STATE ROUTE

# Transportation Concept Report

Caltrans · District 6 · Planning · December 2009

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**Cover Photos:**

Background Photo – Route 201 – Tulare County @ PM 23.05 (Segment 8)

Top Left Photo – Route 201 – Fresno County @ PM 00.13 (Segment 1)

2nd from Top Left – Route 201 – Fresno County @ PM 0.45 (Segment 2)

3rd from Top Left – Route 201 – Fresno County @ PM 0.61 (Segment 2)

Right Bottom – Route 201 – Tulare County @ PM 22.20 (Segment 8)

# STATE ROUTE 201 TRANSPORTATION CONCEPT REPORT

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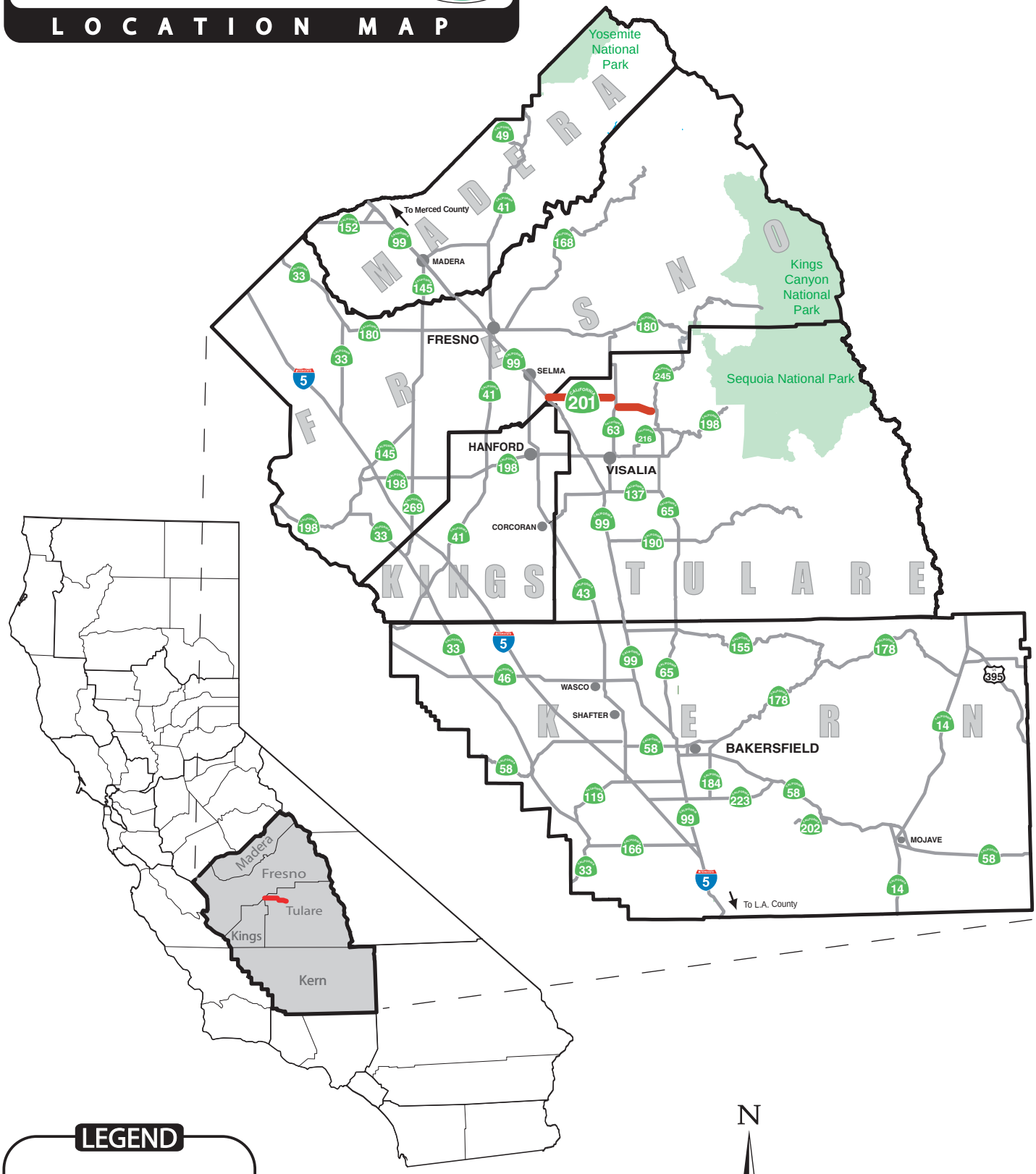
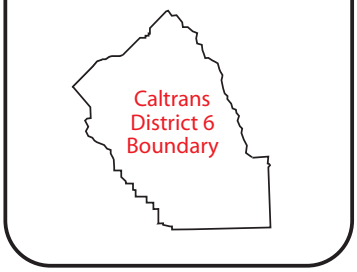
# STATE ROUTE 201

TRANSPORTATION CONCEPT REPORT

## LOCATION MAP




## LEGEND

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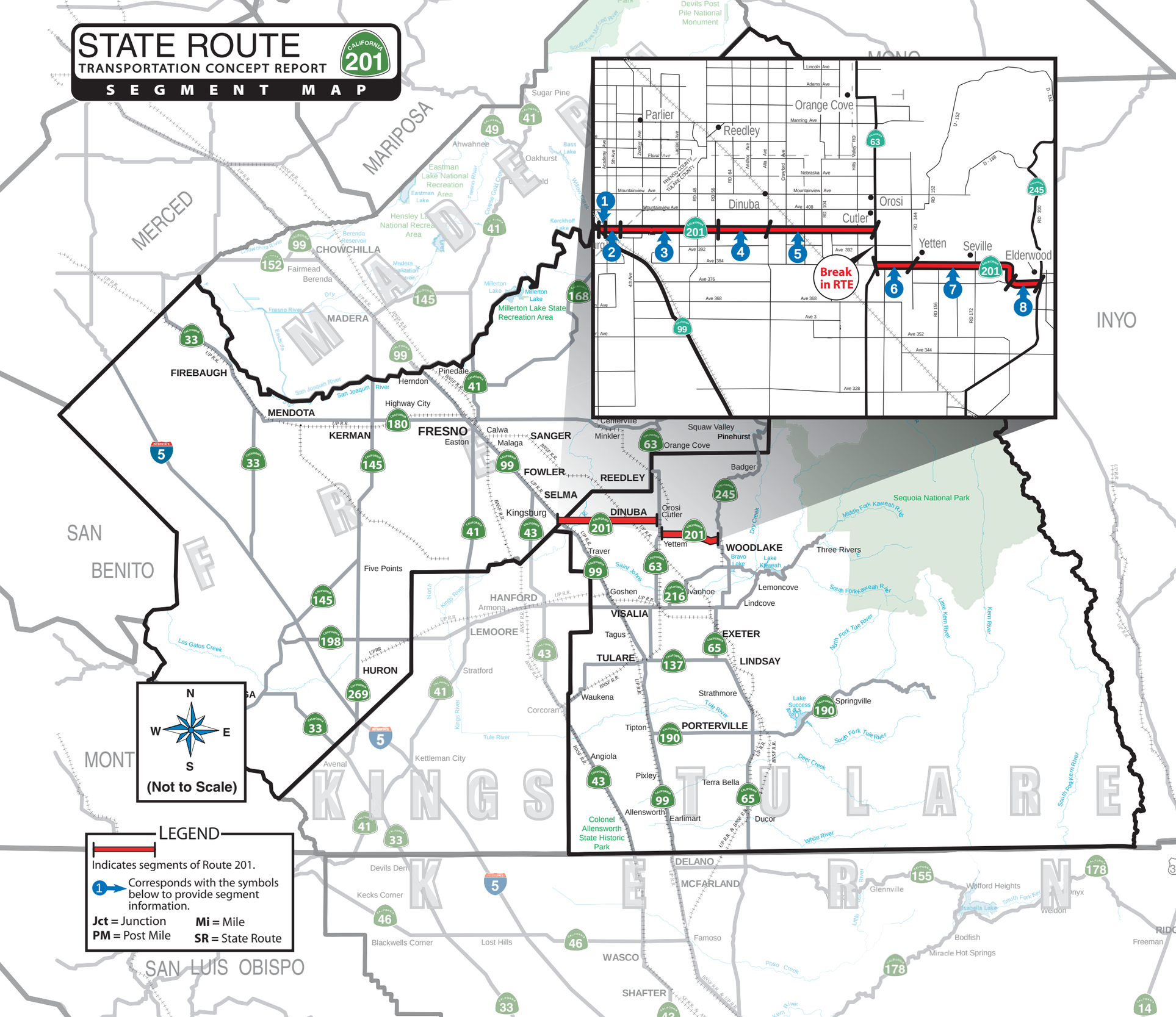
Not To Scale

# STATE ROUTE 201
## TRANSPORTATION CONCEPT REPORT
## SEGMENT MAP



## Fresno County

1. **Segment 1:** SR 201 PM 0.00 / 0.25
   RTE 99 to Marion Street / 10th Ave
2. **Segment 2:** SR 201 PM 0.25 / 1.30
   Marion Street / 10th Ave to Fresno / Tulare County Line

## Tulare County

3. **Segment 3:** SR 201 PM 0.00 / 0.28
   Fresno / Tulare County Line to Road 56
4. **Segment 4:** SR 201 PM 0.28 / 1.34
   Road 56 to Road 80
5. **Segment 5:** SR 201 PM 7.95 / 13.98
   Road 80 to South JCT RTE 63
   **<Break in Route>**
6. **Segment 6:** SR 201 PM 13.98 / 16.01
   South JCT RTE 63 to Road 144 (Yettem)
7. **Segment 7:** SR 201 PM 16.01 / 22.20
   Road 144 (Yettem) to AVE 376 (Piedra DR)
8. **Segment 8:** SR 201 PM 22.20 / 23.96
   AVE 376 (Piedra DR) to JCT RTE 245 (Elderwood Junction)

# Transportation Concept Report
# State Route 201
# December 2009

## I. INTRODUCTION

A Transportation Concept Report (TCR) is a long-range System Planning document that establishes a planning concept for the corridor through the year 2030. The TCR provides Route data and information, as well as information on operating characteristics for current and projected years (2009, 2020, and 2030).

