

SR 59

APRIL 2013



CALTRANS DISTRICT 10

State Route 59

TRANSPORTATION CONCEPT REPORT

Prepared by:

**Caltrans District 10
Office of System Planning and Goods Movement**

Lynn O'Connor, Chief
(209) 948-3975
Lynn_OConnor@dot.ca.gov

For additional information on the SR 59 TCR, contact:

Sally Rodeman, Associate Transportation Planner
(209) 948-7926
Sally_Rodeman@dot.ca.gov

Table of Contents

| | |
|----------------------------------------------------------------|---|
| Introduction to the Transportation Concept Report | 4 |
| Executive Summary | 5 |

MERCED COUNTY

| | |
|------------------------------------|---|
| Merced County Summary | 6 |
| Segment Fact Sheets..... | 7 |

APPENDICES

| | |
|-----------------------------------|----|
| Appendix A: Glossary | 16 |
| Appendix B: Acronyms | 17 |

Approval Recommended:

 4/4/13
 KEN BAXTER Date
 Deputy District Director
 Planning and Local Assistance

 4/10/13
 CARRIE L. BOWEN Date
 Director
 District 10, Stockton

INTRODUCTION TO THE TRANSPORTATION CONCEPT REPORT

What is a Transportation Concept Report?

A Transportation Concept Report (TCR) is a long-term planning document that each Caltrans District prepares for every State highway, or portion thereof, in its jurisdiction, and is where long-range corridor planning in Caltrans usually begins. The purpose of a TCR is to determine how a highway will be developed and managed so that it delivers the targeted level of service (LOS) and quality of operations that are feasible to attain over a twenty-year period as indicated in the route concept.

The concept facility will provide the amount of vehicle-carrying capacity necessary to achieve the concept LOS and, in some cases, people-carrying capacity will also be incorporated. Auxiliary lanes are not considered a part of the mainline roadway and, therefore, are not included in the number of travel lanes indicated in a concept.

In addition to the 20-year route concept, the TCR includes an ultimate concept, which is the ultimate goal for the route beyond the twenty-year planning horizon. Ultimate concepts must be used cautiously however, because unforeseen changes in land use and other variables make forecasting beyond twenty years difficult.

How does the TCR fit in with local and regional planning efforts?

As owner/operator of the State Highway System (SHS), Caltrans establishes a long-range vision for its highways and determine overall strategies for their management. This is achieved by taking into consideration the numerous factors encompassed in the human and natural environments in which a particular route exists. During development of a TCR, Caltrans' objective is to have local, regional, and State consensus on corridor concepts, planning strategies, and improvement priorities.

State highways within the jurisdiction should be recognized and included in the circulation element of the General Plan. The jurisdiction should also adopt the concept LOS standard (the minimum level or quality of operations that is appropriate for each route segment and is considered to be reasonably attainable within the 20-year planning period) indicated in the TCR, along with the concept improvements described in the TCR as nec-

essary to meet the concept LOS. The jurisdiction has the option of adopting a higher LOS standard and acknowledging the inconsistency with the TCR and the associated funding participation limitations by the State for State highway improvements. Typical concept LOS standards in District 10 are LOS 'C' in rural areas and LOS 'D' in urban areas.

Does the TCR have to be read from cover to cover in order to get pertinent information about a route segment?

Caltrans does not intend for TCRs to be read from cover to cover as one would read a book. Rather, the TCR is a reference document with segment-specific information presented in a concise and readable format that allows the user to easily access, in one place in the document, all the necessary data and information that pertains to a particular segment of the route.

This format creates a certain amount of repetition in the TCR, as the route is divided into segments for analysis. Each segment's fact sheet contains a variety of technical, statistical, cultural, environmental and other useful information that provide a deeper understanding of the route and a context for the concepts developed for it.

TCRs also include estimated right-of-way widths, and a scan of environmental resources and issues known to exist in the vicinity of the highway. Right-of-way and environmental information provided in a TCR are relative to the route or route segment and are not to be considered project specific. Precise right-of-way needs and environmental resources cannot be defined until the appropriate environmental and engineering studies are completed.

In the back of the TCR is a glossary of terms and acronyms used for this report.

Concept Improvements

The range of improvements available to achieve a route concept is heavily influenced by environmental, political, and fiscal conditions. In many areas, planned projects are subject to meeting air quality conformity standards.

Unanticipated safety projects and routine roadway maintenance are not included in route concept improvements, although both will occur throughout the corridor as needed.

Because a highway is but one part of an interconnected transportation network, District 10 takes a corridor approach to developing TCRs. The corridor may include additional transportation systems, such as bus or rail transit service, bicycle and pedestrian facilities, heavy rail, ports, airports, interregional bus service, local roadways, and facilities for neighborhood electric vehicles, used occasionally by older citizens for local mobility. All of these systems reduce excess highway demand by providing travelers and shippers of goods with non-highway or non-driving options. Expansion of those that can provide a notable improvement to mobility within the corridor are included as concept improvements.

Where a concept LOS is 'F', the TCR recommends general operational improvements and alternate modes of travel as starting places for further study. Because the number of route segments with a concept LOS 'F' are expected to increase, operational improvements become the primary strategy to optimize the segment efficiency. To fully integrate this strategy, future TCRs will include an operational analysis of heavily-congested urban route segments. The results of this analysis will determine which specific operational improvements will become concept improvements.

District 10 strives to improve the quality and usefulness of its TCRs. Future updates will be expanded to include performance measures and, if available, plans that help incorporate specific, context-sensitive features into highway projects.

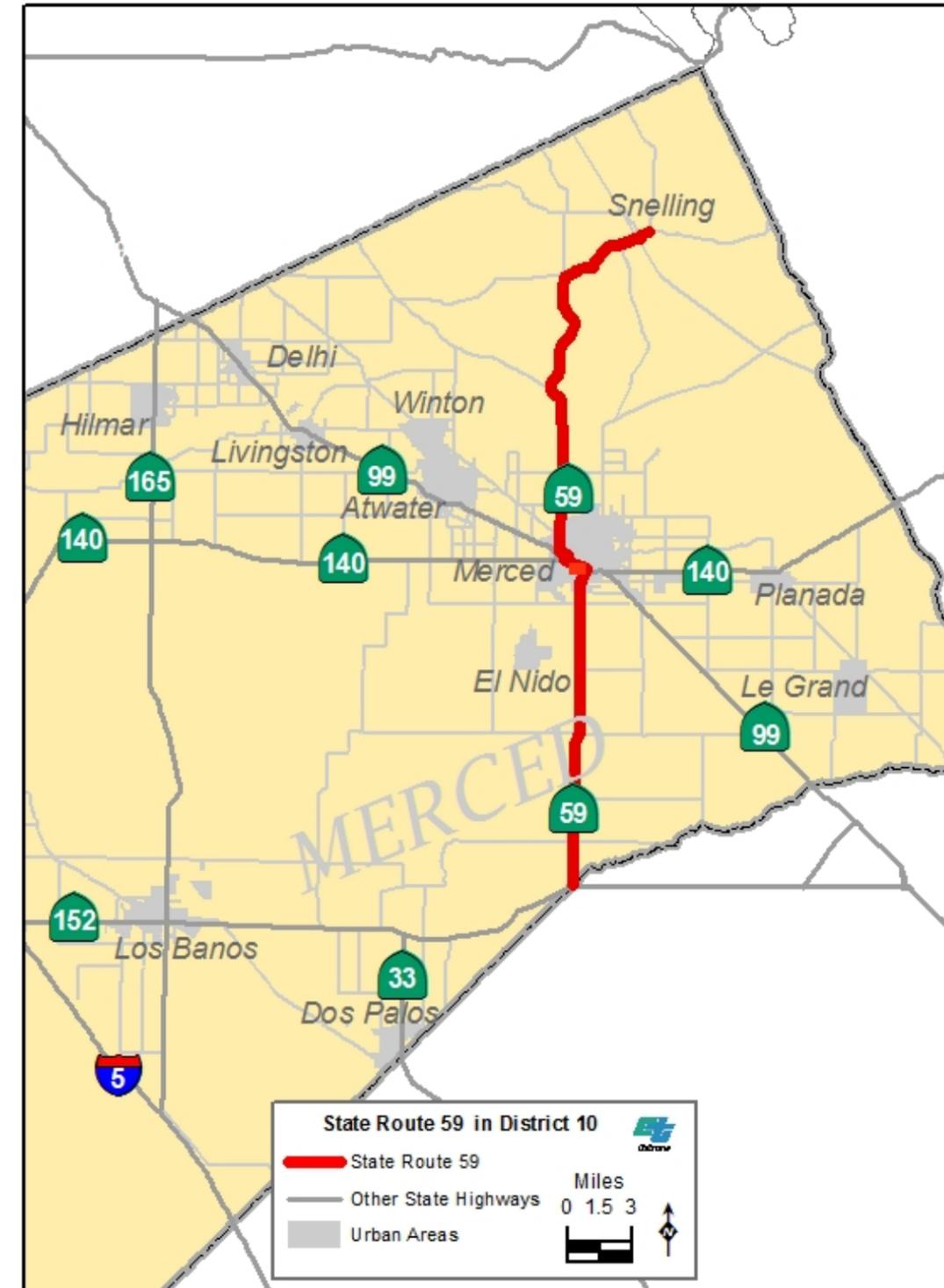
EXECUTIVE SUMMARY

The TCR provides long range system planning for highways, and identifies the potential future need for capacity increasing improvements. Employing Highway Capacity Manual (HCM 2010) methodologies, the TCR projects current traffic volumes twenty years into the future and compares future outcomes with the current facility and concept LOS, recommends future concept facilities, and defines the Ultimate Transportation Corridor (UTC) needed for the preservation of future right of way beyond its twenty year planning horizon.

Within Merced County, State Route 59 (SR-59) is not on the Interregional Road System. The concept LOS standard for facilities without the IRRS designation in District 10 is 'D'. As a component of the Freeway and Expressway System, SR-59's minimal concept facility is expressway. SR-59 is not on the National Highway System, is not designated or eligible for state or federal scenic highway status, and, is both bicycle and pedestrian accessible.

The current or future concept LOS for four segments (segments two, six, seven, and eight) will be exceeded by 2030. The concept facilities to address these deficiencies would employ a four lane expressway on a new alignment consistent with local planning. The anticipated UTC remains similar to the concept facility at this time.

Initial planning documents do not consider costs, design, or prioritization, and are subject to refinement and revision as better information or methods become available. The information provided reflects best practices and do not necessarily constitute standards, specifications or regulations. Every effort has been made by the District 10 Planning Division to ensure the accuracy and precision of the data presented.



MERCED COUNTY SUMMARY

Nine segments of SR-59 were analyzed in Merced County. The division of these segments followed considerations of changes in traffic volume or its composition, whether the segment was urban or rural, changes in lane number, or changes in transportation planning or land use planning agency (city jurisdiction vs. county jurisdiction). This method deviates from that suggested in HCM (2000) p 21-13, but provides for a more concise characterization of the need for capacity increases, versus operation improvements outside this document's scope.

Application of Highway Capacity Software (HCS version 6.1) consistent with HCM (2010) employed the two lane modules for all segments except segments three and six which require the urban street module (which has not yet been deployed by the software developer). Additionally, analysis employed the Florida Department of Transportation (DOT) LOSPLAN (version 5.3) HIGHPLAN for all segments except for segments three and six which were analyzed using ARTPLAN. Comparison of HCS results with LOSPLAN permits validation and confirmation of the findings.

SR-59 travels concurrently over SR-99 and SR-140 in the City of Merced. The assessment of the LOS for this route may not be consistent with other TCRs for the time period under consideration. Planning efforts specific to the SR-99 may require additional analytical rigor to address changes in speed limits and traffic volumes. It is outside the purpose of this document to address future planning needs for these segments other than to assess if current or future conditions exceed concept LOS.

