOPP project to reconstruct the SR-99/SR-219 interchange.

4.3.5 Access Control

Access control is necessary on freeways and expressways so current and future operations are not compromised. The Phase I and Phase II widening projects will build the entire SR-219 facility to expressway standards which will provide limited access control.

4.4 Corridor Transportation Management Strategies

4.4.1 Incident Management

The standard operating procedure and protocol for incident management and closures for natural causes on SR-219 is coordinated between the CHP and the Caltrans District 10 Traffic Monitor Center (TMC). Communication with the media is coordinated through the CHP. Meetings are held twice a year with CHP, Caltrans, Stanislaus County agencies and the Office of Emergency Services to discuss incident, construction, maintenance, and special event traffic management, including permit related issues.

Key ITS elements are strategically placed at major decision points and areas with high incident rates where extensive data is gathered through Traffic Monitoring Stations (TMS), Roadside Weather Information Systems (RWIS), and Close Circuit Television Cameras (CCTV). Caltrans District 10 communicates road and weather information via the Caltrans Highway Information Network (CHIN), Changeable Message Signs (CMS), and Highway Advisory Radio (HAR). Advanced Traveler Information Systems (ATIS) is available through the telephone and internet via the University of California (UC) Berkeley Performance Monitoring System (PeMS), RWIS, and other statewide databases.

SECTION 5 COMPREHENSIVE CORRIDOR PERFORMANCE ASSESSMENT AND CORRIDOR SYSTEM MANAGEMENT STRATEGIES

5.0 Delays

The concept LOS for SR-219 is ‘D’, and the entire corridor is currently operating at deficient LOS ‘E’. With the CMIA project, the corridor is expected to be operating at acceptable LOS ‘A-D’ through 2015, and without additional widening is expected to be operating at deficient LOS ‘E-F’ by 2030.

The SR-219 corridor is operating at deficient LOS primarily due to the high amount of traffic traveling on the two-lane facility. The roadway is congested during the peak hours of the day when travel demand is the greatest, and when traffic volumes are high, motorists are forced to wait at the intersections causing traffic delays. In addition, the highway is an STAA route with truck traffic contributing to congestion.

High traffic volumes, the presence of stop-controlled intersections, and congested conditions at intersections are the major causes of traffic congestion along the route. Stanislaus Union Elementary School is located directly adjacent to the highway just west of Carver Road with a posted speed limit of 25 mph when children are present. All of these factors contribute to delays along SR-219.

5.1 Proposition 1B CMIA Project Benefits

5.1.1 SR-219 CMIA Widening Project Phases I and II

The SR-219 Corridor Widening Project will relieve congestion on SR-219, and accommodate future growth in the Modesto and eastern Stanislaus County region. The project is expected to improve LOS on the corridor from LOS ‘E’ to LOS ‘A’ and ‘B’ with the new four to six lane expressway and operational improvements along the corridor including signalization. It is anticipated that the following benefits will be realized as a result of the corridor mobility improvement projects (Tables 5.1.1a and 5.1.1.b):

The Daily Vehicle Hours of Delay saved on Phase I will be 628 hours. The Daily Peak Duration Person-Minutes Saved will be 1.55 minutes per individual and 37,680 minutes cumulative.

TABLE 5.1.1a: CMIA Phase I

		<p align="center">SR-219 CMIA Phase I Project Benefits</p>	
<p>Daily Travel Time Savings (hours)</p>		<p align="center">628</p>	
<p>Peak Period Time Savings (minutes):</p>		<p align="center">37,680</p>	

The Daily Vehicle Hours of Delay saved on Phase II will be 301 hours. The Daily Peak Duration Person-Minutes Saved will be 1.2 minutes per individual and 18,060 minutes cumulative.

TABLE 5.1.1b: CMIA Phase II

		<p align="center">SR-219 CMIA Phase II Project Benefits</p>	
<p>Daily Travel Time Savings (hours)</p>		<p align="center">301</p>	
<p>Peak Period Time Savings (minutes)</p>		<p align="center">18,060</p>	

The project benefits are published on the California Strategic Growth Plan: Bond Accountability Website: <http://svdtsucp.dot.ca.gov:8084/bondacc/>.