Considering reasonable financial and physical constraints, the TCR defines the appropriate Concept Level of Service (LOS) and facility type(s) for each Route. It also broadly identifies the nature and extent of improvements needed to attain that Concept LOS. The primary focus for LOS attainment is capacity-enhancing improvements such as lane additions.

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D, or whichever LOS is feasible to attain. For the purposes of this document the Concept LOS is a "target" LOS determined by the importance of the Route and the environmental context. A deficiency (need for improvement) is triggered when the actual LOS falls below the Concept LOS.

The Ultimate Transportation Corridor (UTC), as identified in this TCR, also ensures that adequate right-of-way (ROW) is preserved for ultimate facility projects beyond 2030. Caltrans District 6 Planning staff should be consulted for the interim ROW (prior to ultimate construction) for a specific location along the corridor. The UTC is only a guideline; please see note on Page 6.

The TCR also identifies alternate modes of transportation (public transit, rail, bicycle, and pedestrians) and the deployment of Intelligent Transportation Systems (ITS) as integral to a Route's future development. ITS refer to a wide variety of tools and techniques that focus on addressing transportation problems by improving the efficiency and safety of the existing transportation infrastructure. These tools rely on the integration of high tech computing and information sharing.

This document identifies the initial and conceptual planning phase that leads to subsequent programming and the project development process. Consideration of the availability of funding from the various sources of transportation programming funds is the public decision making process that sets priorities and funds projects envisioned in long range transportation plans. It commits expected revenues over a multi-year period to transportation projects. Programming schedules capital outlay projects for development and implementation. Programming documents include Federal, State, Regional, and

Metropolitan Transportation Plans (please see Appendix E, Page 24 - 26, for a complete description). Consequently, the specific nature of proposed improvements such as roadway width, number of lanes, and access control might change in later project development stages. Final determinations are normally made during the Project Study Report (PSR) and design phases.

The TCR for Route 201 was prepared by District 6 Planning staff in cooperation with local and regional agencies and other Caltrans functional units. As such, it will serve as a guide in the cooperative planning and implementation of transportation and land use decisions.

TCRs should be considered "living documents," and subject to amendment as various projects are completed and conditions change. District 6 Planning staff will be updating the TCR as needed.

## II. ROUTE DESCRIPTION AND PURPOSE

Route 201 is officially described in the California Streets & Highways Code Section 300:

501. Route 201 is from:

(a) Route 99 near Kingsburg easterly to Route 63.
(b) Route 63 easterly to Route 245.

**Begins**: Route 201 begins in the City of Kingsburg, Fresno County, at its junction with Route 99. The Route serves local traffic within the City limits of Kingsburg and is the only east – west road that traverses the entire City. Within the City, Route 201 is known as "Sierra Street." Caltrans District 6 has received a request to relinquish the portion of Route 201 within the City limits of the City of Kingsburg. The City is pursuing this via a legislative relinquishment. If the relinquishment is completed, Route 201 will begin at Madsen Avenue, the eastern City limit of Kingsburg. Since this will be a legislative relinquishment, it will not be necessary to identify an alternative roadway for the section that has been given to the City. However, local traffic already uses Avenue 384 in Tulare County and Mountain View/Avenue 416 in Fresno/Tulare Counties as an alternative to Route 201 through the City of Kingsburg and its associated urban traffic. While these are not official alternatives, either could be given consideration in the future.

**Ends**: Route 201 ends at the junction of Route 245 (Elderwood Junction; also known as Stafford's Corner) in Tulare County.

**Length**: Route 201 is comprised of 25.34 miles of highway. The highway is split at its junction with Route 63 (TUL PM 13.97), where it overlaps with this Route for approximately 2.00 miles.

**Land Use:** Route 201 lies in the central San Joaquin Valley and traverses the area in a west-to-east direction. With the exception of the highway portions within the urban areas

of Kingsburg, agriculture comprises the most dominant land use along this Route's corridor, with the Route serving as a farm-to-market corridor. Predominant agriculture includes vegetable crops, orchards and vineyard with some limited dairy production and livestock. This Route is primarily rural in nature with the exception of the portion through the City of Kingsburg. Outside of the City of Kingsburg, there are three medium sized, seasonally affected packing houses, two elementary schools (Kings River and Grand View Elementary Schools) and two high schools (Yettam Continuation and Esperanza High Schools); there are no major residential, commercial, or industrial areas. Within the City, there are two schools, Kingsburg High School, and Oasis Continuation High School. Similarly, large traffic generating entities, such as shopping and service centers are found only within the City of Kingsburg.

**Terrain**: With the exception of a short stretch of this highway in Tulare County, between TUL PM 21.23 (Friant-Kern Canal) and PM 23.05 (Elderwood Junction), the highway is located on flat terrain. This portion from the Friant-Kern Canal to Elderwood Junction is rolling foothill terrain.

## A. Modal Alternatives

**Passenger Rail Service:** At the present time, there is no passenger rail service available along this Route or for the communities located on the Route. The Union Pacific/Southern Pacific (UP/SP) railroad parallels Route 99, and crosses Route 201, in the City of Kingsburg. At this time, the tracks are for the movement of freight only.

The San Joaquin Valley Railroad crosses this Route at PM 9.60 in Tulare County. There is a concern that this rail line, important for goods movement and the economy of the region, will be abandoned. If the line is retained, these tracks could continue to be used for freight movement, and possibly for a future north-south light- or passenger-rail system, if the need arose and if all parties agreed.

**High Speed Rail:** The California High Speed Rail Authority (HSRA) has developed a plan to build a high-speed rail line, capable of reaching speeds of 220 miles per hour that would service the major metropolitan centers of California. The rail line would eventually run from San Diego to as far north as Sacramento, with several proposed stations in the San Joaquin Valley. It is projected that 32 million inter-city passengers and another 10 million commuters would use the system per year. Based on a comprehensive screening evaluation of alignment and station options, the Authority recommended alignments through the Valley that included both the UP/SP and Burlington Northern/Santa Fe (BNSF) railroad corridors (both running generally parallel to Route 99). Proposed Valley stations include Bakersfield, Fresno, Merced, Modesto, Stockton, and Sacramento. Total cost of the high-speed rail is estimated to be $40 billion. A bond measure to fund at least a portion of the High-Speed Rail was passed in November 2008. The bond measure authorizes $9.95 billion in spending for high-speed rail improvements and other rail services. With the passage of this bond, construction could begin as early as 2011.

The Federal Railroad Administration's (FRA) high-speed and passenger rail funding guidelines were released June 17, 2009. It appears to put California's proposed 800-mile statewide system at the forefront for a significant share of $8 billion in stimulus funding for high-speed trains as California is the only state in the country that already has in place voter-approved financing, environmental clearances, and an adopted Route for a true high-speed train. The California High-Speed Rail Authority hopes to secure a significant federal stimulus grant consistent with the ongoing project's progress. The stimulus money is part of the FRA agency's implementation of President Obama's vision for an American network of high-speed trains. The deadline for pre-applications was July 10, 2009, with a deadline of August 24, 2009 for most final application papers. The FRA said it intends to release the first round of grants in the fall. California's application for high-speed train funding will include projects for virtually every section within the 800-mile system.

**Transit Services**: Within Fresno County, no scheduled transit services are available. However, the Fresno County Rural Transit Agency's (FCRTA's) Kingsburg Transit does offer demand response services (i.e. Dial-A-Ride services) within the City of Kingsburg. These services may occasionally use a portion of Route 201 for its in-town shuttle.

Within Tulare County, Tulare County Area Transit (TCaT) offers twice-a-day transit services to its north county residents via its Dinuba-London-Traver-Delft Colony Route. The portion of this Route between Road 56 (TUL PM 4.95) to Alta Avenue (TUL PM 7.95) uses Route 201. TCaT also offers twice-a-day transit services via its North County Route from/to Visalia to Yettem and Seville (to the Seville Market) or from/to Cutler/Orosi. The portion of this Route from the south junction of Route 63 (TUL PM 13.98) to Road 156/Seville Market (TUL PM17.55) is routed along Route 201.

Neither Greyhound or the Orange Belt Stageline, this area's two primary inter-city bus companies, provide any normally scheduled services along any portion of this Route.

**Park & Ride Facilities:** No park and ride facilities are located at any point along this Route.

**Bicycle Routes & Facilities:** The entire length of Route 201, being a 2-lane conventional state highway, is open to bicycle travel under a "share-the-road" basis. Additionally, both segments within Fresno County have been designated as either Class 2 or Class 3 bicycle facilities. Wide shoulders are available to bike riders within the City of Kingsburg but the remainder of the roadway lacks these shoulders.

In Tulare County, all segments are open to bicycle travel bicyclists under a "share-the-road" scenario. The highway lacks shoulders.

Please refer to Appendix B, Page 16, for more detailed information on bicycle routes and facilities along Route 201.

**Pedestrian Needs/Facilities:** The section of the Route within the City of Kingsburg is complaint in regard to Pedestrian and Americans with Disabilities Act (ADA) issues. The remainder of this Route is very rural with few, if any, current pedestrian or ADA concerns at the present time. Nonetheless, any future development along this Route would need to be ADA compliant.