A provisional decision was made to include the couplets (segment five) as components of SR-59, although SR-140 and SR-99 run concurrent along the same alignment (the couplets were originally constructed as operational improvements to SR-99 by reducing the number of off-ramps and on-ramps, and should be seen as modified ramps to the 'R' and 'V' Street interchanges). As no analysis and evaluation of couplets were undertaken, the status of these being components of SR-59 should be understood as temporary, with assignment to SR-99 likely, once the matter is addressed by the Traffic Accident Surveillance and Analysis System (TASAS) branch, which administers the route and post miles assignments for the SHS.

Analysis of segment six required employing evaluation techniques consistent with HCM (2010) guidance on evaluating interrupted flow in Chapters 16 and

17. As the HCS urban streets module is currently unavailable, only the Florida DOT ARTPLAN was employed. For the facility, the lane drop on the signalized portion between Auto Center Drive and Sixteenth Street constrained LOS. Traffic progression between signals in the peak hour direction currently understood as 'poor' appear to have a role in the deficient LOS currently ascribed to the segment. Modeling suggests that better traffic coordination, coupled with increased left turn storage, and capacity increasing improvements will best address this need. It should be noted that ARTPLAN does not allow for evaluation of at grade railroad crossings on LOS. Further analysis and evaluation would be necessary.

Future forecast volumes were obtained through three linear projections, from twenty year previous to present, the local transportation planning jurisdiction's travel demand model (TDM), and a twenty year state-wide growth projection from present. Comparison is made between the three projections for consistency, and may result in one projection being dropped, usually because it markedly overestimates or underestimates future growth compared to a transportation planning jurisdiction's TDM.

SR-59 serves three communities: the City of Merced, El Nido, and Snelling. These communities have a strong agricultural base (orchard crops, dairy and beef, silage and animal feeds). Two of the early settled communities in Merced County, Snelling and Merced were connected by the Yosemite Valley Railroad that roughly follows the current northern alignment of SR-59. For the communities of Snelling and El Nido, SR-59 functions both as a work and freight connection to other communities but also as the local 'Main Street.' Within the City of Merced, SR-59 comprises a portion of the downtown commercial district.

Although multimodal opportunities are at their greatest within the City of Merced, SR-59 primarily serves as a transit connection to other communities in the County. Interregional transit connections can be made to Amtrak, Merced County's "The Bus," Yosemite Area Regional Transportation System (YARTS) to Yosemite National Park, or Greyhound. Future access to High Speed Rail (HSR) may be available. State Route 59 is a Class III bicycle accessible route. Sidewalks are present as part of the urban streetscape in Merced, but are missing in the rural portions of the route.

Overall, freight in Merced County moves north and south via I-5 or SR-99. Freight movement along SR-59 arises either as a local trunk route, or as an alternative route to I-5 or SR-99 from SR-152. As a truck route, the dairy industry in the southern portion of the County contributes to truck traffic between El Nido and Merced on SR-59. Seasonal agricultural products (almonds, corn and alfalfa) also contribute to truck traffic on SR-59. The landfill site located at PM 21.03 on SR-59 (Segment 9) generates truck traffic on SR-59 north of Merced. In addition, there are several gravel/rock and concrete plants that contribute to truck traffic between Merced and Snelling.

Inadequacies in the local traffic monitoring and reporting network have led to programmed upgrades that include additional traffic monitoring stations (TMS), congestion monitoring stations (CMS), closed circuit television (CCTV) cameras and remote weather information systems (RWIS) along the route.

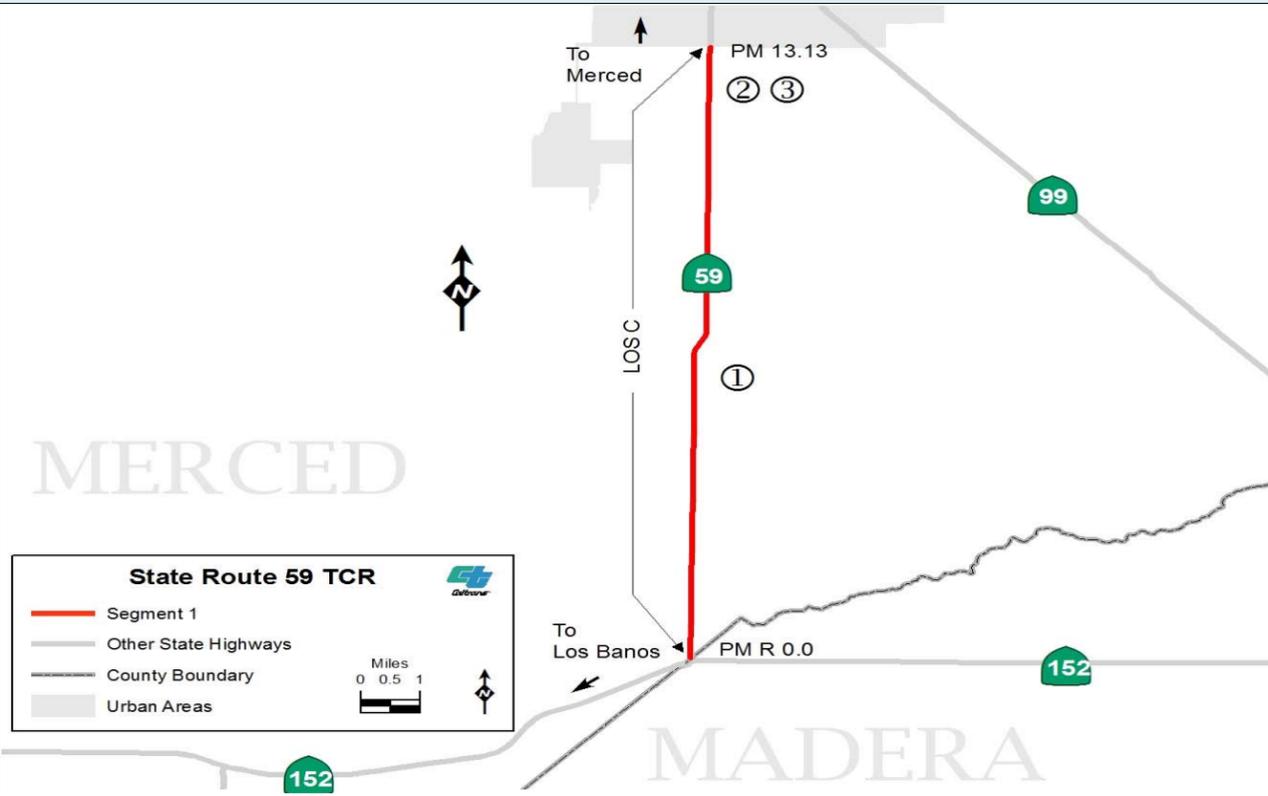
Current or future LOS is deficient for four segments along SR-59 (segments two, six, seven and eight). The current Merced County Association of Government's Regional Transportation Plan identifies projects to create new alignments to address these deficient segments. The Atwater Merced Expressway (AME) realigns SR-59 north of SR-99 to Bellevue Road, as a new alignment (the portion of the Atwater Merced Expressway that replaces the Buhach Road interchange is currently programmed, other phases may be long lead). Complementing the AME, The Southern Extension (Tier II), connects SR-59 at Mission eastward to the terminus of the AME south of the current Buhach Road interchange.

MERCED COUNTY FACT SHEETS— SEGMENT 1

STATE ROUTE 59 TRANSPORTATION CONCEPT REPORT

MERCED COUNTY

SEGMENT 1



| | | | |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------|------------------------------------------------------|
| Segment Location: | | | |
| Description: Merced/Madera County Line to Dickenson Road (Left)/Mission Avenue (Right) | | | |
| Post Mile: R0.0/13.13 | Rural/Urban/Urbanized: Rural | Within City Limits: No | Local Planning Jurisdiction: County of Merced |
| Length: 13.130 | Functional Classification: Major Collector | | |
| Roadbed Information | | | |
| Number of Lanes: Two | Lane Width: 11-12 ft. | Right of Way Width: 60-100 ft. | Shoulder Width: 4-8 ft. |
| Terrain: Level | Accessible to Bicycles: Yes | Median Width: 0 ft. | Distressed Lane Miles: 21.30 |
| Grade %: N/A | Bridge Needs | | Present Serviceability Rating: 2 |
| Postmile: N/A | Bridge#: N/A | | |
| Bridge Name: N/A | | | |
| Route Designations | | | |
| Functional Classification: Major Collector | Scenic Highway (Designated): No | | |
| Facility Type: Conventional Highway | Scenic Highway (Eligible): No | | |
| Interregional Road System: No | Trucking Network: | | |
| High Emphasis Route: No | National Network, Terminal Access: Terminal Access | | |
| Focus Route/Gateway Route: No | Surface Transportation Assistance Act (STAA): Yes | | |
| National Highway System: No | California Legal: Yes | | |
| Freeway Expressway System: Yes | Advisory: No | | |
| Strategic Highway Network: No | Additional Restrictions: No | | |
| Freeway Agreement: No | Access to Intermodal Freight Facility: No | | |
| Environmental Status | | | |
| Degree of Impact | | Degree of Impact | |
| Flood Plains: Low | Cultural Resources: Low | | |
| Wetlands: Low | Leaking Underground Tanks: Low to Moderate | | |
| Special Status Species: Moderate | Possible Hazardous Waste: Moderate | | |
| Air Quality: | | | |
| Ozone: Non-attainment | Particulate Matter 10 m: Non-attainment | Particulate Matter 2.5 m: Non-attainment | Carbon Monoxide: Attainment/Unclassified |

Travel Forecast Data

| Posted Speed Limit: 55 MPH Existing Facility: Two Lane Conventional Highway Level of Service: C Volume/Capacity: 0.25 Peak Hour Volume: 641 Average Daily Traffic: 6,073 Peak Hour Directional Split: 57/43 Truck Volume % of Total ADT: 12% Peak Hour % of Trucks: 10% | 2010 | | 2020 | | 2030 | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------|-------|---------|--------|---------|
| | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN |
| | 0.25 | 0.26 | 0.35 | 0.35 | 0.46 | 0.46 |
| | 641 | | 900 | | 1200 | |
| | 6,073 | | 8,600 | | 12,000 | |
| | 57/43 | | 57/43 | | 57/43 | |
| | 12% | | 12% | | 12% | |
| | 10% | | 10% | | 10% | |

Level of Service (LOS) calculated using Highway Capacity Software (HCS+T7F) and Florida Department of Transportation HIGHPLAN 2009 Multilane and Two Lane Highway Level of Service. Analysis for Conceptual Planning and Preliminary Engineering Version Data: 7/17/20120
 All LOS reflects vehicles only. LOS does not reflect multimodal at this time.