5.2 SR-219 CSMP System Management Strategies

Analysis indicates that demand will continue to exceed capacity along the SR-219 corridor. The 2030 concept facility and UTC for SR-219 is six lanes which is consistent with the 2007 StanCOG RTP, financially unconstrained project list. In order to reduce congestion, improve safety, and preserve the mobility gains of the Proposition 1B CMIA investments, Caltrans District 10 and StanCOG are committed to the following system management strategies:

- Construction of new and expansion of existing parallel facilities to reduce congestion, enhance safety, and preserve the mobility gains of the SR-219 Proposition 1B CMIA investment. Currently there are plans to widen several local parallel and connecting roads that serve SR-219, as well as plans for a new four to eight lane facility located north and east of SR-219. The project is currently in the PA&ED phase.

The North County Corridor Project illustrated in Figure 5.2, will provide approximately 24 miles of roadway on new alignment to enhance local traffic circulation and provide regional connectivity. The facility will extend approximately from the SR-99/Hammett Road interchange to east of the City of Oakdale. The primary intent of the project is to provide a high capacity/high speed east-west roadway to accommodate anticipated traffic growth in the area, to alleviate traffic on parallel roadways, and to accommodate multi-modal travel.

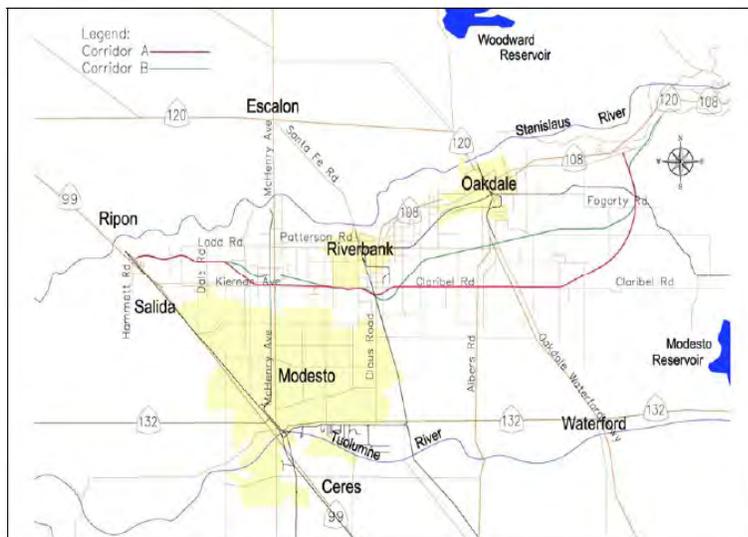


FIGURE 5.2: North County Corridor

It is anticipated that the facility type will be a four to eight lane Class A Expressway at-grade intersections, grade separated railroad crossings, irrigation district crossings, frontage road and street realignments. Traffic currently travels SR-219 to access SR-99. The North County Corridor Project is needed to serve as a direct route between SR-99, SR-108, and SR-120. The new facility will serve SR-219 by providing regional traffic an alternate parallel east/west route.

- Expansion of ITS elements to enhance incident management, traveler information, traffic detection, and synchronization of traffic signals. There are two traffic count stations currently existing on SR-219. The widening projects include two CMS/CCTV/TMS stations, and there are plans for CMS/CCTV/TMS stations on SR-108 and SR-99 to serve the SR-219 corridor. ITS project improvements are categorized as short-term (0 - 4 years), mid-term (5 - 7 years) and long-term (8 to 10 years). Short-term project goals for SR-219 include placing ITS elements at major decision points within STIP and Bond funded projects. Mid-term project goals for SR-219 include TMS for congestion monitoring of lane volumes and possible travel time calculations, as well as CCTV for incident verification and management. Long-term project goals for SR-219 include full instrumentation of ITS elements along freeway corridors. Programmed, planned, and proposed ITS projects are listed in the Ten Year Implementation Plan and Project List on pages 26 and 27 (Figure 5.2.1 and Table 5.2.1).
- The management of traffic incidents and closures for natural causes will continue to be coordinated between the CHP and the Caltrans District 10 TMC, and communication with the media will continue to be coordinated between the CHP. Meetings will also continue to be held twice a year with CHP, Caltrans, Stanislaus County agencies, and the Office of Emergency Services to discuss incident, construction, maintenance, and special event traffic management, including permit related issues.
- Operational, rehabilitation and maintenance improvements to include left turn lanes, modify intersections and reconstruct bridges, AC overlays, and landscaping. The programmed and planned project improvements will provide safety and operational benefits at the location of the improvements and contribute to the overall improved performance of the corridor. Improvements are categorized as short-term (0 - 4 years), mid-term (5 - 7 years) and long-term (8 to 10 years). Short and mid term project goals for SR-219 include the operational improvements within the SR-219 CMIA projects, and

those currently programmed in the STIP and SHOPP. Long-term project goals include operational improvements not currently identified for funding. Programmed, planned, and proposed operational, rehabilitation and maintenance improvements are listed in the Ten Year Implementation Plan and Project list on pages 26 and 27 (Figure 5.2.1 and Table 5.2.1).