Please refer to Appendix C, Page 17, for more detailed information on pedestrian and ADA access along Route 201.

**B. Intelligent Transportation Systems (ITS):** At present there are no ITS applications located on this Route, but there is a Changeable Message Sign proposed near Road 116 (TUL-201-PM- 12.75). The future addition of ITS technology may enhance the operational efficiency and safety of the area by informing motorists of traffic congestion, inclement weather such as fog and dust storms, construction delays and accidents. The same can be said for the proposed 511 system that is being considered by Fresno and Tulare counties.

Please refer to Appendix D, Pages 18 – 21, for more detailed information on Intelligent Transportation Systems and implementation of the proposed 511 system.

**C. Route 201 Highway Facts**

**Historical Information:** Route 201 was added to the State highway system in 1933. Before being renumbered in July 1964, along with all California highways, this Route was referred to as State Legislative Route 131.

**Jurisdiction:** This Transportation Concept Report covers this Route's entire length from its beginning in the City of Kingsburg (at Route 99 – FRE PM 0.00) in south central Fresno County to its eastern terminus with Route 245 at Elderwood Junction (i.e. north of Woodlake) in Tulare County (TUL PM 23.95). The entire Route is located within Caltrans District 6's jurisdiction. If the relinquishment to the City of Kingsburg is completed, the Route will begin at Madsen Avenue (FRE PM 1.34) in Fresno County, rather than Route 99.

**Existing/Future Facility**: With the exception of the urban areas within the City of Kingsburg (FRE PM 0.00 to PM 1.34), this Route primarily provides access to and from agricultural related endeavors that occur along its corridor. Within the City of Kingsburg, the Route functions as a major arterial.

With the exception of Segment 1 (FRE PM 0.00 to PM 1.34), this entire Route is comprised of rural 2-lane conventional highway. Within Segment 1(FRE PM 0.00 to 0.28 – City of Kingsburg), Route 201 is comprised of a 4-lane divided highway while within Segment 2 (FRE PM 0.28 to PM 1.34 - City of Kingsburg) the Route is comprised of a 2-lane conventional highway with a full length center turn lane.

As shown on the Master Segment Map (Page ii), this Route is split into two alignments. The northwestern alignment begins at its junction with Route 99 (FRE PM 0.00 – City of Kingsburg) and continues in an easterly direction to its junction with Route 63 (TUL L14.00). The southeastern portion begins at TUL PM L14.01 and again continues easterly to the Route's end at Route 245 (TUL PM 23.957; Elderwood Junction). The Route's two portions are connected via a 2.00 mile north-south traverse using Route 63 (Route 63 TUL PM 21.56 to Route 63 TUL PM 19.18).

**Please note:** The number of lanes needed to meet the Ultimate Transportation Concept (UTC) for this Route is only a guideline. The minimum right-of-way is "subject to change" in urban and suburban areas where a Route also serves local circulation needs. The need to widen the roadway beyond the UTC may be necessary to maintain the target Level of Service (LOS). The local jurisdictions should endeavor to maintain adequate right-of-way to maintain the target LOS, which in an urban setting could exceed the UTC number of lanes. Where the State legislature has designated the Route as part of the Freeway and Expressway System, interchange and freeway right-of-way should be part of the General Plan so as not to adversely affect development.

Caltrans has previously identified the need to widen the 2-lane section of the Route within the City of Kingsburg to 4 lanes in order to maintain the LOS that the State typically strives for on this type of facility. However, it may not be possible to widen this section of the highway any further due to existing development. It is understood that the four-lane concept does not reflect the City's vision for their downtown area and that the City has expressed a desire that the highway not be widened. Maintaining the Route as a two-lane facility would necessitate the City accepting a lower level of service. Caltrans will work with our local partners to develop context sensitive solutions for this section of the Route that also serves as one of the City of Kingsburg's main streets.

Future plans call for only very minor improvements on the remainder of the roadway (i.e. the addition of turn lanes, signalized intersections, shoulders and perhaps one or more passing lanes) and a Changeable Message Sign proposed near Road 116.

For additional information on existing and future facilities, please refer to the Summary Charts, 1-A and 1-B, Pages 11 and 12, respectively.

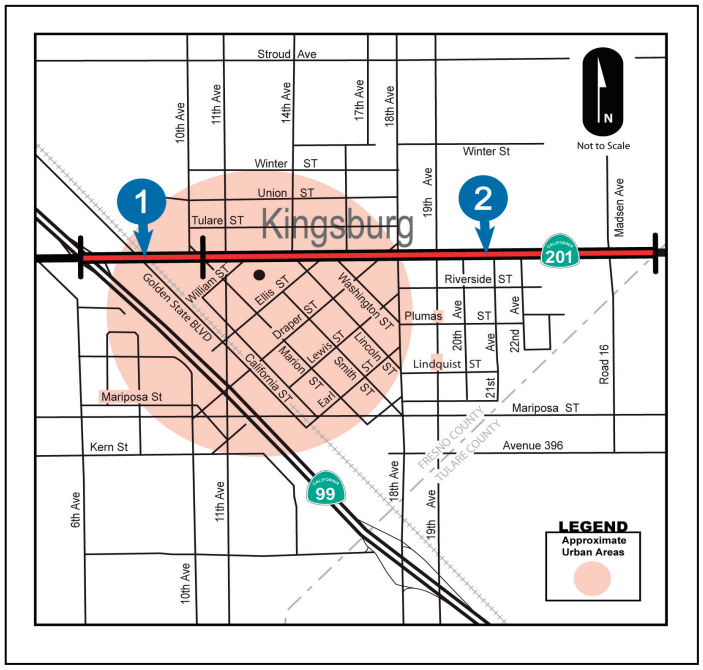
**General Environmental Concerns:** Environmental concerns vary from segment to segment and are presented in this document with each segment's description. Many of these sites are monitored by Caltrans' Cultural Resources staff and/or Native American Consultants and may be further subject to considerations under State and Federal laws relating to cultural resources management. Area specific environmental concerns are presented in the discussion of each segment in Section 4, Pages 7, 8, and 9, of this document.

## III. SEGMENT MAP

At the beginning of this document, Page ii, is the Master Segment Map showing the location of this highway's eight segments detailed within this TCR. Segments 1 & 2 are located within Fresno County while Segments 3 – 8 are located within Tulare County.

## IV. GEOMETRICS, LAND USE AND ENVIRONMENTAL CONSIDERATIONS

This section provides an overview of Route 201's geometrics, including land use, environmental considerations, and technical information, both current and forecasted. The overview is divided into three segment groups. Each group has a detailed segment map and information concerning the segments covered within that group.




**Segments 1-2: Junction Route 99 to the Tulare County Line**

**Begins:** At the junction of Route 99 (FRE PM 0.00) in Fresno County. If the relinquishment to the City of Kingsburg is implemented, the Route would begin at Madsen Avenue (FRE PM 1.34).

**Ends:** At the Fresno/Tulare County Line (FRE PM 1.34 or TUL PM 0.00).

**Land Use:** Within the City of Kingsburg, land uses are urban and include residential, commercial, and industrial.

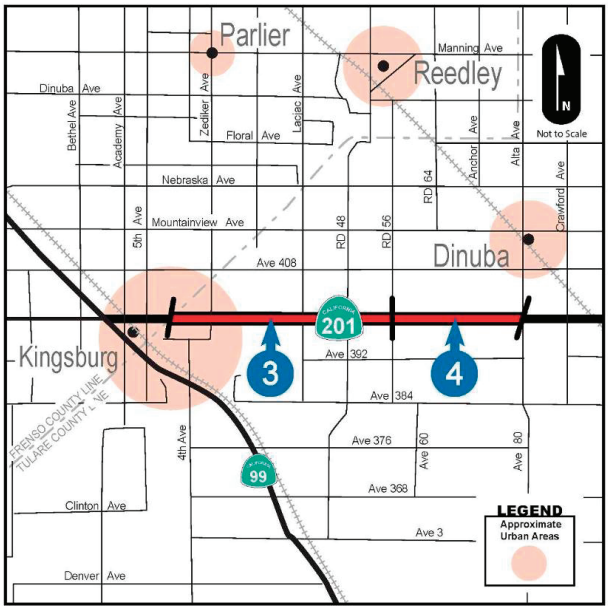
Outside of the City, land use is primarily agricultural. Uses include vegetable crops, orchards, and vineyard with some limited dairy production and livestock. The Union Pacific Railroad crosses Route 201 at FRE PM 0.16.

**Facility**: Between its beginning at Route 99 (FRE PM 0.0) and Marion Street (FRE PM 0.28), the Route is a four-lane conventional highway. From Marion Street to the Fresno/Tulare County line (FRE PM 1.3/TUL PM 0.0), the Route is a two-lane conventional highway.

**Interchanges and other State Highway connections within Segments 1-2:** Route 201 begins with a signalized grade-separated intersection with Route 99 at Fresno PM 0.00. There are no other State Highway connections in this segment.

**Environmental / Archeological Concerns:** The following environmental and/or archeological concerns may be encountered within Segments 1-2:

- Encroachment into and/or the displacement of the existing built environment within the city of Kingsburg; and
- The presence of the Santa Fe Railroad facilities located just east of Route 99 (FRE PM 0.16) in Segment 1.




**Segments 3-4: Tulare County Line to Road 80**

**Begins:** At the Fresno/Tulare County Line (TUL PM 0.00) in Tulare County.

**Ends:** At the intersection of Road 80 (TUL PM 7.95) in Tulare County.

**Land Use:** The land use within Segments 3 and 4 is predominantly agricultural. Uses include vegetable crops, orchards, and vineyard with some limited dairy production and livestock.