Segment Route Concept

| |
|--------------------------------------------------------------|
| Concept Level of Service: D |
| Concept Facility: 2030 Two Lane Conventional |
| Ultimate Transportation Corridor: Two Lane Expressway |
| Comments: |

Intelligent Transportation System (ITS) Elements & Detection

| Postmile | ITS Element | Status | Direction |
|----------|-----------------|----------|-----------|
| R0.114 | TMS | Existing | SB |
| R0.306 | TMS | Existing | NB |
| 12.2 | Flashing Beacon | Existing | NB |

| | | | |
|----------------------------------------|-------------------------------|-----------------------------------------------|----------------------------------------------|
| Existing Transportation Network | | | |
| Bicycle Facility: Yes/No | Airports: Yes/No | Intermodal Commuter Facilities: Yes/No | Intermodal Freight Facilities: Yes/No |
| Yes | No | No | No |
| PM | PM | PM | PM |
| Location | Location | Location | Location |
| Class: III | | | |
| LOS: F | | | |
| Pedestrian Facility: Yes/No | Park and Rides: Yes/No | Freight Distribution: Yes/No | Transit Bus: Yes/No |
| No | No | No | Yes |
| PM | PM | PM | R0.00-14.770/15.419 |
| Location | Location | Location | Merced |
| LOS: | | | |

Planned Programmed Projects

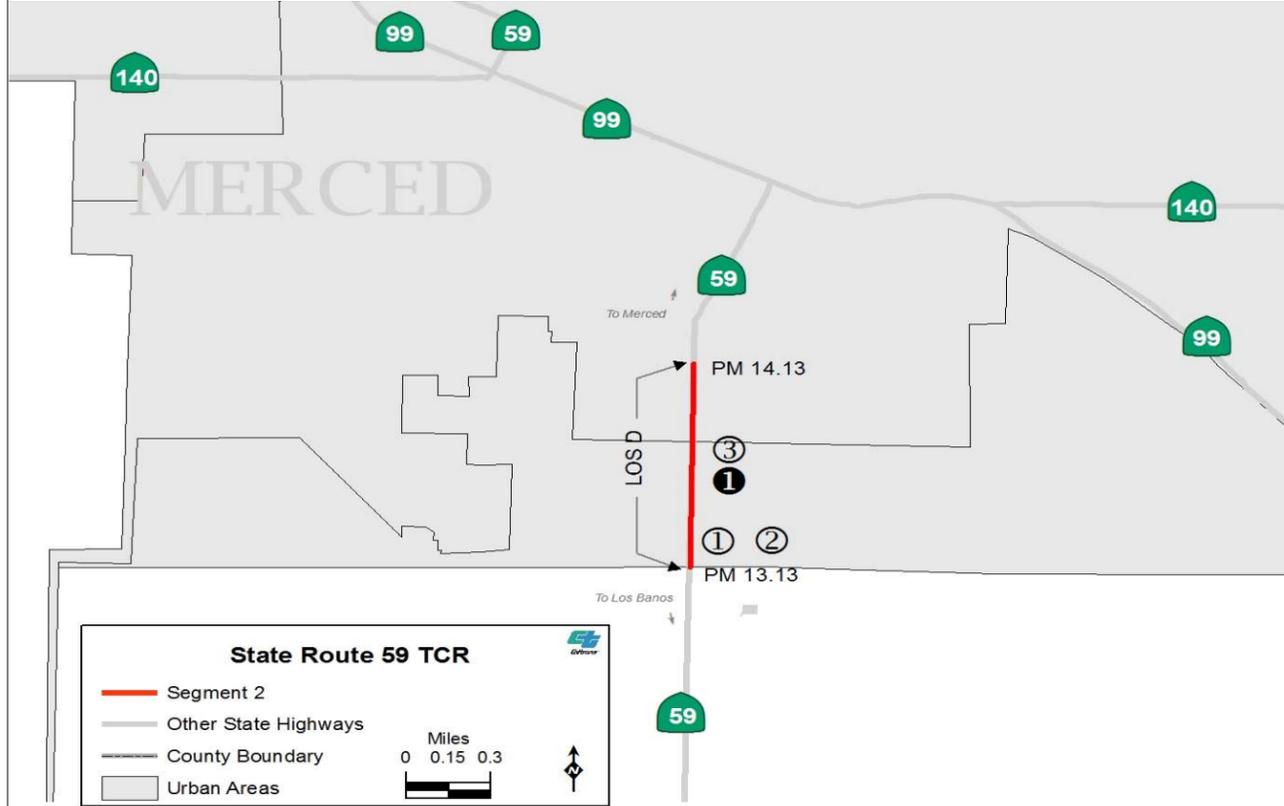
| Post Mile | Location | Description |
|-----------------|-----------------------------------------------------------------|-------------------------------------|
| ① R0.000-13.130 | From SR-152 to Mission Avenue | Widen Shoulders, add passing lanes. |
| ② 12.800-13.500 | Mission Avenue/Dickenson Ferry Road Intersection | Install Left Turn Channelization. |
| ③ 13.13 | Mission Avenue/Dickenson Ferry Road Intersection to Buhach Road | SR-59 Southern Realignment |
| ④ 0.000 | SR-59 at SR-152 | Install TMS in both directions |
| ⑤ 13.13 | South of the Dickenson and Mission Avenues intersection | Install TMS in both directions |
| ● | There are no programmed projects for this segment. | |

Note: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

Comments:

MERCED COUNTY FACT SHEETS— SEGMENT 2

STATE ROUTE 59 TRANSPORTATION CONCEPT REPORT MERCED COUNTY SEGMENT 2



| | | | |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Description: Dickenson Road (Left)/Mission Avenue (Right to Childs Avenue) | | | |
| Post Mile: 13.13/14.13 | Rural/Urban/Urbanized: Urban | | |
| Length: 1.00 | Within City Limits: No | | |
| Functional Classification: Major Collector | Local Planning Jurisdiction: County of Merced | | |
| Roadbed Information | | | |
| Number of Lanes: Two | Lane Width: 12-13 ft. | | |
| Terrain: Level | Right of Way Width: 60 ft. | | |
| Grade %: N/A | Shoulder Width: 4-8 ft. | | |
| Accessible to Bicycles: Yes | Median Width: 0-12 ft. | | |
| Bridge Needs | | | |
| Postmile: N/A | Distressed Lane Miles: 3.54 | | |
| Bridge#: N/A | Present Serviceability Rating: 2 | | |
| Bridge Location: N/A | | | |
| Route Designations | | | |
| Functional Classification: Major Collector | Scenic Highway (Designated): No | | |
| Facility Type: Conventional Highway | Scenic Highway (Eligible): No | | |
| Interregional Road System: No | Trucking Network: | | |
| High Emphasis Route: No | National Network, Terminal Access: Terminal Access | | |
| Focus Route/Gateway Route: No | Surface Transportation Assistance Act (STAA): Yes | | |
| National Highway System: No | California Legal: Yes | | |
| Freeway Expressway System: Yes | Advisory: No | | |
| Strategic Highway Network: No | Additional Restrictions: No | | |
| Freeway Agreement: No | Access to Intermodal Freight Facility: No | | |
| Environmental Status | | | |
| Flood Plains: Low | Cultural Resources: Moderate | | |
| Wetlands: Low | Leaking Underground Tanks: Low | | |
| Special Status Species: Low | Possible Hazardous Waste: Low | | |
| Air Quality: | | | |
| Ozone: Non-attainment | Particulate Matter 10 m: Non-attainment | Particulate Matter 2.5 m: Non-attainment | Carbon Monoxide: Attainment/Unclassified |

| | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------|-------------|----------------|-------------|----------------|
| Travel Forecast Data | | | | | | |
| Posted Speed Limit: 45 MPH Existing Facility: Two Lane Conventional Highway Level of Service: Volume/Capacity: Peak Hour Volume: Average Daily Traffic: Peak Hour Directional Split: Truck Volume % of Total ADT: Peak Hour % of Trucks: | 2010 | | 2020 | | 2030 | |
| | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN |
| | D | C | E | D | E | E |
| | 0.38 | 0.34 | 0.50 | 0.52 | 0.69 | 0.68 |
| | 1,000 | 10,150 | 1,300 | 13,400 | 1,800 | 17,700 |
| 57/43 | 57/43 | 57/43 | 57/43 | 57/43 | 57/43 | |
| 12% | 12% | 12% | 12% | 12% | 12% | |
| 10% | 10% | 10% | 10% | 10% | 10% | |

Level of Service (LOS) calculated using Highway Capacity Software (HCS+T7F) and Florida Department of Transportation HIGHPLAN Multilane and Two Lane Highway Level of Service. Analysis for Conceptual Planning and Preliminary Engineering Version Data: 7/17/2010. All LOS reflects vehicles only. LOS does not reflect multimodal at this time.

| | | | |
|----------------------------------------|-----------------------|---------------------------------------|--------------------------------------|
| Existing Transportation Network | | | |
| Bicycle Facility | Airports | Intermodal Commuter Facilities | Intermodal Freight Facilities |
| Yes/No: Yes | Yes/No: Yes | Yes/No: No | Yes/No: No |
| PM | 14.13 (Near) | PM | PM |
| Location | 20 Macready Dr. | Location | Location |
| Class: III | | | |
| LOS: F | | | |
| Pedestrian Facility | Park and Rides | Freight Distribution | Transit Bus |
| Yes/No: No | Yes/No: No | Yes/No: No | Yes/No: Yes |
| PM | PM | PM | PM |
| Location | Location | Location | Location |
| LOS | | | R0.00-14.770/15.419 Merced |

| | |
|------------------------------------------|------------------------------------|
| Segment Route Concept | |
| Concept Level of Service: D | 2030 Four lane Conventional |
| Concept Facility: 2030 | Four Lane Expressway |
| Ultimate Transportation Corridor: | Four Lane Expressway |
| Comments: | |

| | | | | | |
|------------------|----------------------------------------------------------------------|---------------------------------------------|----------------------------|--|--|
| Planned | | | Programmed Projects | | |
| Post Mile | Location | Description | | | |
| ① 12.800-13.500 | Mission Avenue/Dickenson Ferry Road Intersection | Install Left Turn Channelization. | | | |
| ② 13.13 | From Mission Avenue/Dickenson Ferry Road Intersection to Buhach Road | SR-59 Southern Realignment | | | |
| ③ 13.130-14.130 | From Mission Avenue to Childs Avenue | Widen to 4/5 Lanes. | | | |
| ④ 13.9 | South of the junction with SR-99. | Install TMS,CMS, CCTV and RWIS (northbound) | | | |

| | | | |
|-------------------------------------------------------------------------|------------------------|---------------|------------------|
| Intelligent Transportation System (ITS) Elements & Detection | | | |
| Postmile | ITS Element | Status | Direction |
| | No ITS Element Present | | |

Note: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

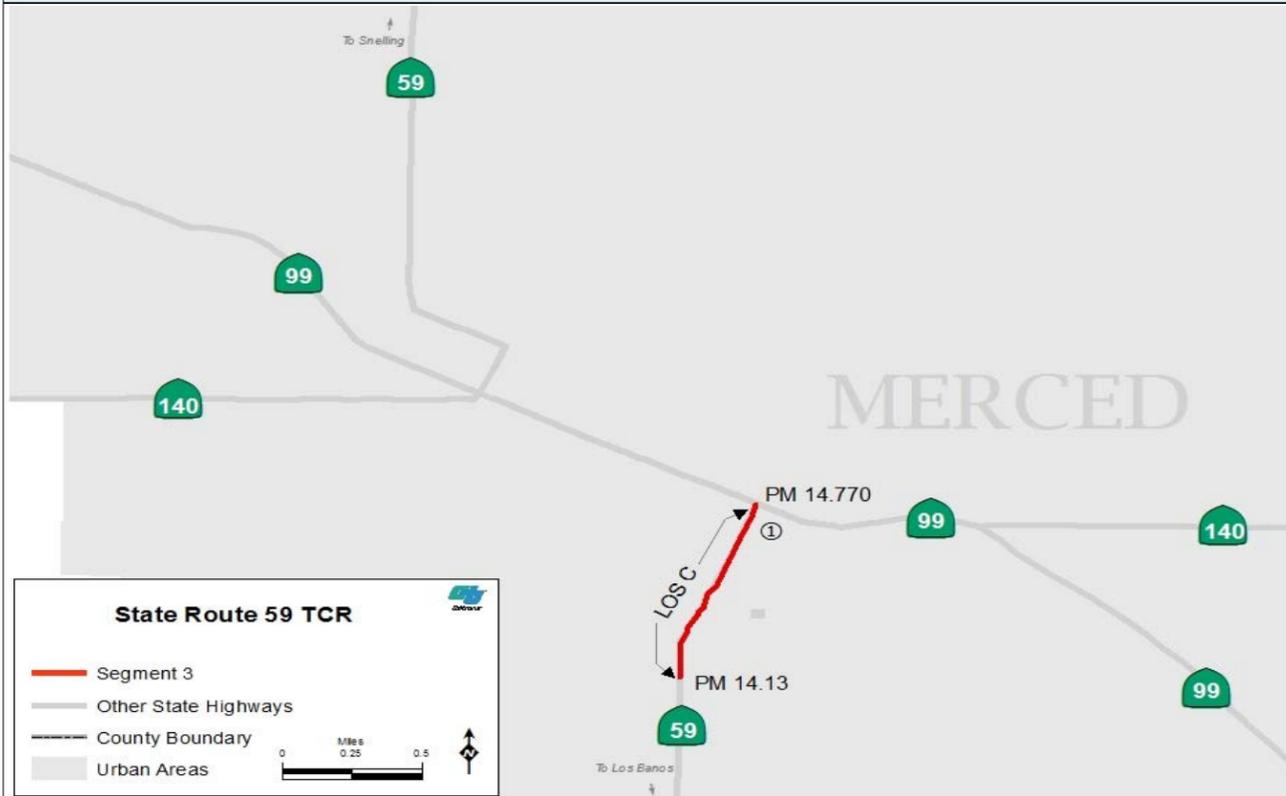
Comments:

MERCED COUNTY FACT SHEETS— SEGMENT 3

STATE ROUTE 59 TRANSPORTATION CONCEPT REPORT

MERCED COUNTY

SEGMENT 3



| Segment Location: | | | |
|------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Description: Childs Avenue to Martin Luther King Jr. Blvd/SR-99 | | | |
| Post Mile: 14.13/14.770 | Rural/Urban/Urbanized: Urban | | |
| Length: 0.640 | Within City Limits: Yes | | |
| Functional Classification: Principal Arterial | Local Planning Jurisdiction: City of Merced | | |
| Roadbed Information | | | |
| Number of Lanes: Five | Lane Width: 12 ft. | | |
| Terrain: Level | Right of Way Width: 80 ft. | | |
| Grade %: N/A | Shoulder Width: 0-8 ft. | | |
| Accessible to Bicycles: Yes | Median Width: 0-12 ft. | | |
| Bridge Needs | | Distressed Lane Miles: 1.54 | |
| Postmile: N/A | | Present Serviceability Rating: 3 | |
| Bridge#: N/A | | | |
| Bridge Location: N/A | | | |
| Route Designations | | | |
| Functional Classification: Principal Arterial | Scenic Highway (Designated): No | | |
| Facility Type: Conventional Highway | Scenic Highway (Eligible): No | | |
| Interregional Road System: No | Trucking Network: | | |
| High Emphasis Route: No | National Network, Terminal Access: Terminal Access | | |
| Focus Route/Gateway Route: No | Surface Transportation Assistance Act (STAA): Yes | | |
| National Highway System: No | California Legal: Yes | | |
| Freeway Expressway System: Yes | Advisory: No | | |
| Strategic Highway Network: No | Additional Restrictions: No | | |
| Freeway Agreement: No | Access to Intermodal Freight Facility: No | | |
| Environmental Status | | | |
| Degree of Impact | | Degree of Impact | |
| Flood Plains: Low | | Cultural Resources: Low | |
| Wetlands: Low | | Leaking Underground Tanks: High | |
| Special Status Species: Low | | Possible Hazardous Waste: High | |
| Air Quality: | | | |
| Ozone: Non-attainment | Particulate Matter 10 m: Non-attainment | Particulate Matter 2.5 m: Non-attainment | Carbon Monoxide: Attainment/Unclassified |

Travel Forecast Data

| | 2010 | | 2020 | | 2030 | |
|----------------------------------------------------------|--------|---------|--------|---------|--------|---------|
| | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN |
| Posted Speed Limit: 35 MPH | | | | | | |
| Existing Facility: Five Lane Conventional Highway | | | | | | |
| Level of Service: | N/A | C | N/A | C | N/A | C |
| Volume/Capacity: | N/A | 0.80 | N/A | 0.80 | N/A | 0.80 |
| Peak Hour Volume: | 1,300 | | 1,600 | | 1,700 | |
| Average Daily Traffic: | 12,750 | | 15,900 | | 17,200 | |
| Peak Hour Directional Split: | 57/43 | | 57/43 | | 57/43 | |
| Truck Volume % of Total ADT: | 12% | | 12% | | 12% | |
| Peak Hour % of Trucks: | 10% | | 10% | | 10% | |

Level of Service (LOS) calculated using Florida Department of Transportation ARTPLAN 2009 software. Analysis for Conceptual Planning and Preliminary Engineering Version Data: 7/17/2010. All LOS reflects vehicles only. LOS does not reflect multimodal at this time.

Segment Route Concept

Concept Level of Service: D
Concept Facility: 2030 Five Lane Conventional
Ultimate Transportation Corridor: Four Lane Expressway
Comments:

Intelligent Transportation System (ITS) Elements & Detection

| Postmile | ITS Element | Status | Direction |
|----------|------------------------|--------|-----------|
| | No ITS Element Present | | |

| Existing Transportation Network | | | |
|---------------------------------|--------------|---------------------------------------|---------------------|
| Bicycle Facility | | Airports | |
| Yes/No | Yes | Yes/No | No |
| PM | | PM | |
| Location | | Location | |
| Class | III | | |
| LOS | N/A | | |
| Pedestrian Facility | | Park and Rides | |
| Yes/No | Yes | Yes/No | No |
| PM | 14.13-14.770 | PM | |
| Location | SR-59 | Location | |
| LOS | N/A | | |
| | | Freight Distribution | |
| Yes/No | No | Yes/No | No |
| PM | | PM | |
| Location | | Location | |
| | | Intermodal Commuter Facilities | |
| Yes/No | No | Yes/No | No |
| PM | | PM | |
| Location | | Location | |
| | | Intermodal Freight Facilities | |
| Yes/No | No | Yes/No | Yes |
| PM | | PM | R0.00-14.770/15.419 |
| Location | Merced | Location | |

| Post Mile | Planned | | Programmed Projects | |
|-----------|----------------------------------------------------|--------------------------------|---------------------|-------------|
| | Location | Description | Location | Description |
| 14.77 | Junction of SR-59 with SR-99 | Install TMS in both directions | | |
| | There are no programmed projects for this segment. | | | |

Note: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

Comments:

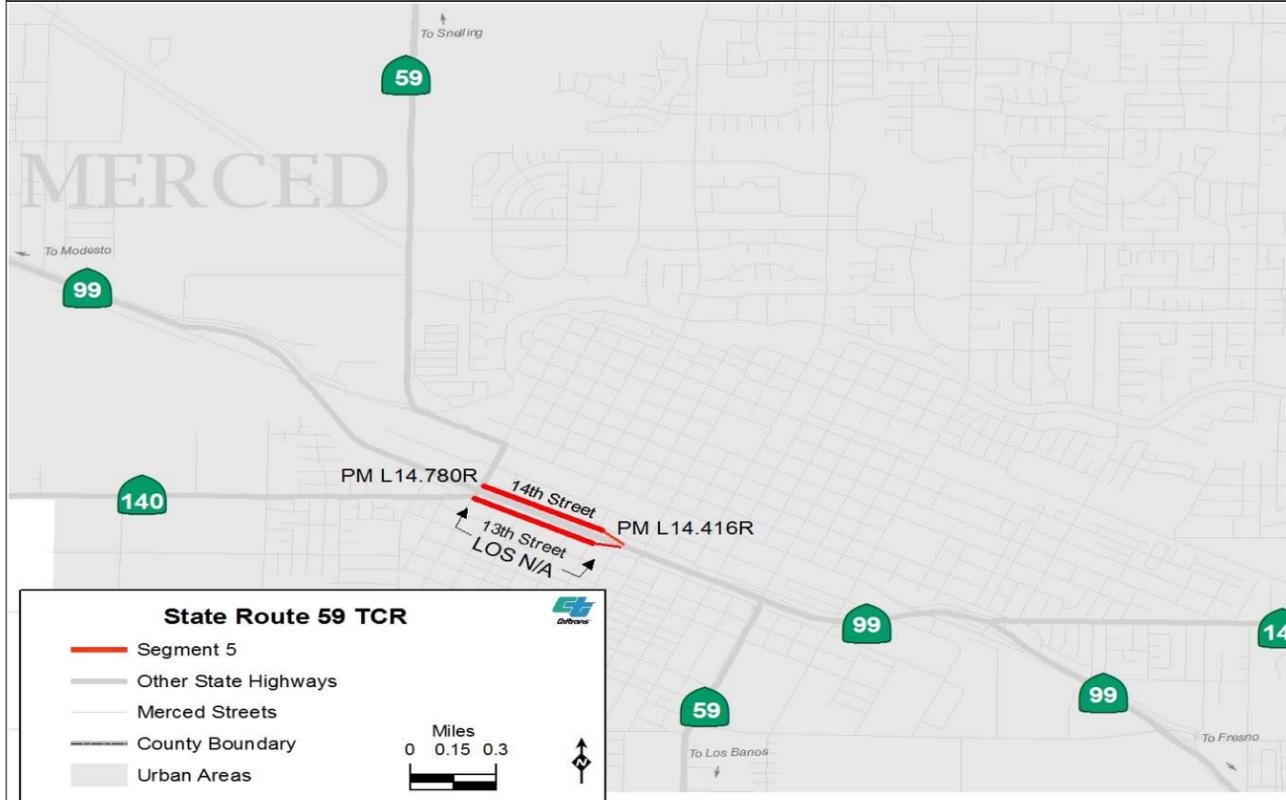
MERCED COUNTY FACT SHEETS— SR 99/140 CONCURRENT SEGMENT 4

| STATE ROUTE 59 TRANSPORTATION CONCEPT REPORT | | MERCED COUNTY SR 99/140 CONCURRENT SEGMENT 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|-----------|-------------|------------------------|---------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|-----|---------|-----|---------|-------------------|---|---|---|---|---|---|------------------|------|-----|------|-----|------|-----|-------------------|-------|--|-------|--|-------|--|------------------------|--------|--|--------|--|--------|--|------------------------------|-------|--|-------|--|-------|--|------------------------------|-----|--|-----|--|-----|--|------------------------|-----|--|-----|--|
| | | Segment Location: Description: Martin Luther King Jr. Blvd/SR-99 to R Street/SR-99 Post Mile: 14.686/15.416 Length: 0.730 Functional Classification: Principal Arterial | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Rural/Urban/Urbanized: Urban Within City Limits: Yes Local Planning Jurisdiction: City of Merced | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Roadbed Information Number of Lanes: Four Terrain: Level Grade %: N/A Accessible to Bicycles: No Lane Width: >12 ft. Right of Way Width: 100-150 ft. Shoulder Width: 0-8 ft. Median Width: 46 ft. Distressed Lane Miles: 1.44 Present Serviceability Rating: 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Bridge Needs Postmile: N/A Bridge#: N/A Bridge Location: N/A Functional Classification: Principal Arterial Facility Type: Freeway Interregional Road System: Yes High Emphasis Route: Yes Focus Route/Gateway Route: Gateway National Highway System: Yes Freeway Expressway System: Yes Strategic Highway Network: Yes Freeway Agreement: Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Route Designations Scenic Highway (Designated): No Scenic Highway (Eligible): No Trucking Network: National Network, Terminal Access: National Network Surface Transportation Assistance Act (STAA): Yes California Legal: Yes Advisory: No Additional Restrictions: No Access to Intermodal Freight Facility: No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Environmental Status Degree of Impact Flood Plains: Low to Moderate Wetlands: Low Special Status Species: Moderate Cultural Resources: Moderate Leaking Underground Tanks: High Possible Hazardous Waste: High | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Air Quality: Ozone: Non-attainment Particulate Matter 10 m: Non-attainment Particulate Matter 2.5 m: Non-attainment Carbon Monoxide: Attainment/Unclassified | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Existing Transportation Network Bicycle Facility: Yes/No No Airports: Yes/No No Intermodal Commuter Facilities: Yes/No Yes Intermodal Freight Facilities: Yes/No No Pedestrian Facility: Yes/No No Park and Rides: Yes/No No Freight Distribution: Yes/No No Transit Bus: Yes/No Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Posted Speed Limit: 55 MPH Existing Facility: Four Lane Freeway Level of Service: C Volume/Capacity: 0.55 Peak Hour Volume: 4,600 Average Daily Traffic: 52,000 Peak Hour Directional Split: 57/43 Truck Volume % of Total ADT: 13% Peak Hour % of Trucks: 10% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Travel Forecast Data <table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">2010</th> <th colspan="2">2020</th> <th colspan="2">2030</th> </tr> <tr> <th>HCS</th> <th>LOSPLAN</th> <th>HCS</th> <th>LOSPLAN</th> <th>HCS</th> <th>LOSPLAN</th> </tr> </thead> <tbody> <tr> <td>Level of Service:</td> <td>C</td> <td>D</td> <td>D</td> <td>D</td> <td>E</td> <td>F</td> </tr> <tr> <td>Volume/Capacity:</td> <td>0.55</td> <td>N/A</td> <td>0.81</td> <td>N/A</td> <td>1.05</td> <td>N/A</td> </tr> <tr> <td>Peak Hour Volume:</td> <td colspan="2">4,600</td> <td colspan="2">6,700</td> <td colspan="2">8,600</td> </tr> <tr> <td>Average Daily Traffic:</td> <td colspan="2">52,000</td> <td colspan="2">66,800</td> <td colspan="2">86,100</td> </tr> <tr> <td>Peak Hour Directional Split:</td> <td colspan="2">57/43</td> <td colspan="2">57/43</td> <td colspan="2">57/43</td> </tr> <tr> <td>Truck Volume % of Total ADT:</td> <td colspan="2">13%</td> <td colspan="2">13%</td> <td colspan="2">13%</td> </tr> <tr> <td>Peak Hour % of Trucks:</td> <td colspan="2">10%</td> <td colspan="2">10%</td> <td colspan="2">10%</td> </tr> </tbody> </table> | | | 2010 | | 2020 | | 2030 | | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN | Level of Service: | C | D | D | D | E | F | Volume/Capacity: | 0.55 | N/A | 0.81 | N/A | 1.05 | N/A | Peak Hour Volume: | 4,600 | | 6,700 | | 8,600 | | Average Daily Traffic: | 52,000 | | 66,800 | | 86,100 | | Peak Hour Directional Split: | 57/43 | | 57/43 | | 57/43 | | Truck Volume % of Total ADT: | 13% | | 13% | | 13% | | Peak Hour % of Trucks: | 10% | | 10% | |
| | 2010 | | 2020 | | 2030 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level of Service: | C | D | D | D | E | F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Volume/Capacity: | 0.55 | N/A | 0.81 | N/A | 1.05 | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour Volume: | 4,600 | | 6,700 | | 8,600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Average Daily Traffic: | 52,000 | | 66,800 | | 86,100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour Directional Split: | 57/43 | | 57/43 | | 57/43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Truck Volume % of Total ADT: | 13% | | 13% | | 13% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour % of Trucks: | 10% | | 10% | | 10% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Segment Route Concept Concept Level of Service: D Concept Facility: 2030 Six Lane Freeway Ultimate Transportation Corridor: Six Lane Freeway Comments: | | Planned / Programmed Projects <table border="1"> <thead> <tr> <th>Post Mile</th> <th>Location</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>○</td> <td>See SR-99 TCR</td> <td></td> </tr> <tr> <td>●</td> <td>See SR-99 TCR</td> <td></td> </tr> </tbody> </table> | | Post Mile | Location | Description | ○ | See SR-99 TCR | | ● | See SR-99 TCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Post Mile | Location | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ○ | See SR-99 TCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ● | See SR-99 TCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intelligent Transportation System (ITS) Elements & Detection <table border="1"> <thead> <tr> <th>Postmile</th> <th>ITS Element</th> <th>Status</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td></td> <td>No ITS Element Present</td> <td></td> <td></td> </tr> </tbody> </table> | | Postmile | ITS Element | Status | Direction | | No ITS Element Present | | | Note: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Postmile | ITS Element | Status | Direction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | No ITS Element Present | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