- Expansion of TDM practices, including construction of new park and ride facilities with transit connectivity, and continued work force vanpool and ride share services through Commute Connection.
- Connectivity of bike and pedestrian facilities along and crossing SR-219. The widening projects include a Class II bike facility along the entire SR-219 corridor. Programmed and planned bike and pedestrian facilities are listed in the Ten Year Implementation Plan and Project List on pages 26 and 27 (Figure 5.2.1 and Table 5.2.1).
- Maintain and support existing transit service along SR-219 and consider expansion when feasible.
- School representatives have identified the need for the continuance of the existing 25 mile per hour school zone on SR-219.
- Construction of frontage roads when considering future transportation projects and commercial and residential development along SR-219.

5.2.1 Ten Year Implementation Plan

The SR-219 CSMP includes a Ten Year Implementation Plan or project listing of transportation improvements currently identified in the STIP, SHOPP, RTP, and other transportation programming and planning documents that will assist in preserving the gains from the SR-219 CMIA widening project. The project list includes programmed and planned ITS, detection, operational, rehabilitation, interchange/intersection, capacity increasing, park-and-ride, and bicycle and pedestrian facility improvements along the corridor. The 10 year planning horizon extends ten years from the begin construction date of the CMIA SR-219 Expressway Phase I and II projects or 2020.

The project list also includes proposed improvements that have been recommended as a result of the CSMP development process. Funding for the proposed improvements has not been identified, and the improvements are considered planned projects for CSMP purposes. It is expected that these improvements will be considered during the next available update of transportation planning and programming processes. Refer to Ten Year Implementation Plan and project list on pages 26 and 27 (Figure 5.2.1 and Table 5.2.1).

5.2.2 Other Considerations

While project specific considerations are not included in the CSMP, the following will need to be considered during implementation of the improvements identified in the SR-219 CSMP Ten Year Implementation Plan:

5.2.2.1 Context Sensitive Solutions

Context Sensitive Solutions (CSS) are used as an approach to plan, design, construct, maintain and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders and meets transportation goals in harmony with community goals and natural environments. However the highest priority will be that any recommended solutions are consistent with safety policies.

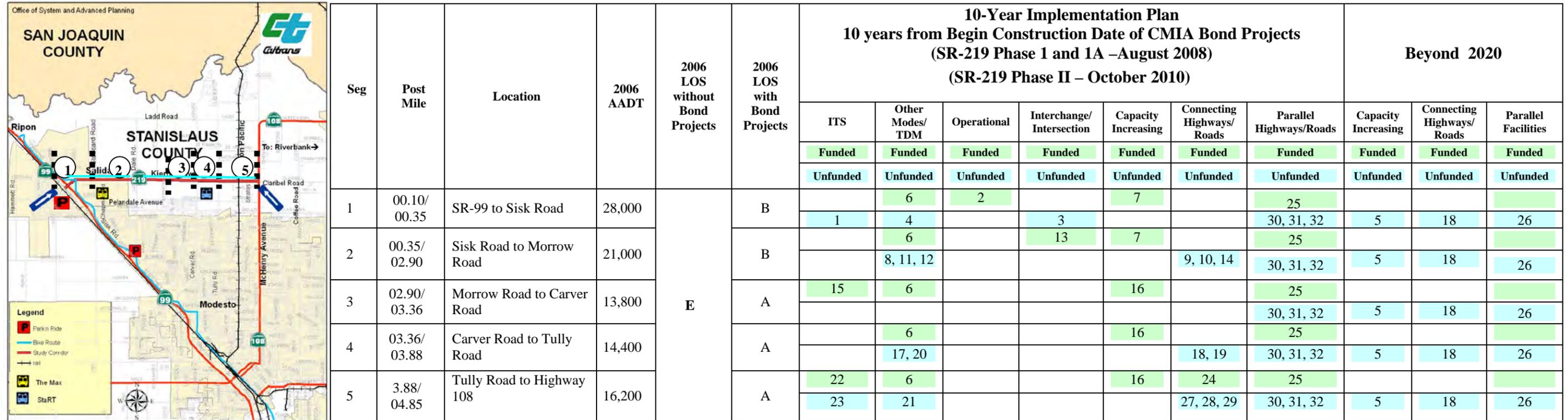
Context sensitive solutions require careful, imaginative, and early planning, and continuous community involvement. The context of all projects and activities is a key factor in reaching decisions. It is considered for all State transportation and support facilities when defining, developing, and evaluating options. Relevant laws, rules, and regulations must be investigated when considering CSS issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, and safety.