**Facility:** Between the Fresno/Tulare County line to the intersection of Road 80, the facility is a 2-lane conventional highway.

**Interchanges and other State highway connections:**
No interchanges or intersections with other State highways occur within Segments 3 or 4.

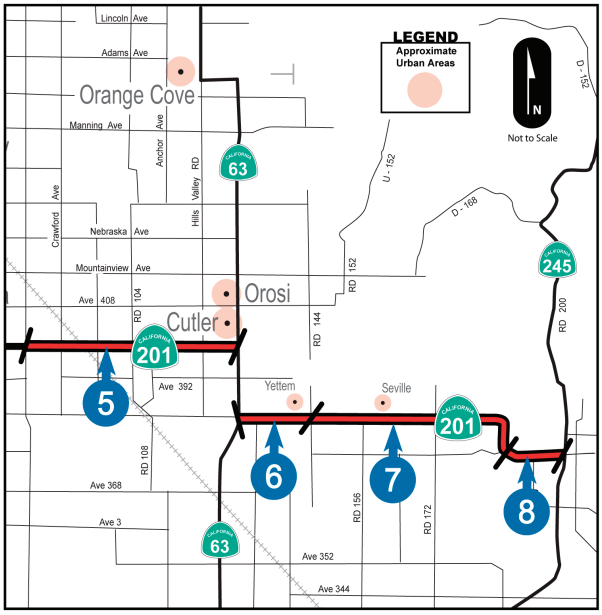
**Environmental/Archeological Concerns:** The following environmental and/or archeological concerns may be encountered within Segments 3 and 4:

- The possible encroachment into archeological sites primarily at/near the Kings River crossing (TUL PM 1.85); and
- Endangered species habitats and wetlands (various locations), but primarily along the Kings River (TUL PM 1.85).

**Segments 5 - 8 Road 80 to the Junction of Route 245 (Elderwood Junction)**

**Begins:** At Road 80 (TUL PM 7.95) in Tulare County.

**Ends:** At the Jct. of Route 245 (Elderwood Junction – TUL PM 23.96) in Tulare County.




**Land Use:** Land uses within Segments 5 - 8 are also predominantly agricultural related, such as dry land farming, irrigated field crops (mostly cotton and alfalfa), vineyards, dairies, and fruit orchards. Two large fruit processing/packing houses and one elementary school are also within these four segments. Within the unincorporated communities of Yettam and Seville, the environment changes from predominantly agricultural to a non-homogeneous mix of small commercial and retail establishments along with many residential units.

In season, the movement of large agricultural implements (i.e. tractors, combines, mechanical picking equipment, etc.) is a frequent occurrence within these four segments. Such movement of equipment occasionally hinders the free flow of traffic along this highway.

**Interchanges and other State highway connections within Segments 5-8:** Route 201 has 2 signalized at-grade intersections with Route 63. The north junction is at Tulare PM L13.97 (Route 63 TUL PM 21.56) and the south intersection (2.00 miles south along Route 63) is at TUL PM L13.98 (Route 63 TUL PM 19.18).

Route 201 ends at its junction with Route 245 (TUL PM 23.95) in Tulare County. This intersection is a two-way stop controlled intersection with a stop sign on Route 201.

**Environmental/Archeological Concerns:** The following environmental and/or archeological concerns may need to be addressed within Segments 5-8:

- The possible encroachment into archeological sites at various determined and undetermined locations;
- Possible endangered species habitats and wetlands (various locations);
- Possible environmental and/or right-of-way problems in conjunction with the Friant-Kern Canal crossing at PM 21.25; and
- Encroachment into and/or the displacement of the existing built environment (primarily in the vicinity of the Yettam, Seville, and Elderwood Junction/Route 245).

# V. CONCEPT RATIONALE

**Route Concept LOS:**

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D. However, for some highways this is not practical. The Concept LOS for Route 201 is D. The limited availability of transportation funding, the fact that the Route is part of the "Secondary System" of highways, and is mostly rural in nature makes this LOS acceptable to our local partners and to Caltrans.

**Rural:** LOS D was assigned to all of the rural portions of Route 201 due to the regional importance of this Route and the anticipated traffic volumes.

**Urban:** LOS D was also assigned to the urban portions of this route (Segments 1 and 2) within the City of Kingsburg. LOS D also signifies that attaining better traffic operations is more difficult due to heavier traffic congestion and construction complexities typically encountered when working in existing urban environments.

**Concept Facility**: The Concept Facility (i.e. between now and the year 2030) for Route 201 is fairly uniform. The highway will consist of one section of urban 4-lane highway, one segment of 2-lane conventional roadway, and numerous sections of "2C(I)," or 2-lane conventional highways with improvements such as widened or added shoulders, added or enhanced turn lanes, enhanced signalizations, bike lanes, etc., to be installed by the year 2030. The only other improvement planned is a Changeable Message Sign proposed near Road 116.

**Ultimate Facility:** This Route's Ultimate Facility (i.e. year 2030 and beyond) improvement list is as follows:

- Segment 1 already meets the Ultimate Concept for this portion of the Route; there are no planned improvements.
- Segment 2 is planned to be improved from a 2-lane conventional highway to a 4-lane conventional highway. However, it may not be possible to widen this section of the highway any further due to existing development. It is understood that the four-lane concept does not reflect the City's vision for their downtown area and that the City has expressed a desire that the highway not be widened. Maintaining the Route as a two-lane facility would necessitate the City accepting a lower level of service. Caltrans will work with our local partners to develop context sensitive solutions for this section of the section of the Route that also serves as one of the City of Kingsburg's main streets.
- Segments 3 – 8 will remain a 2-lane conventional highway, but with the potential for future improvements such as turn lanes, signals, passing lanes, etc.

Please note: The number of lanes needed to meet the Ultimate Transportation Concept (UTC) for this Route is only a guideline. The minimum right-of-way is "subject to

change" in urban and suburban areas where a Route also serves local circulation needs. The need to widen the roadway beyond the UTC may be necessary to maintain the target Level of Service (LOS). The local jurisdictions should endeavor to maintain adequate right-of-way to maintain the target LOS, which in an urban setting could exceed the UTC number of lanes. Where the State legislature has designated the Route as part of the Freeway and Expressway System, interchange and freeway right-of-way should be part of the General Plan so as not to adversely affect development.

## VI. STATE ROUTE 201 TRANSPORTATION CONCEPT REPORT SUMMARY CHART

The Summary Charts on the following two pages divide Route 201 into eight separate segments. The charts provide descriptive and technical information, both current and forecasted, for the State highway. They also have a linear geographic diagram that illustrates the major state and local highway facilities, along with key natural features and city/county boundaries, current highway geometrics, i.e., conventional highway, expressway, or freeway. The Summary Charts delineate the functional classification, various highway designations, environmental information, and General Plan information. The "Chart Explanation" on the left side of each chart defines what is shown on the chart with the exception of self-explanatory items.

## VII. REVIEW OF ROUTE 201 PERFORMANCE: CURRENT AND FUTURE

A comparison of the current and future operating traffic LOS to the designated Route Concept LOS is a way of measuring the existing and future performance levels on a State highway. For purposes of this review, a segment on Route 201 is deficient when it operates below the designated Route Concept LOS of D. As of the year 2009, Route 201 is operating at LOS C or D throughout all of Fresno County, and LOS B or C within all of Tulare County. By 2030, <u>without</u> improvements, this Route will be below its Concept LOS of D in Segments 1 and 2. In Segments 3 through 8, the Route will meet or exceed its Concept LOS of D. No improvements are scheduled for the Route.

Although Route 201 is primarily a 2-lane conventional highway for a majority of its length, the section of the Route from Route 99 to Route 63 is a Terminal Access (TA) Route under the STAA network and is classified as Regionally Significant. Some sections experience heavy truck volumes. Segments 1 and 2 have truck volumes of 14%; Segments 3, 4, and 5 have truck volumes of 26%; and Segments 6, 7, and 8 experience volumes between 14 and 21%. Additionally, during certain times of the year, the movement of large agricultural implements (i.e. tractors, combines, mechanical picking equipment etc.) is a common occurrence within the rural Segments of this Route. Such movement of equipment occasionally hinders the free flow of traffic along this highway.