MERCED COUNTY FACT SHEETS— SEGMENT 5

STATE ROUTE 59 TRANSPORTATION CONCEPT REPORT

MERCED COUNTY SEGMENT 5



| | | | |
|-------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------|
| Description: Three lane couplet 14th Street from R Street SR-99 to V Street* | | Segment Location: | |
| Post Mile: L14.416R&L/L14.780R&L | Rural/Urban/Urbanized: Urban | Within City Limits: Yes | Local Planning Jurisdiction: City of Merced |
| Length: 0.370 | | | |
| Functional Classification: Principal Arterial | | | |
| Roadbed Information | | | |
| Number of Lanes: Six | Lane Width: 11-12 ft. | Right of Way Width: 100-150 ft. | Shoulder Width: 8 ft. |
| Terrain: Level | | Median Width: N/A | Distressed Lane Miles: 2.30 |
| Grade %: N/A | | Present Serviceability Rating: N/A | |
| Accessible to Bicycles: Yes | | | |
| Bridge Needs | | | |
| Postmile: N/A | | | |
| Bridge#: N/A | | | |
| Bridge Location: N/A | | | |
| Route Designations | | | |
| Functional Classification: Principal Arterial | Scenic Highway (Designated): No | Trucking Network: | |
| Facility Type: Conventional Highway | Scenic Highway (Eligible): No | National Network, Terminal Access: Terminal Access | |
| Interregional Road System: Yes | | Surface Transportation Assistance Act (STAA): Yes | |
| High Emphasis Route: Yes | | California Legal: Yes | |
| Focus Route/Gateway Route: Gateway | | Advisory: No | |
| National Highway System: Yes | | Additional Restrictions: No | |
| Freeway Expressway System: Yes | | Access to Intermodal Freight Facility: No | |
| Strategic Highway Network: Yes | | | |
| Freeway Agreement: Yes | | | |
| Environmental Status | | | |
| Degree of Impact | | Degree of Impact | |
| Flood Plains: Low | Wetlands: Low | Cultural Resources: Low | Leaking Underground Tanks: High |
| Special Status Species: Low | | Possible Hazardous Waste: High | |
| Air Quality: | | | |
| Ozone: Non-attainment | Particulate Matter 10 m: Non-attainment | Particulate Matter 2.5 m: Non-attainment | Carbon Monoxide: Attainment/Unclassified |

Travel Forecast Data

| | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------|------|---------|------|---------|
| Posted Speed Limit: 30 MPH Existing Facility: Six Lane Conventional Highway Level of Service: Volume/Capacity: Peak Hour Volume: Average Daily Traffic: Peak Hour Directional Split: Truck Volume % of Total ADT: Peak Hour % of Trucks: | 2010 | | 2020 | | 2030 | |
| | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN |
| | N/A | N/A | N/A | N/A | N/A | N/A |
| | N/A | N/A | N/A | N/A | N/A | N/A |
| | N/A | N/A | N/A | N/A | N/A | N/A |
| | N/A | N/A | N/A | N/A | N/A | N/A |
| | N/A | N/A | N/A | N/A | N/A | N/A |
| | N/A | N/A | N/A | N/A | N/A | N/A |

Level of Service (LOS) calculated using Highway Capacity Software (HCS+T7F) Freeways and Florida Department of Transportation FREEPLAN 2009 software. Analysis for Conceptual Planning and Preliminary Engineering Version Data: 7/17/2010. All LOS reflects vehicles only. LOS reflects vehicles only. LOS does not reflect multimodal at this time.

Segment Route Concept

Concept Level of Service: D
 Concept Facility: 2030 N/A
 Ultimate Transportation Corridor: N/A
 Comments:

Intelligent Transportation System (ITS) Elements & Detection

| Postmile | ITS Element | Status | Direction |
|----------|------------------------|--------|-----------|
| | No ITS Element Present | | |

| | | | |
|----------------------------------------|-----------------------|---------------------------------------|--------------------------------------|
| Existing Transportation Network | | | |
| Bicycle Facility | Airports | Intermodal Commuter Facilities | Intermodal Freight Facilities |
| Yes/No: Yes | Yes/No: No | Yes/No: Yes | Yes/No: No |
| PM: PM | Location: Location | PM: ~15.419 | PM: PM |
| Class: III | Location: 14th Street | Location: 325 W. 24th Street | Location: Location |
| LOS: N/A | | | |
| Pedestrian Facility | Park and Rides | Freight Distribution | Transit Bus |
| Yes/No: Yes | Yes/No: No | Yes/No: No | Yes/No: Yes |
| PM: L14.780R | PM: PM | PM: PM | PM: R0.00-14.770/15.419 |
| Location: 14th Street | Location: Location | Location: Location | Location: Merced |
| LOS: N/A | | | |

| Post Mile | Location | Description |
|-----------|----------|---------------------------------------------------|
| ○ | | There are no planned projects for this segment |
| ● | | There are no programmed projects for this segment |

Note: 1.) This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division. 2.) Most transportation information on these segments is unavailable, the inclusion of this fact sheet is informational only.

Comments:

MERCED COUNTY FACT SHEETS— SEGMENT 6

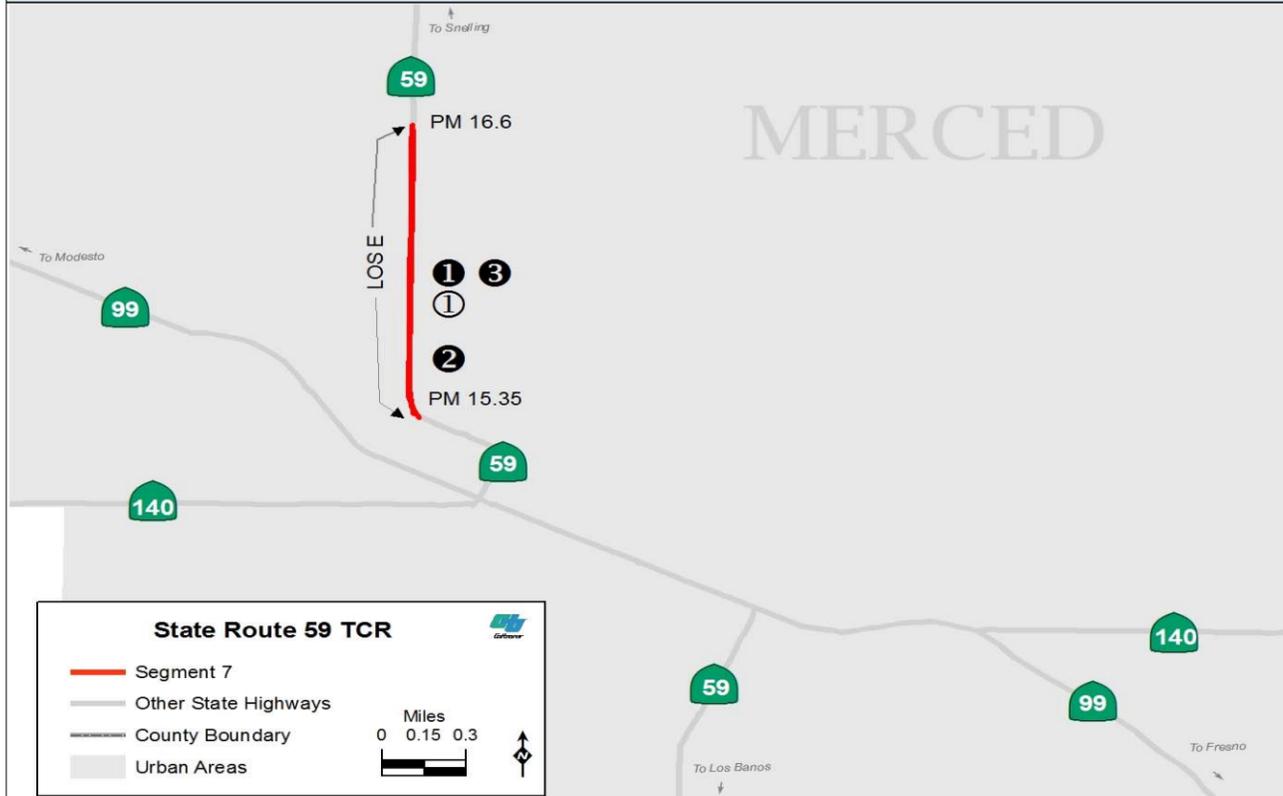
| STATE ROUTE 59 TRANSPORTATION CONCEPT REPORT | | MERCED COUNTY | | SEGMENT 6 | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------|------------------|----------------------------------------------------|---------------------|----------------|
| | | Segment Location: | | | | |
| | | Description: V Street and 13th/14th Streets to Snelling Highway | | Rural/Urban/Urbanized: Urban | | |
| | | Post Mile: 14.780E/15.350 | | Within City Limits: Yes | | |
| | | Length: 0.570 | | Local Planning Jurisdiction: City of Merced | | |
| | | Functional Classification: Principal Arterial | | | | |
| | | Number of Lanes: Five | | Lane Width: 10-13 ft. | | |
| | | Terrain: Level | | Right of Way Width: ~180 ft. | | |
| | | Grade %: N/A | | Shoulder Width: 0-8 ft. | | |
| | | Accessible to Bicycles: Yes | | Median Width: 0-44 ft. | | |
| | | Bridge Needs | | Distressed Lane Miles: 2.25 | | |
| Postmile: N/A | | Present Serviceability Rating: 1 | | | | |
| Bridge#: N/A | | | | | | |
| Bridge Location: N/A | | | | | | |
| Route Designations | | | | | | |
| Functional Classification: Principal Arterial | | Scenic Highway (Designated): No | | | | |
| Facility Type: Conventional Highway | | Scenic Highway (Eligible): No | | | | |
| Interregional Road System: No | | Trucking Network: | | | | |
| High Emphasis Route: No | | National Network, Terminal Access: Terminal Access | | | | |
| Focus Route/Gateway Route: No | | Surface Transportation Assistance Act (STAA): Yes | | | | |
| National Highway System: No | | California Legal: Yes | | | | |
| Freeway Expressway System: Yes | | Advisory: No | | | | |
| Strategic Highway Network: No | | Additional Restrictions: No | | | | |
| Freeway Agreement: No | | Access to Intermodal Freight Facility: No | | | | |
| Environmental Status | | | | | | |
| Degree of Impact | | Degree of Impact | | | | |
| Flood Plains: Low to Moderate | | Cultural Resources: Low | | | | |
| Wetlands: Low | | Leaking Underground Tanks: Moderate | | | | |
| Special Status Species: Moderate | | Possible Hazardous Waste: Moderate | | | | |
| Air Quality: | | | | | | |
| Ozone: Non-attainment | | Particulate Matter 10 m: Non-attainment | | Particulate Matter 2.5 m: Non-attainment | | |
| | | | | Carbon Monoxide: Attainment/Unclassified | | |
| Travel Forecast Data | | | | | | |
| Posted Speed Limit: 35MPH Existing Facility: Four Lane Conventional Highway Level of Service: Volume/Capacity: Peak Hour Volume: Average Daily Traffic: Peak Hour Directional Split: Truck Volume % of Total ADT: Peak Hour % of Trucks: | 2010 | | 2020 | | 2030 | |
| | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN |
| | N/A | E | N/A | F | N/A | F |
| | N/A | > 1.0 | N/A | > 1.0 | N/A | > 1.0 |
| | 2,600 | | 3,700 | | 5,400 | |
| | 25,933 | | 37,200 | | 53,500 | |
| 57/43 | | 57/43 | | 57/43 | | |
| 5.0% | | 5.0% | | 5.0% | | |
| 4.0% | | 4.0% | | 4.0% | | |
| Level of Service (LOS) calculated using Highway Capacity Software (HCS+T7F) Freeways and Florida Department of Transportation LOSPLAN 2009 software. Analysis for Conceptual Planning and Preliminary Engineering Version Data: 7/17/2010. All LOS reflects vehicles only. LOS reflects vehicles only. LOS does not reflect multimodal at this time. | | | | | | |
| Segment Route Concept | | | | | | |
| Concept Level of Service: N/A | | | | | | |
| Concept Facility 2030: N/A | | | | | | |
| Ultimate Transportation Corridor: N/A | | | | | | |
| Comments: | | | | | | |
| Intelligent Transportation System (ITS) Elements & Detection | | | | | | |
| Postmile | ITS Element | Status | Direction | | | |
| | No ITS Element Present | | | | | |
| Existing Transportation Network | | | | | | |
| Bicycle Facility | | Airports | | Intermodal Commuter Facilities | | |
| Yes/No | Yes | Yes/No | No | Yes/No | No | |
| PM | | PM | | PM | | |
| Location | | Location | | Location | | |
| Class | III | | | | | |
| LOS | N/A | | | | | |
| Pedestrian Facility | | Park and Rides | | Freight Distribution | | |
| Yes/No | Yes | Yes/No | No | Yes/No | No | |
| PM | 14.968 - 15.323 | PM | | PM | | |
| Location | 16th Street | Location | | Location | | |
| LOS | N/A | | | | | |
| | | | | Transit Bus | | |
| | | | | Yes/No | Yes | |
| | | | | PM | R0.00-14.770/15.419 | |
| | | | | Location | Merced | |
| Planned & Programmed Projects | | | | | | |
| Post Mile | Location | Description | | | | |
| ① 15.35 | North of 16th Street | Install TMS in both directions | | | | |
| ② 15.35-16.60 | Atwater-Merced Expressway | Interchange on SR-99, new alignment | | | | |
| | 16th Street/Snelling Highway | Widening Phase I- Intersection Turn Lanes. | | | | |
| Note: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division. | | | | | | |
| Comments: *Most transportation information is not available for this segment yet. | | | | | | |

MERCED COUNTY FACT SHEETS— SEGMENT 7

STATE ROUTE 59 TRANSPORTATION CONCEPT REPORT

MERCED COUNTY

SEGMENT 7



| | | | |
|----------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------|
| Description: Snelling Highway to Buena Vista Road | | Segment Location: | |
| Post Mile: 15.350/16.6 | Rural/Urban/Urbanized: Urban | Within City Limits: Yes | Local Planning Jurisdiction: City of Merced |
| Length: 1.250 | Functional Classification: Principal Arterial | Roadbed Information | |
| Bridge Needs | | Lane Width: 10-14 ft. | Right of Way Width: 50-150 ft. |
| Postmile 14.780E/15.350 | Bridge# 39 0009L | Shoulder Width: 0-8 ft. | Median Width: 0 ft. |
| Bridge Location: Bear Creek | | Distressed Lane Miles 2.50 | Present Serviceability Rating 3 |
| Route Designations | | | |
| Functional Classification: Principal Arterial | Scenic Highway (Designated): No | Trucking Network: | |
| Facility Type: Conventional Highway | Scenic Highway (Eligible): No | National Network, Terminal Access Terminal Access | Surface Transportation Assistance Act (STAA) Yes |
| Interregional Road System: No | | California Legal: Yes | Advisory No |
| High Emphasis Route: No | | Additional Restrictions No | Access to Intermodal Freight Facility No |
| Focus Route/Gateway Route: No | | Environmental Status | |
| National Highway System No | | Degree of Impact | |
| Freeway Expressway System Yes | | Flood Plains: Low to Moderate | Cultural Resources: Low |
| Strategic Highway Network No | | Wetlands: Low | Leaking Underground Tanks: Moderate |
| Freeway Agreement: No | | Special Status Species: Moderate | Possible Hazardous Waste: Moderate |
| Air Quality: | | | |
| Ozone Non-attainment | Particulate Matter 10 m Non-attainment | Particulate Matter 2.5 m Non-attainment | Carbon Monoxide Attainment/Unclassified |

| Posted Speed Limit: 40MPH Existing Facility: Five Lane Conventional Highway Level of Service: Volume/Capacity: Peak Hour Volume: Average Daily Traffic: Peak Hour Directional Split: Truck Volume % of Total ADT: Peak Hour % of Trucks: | Travel Forecast Data | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|--------|---------|--------|---------|
| | 2010 | | 2020 | | 2030 | |
| | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN |
| | E | D | E | E | E | E |
| | 0.44 | 0.44 | 0.51 | 0.51 | 0.58 | 0.59 |
| | 900 | | 1,400 | | 1,600 | |
| | 11,690 | | 13,700 | | 16,200 | |
| | 57/43 | | 57/43 | | 57/43 | |
| | 7% | | 7% | | 7% | |
| | 5% | | 5% | | 5% | |

Level of Service (LOS) calculated using Florida Department of Transportation ARTPLAN 2009 software. Analysis for Conceptual Planning and Preliminary Engineering Version Data: 7/17/2010 All LOS reflects vehicles only. LOS does not reflect multimodal at this time.

| Existing Transportation Network | | | |
|---------------------------------|----------------|--------------------------------|-------------------------------------|
| Bicycle Facility | Airports | Intermodal Commuter Facilities | Intermodal Freight Facilities |
| Yes/No Yes | Yes/No No | Yes/No No | Yes/No No |
| PM Location | PM Location | PM Location | PM Location |
| Class III | | | |
| LOS F | | | |
| Pedestrian Facility | Park and Rides | Freight Distribution | Transit Bus |
| Yes/No No | Yes/No No | Yes/No No | Yes/No Yes |
| PM Location | PM Location | PM Location | PM R0.00-14.770/15.419 Merced |

| Segment Route Concept | |
|---------------------------------------------------------------|--|
| Concept Level of Service: D | |
| Concept Facility 2030 Four Lane Expressway | |
| Ultimate Transportation Corridor: Four Lane Expressway | |
| Comments: | |

| Post Mile | Location | Description |
|---------------|--------------------------------------|--------------------------------------------|
| ① 16.1 | North of 16th Street | Install TMS in both directions |
| ② 15.35-16.6 | From 16th Street to Buena Vista Road | Widened to 4 lanes |
| ③ 15.35 | 16th Street/Snelling Highway | Widening Phase I- Intersection Turn Lanes. |
| ④ 15.35-16.60 | Atwater-Merced Expressway | Interchange on SR-99, new alignment |

| Intelligent Transportation System (ITS) Elements & Detection | | | |
|--------------------------------------------------------------|------------------------|--------|-----------|
| Postmile | ITS Element | Status | Direction |
| | No ITS Element Present | | |

Note: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

Comments:

MERCED COUNTY FACT SHEETS— SEGMENT 8

| STATE ROUTE 59 | | TRANSPORTATION CONCEPT REPORT | | MERCED COUNTY | | SEGMENT 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | Segment Location: Description: Buena Vista Road to West Cardella Road Post Mile: 16.6/18.0 Length: 1.400 Functional Classification: Major Collector | | | | Rural/Urban/Urbanized: Urban ends at PM 18.0 Within City Limits: Yes/No; City ends at PM 16.36 Local Planning Jurisdiction: City of Merced/County of Merced | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Roadbed Information Number of Lanes: Two Terrain: Level Grade %: N/A Accessible to Bicycles: Yes Lane Width: 11-12 ft. Right of Way Width: 110-115 ft. Shoulder Width: 4-8 ft. Median Width: 0 ft. Distressed Lane Miles: 3.70 Present Serviceability Rating: 4 | | | | Bridge Needs Postmile: N/A Bridge#: N/A Bridge Location: N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Route Designations Functional Classification: Major Collector Facility Type: Conventional Highway Interregional Road System: No High Emphasis Route: No Focus Route/Gateway Route: No National Highway System: No Freeway Expressway System: Yes Strategic Highway Network: No Freeway Agreement: No | | | | Scenic Highway (Designated): No Scenic Highway (Eligible): No Trucking Network: National Network, Terminal Access: Terminal Access Surface Transportation Assistance Act (STAA): Yes California Legal: Yes Advisory: No Additional Restrictions: No Access to Intermodal Freight Facility: No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Degree of Impact Flood Plains: Low Wetlands: Low Special Status Species: Low | | | | Degree of Impact Cultural Resources: Low Leaking Underground Tanks: Low to Moderate Possible Hazardous Waste: Low to Moderate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air Quality: Ozone: Non-attainment Particulate Matter 10 m: Non-attainment Particulate Matter 2.5 m: Non-attainment Carbon Monoxide: Attainment/Unclassified | | | | Existing Transportation Network <table border="1"> <thead> <tr> <th>Bicycle Facility</th> <th>Airports</th> <th>Intermodal Commuter Facilities</th> <th>Intermodal Freight Facilities</th> </tr> </thead> <tbody> <tr> <td>Yes/No: Yes</td> <td>Yes/No: No</td> <td>Yes/No: No</td> <td>Yes/No: No</td> </tr> <tr> <td>PM: Location</td> <td>PM: Location</td> <td>PM: Location</td> <td>PM: Location</td> </tr> <tr> <td>Class: III</td> <td></td> <td></td> <td></td> </tr> <tr> <td>LOS: F</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Pedestrian Facility</th> <th>Park and Rides</th> <th>Freight Distribution</th> <th>Transit Bus</th> </tr> </thead> <tbody> <tr> <td>Yes/No: Yes</td> <td>Yes/No: No</td> <td>Yes/No: No</td> <td>Yes/No: No</td> </tr> <tr> <td>PM: 14.968 - 15.323</td> <td>PM: Location</td> <td>PM: Location</td> <td>PM: Location</td> </tr> <tr> <td>Location: 16th Street</td> <td></td> <td></td> <td></td> </tr> <tr> <td>LOS: N/A</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | | | Bicycle Facility | Airports | Intermodal Commuter Facilities | Intermodal Freight Facilities | Yes/No: Yes | Yes/No: No | Yes/No: No | Yes/No: No | PM: Location | PM: Location | PM: Location | PM: Location | Class: III | | | | LOS: F | | | | Pedestrian Facility | Park and Rides | Freight Distribution | Transit Bus | Yes/No: Yes | Yes/No: No | Yes/No: No | Yes/No: No | PM: 14.968 - 15.323 | PM: Location | PM: Location | PM: Location | Location: 16th Street | | | | LOS: N/A | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bicycle Facility | Airports | Intermodal Commuter Facilities | Intermodal Freight Facilities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yes/No: Yes | Yes/No: No | Yes/No: No | Yes/No: No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PM: Location | PM: Location | PM: Location | PM: Location | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Class: III | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LOS: F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pedestrian Facility | Park and Rides | Freight Distribution | Transit Bus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yes/No: Yes | Yes/No: No | Yes/No: No | Yes/No: No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PM: 14.968 - 15.323 | PM: Location | PM: Location | PM: Location | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Location: 16th Street | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LOS: N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Travel Forecast Data Posted Speed Limit: 55 MPH Existing Facility: Two Lane Conventional Highway Level of Service: D Volume/Capacity: 0.33 Peak Hour Volume: 900 Average Daily Traffic: 8,700 Peak Hour Directional Split: 57/43 Truck Volume % of Total ADT: 7% Peak Hour % of Trucks: 5% | | | | <table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">2010</th> <th colspan="2">2020</th> <th colspan="2">2030</th> </tr> <tr> <th>HCS</th> <th>LOSPLAN</th> <th>HCS</th> <th>LOSPLAN</th> <th>HCS</th> <th>LOSPLAN</th> </tr> </thead> <tbody> <tr> <td>D</td> <td></td> <td>C</td> <td>E</td> <td>C</td> <td>E</td> <td>D</td> </tr> <tr> <td></td> <td>0.33</td> <td>0.33</td> <td>0.48</td> <td>0.48</td> <td>0.66</td> <td>0.66</td> </tr> <tr> <td>Volume/Capacity</td> <td colspan="2">900</td> <td colspan="2">1,300</td> <td colspan="2">1,800</td> </tr> <tr> <td>Average Daily Traffic</td> <td colspan="2">8,700</td> <td colspan="2">12,500</td> <td colspan="2">18,400</td> </tr> <tr> <td>Peak Hour Directional Split</td> <td colspan="2">57/43</td> <td colspan="2">57/43</td> <td colspan="2">57/43</td> </tr> <tr> <td>Truck Volume % of Total ADT</td> <td colspan="2">7%</td> <td colspan="2">7%</td> <td colspan="2">7%</td> </tr> <tr> <td>Peak Hour % of Trucks</td> <td colspan="2">5%</td> <td colspan="2">5%</td> <td colspan="2">5%</td> </tr> </tbody> </table> | | | | | 2010 | | 2020 | | 2030 | | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN | D | | C | E | C | E | D | | 0.33 | 0.33 | 0.48 | 0.48 | 0.66 | 0.66 | Volume/Capacity | 900 | | 1,300 | | 1,800 | | Average Daily Traffic | 8,700 | | 12,500 | | 18,400 | | Peak Hour Directional Split | 57/43 | | 57/43 | | 57/43 | | Truck Volume % of Total ADT | 7% | | 7% | | 7% | | Peak Hour % of Trucks | 5% | | 5% | | 5% | |
| | 2010 | | 2020 | | 2030 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | | C | E | C | E | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0.33 | 0.33 | 0.48 | 0.48 | 0.66 | 0.66 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Volume/Capacity | 900 | | 1,300 | | 1,800 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Average Daily Traffic | 8,700 | | 12,500 | | 18,400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour Directional Split | 57/43 | | 57/43 | | 57/43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Truck Volume % of Total ADT | 7% | | 7% | | 7% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour % of Trucks | 5% | | 5% | | 5% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level of Service (LOS) calculated using Highway Capacity Software (HCS+T7F) and Florida Department of Transportation HIGHPLAN 2009 Multilane and Two Lane Highway Level of Service. Analysis for Conceptual Planning and Preliminary Engineering Version Data: 7/17/2010. All LOS reflects vehicles only. LOS does not reflect multi modal at this time. | | | | Segment Route Concept Concept Level of Service: D Concept Facility: 2030 Four Lane Expressway Ultimate Transportation Corridor: Four Lane Expressway Comments: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intelligent Transportation System (ITS) Elements & Detection <table border="1"> <thead> <tr> <th>Postmile</th> <th>ITS Element</th> <th>Status</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td></td> <td>No ITS Element Present</td> <td></td> <td></td> </tr> </tbody> </table> | | | | Postmile | ITS Element | Status | Direction | | No ITS Element Present | | | <table border="1"> <thead> <tr> <th>Post Mile</th> <th>Location</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>① 17.2-22.6</td> <td>From 0.3 miles S/O Belcher Avenue to 0.4 miles S/O Oakdale Road</td> <td>Rubberized Hot Mix Asphalt Overlay</td> </tr> <tr> <td>② 15.35-16.60</td> <td>Atwater-Merced Expressway</td> <td>Interchange on SR-99, new alignment</td> </tr> </tbody> </table> | | | | Post Mile | Location | Description | ① 17.2-22.6 | From 0.3 miles S/O Belcher Avenue to 0.4 miles S/O Oakdale Road | Rubberized Hot Mix Asphalt Overlay | ② 15.35-16.60 | Atwater-Merced Expressway | Interchange on SR-99, new alignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Postmile | ITS Element | Status | Direction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | No ITS Element Present | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Post Mile | Location | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ① 17.2-22.6 | From 0.3 miles S/O Belcher Avenue to 0.4 miles S/O Oakdale Road | Rubberized Hot Mix Asphalt Overlay | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ② 15.35-16.60 | Atwater-Merced Expressway | Interchange on SR-99, new alignment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division. | | | | Comments: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

MERCED COUNTY FACT SHEETS— SEGMENT 9

STATE ROUTE 59 TRANSPORTATION CONCEPT REPORT

MERCED COUNTY SEGMENT 9



| | | | |
|----------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------|
| Description: West Cardella Road to La Grange Road | | Segment Location: | |
| Post Mile: 18.0/33.709 | Rural/Urban/Urbanized: Rural | Within City Limits: No | Local Planning Jurisdiction: County of Merced |
| Length: 15.700 | Functional Classification: Major Collector | Roadbed Information | |
| Number of Lanes: Two | Terrain: Level | Lane Width: 10-14 ft. | Right of Way Width: 60-200 ft. |
| Grade %: N/A | Accessible to Bicycles: Yes | Shoulder Width: 0-8 ft. | Median Width: 0 ft. |
| Bridge Needs | | Distressed Lane Miles | Present Serviceability Rating |
| Postmile: N/A | Bridge#: N/A | Bridge Location: N/A | 14.40 |
| Route Designations | | Trucking Network: | |
| Functional Classification: Major Collector | Facility Type: Conventional Highway | Scenic Highway (Designated): No | Scenic Highway (Eligible): No |
| Interregional Road System: No | High Emphasis Route: No | National Network, Terminal Access: Terminal Access | Surface Transportation Assistance Act (STAA): Yes |
| Focus Route/Gateway Route: No | National Highway System: No | California Legal: Yes | Advisory: No |
| Freeway Expressway System: Yes | Strategic Highway Network: No | Additional Restrictions: No | Access to Intermodal Freight Facility: No |
| Freeway Agreement: No | Environmental Status | | |
| Degree of Impact | | Degree of Impact | |
| Flood Plains: Low | Wetlands: Moderate | Cultural Resources: Mod. | Leaking Underground Tanks: Low to Moderate |
| Special Status Species: High | | Possible Hazardous Waste: Low to Moderate | |
| Air Quality: | | | |
| Ozone: Non-attainment | Particulate Matter 10 m: Non-attainment | Particulate Matter 2.5 m: Non-attainment | Carbon Monoxide: Attainment/Unclassified |

| Posted Speed Limit: 55 MPH Existing Facility: Two Lane Conventional Highway Level of Service: Volume/Capacity: Peak Hour Volume: Average Daily Traffic: Peak Hour Directional Split: Truck Volume % of Total ADT: Peak Hour % of Trucks: | Travel Forecast Data | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|-------|---------|-------|---------|
| | 2010 | | 2020 | | 2030 | |
| | HCS | LOSPLAN | HCS | LOSPLAN | HCS | LOSPLAN |
| | C | B | C | B | C | B |
| | 0.12 | 0.15 | 0.16 | 0.19 | 0.24 | 0.27 |
| | 300 | | 400 | | 600 | |
| | 2,600 | | 3,800 | | 5,700 | |
| | 57/43 | | 57/43 | | 57/43 | |
| | 12% | | 12% | | 12% | |
| | 10% | | 10% | | 10% | |

Level of Service (LOS) calculated using Highway Capacity Software (HCS+T7F) and Florida Department of Transportation HIGHPLAN 2009 Multilane and Two Lane Level of Service. Analysis for Conceptual Planning and Preliminary Engineering Version Data: 7/17/2010. All LOS reflects vehicles only. LOS does not reflect multi modal at this time.

| Existing Transportation Network | | | |
|------------------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Bicycle Facility | Airports | Intermodal Commuter Facilities | Intermodal Freight Facilities |
| Yes/No PM Location Class LOS | Yes/No No PM Location | Yes/No No PM Location | Yes/No No PM Location |
| Yes/No PM Location LOS | Park and Rides | Freight Distribution | Transit Bus |
| Yes/No No PM Location LOS | Yes/No No PM Location | Yes/No No PM Location | Yes/No No PM Location |

| Segment Route Concept | |
|----------------------------------------------------------------|--|
| Concept Level of Service: D | |
| Concept Facility: 2030 Two Lane Conventional | |
| Ultimate Transportation Corridor: Two Lane Conventional | |
| Comments: | |

| Planned Projects | | | Programmed Projects | | |
|------------------|-----------------------------------------------------------------|-------------------------------------|---------------------|----------|-------------|
| Post Mile | Location | Description | Post Mile | Location | Description |
| ① 17.2-22.6 | From 0.3 miles S/O Belcher Avenue to 0.4 miles S/O Oakdale Road | Rubberized Hot Mix Asphalt Overlay | | | |
| ② 18.8 | South of Bellevue Road | Install CCTV, CMS, and TMS | | | |
| ③ 19.2 | North of Bellevue Road | Install CCTV, CMS, and TMS | | | |
| ④ 33.709 | South of the intersection with La Grange Road | Install TMS in both directions | | | |
| ⑤ 16.60-18.0 | Atwater-Merced Expressway | Interchange on SR-99, new alignment | | | |

| Intelligent Transportation System (ITS) Elements & Detection | | | |
|--------------------------------------------------------------|------------------------|--------|-----------|
| Postmile | ITS Element | Status | Direction |
| | No ITS Element Present | | |

Note: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

Comments:

APPENDIX A: GLOSSARY

Annual Average Daily Traffic (AADT): AADT consists of Caltrans, District 10 annual traffic counts as measured at approved count station locations.

ARTPLAN: see *Highway Capacity Manual*.

Bicycle Routes: Refers to travelways specific to users employing bicycles. There are three general classifications: 'III'--bicycles share street with automobiles without separation; 'II'--bicycles share street within their own designated lane; and 'I'--bicycles travel independent of automobile traffic, often sharing right of way with pedestrians or equestrians.