5.2.2.2 Safety Conscious Planning

Safety conscious planning is incorporated into all planning processes and complements context sensitive solutions. As in most projects, a need is established before a project can be built.

Factors such as congestion, collision patterns, poor LOS, narrow roads, non-standard alignments and operational problems can facilitate safety improvements. The CSMP can be used as a tool to proactively identify operational problems rather than waiting to react to safety problems. Suggested solutions for these problems should conform to the surrounding environment and meet the needs of the people within.

**Figure 5.2.1 SR-219 CSMP 10 Year Implementation Plan (2020)
LOS Analysis with Project List Summary**



Green: Programmed/Funded/Partially Funded
Blue: Planned/Unfunded

TABLE: 5.2.1 SR-219 CSMP Ten Year Implementation Plan Project List (2020)

Seg #	Project #	Begin Construction	Primary Funding Source	Expenditure Authorization	Postmile	Location	Description	Total Cost (\$1,000)	SHOPP *** (Short Term, Mid Term, Long Term)/ RTP (Tier I, Tier II, Y/N)
1	1	2015-2017	SHOPP/STIP/TBD	0M950	00.10	SR-99/SR-219	CMS/CCTV/TMS on SR-99 to serve SR-219	TBD	Mid Term
	2	October 2008	SHOPP	0K700	00.10	SR-99/SR-219	Reconstruct NB/SB off-ramps, relocate maintenance vehicle pullout/modify signals	\$1,626	Short Term
	3	TBD	Local Candidate	0L330	00.10	SR-99/SR-219	Reconstruct SR-99/SR-219 Interchange	\$59,300	Tier I
	4	TBD	TBD	Not Assigned	TBD	SR-219/SR-99 (close proximity)	Park and Ride Facility**	TBD	No
	5	2025	TBD	Not Assigned	00.10/04.90	SR-99 to SR-108	Widen SR-219 to six lanes	\$89,500	Tier I
	6	August 2008	RIP/CMIA	0A870 and 0A872	00.10/04.90	SR-99 to SR-108	Class II Bike Facility included in CMIA widening project*	See 0A871	Tier I
	7	August 2008	RIP/CMIA	0A870	00.10/02.90	SR-219 from SR-99 to Morrow Lane SR-219	CMIA Project 4-Lane Widening, Phase I	\$49,780	Tier I
2	8	TBD	TBD	Not Assigned	00.35/04.90	SR-219 from Sisk Road to SR-108	Class I Bike Facility*	TBD	No
	9	2015	TBD	Not Assigned	00.35	Sisk Road from Pirrone Road to Pelandale Avenue	Widen 2 to 4 lanes	\$1,591	Tier 1
	10	2015	TBD	Not Assigned	00.85	Stoddard Road from Kiernan Avenue to Ladd Road	Widen 2 to 4 lanes	\$1,410	Tier 1
	11	TBD	TBD	Not Assigned	TBD	MJC Connector from SR-219 to TRRP	Class I Bike Facility*	TBD	No
	12	TBD	TBD	Not Assigned	01.10	Chapman Road from Pelandale Avenue to SR-219	Class III Bike Facility*	TBD	No
	13	August 2008	RIP/Local/Demo	0N000	01.85	SR-219 at Dale Road	Intersection Improvements	\$26,507	Tier 1
	14	2015	TBD	Not Assigned	01.85	Dale Road from Ladd Road to Standiford Road	Widen 2 to 4 lanes	\$24,588	Tier 1
3	15	August 2008	RIP/CMIA	0A871	02.50	Eastbound West of Morrow Road	CMS/CCTV/TMS	See 0A871	Tier 1
	16	December 2009	RIP/CMIA/Demo	0A872	02.90/04.90	From Morrow Lane to SR-108	CMIA Project 4 Lane Widening, Phase II including six lanes from Tully Road to Carver Road	\$50,500	Tier 1
4	17	TBD	TBD	Not Assigned	03.36	Canal Mid Lateral #6 from Carver Road to SR-219	Class I Bike Facility*	TBD	No
	18	2025	TBD	Not Assigned	03.88	Tully Road from Kiernan Avenue to Pelandale Avenue	Widen 4 to 6 lanes	\$8,654	Tier I
	19	2015	TBD	Not Assigned	03.88	Tully Road from Pelandale to 9 th	Widen 4 to 6 lanes	\$12,132	Tier I
	20	TBD	TBD	Not Assigned	03.88	Tully Road from Pelandale Avenue to SR-219	Class II Bike Facility*	TBD	No
5	21	TBD	TBD	Not Assigned	04.36	Virginia Railroad Trail from SR-219 to MJC	Class I Bike Facility*	TBD	No
	22	December 2009	RIP/CMIA	0A872	04.50	Westbound West of Stratos Way	CMS/CCTV/TMS	See 0A872	Tier 1
	23	2015-2017	SHOPP/STIP/TBD	Not Assigned	TBD	SR-108/SR-219	CMS/CCTV/TMS on SR-108 to serve SR-219	TBD	Mid Term
	24	January 2008	SHOPP	0N440	28.70/29.30	McHenry Avenue/Ladd Road Signals	Left turn channelization with new signals	\$2,036	Short Term