# Transportation Concept Report

## State Route 201



LEGEND

Existing Lanes

Planned or Programmed by 2030

Add Through Lanes

Conventional

Expressway

Number of Lanes 2 4

* Length of segments not to scale

Dir = Direction

Route 99 | Marion St | Fresno/Tulare Co Line | Road 56 | Road 80 | N Jct Route 63 | Route 144 | Ave 376 | Route

PM 0.0 | PM 0.28 | PM 0.0 | PM 4.95 | PM 7.95 | PM 13.98 | PM 16.01 | PM 22.20 | PM 23.96

Dir W - E

K I N G S B U R G

Break in Route

| SEGMENT | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| County / Route | FRE / 201 | FRE / 201 | TUL / 201 | TUL / 201 | TUL / 201 | TUL / 201 | TUL / 201 | TUL / 201 |
| Description Begin | ROUTE 99 | MARION ST | FRESNO/TULARE CO LINE | ROAD 56 | ROAD 80 | N JCT ROUTE 63 | ROUTE 144 | AVE 376 |
| Description End | MARION ST | FRESNO/TULARE CO LINE | ROAD 56 | ROAD 80 | N JCT ROUTE 63 | ROUTE 144 | AVE 376 | ROUTE 245 |
| Postmile Limits Begin/End (PM) | 0.0 / 0.28 | 0.28 / 1.34 | 0.0 / 4.95 | 4.95 / 7.95 | 7.95 / 13.97 | 13.98 / 16.01 | 16.01 / 22.20 | 22.20 / 23.96 |
| Length (MI) | 0.28 | 1.06 | 4.95 | 3.00 | 6.00 | 2.03 | 6.19 | 1.76 |
| Rural / Urban | Urban | Urban | Rural | Rural | Rural | Rural | Rural | Rural |
| Terrain | Flat | Flat | Flat | Flat | Flat | Flat | Flat | Rolling |
| **ROW**: Range Existing (FT) | 50 / 50 | 50 / 84 | 50 / 110 | 50 / 110 | 50 / 110 | 50 / 110 | 60 / 110 | 76 / 110 |
| Median Range (FT) | 0 / 0 | 0 / 0 | 21 / 21 | 0 / 21 | 0 / 14 | 0 / 22 | 0 / 22 | 0 / 0 |
| Shoulder Range (FT) - Treated | 2 / 8 | 2 / 8 | 10 / 10 | 2 / 8 | 2 / 8 | 2 / 10 | 6 / 8 | 6 / 8 |
| Lane Width (FT) | 12 | 12 | 12 | 12 | 11 | 11 | 11 | 10 |
| Ultimate ROW (FT) | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| **Facility**: Existing | 4C | 2C | 2C | 2C | 2C | 2C | 2C | 2C |
| 2030 Concept | 4C | 2C(I)+ | 2C(I)+ | 2C(I)+ | 2C(I)+ | 2C(I)+ | 2C(I)+ | 2C(I)+ |
| UTC | 4C | 4C* | 2C(I)+ | 2C(I)+ | 2C(I)+ | 2C(I)+ | 2C(I)+ | 2C(I)+ |
| **LOS**: 2009 | C | D | C | C | B | C | C | C |
| **LOS**: 2020 | D | E | C | C | C | D | C | C |
| **LOS**: 2030 (Forecasted LOS) | E | E | D | D | D | D | D | C |
| **LOS**: Concept 2030 (Target LOS) | D | D** | D | D | D | D | D | D |
| Deficiency/Year Deficient | 2030 | 2020 | N/A | N/A | N/A | N/A | N/A | N/A |
| Project in STIP/RTP (Y/N) | No | No | No | No | No | No | No | No |
| LOS W/ Concept Improvement | N/A*** | N/A*** | N/A | N/A | N/A | N/A | N/A | N/A |
| **Directional Split** (Peak Hour) | 62/38 | 62/38 | 56/44 | 56/46 | 68/32 | 53/47 | 54/46 | 55/45 |
| **AADT**: 2009 | 17,200 | 13,000 | 5,200 | 4,500 | 3,100 | 4,800 | 4,800 | 2,600 |
| **AADT**: 2020 | 26,000 | 19,700 | 7,400 | 6,400 | 5,500 | 7,600 | 8,200 | 3,600 |
| **AADT**: 2030 | 38,400 | 29,800 | 10,600 | 9,200 | 9,900 | 12,300 | 13,700 | 4,800 |
| **Peak Hour**: 2009 | 1,800 | 1,350 | 520 | 450 | 310 | 500 | 500 | 270 |
| **Peak Hour**: 2020 | 2,700 | 2,000 | 700 | 600 | 600 | 800 | 850 | 400 |
| **Peak Hour**: 2030 | 4,000 | 3,100 | 1,100 | 900 | 1,000 | 1,300 | 1,430 | 500 |
| **% Trucks**: AADT | 14% | 14% | 26% | 26% | 26% | 14% | 21% | 18% |
| **% Trucks**: Peak Hour | 8% | 5% | 11% | 11% | 13% | 14% | 21% | 18% |

**Segment**: Is self-explanatory except for several data sets:

**Rural/Urban**: Indicates whether the segment is in a rural area or city limits.

**Terrain**: Shows the general highway grade: minimal grade = level; moderate grade = rolling; and severe grade = mountainous.

**ROW**: Portrays Right-of-Way (ROW) and geometric data in feet.

**Shoulder Range**: Is a range of treated surface (8' standard), both inside and outside shoulders.

**Ultimate Transportation Corridor (UTC)**: Is the typical ROW needed for the ultimate facility,i.e., 8 lane freeway(8F) 218 feet is the standard typical UTC ROW - will be updated upon corridor plan lining by specific sections of highway.

**Facility:** Shows the Existing Facility, the desired facility type (2030 Concept) by 2030- RTPAs and Caltrans, and the Ultimate Facility to preserve ROW and plan line beyond 2030. 2C(I) indicates that the highway has been improved in select locations with operational or safety improvements.

**LOS**: The current LOS (level of service), along with the expected calculated LOS in 2020 and 2030. The 2030 Concept is the target LOS desired, i.e., LOS C, for attainment by 2030.

**Deficiency**: Occurs when the target LOS is degraded, i.e., LOS D worse than LOS C, with the year of occurrence shown. It also shows whether a capacity improving project is in the STIP, and what the LOS would be with the 2030 Concept improvement.

**Directional Split**: Denotes the split in the peak hour traffic flow on a directional basis (NB/SB or WB/EB) either in the morning (AM) or evening (PM).

**% Trucks:** shows the percentage of trucks for AADT and Peak Hour.

**AADT**: signifies Annual Average Daily Traffic.

**Peak Hour**: Indicates a representation of the maximum hour of traffic flow during the day.

**N/A** - Not deficient, no project recommended/not applicable.

**4C*** - the four-lane concept may not be possible due to existing development.

**D** -** May not meet the Concept LOS if the Route remains 2 lanes

**N/A*** - Deficient, no project recommended.

**(I)+** 2-lane conventional highway improvements, turn lanes, signals, passing lanes, etc.

# Transportation Concept Report

## State Route 201

**SUMMARY CHART 1B**

LEGEND

**Existing Lanes** — Conventional / Expressway

**Planned or Programmed by 2030** — Add Through Lanes

Number of Lanes: 2, 4

* Length of segments not to scale

Dir = Direction

Route 99 | Marion St | Fresno/Tulare Co Line | Road 56 | Road 80 | N Jct Route 63 | Route 144 | Ave 376

PM 0.0 (Dir W - E) | PM 0.28 | PM 0.0 | PM 4.95 | PM 7.95 | PM 13.98 | PM 16.01 | PM 22.20 | PM 23.96

K I N G S B U R G

Break in Route

**Segment**: Is self-explanatory except for several data sets:

**Functional Classification:** A process by which streets and highways are grouped into or classification systems.

**NHS (National Highway System):** Included in the NHS is all interstate routes, a large percentage of urban and rural principal arterials, the defense strategic highway network, and strategic highway connectors.

**Freeway/Expressway System:** The Statewide system of highways declared to be essential to the future development of California.

**Regionally Significant:** Serves regional transportation needs including at a minimum all principal arterial highways and all fixed guideway transit facilities.

**STRAHNET:** A highway that provides defense access, continuity, and emergency capabilities for movements of personnel and equipment in both peace and war.

**Lifeline:** A route on the State highway system that is deemed so critical to emergency response/life-saving activities of a region or the state that it must remain open.

**IRRS (Interregional Road System):** A series of State highway routes, outside the urbanized areas, that provide access to the State's economic centers, major recreational areas, and urban and rural regions.

**STAA (Surface Transportation Assistance Act):** This act required states to allow larger trucks on the National Network. "Terminal Access" routes are State highways that can accomodate STAA trucks. Other designations i.e., California Legal offer more limited access.

**Scenic:** A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers.

**ICES** (Intermodal Corridor of Economic Significance): Significant National Highway System Corridors that link intermodal faclities most directly, conveniently and efficiently to intrastate, interstate, and international markets.

**Yes*** = Designated Bike Lane or Bike Route in Roadway

| SEGMENT | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| County / Route | FRE / 201 | FRE / 201 | TUL / 201 | TUL / 201 | TUL / 201 | TUL / 201 | TUL / 201 | TUL / 201 |
| Description Begin | ROUTE 99 | MARION ST | FRESNO/TULARE CO LINE | ROAD 56 | ROAD 80 | N JCT ROUTE 63 | ROUTE 144 | AVE 376 |
| Description End | MARION ST | FRESNO/TULARE CO LINE | ROAD 56 | ROAD 80 | N JCT ROUTE 63 | ROUTE 144 | AVE 376 | ROUTE 245 |
| Postmile Limits Begin/End (PM) | 0.0 / 0.28 | 0.28 / 1.34 | 0.0 / 4.95 | 4.95 / 7.95 | 7.95 / 13.97 | 13.98 / 16.01 | 16.01 / 22.20 | 22.20 / 23.96 |
| Length (MI) | 0.28 | 1.06 | 4.95 | 3.00 | 6.00 | 2.03 | 6.19 | 1.76 |
| Functional Classificaton | Principal Arterial | Major Collector | Major Collector | Major Collector | Major Collector | Minor Collector | Minor Collector | Minor Collector |
| National Highway System (NHS) Y/N | NO | NO | NO | NO | NO | NO | NO | NO |
| Freeway/Expressway System | NO | NO | NO | NO | NO | NO | NO | NO |
| Regionally Significant Y/N | YES | YES | YES | YES | YES | YES | YES | YES |
| STRAHNET Y/N | NO | NO | NO | NO | NO | NO | NO | NO |
| Lifeline Y/N | NO | NO | NO | NO | NO | NO | NO | NO |
| **IRRS** (Yes: HE=High Emphasis, F=Focus, G=Gateway or No) | NO | NO | NO | NO | NO | NO | NO | NO |
| TRUCK NETWORK, STAA: (NN=National Network, TA=Terminal Access, CL= California Legal, R= Special Restrictions, or A=Advisory) | TA | TA | TA | TA | TA | TA | TA | TA |
| Scenic (Yes: Officially Designated, Eligible or No) | NO | NO | NO | NO | NO | NO | NO | NO |
| ICES (Intermodal Corridor of Economic Significance) (Y/N) | NO | NO | NO | NO | NO | NO | NO | NO |
| General Plan/RTP LOS Standard | Fresno Co LOS C; For RTP Regionally Significant System | Fresno Co LOS C; For RTP Regionally Significant System | Tulare Co LOS D; For CMP & RTP Regionally Significant | Tulare Co LOS D; For CMP & RTP Regionally Significant | Tulare Co LOS D; For CMP & RTP Regionally Significant | Tulare Co LOS D; For CMP & RTP Regionally Significant | Tulare Co LOS D; For CMP & RTP Regionally Significant | Tulare Co LOS D; For CMP & RTP Regionally Significant |
| General Plan/RTP Standard Highway Classification | EXPRESSWAY | EXPRESSWAY | EXPRESSWAY | EXPRESSWAY | EXPRESSWAY | EXPRESSWAY | EXPRESSWAY | EXPRESSWAY |
| Bikes/pedestrians Allowed (Y/N) | YES* | YES* | YES | YES | YES | YES | YES | YES |