California Environmental Quality Act (CEQA): Passed in 1971, CEQA provides the framework in which undertakings that may affect the environment are evaluated and if found to be adverse are to be mitigated for, as part of the governmental decision making process. For local governments, implementation of general plans and land use designations became a requirement and a bench mark for which changes in zoning or land uses could be assessed.

Census Designation: The designation of *rural* (population below 5,000), or *urbanized* (population between 5,000 and 50,000), or *urban* (populations of 50,000 or greater) highways are obtained from the California Road System Maps published by FHWA. These are based upon the most recent census.

Concept Facility: Highway facility that best maintains the Concept LOS at the end of the twenty year planning period.

Concept Level of Service: see *Level of Service*.

Conventional Highway: Highway which permits direct access by both road intersections and driveways.

Expressway: Highway, usually an arterial, typically with access limited to at grade road intersections

Federal Highway System: Designated by the Federal Highway Administration, these segments of state highways serve to either support interstate commerce, national defense, or other responsibilities of the federal government. As such they are eligible for federal funding, and subject to the National Environmental Policy Act (NEPA).

Focus Route: see *Interregional Road System*.

FREEPLAN: see *Highway Capacity Manual*.

Freeway: A divided arterial highway with full access control and grade separations at intersections.

Highway Capacity Manual (HCM): Published by the National Research Council's Transportation Research Board, the HCM is the national standard for methodologies to evaluate and estimate highway performance. Approved software packages developed to reduce the computation effort associated with the HCM are Highway Capacity Software's (HCS) various modules and the Florida Department of Transportation's (FDOT) transportation planning softwares— ARTPLAN (urban arterials), FREEPLAN (freeways), and HIGHPLAN (two or four lane highways). FDOT's softwares incorporate features unavailable in HCS, and specifically address multimodal components other than the automobile. The most recent update of HCM is for 2010, though several of the software interfaces are not yet currently available. Analyses performed for this document were consistent with the previous version of HCM (2000).

Highway Capacity Software (HCS): see *Highway Capacity Manual*.

High Emphasis Route: see *Interregional Road System*.

HIGHPLAN: see *Highway Capacity Manual*.

Interregional Road System (IRRS): A State planning effort that emphasized highways within the Freeway and Expressway system that provided network connections to urban places statewide, but were not yet constructed to freeway or expressway standards. The most recent expression of this plan (1998) discussed Focus and High Emphasis routes, and established short term and long term improvements for these specific routes.

Level: see *Terrain*.

Level of Service (LOS): A qualitative performance measure that describes the perception of the commuter (driver, bicyclist, pedestrian, transit) of the operational conditions within a traffic stream on a highway segment. Generally scaled in a range from A through F, and historically as a performance measure for automobiles, the LOS targets optimal utility expressed as the *concept LOS* (C for rural highways on the IRRS, D for urban highways on the IRRS and all routes not on the IRRS). Although the current version of the Highway Capacity Manual includes LOS calculations for users other than drivers, standards have yet to be established by the State.

Mountainous: see *Terrain*.

National Environmental Policy Act (NEPA): Established in 1971,

this environmental policy applies to federal undertakings or efforts that have a federal nexus. Federal agencies were tasked to develop policies and standards to evaluate and assess the environmental impacts of federal undertakings, while the Act established general policies regarding public notification and report standards.

Rolling: see *Terrain*.

Rural: see *Census Designation*

Surface Transportation Assistance Act (STAA): Federal highway legislation that included federal design standards and requirements for trucks (see Truck Routes).

Terrain: Refers to topography specific to its affect on trucks and other heavy vehicle operation (see HCM). Level terrain contains any combination of grades or horizontal or vertical alignments that permit heavy vehicles to maintain the same speed as passenger cars; rolling terrain contains any combination of grades or horizontal or vertical alignments that causes heavy vehicles to reduce their speed substantially below that of passenger car speeds, but not to where they crawl for a significant length of time; mountainous terrain is any combination of grades or horizontal or vertical alignment that causes heavy vehicles to operate at crawl speed for significant distances or at frequent intervals. HCM methodologies address highway segments with level or rolling terrain with a set of constant values. Mountainous terrain requires separate upgrade or downgrade analysis and recommends that any segment with grades between 2% and 3% with a length of more than half a mile be considered a separate segment.

Truck Routes: may refer to either federal standards (contained in STAA) or California standards. Routes with an STAA designation permit travel by tractor trailers with a fifty five foot long trailer, or tandems with trailers no greater than twenty eight and a half feet, while California legal routes permit limit the overall truck length to sixty five feet total for single and seventy five for tandems. Advisory truck routes usually possess highway geometrics that limit truck length for safe operation. Restricted truck routes have legal restrictions on the type of truck or activity.

Urbanized: see *Census Designation*.

APPENDIX B: ACRONYMS

| | | | | | |
|------------------|--------------------------------------------|-------------|-----------------------------------------------|---------------|--------------------------------------------------|
| AADT | Annual Average Daily Traffic | CTIS | California Transportation Investment Strategy | HICOMP | State Highway Congestion Monitoring Program |
| AB | Assembly Bill | | | HOV | High Occupancy Vehicle |
| ADA | Americans with Disabilities Act of 1990 | DBE | Disadvantaged Business Enterprise | | |
| ADT | Average Daily Traffic | DOT | Department of Transportation | I/C | Interchange |
| AHS | Automated Highway System | DSMP | District System Management Plan | ICES | Inter-modal Corridor of Economic Significance |
| AME | Atwater Merced Expressway | DVHD | Daily Vehicle Hours of Delay | IIP | Interregional Improvement Program |
| APE | Area of Potential Effects | | | IRRS | Interregional Road System |
| ATIS | Advance Transportation Information System | EB | Eastbound | ISTEA | Intermodal Surface Transportation Efficiency Act |
| ATSD | Advanced Transportation System Development | EEO | Equal Employment Opportunity | IT | Information Technology |
| AVI | Automated Vehicle Identification | EIS | Environmental Impact Statement | ITMS | Intermodal Transportation Management System |
| | | EIR | Environmental Impact Report | ITS | Intelligent Transportation Systems |
| BN&SF | Burlington Northern and Santa Fe Railroad | E/O | East Of | ITSP | Interregional Transportation Strategic Plan |
| BRT | Bus Rapid Transit | EPA | Environmental Protection Agency | | |
| BTA | Bicycle Transportation Account | ESA | Environmental Sensitivity Area | JCT | Junction |
| | | EXPW | Expressway | | |
| CAWS | Caltrans Automated Warning System | | | LD/IGR | Local Development Intergovernmental Review |
| CBD | Central Business District | FAHP | Federal-aid Highway Program | LOS | Level of Service |
| CCAA | California Clean Air Act | FES | Freeway and Expressway System | LROP | Long Range Operations Plan |
| CCTV | Closed Circuit Television | FAT | Fatalities | LRT | Light Rail Transit |
| CEQA | California Environmental Quality Act | FB | Flashing Beacon | LTAP | Local Technical Assistance Program |
| CFR | Code of Federal Regulations | FEMA | Federal Emergency Management Administration | LU | Legacy for Users |
| CHIN | California Highway Information Network | FHWA | Federal Highway Administration | | |
| CHP | California Highway Patrol | FHS | Federal Highway System | MCAG | Merced County Association of Governments |
| CIP | Congestion Improvement Program | FSP | Freeway Service Patrol | METS | Materials Engineering and Testing Service |
| CMAQ | Congestion Mitigation and Air Quality | FTA | Federal Transit Administration | MIS | Major Investment Study |
| CMIA | Corridor Mobility Improvement Account | FTIP | Federal Transportation Improvement Program | MOU | Memorandum of Understanding |
| CMP | Congestion Management Plan | FY | Fiscal Year | MSL | Maintenance Service Level |
| CMS | Changeable Message Sign | | | MVTM | Million Vehicle Miles Traveled |
| CNDDB | California Natural Diversity Data Base | GMAP | Goods Movement Action Plan | | |
| CO | Carbon Monoxide | GVC | Great Valley Center | NAAQS | National Ambient Air Quality Standards |
| COG | Council of Governments | | | NAFTA | North American Free Trade Agreement |
| CSIP | Corridor Safety Improvement Program | HAR | Highway Advisory Radio | NB | Northbound |
| CSMP | Corridor System Management Plan | HBP | Highway Bridge Program | NBIS | National Bridge Inspection Standards |
| CSS | Context Sensitive Solutions | HCM | Highway Capacity Manual | NEPA | National Environmental Policy Act |
| CTC | California Transportation Commission | HCS | Highway Capacity Software | NHS | National Highway System |

APPENDIX B: ACRONYMS

| | | | | | |
|------------------|---------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------|
| NAC | Noise Abatement Criteria | RTIF | Regional Transportation Impact Fee | TDM | Transportation Demand Management |
| N/O | North Of | RTL | Ready to List | TEA-21 | Transportation Equity Act of the 21st Century |
| NTN | National Truck Network | RTP | Regional Transportation Plan | TIP | Transportation Improvement Plan |
| | | RTPA | Regional Transportation Planning Agency | TMC | Transportation Management Center |
| OC | Over-crossing | R/W | Right of Way | TMP | Transportation Management Plan |
| OH | Overhead | RWIS | Roadside Weather Information System | TMS | Traffic Monitoring Station/Transportation Management System |
| OTS | Office of Traffic Safety | | | TOS | Traffic Operations System |
| OWP | Overall Work Program | SAFETEA-LU | Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users | TPA | Transportation Planning Agency |
| | | SB | Southbound | TSDP | Transportation System Development Plan |
| PA&ED | Project Approval and Environmental Document (phase) | SGP | Strategic Growth Plan | TSI | Transportation System Information |
| PCS | Pavement Condition Survey | SHOPP | State Highway Operations Protection Program | TSM | Transportation System Management |
| PeMS | Performance Measurement System (Detection) | SHS | State Highway System | | |
| PG&E | Pacific Gas and Electric Company | SIP | State Implementation Plan | UAPCD | Unified Air Pollution Control Districts |
| PHV | Peak Hour Volume | SJV | San Joaquin Valley | UC | Under-crossing |
| PIF | Public Interest Finding | SJVUAPCD | San Joaquin Valley Unified Air Pollution Control District | UPRR | Union Pacific Rail-Road |
| PM | Post Mile | S/O | South of | USC | United States Code |
| PMS | Pavement Management System | SOP | Status of Projects | UTC | Ultimate Transportation Corridor |
| PM-2.5 | 2.5 Micron Diameter Particulate Matter (diesel exhaust) | SOV | Single Occupancy Vehicle | | |
| PM-10 | 10 Micron Diameter Particulate Matter (dust) | SPR | State Planning and Research | V/C | Volume to Capacity |
| PR | Project Report | SPRR | Southern Pacific Railroad | VMT | Vehicle Miles Traveled |
| PS&E | Plans, Specifications and Estimates | SR | State Route | | |
| PSR | Project Study Report | STAA | Surface Transportation Assistance Act | WB | Westbound |
| PTOC | Primary Traffic Operations Center | StanCOG | Stanislaus County Council of Governments | W/O | West of |
| | | STIP | State Transportation Improvement Program | | |
| RAQS | Regional Air Quality Strategy | STRAHNET | Strategic Highway Network | YARTS | Yosemite Area Regional Transportation System |
| RAS | Regional Arterial System | STRAIN | Structures Replacement and Improvement Needs | | |
| RCMP | Regional Congestion Management Plan | | | | |
| RCR | Route Concept Report | TA | Terminal Access | | |
| RIP | Regional Improvement Plan | TASAS | Traffic Accident Surveillance and Analysis System | | |
| ROW | Right-of-Way | TBD | To Be Determined | | |
| RT | Regional Transit | TCM | Transportation Control Measure | | |
| RPA | Rural Planning Assistance | TCR | Transportation Concept Report | | |
| RSTP | Regional Surface Transportation Program | TCRP | Traffic Congestion Relief Program | | |
| RTE | Route | TDA | Transportation Development Act | | |
| RTIP | Regional Transportation Improvement Plan | | | | |