Parallel Facilities

25	April 2010	RIP	Not Assigned	TBD	SR-108/McHenry Avenue from Ladd Road to Stanislaus River Bridge	SR-108 widen to 5 lanes.	\$12,000	Tier 1
26	2025	RIP	Not Assigned	TBD	North County Corridor – New Expressway – (Programmed for PA&ED Phase)	4 to 8 lane Class A Expressway- Near Salida and Escalon, between Route 99 at Hammett Road interchange and 7.8 miles east of Route 108/120 Junction.	\$40,951	Tier I
27	2010	RIP	Not Assigned	TBD	Claribel Road from SR-108/SR-219 to Oakdale Road (2.0 miles).	Widen from two to five lanes (two lanes each direction and center turn lane), signalize the Claribel/Coffee Road intersection, replace the MID Lateral No. 6 Bridge.	\$9,905	Tier I
28	2013	RIP/TE	Not Assigned	TBD	Claribel Road from SR-108/McHenry Avenue to Oakdale Road	Class I Bike Facility	\$840	Tier I
29	2010	TBD	Not Assigned	TBD	Claribel Road from Claus Road to Albers Road	New 6 lane expressway	\$21,200	Tier I
30	2010	TBD	Not Assigned	TBD	Pelandale Avenue from SR-99 to McHenry Avenue	Complete 6 lane expressway	\$26,799	Tier I
31	2015	TBD	Not Assigned	TBD	Ladd Road from SR-99 to Dale Road	Widen 2 to 4 lanes	\$9,051	Tier I
32	TBD	TBD	Not Assigned	TBD	Ladd/Patterson Road from Riverbank to SR-99	Widen and Construct 4 lane expressway	\$44,000	Tier II

* City of Modesto Updated 2006 Non-Motorized Master Plan
 ** Caltrans 2004 Park and Ride Plan
 ***Short Term: 2010 to 2014
 Mid Term: 2015 to 2017
 Long Term: 2018 to 2020

FIGURE 1 Letter of Intent

DEPARTMENT OF TRANSPORTATION

P.O. BOX 2048 (1976 E. CHARTER WAY)
STOCKTON, CA 95201 (95205)
TTY: California Relay Service (800) 735-2929
PHONE (209) 948-7943
FAX (209) 948-3670



*Flex your power!
Be energy efficient!*

March 20, 2008

Vince Harris
Executive Director
Stanislaus Council of Governments
900 H Street
Modesto, CA 95354

Dear Mr. Harris,

This letter is to communicate our intent to work, in partnership, with the Stanislaus Council of Governments (StanCOG) to jointly develop the State Route (SR) 219 Corridor System Management Plan (CSMP). This partnership also extends to CSMP development work for SR-99 that includes a portion in Stanislaus County. The CSMP is a guide for managing the corridor among all partners, and the process is intended to develop and implement a CSMP across all jurisdictions and modes for the highest mobility benefits to travelers in the corridor.