An area of concern for future development of this highway is the section that passes through the City of Kingsburg. In the City, the Route functions as an arterial street, and considerable commercial and residential buildings currently exist adjacent to the highway right-of-way. The City of Kingsburg, through a Caltrans Community-Based Transportation Planning Grant, developed the 2007 Central Kingsburg Revitalization Plan. The plan identified physical design strategies to revitalize and increase the walkability of the City's historical downtown. The Route 201 corridor between Marion Street and 18th Avenue formed a part of the study area. Changes by the City to the corridor could potentially impact Route 201. Additionally, any future improvements or widening of Route 201 in this area will present challenges and the possible displacement of people and/or structures. This concern is one reason that the City of Kingsburg has requested that Caltrans relinquish to the City the section of the Route within the City limits.

Encroachment into and/or the displacement of the existing built environments in the vicinity of the unincorporated communities of Yettam and Seville, and existing development at Elderwood Junction, is also a concern.

Air quality standards will have an impact on transportation decisions for Route 201, as they will with any State highway. State and federal regulations govern air quality standards and these standards are controlled locally by the San Joaquin Valley Air Pollution Control District, whose main office is located in Fresno.

## VIII. PLANNED AND PROGRAMMED IMPROVEMENTS TO ROUTE 201

The following tables show both the planned and programmed projects for Route 201 over the next 30 years. The planned projects include *candidate* projects for the STIP as well as RTP projects. The programmed projects include *actual* projects in the SHOPP and STIP that are partially or fully funded. Project scope and technical data are for general informational purposes only. If current information is needed, please verify with Caltrans District 6 Planning at (559) 488-4347.

| Segment # PM From/To | Planned Projects | Programmed Projects |
|---|---|---|
| **FRESNO COUNTY** | | |
| **Segments 1 - 2:** PM 0.0/1.34 Jct. Route 99 (Begin Route) / Tulare County Line | There are currently no projects planned for these segments. | There are currently no projects programmed for these segments. |
| **TULARE COUNTY** | | |
| **Segments 3-8:** PM 0.0/23.96 Tulare Co. Line /Jct. Route 245 | There are currently no projects planned for these segments. | There are currently no projects programmed for these segments. |

# APPENDIX A
# REFERENCES

**Local Jurisdictions:**

**Council of Fresno County Governments (COFCG)**
2035 Tulare St., Suite 201
Fresno, CA 93721
(559) 233-4148

**Tulare County Association of Governments (TCAG)**
Resource Management Agency
5961 South Mooney Boulevard
Visalia, CA 93227
(559) 733-6291

**Air Quality District:**

**San Joaquin Valley Air Pollution Control District**
1990 E. Gettysburg Ave.
Fresno, CA 93726
(559) 230-6000

**Air Basin:** San Joaquin Valley
**Air Basin Determination:**
Severe non-attainment for ozone and serious for $PM^{10}$. Contact the Air District for more information.

**Transit Services:** (Listed from West to East)

**Fresno County Rural Transit Agency (FCRTA)**
2035 Tulare Street, Suite 201
Fresno, CA 93721
(559) 233-6789

**Tulare County Area Transit (TCaT)**
5961 So. Mooney Boulevard
Visalia, CA 93227
(559) 733-6291

**Traffic Accident Data:**

Caltrans District 6
Office of Traffic Investigations
1352 W. Olive
Fresno, CA 93728
(559) 488-4123

**Sources of Information - Caltrans:**

Traffic Congestion Relief Program, 2000
State Transportation Improvement Program (STIP) 2008
State Highway Operations and Protection Program (SHOPP) 2008.
Interregional Improvement Track-Interregional Road System Plan (ITSP), 1998, 2000
Caltrans District 6 Bicycle Route Inventory for California State Highways (District 6 Edition), May 2004 Office of System Planning

**Sources of Information - By County**

**Fresno County:**
Fresno County, Regional Transportation Plan (RTP) 2007, COFCG
Fresno County General Plan, Transportation & Circulation Element - Rural Bikeway Plan.
City of Kingsburg Bikeway and Trails Map
COFCG-Rideshare Program-2007
Comprehensive General Plan – Swedish Village of Kingsburg – 1992
Central Kingsburg Revitalization Plan – 2007
North Kingsburg Specific Plan - 2005

**Tulare County:**
TCAG Regional Transportation Plan (RTP) 2007
Tulare County Draft General Plan, 2007
TCAG 2002 Countywide Bicycle Transportation Plan, May, 2002

# APPENDIX B

## Bicycle Facilities
## Fresno & Tulare Counties
## December 2008

| Segment # PM From / To | Bicycle Facilities by Segment[1] [2] |
|---|---|
| 1-2<br>FRE PM 0.00 - 1.30<br>(Kingsburg)<br>Rte 99 to Fresno/Tulare Co Line | Both urban segments open to bicycle travel. Level terrain. *Ample paved shoulder*. Several alternate Routes currently exist for these two segments.[3][4]<br><br>Designation: Within Kingsburg Route 201 (i.e. Sierra St.) is 4-Lane conventional state highway from Route 99 to Marion St. and then a 2-lane conventional highway from Marion St. to the Fresno/Tulare County Line. The City of Kingsburg has designated the portion of Route 201 (i.e. Sierra St.) from Route 99 (PM 0.00) to Madsen Ave. (PM 1.25) as a Class 2 or 3 Bikeway. |
| 3-5<br>TULARE<br>PM 0.00 - L13.97<br>Tulare/Fresno Co Line to N. Jct Route 63 | All three segments are open to bicycle travel. Level terrain. *No shoulder*. No direct alternate Route currently exists for these three segments.[3][4]<br><br>Designation: 2-lane conventional state highway opened to bicycle travel. |
| BREAK IN ROUTE | |
| 6-8<br>TULARE<br>PM L13.98 - 23.96<br>S. Jct Route 63 to Jct Route 245<br>(Elderwood Junction) | All three segments are open to bicycle travel. Level terrain in segments 6-7 followed by hilly terrain in portions of segment 8. *No shoulders*. No direct alternate Route currently exists for these three segments.[3][4]<br><br>Designation: 2-lane conventional state highway opened to bicycle travel. |

[1] **Deputy Directive 64-R1 (DD-64-R1)** - **(Policy)** The Department provides for the needs of travelers of all ages and abilities in all programming, planning, design,, construction, operations and maintenance activities and products on the State highway system. The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycles, pedestrians and transit modes as integral elements of the transportation system."

[2] **PDPM - Chapter 31** (Non-motorized Transportation Facilities) Section 1 - General - Introduction
".... State and federal laws require Caltrans to promote and facilitate increased use of non-motorized transportation. The purpose of this chapter is to outline pertinent statutory requirements, planning policies, and implementing procedures regarding non-motorized transportation facilities."

[3] **Streets and Highway Code - Section 888** - "The department shall not construct a state highway as a freeway that will result in the severance or destruction of an existing major route for non-motorized transportation traffic and light motorcycles, unless it provides a reasonable, safe, and convenient alternate route, or such a route already exists."

[4] **California Vehicle Code - Section 21960 (Bikes & Pedestrians on Freeways)** (a) The Department of Transportation and local authorities [i.e. acting together - not separately], [may] by order, ordinance, or resolution, with respect to freeways, expressways ... prohibit or restrict the use of the freeways, expressways, or any portion thereof by pedestrians, bicycles or other non-motorized traffic..."

# APPENDIX C

## Pedestrian Facilities
## Fresno & Tulare Counties
## December 2008

| Segment (s) PM From / To | Pedestrian Facilities by Segment [1] [2] |
|---|---|
| 1-8<br>FRESNO & TULARE COUNTIES<br>All Segments - All Postmiles | Pedestrian and ADA concerns on Route 201, such as the installation and maintenance of crosswalks, sidewalks, ramps, curb cuts, hand railings, and pedestrian activated signal heads etc., are primarily to be found near this route's one major population center - Kingsburg (FRE PM 0.00 - 1.30) - and within the smaller roadside communities of Yettem and Seville in Tulare County (approximately TUL PM 15.50 and PM 19.50 respectively).<br><br>The remainder of this route is very rural with few, if any, pedestrian or ADA concerns needing to be addressed at this time. Nonetheless, additional ADA and pedestrian concern may occur anywhere along this route should any form of urban development occur in the future. |

[1] **Deputy Directive 64-R1 (DD-64-R1)** - **(Policy)** The Department provides for the needs of travelers of all ages and abilities in all programming, planning, design, construction, operations and maintenance activities and products on the State highway system. The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycles, pedestrians and transit modes as integral elements of the transportation system."

[2] **PDPM - Chapter 31** (Non-motorized Transportation Facilities) Section 1 - General - Introduction -
".... State and federal laws require Caltrans to promote and facilitate increased use of non-motorized transportation. The purpose of this chapter is to outline pertinent statutory requirements, planning policies, and implementing procedures regarding non-motorized transportation facilities."

# APPENDIX D
# INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

ITS is any electronic transportation system that communicates information to the traveler that will improve safety and efficiency. ITS includes traffic signals, closed-circuit televisions, changeable message signs, ramp meters, weigh-in-motion devices, roadway service patrols, weather stations, highway advisory radio stations, and transportation management centers. Traveler Information Broadcast Systems, traffic signal priority for emergency or transit vehicles, ITS data archive management, and vehicle safety warning systems are all a part of ITS. Also included is centralizing the control of many of these components from traffic or transit management centers.

Deployment of ITS technology will enhance traveler information services, as well as the operational and safety efficiency of the Route by informing motorists of traffic congestion, inclement weather such as fog, dust, highway construction and/or closings. Currently, there is a regional architecture in existence called the "San Joaquin Valley ITS." This architecture covers the 8 counties within the San Joaquin Valley (San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and Kern). This Plan is available at: http://www.kimleyhorn.com/ Caarchitecture/task9/sjintro.htm.

## 1. 511 Traveler Information System

On July 21, 2000, the Federal Communications Commission (FCC) designated 511 as the single travel information telephone number to be made available to states and local jurisdictions across the country. The 511 system provides information about travel conditions, allowing travelers to make better choices: choice of time, choice of route, and choice of mode of transportation. It can also be expanded to provide transit information and rideshare options. SAFETEA-LU mentions provisions for the 511 system to be implemented at the regional level as the urban metropolitan areas convert their existing traveler systems or establish enhanced 511 services.

The initial development proposal for the central valley 511 Traveler Information System will include the eight counties in the San Joaquin Valley (Kern, Kings, Tulare, Fresno, Madera, Merced, Stanislaus, and San Joaquin). A "baseline" 511 system for the San Joaquin Valley has been defined. It consists of wireless access in the Caltrans Highway Information Network (CHIN) with each county having the option to add additional "features" for users within their respective counties. This "baseline" is in the process of being deployed now, with a possible winter 2009 launch date. The San Joaquin Valley 511 System may be hosted in Fresno County, but no decision has yet been made.

## 2. Detection

Detection is one of the most important components of ITS. Detection refers to the real-time measurement of transportation movements and conditions. In the past, measurements have been conducted periodically (such as once per year) and those measurements were used to determine the need for infrastructure expansion.

Optimizing management strategies will require that accurate, on-going data collection be provided by detection systems placed throughout the corridor. Without detection systems, transportation agencies cannot implement advanced traffic control strategies, cannot inform the public about traffic conditions, expected delays and options, and cannot detect and react to incidents quickly enough to minimize the impacts created by those incidents. Route 201 within the limits of this CSMP does not currently include a sufficient detection system to fully optimize these strategies. Improvement projects are typically planned to include detection units as part of the construction. Caltrans commitment to the installation of detection units includes installing wireless radar units at the first available opportunity. Even though these wireless units would be part of the project, they can be installed before construction, without the effort and cost of disturbing a more traditional system when the road construction begins.

### 3. Traffic Control

Traffic control, another element of ITS, includes signal strategies for managing traffic flows on arterials as well as ramp metering on the freeway system. These strategies offer great promise to improve the productivity of the transportation system. There are, however, challenges for Caltrans in utilizing some of these options. Local agencies are often concerned that traffic control devices will cause additional traffic to choose local streets as an alternative. Caltrans will need to work with local partners to reach solutions that will be agreeable to all parties.

### 4. Incident Management

Incident Management is a significant component of ITS. Most studies in the United States suggest that incidents such as accidents, special events, and severe weather conditions are responsible for about half of the delay on our freeway system. Motorists are accustomed to normal delays. However, traffic incidents disrupt the motorist's normal routine, creating unplanned delays. Such delays can cause negative impacts to motorists. Unanticipated delays may also create frustration, aggressive driving, and the potential for "Road Rage." Such aggressive behavior poses a danger not only to other motorists but also to emergency response personnel. The goal of effective Traffic Incident Management (TIM) is to reduce the time it takes to clear traffic incidents from the roadway. The less time it takes to clear an incident, the less congestion and delay the motorist experiences. Safety for both the emergency response personnel and the traveling public is improved. Even small improvements in this process can yield significant benefits. Effective TIM relies on advanced technologies to allow for expedited incident detection, verification, coordination among necessary emergency response agencies, and the subsequent clearance of an incident as rapidly as possible.

Collision and/or natural causes will often require lane or road closures. Changeable Message Signs (CMS) systems are used to inform travelers of the road closure, and, if applicable, existing traffic control [such as one-way controlled traffic, California Highway Patrol (CHP) pace vehicles] and the estimated amount of delay. CMS systems are also used to warn of high winds and accidents.

### 5. Advanced Traveler Information Systems

One of the more progressive components of ITS is the Advanced Traveler Information System (ATIS). Most commuters get information about traffic conditions from the media; for instance, radio stations. ATIS will provide modal-specific, time-of-day demand data that will allow travelers to get the most out of the transportation system. The system would allow travelers to manage their trips in the most efficient manner. Implementing advanced traveler information systems requires a partnership between transportation agencies and the public. However, it is clear that the framework is not yet fully developed and that, at this time, current detection systems are not adequate for real-time, tailored information.

### 6. Transportation Management Centers

Effective ITS implementation requires coordination of all components. Transportation Management Centers (TMC) play an important role in day-to-day system management, providing coordinated incident responses, as well as integration of various systems. An example of integration would be the coordination of ramp metering and arterial signal management. Traveler information also requires sharing data with both public and private partners. Different agencies, such as Caltrans, CHP, and the media, play different roles and have different systems for incident management. The TMC integrates these roles and systems in one location to optimize performance. TMCs are used in emergencies, Amber Alerts, and provide an Emergency Operations Center function during natural disasters, such as earthquakes. TMCs also serve a security preparedness function; staff can monitor the urban freeway system, quickly activate response strategies (such as changeable message signs), or notify the proper authorities when security risks are identified.

Logical phasing for implementing the components of an effective Traffic Management System would be:

a. Installing simple, adaptive-scheme ramp metering;
b. Optimizing the meter rates;
c. Implementing a corridor adaptive ramp-metering scheme within urbanized areas;
d. Advanced arterial signal actuation strategies and improved incident management; and
e. With all of these in place, a comprehensive traveler information system as the final goal.

Monitoring and evaluation are the foundations for sound management of the corridor and will help to identify the optimum strategies to improve the transportation corridor. Strategies range from maintenance and preservation to system expansion, but will focus on optimization of the existing system by fully incorporating operational strategies into the management plan. Implementation of ITS strategies will complement other improvements, including those improvements that may be implemented by partner agencies such as transit, light rail, and improvements on the local road system. The goal is that the whole of the transportation system, including highways, local roads, and alternative means of transportation, operate as one seamless network.

### 7. Transportation Demand Management

Transportation Demand Management is designed to reduce vehicle trips during peak hours. Transportation Demand Management is specifically targeted at the work force, as commuters generate the majority of peak hour traffic. Incorporating these strategies is a part of land use decisions, the prerogative of local government. Strategies include:

- Rideshare programs
- Transit usage
- Flex hours
- Vanpools
- Bicycling and walking
- Telecommuting
- Mixed land uses (jobs – housing balance)

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.

# APPENDIX E
# GLOSSARY

**AADT:** (Average Annual Daily Traffic). This designation indicates the total daily traffic that is counted at a particular location or within a particular highway segment and then averaged out over one calendar year.

**Access Control (or Controlled Access):** The condition where the ability to access a state highway by owners or occupants of abutting land is fully or partially controlled by public authority. Also, see Classification of Roads.

**Bicycle Facilities:** Bicycle facilities within the state are classified into four categories:

- **Class 1 Bikeways (Bike Paths):** Bike Paths are separate *off-highway* facilities for the exclusive use of bicyclists and with cross flow by motor vehicles minimized.
- **Class 2 Bikeways (Bike Lanes):** Bike Lanes are for preferential use by bicyclists and can be established within the paved area of state highways. Such facilities are approved by, and subsequently maintained by, local jurisdictions and/or Caltrans. Bike lanes are separated from traffic lanes on California highways by the use of a painted 6" stripe on the pavement and are designated as bike lanes by the use of white R81 (Bike Lane), R-81A (Begin) and R81-B (End) "regulatory" signs. (MUTCD Chapter 9 - California Supplement - 2004).
- **Class 3 Bikeways (Bike Routes):** Bike Routes are shared facilities which serve either to (a) provide continuity to other bike facilities (usually a Class 1 or Class 2 bikeway); or (b) to designate a preferred route through a high demand corridor. Such facilities are approved by, and subsequently maintained by, local jurisdictions and/or Caltrans. Bike Routes are not separated from traffic lanes but are designated as bike routes through the use of green D11-1 (Bike Route), M4-11 (Begin) and M4-12 (End) "guide" signs. (MUTCD - Chapter 9 - 2003).
- **Shared Roadway (No Bikeway Designation):** Most bicycle travel on conventional state highways and local streets occurs on facilities without any bikeway designations, signs or striping. Virtually all highways in use by bicyclists for inter-city and recreational travel fall under this "share-the-road" scenario.