The Department of Transportation, District 10 is committed to a coordinated and cooperative effort with StanCOG and our other regional agency partners in the Central Valley to improve mobility and performance along the SR-219 and SR-99 Corridors. This includes local partners throughout the San Joaquin Valley.

On August 28, 2007, our internal CSMP development team met with Carlos Yamzon and StanCOG staff, for the purpose of reviewing requirements, purpose, and scope of the SR-219 CSMP and the SR-99 CSMP in the Merced/Stanislaus area. The respective CSMP documents will be framed similar to a Transportation Concept Report (TCR), but will be modified to emphasize operational aspects, the identification of specific areas of traffic congestion, identify causes, and then identify strategies, actions and projects to remove congestion.

District 10 is coordinating the preparation of the CSMP for the SR-219 corridor pursuant to the Proposition 1B Corridor Mobility Improvement Account (CMIA). This effort is undertaken in conjunction with two programmed projects to widen SR-219 to four lanes. (*Phase I construction to begin November 2007, and Phase II construction to begin 2009*). The CSMP encompasses the entire length of SR-219.

StanCOG and District 10 are committed to undertake the SR-219 CSMP with a delivery date of October 2008. Initially, this commitment was between District 10 and StanCOG, but will be conveyed to other local agencies and the public, for their input, as the process is broadened with additional outreach and education on the value of system and corridor management.

"Caltrans improves mobility across California"



2008 MAR 26 AM 11 19

2008 APR 11 AM 10 59

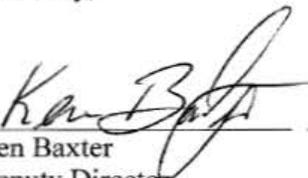
Mr. Vince Harris
March 20, 2008
Page 2

In addition, District 10 is also coordinating the preparation of a CSMP for SR-99 in the Merced area, in partnership with the Merced County Association of Governments (MCAG), pursuant to the SR-99 Infrastructure Bond Program. The SR-99 CSMP in the Merced area includes a portion of SR-99 in Stanislaus County. The corridor limits are: SR-99 north of SR-152 in Madera County to SR-165 in Stanislaus County (City of Turlock). The SR-99 CSMP delivery date is October 2008.

This letter will be included in the CSMP documents to demonstrate the commitment to these collaborative efforts. I look forward to our continued cooperation during development and implementation of the SR-219 and SR-99 CSMPs dedicated to the highest mobility benefits to travelers in the San Joaquin Valley.

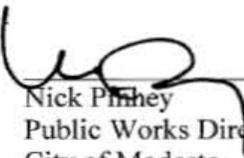
I look forward to the continued cooperation on this important document. If you have questions please do not hesitate to contact Annette Clark of my staff at (209) 948-3975, or me at (209) 948-7906.

Sincerely,



Ken Baxter
Deputy Director
Division of Planning and Local Assistance
Caltrans District 10

3/20/08
Date



Nick Pinney
Public Works Director
City of Modesto

4/8/08
Date



Vince Harris
Executive Director
Stanislaus Council of Governments

3/24/08
Date



Matt Machado
Public Works Director
Stanislaus County

4-9-08
Date

TABLE 6: Glossary of Terms

AADT	Average Annual Daily Traffic
BNSF	Burlington Northern Santa Fe
CCTV	Closed Circuit Television
CHP	California Highway Patrol
CMS	Changeable Message Sign
FHWA	Federal Highway Administration
HAR	Highway Advisory Radio
HICOMP	State Highway Congestion Monitoring Program
I/C	Interchange
ICES	Inter-modal Corridor of Economic Significance
IRRS	Interregional Road System
IT	Information Technology
ITS	Intelligent Transportation Systems
LOS	Level of Service
NTN	National Truck Network
OH	Overhead
OC	Over-crossing
PeMS	Performance Measurement System
PSR	Project Study Report
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RWIS	Roadside Weather Information System
SHOPP	State Highway Operations Protection Program
SP	Southern Pacific Rail Road
SR	State Route
STA	Stanislaus County
STANCOG	Stanislaus Council of Governments
STIP	State Transportation Improvement Program
STRAHNET	Strategic Highway Network
TMC	Transportation Management Center
TMS	Traffic Monitoring Station or Transportation Management System
UC	Under-crossing
UP	Union Pacific Rail Road