**CMS:** (Changeable Message Sign). A CMS is a full-matrix display sign used on State highways to provide motorists with an advanced warning of major highway incidents and route diversion information. CMSs are capable of displaying a variety of character heights and up to three lines of text. CMSs play increasingly important roles on State highways by improving operations and safety.

**Classification of Roads:**

- **Conventional (C):** A highway without access control, which may or may not be divided. Grade separations at intersections or access control may be used when justified at spot locations. Example: 2C = 2 lane conventional highway.
- **Expressway (E):** An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections. Example: 4E = 4 lane expressway (note: 2 lane expressways are not common).
- **Freeway (F):** A highway to which the owners of abutting lands have no right or easement of access to or from their abutting lands. Access is controlled or restricted to interchanges and with grade separation at all intersections. Example: 6F = 6 lane freeway.
- **Functional Classification:** Guided by Federal legislation, functional classification refers to a process by which streets and highways are grouped into classes or

systems, according to the character of the service that is provided, e.g., Principal Arterial, Minor Arterial, Collector, Local, etc.

**Contract Phasing:**

- **Begin Construction:** This is the phase when the contract for construction is approved and construction begins.
- **Complete Construction:** This is the phase when the completion of the construction contract occurs.

**COG:** See RTPA

**CTC:** (California Transportation Commission). The California Transportation Commission (CTC) was established in 1978 by Assembly Bill 402 (Chapter 1106, Statutes of 1977) out of a growing concern for a single, unified California transportation policy. The Commission is responsible for the programming and allocating of funds for the construction of highway, passenger rail and transit improvements throughout California. The Commission also advises and assists the Secretary of Business, Transportation and Housing Agency and the Legislature in formulating and evaluating state policies and plans for California's transportation programs. The Commission is also an active participant in the initiation and development of State and Federal legislation that seeks to secure financial stability for the State's transportation needs.

**Density:** The number of vehicles occupying a given length of lane or roadway averaged over time, usually expressed as vehicles per mile or vehicles per mile per lane. Also see **V/C.**

**Facility:**

- **Concept Facility:** A highway facility type and characteristic considered viable without improvement within the 25 year planning period given financial, environmental, planning and engineering factors.
- **Present Facility:** Highway type and general characteristics in place at the time of the development of a TCR.

**FTIP:** See Project Programming

**ICES:** (Intermodal Corridor of Economic Significance). Significant National Highway System Corridors that link intermodal facilities most directly, conveniently and efficiently to intrastate, interstate, and international markets.

**ITMS:** (Intermodal Transportation Management System). ITMS is a performance-based decision support system operating on a personal computer which allows "alternatives analysis" through the use of performance measures. ITMS incorporates intermodal system elements for freight and person movements using a spatial and attribute database thereby allowing management of transportation systems under existing and forecasted conditions. ITMS provides a new intermodal-planning tool using a common statewide data set for state and local transportation planners.

**ITS:** (Intelligent Transportation Systems). ITS refers to a wide variety of tools and techniques that focus on addressing transportation problems by improving the efficiency and safety of the existing transportation infrastructure. ITS works through the integration of high tech computing and information sharing.

**ITSP:** (Interregional Transportation Strategic Plan). The ITSP is a single document prepared by Caltrans to consolidate and communicate key elements of its ongoing long and short range planning. The ITSP serves as a counterpart to the Regional Transportation Plans (RTPs) prepared by the 43 Regional Transportation Planning Agencies (RTPAs) in California.

**KP:** (Kilo Post) See Post Mile

**Lifeline Routes:** See Route Designations

**LOS:** (Level of Service). Level of Service describes operating conditions a typical driver will experience on a typical day while driving on a particular facility. Like a report card, the LOS is defined in categories ranging from A-F. "A" represents the best traffic flow (low **v/c** ratio and delay, no impediments) through "F" representing the worse congestion (extremely high **v/c** ratio and delay, gridlock conditions).

**MIS:** (Major Investment Study). When the need for a major metropolitan transportation investment is identified and Federal funds are potentially involved, a major investment (corridor or sub-area) study is undertaken to develop or refine the plan. Upon completion, the MIS aids the area's Metropolitan Planning Organization (MPO), in cooperation with any participating agencies, on the design concept and scope of the investment.

**MPO:** See RTPA

**Multi-Modal:** Pertaining to the use of more than one mode of travel such as private vehicles, taxis, bicycles, mass-transit, para-transit, light and heavy rail, ferries, airplanes etc.

**NHS:** See Route Designation

**NTN:** See Route Designation

**Non-attainment (pertaining to air quality):** Identifies non-attainment status for CO (carbon monoxide), Ozone, and PM (particulate matter) within the subject air basin.

**Overcrossing:** (O/C) See Structures, Types of

**PM:** (MilePost Marker, Postmile or KP (Kilo Post). An 8" x 48" metal post marker along a State highway indicating a location using the postmile or designation. This is the distance in miles (or kilometers, in the case of Kilo Post measurements) that the given location is from the county line measuring from the south to the north or from the west to the east. Postmiles ascend in the northerly and easterly directions as determined by the route. The PM marker also includes an abbreviation for the County wherein its located (i.e., in Caltrans District 6: FRE = Fresno, KER = Kern, KIN = Kings, TUL = Tulare, MAD = Madera). As such, a PM marker located along Route 99 and displaying "MAD" and "6.25" would indicate that you are currently located in Madera County at a point 6.25 miles north of the Fresno/Madera County Line.

**Project Programming:** Separate programming documents prepared and adopted for somewhat different purposes, are required under State and Federal law. Transportation programming is the public decision making process that sets priorities and funds projects envisioned in long range transportation plans. It commits expected revenues over a multi-year period to transportation projects. Programming schedules high priority capital outlay projects for development and implementation. Programming documents include Federal,

State, Regional and Metropolitan Transportation Plans, e.g., FTIP, ITIP, RTIP, SHOPP, STIP.

- **FTIP:** (Federal Transportation Improvement Program). To apply for federal highway funding a Federal statute requires MPOs to complete a Transportation Improvement Program. The MPO prepares the FTIP in cooperation with its member agencies (cities), its transit operators, State and Federal agencies, and with public involvement. The FTIP must by law be financially constrained and include a financial plan that demonstrates how projects can be implemented while the existing transportation system is being adequately operated and maintained. The FTIPs are in actuality a listing of planned Federally funded capital improvements to the regions' transit systems along with associated Federal operating assistance program and Federal Statewide Transportation Improvement Program (FSTIP).

- **ITIP:** (Interregional Transportation Improvement Program). The ITIP is Caltrans' equivalent to the RTIP (Regional Transportation Improvement Program) and consists of STIP projects funded from the Interregional Program share, which is 25% of new STIP funding. Caltrans' ITIP may nominate projects to the STIP only for the Interregional Program. The ITIP should be based on a Strategic Plan for implementing the Interregional Program. The ITIP should describe how proposed projects relate to the Strategic Plan and how the Strategic Plan would implement the California Transportation Commission's objectives. The ITIP includes both State highway and rail projects (potentially including mass transit guideway and grade separation projects).

- **PSR:** (Project Study Report). A pre-programming document required for project inclusion in the STIP.

- **PSSR:** (Project Scope Summary Report). An engineering report used to select candidate projects to be programmed in the State Highway Operation Protection Program (SHOPP). SHOPP funds are used primarily for rehabilitation, resurfacing and safety projects on State highways.

- **RTIP:** (Regional Transportation Improvement Program). After consulting with Caltrans, each Regional Transportation Planning Agency (RTPA) and/or County Transportation Commission (CTC) must prepare and submit an RTIP for regions with urbanized areas. Some urbanized RTPAs coincide with the Federal Metropolitan Planning Organizations (MPOs). Each regional agency is required to adopt and submit its RTIP to the CTC and to Caltrans. The CTC will utilize the RTIP to consider projects to be included in the State Transportation Improvement Program (STIP). The funds are available for a broad array of transportation improvement projects, including improving State highways, local roads, public transit, inter-city rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, sound walls, etc.

- **SAFETEA-LU:** Safe, Accountable, Flexible, Efficient Transportation Equity Act: On August 10, 2005, the President signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users **(**SAFETEA-LU). With guaranteed funding for highways, highway safety, and public transportation totaling $244.1 billion, SAFETEA-LU represents the largest surface transportation

investment in our Nation's history. The two landmark bills that brought surface transportation into the 21st century—the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21)—shaped the highway program to meet the Nation's changing transportation needs. SAFETEA-LU builds on this firm foundation, supplying the funds and refining the programmatic framework for investments needed to maintain and grow our vital transportation infrastructure.

- **SHOPP:** (State Highway Operation Protection Program). The SHOPP is a four-year program limited to projects related to State highway safety and rehabilitation. SHOPP funds are for major transportation capital improvements that are necessary to preserve and protect the State highway system. The SHOPP does not include projects that increase capacity. Most of the projects are for pavement rehabilitation, bridge rehabilitation, and traffic safety improvements. Other projects may include such things as operational improvements (e.g., traffic signalization) and roadside rest areas. Caltrans alone has full control of SHOPP funds.

- **STIP:** (State Transportation Improvement Program). Under California law, the STIP and SHOPP (State Highway Operations Protection Program) are the two primary documents through which the CTC commits and allocates funds to particular projects. In the year 2000 and thereafter, the STIP will be a four year plan with updates every two years. The STIP is a capital improvement program of transportation projects funded with revenues from the State Highway Account and other sources on and off the State highway system. The STIP includes a list of transportation projects, proposed in two broad programs, the regional program funded with 75% of new STIP funding and the interregional program funded from 25%. The STIP has two main funding components: the RIP (Regional Improvement Program), prepared by RTPAs and the IIP (Interregional Improvement Program) prepared by Caltrans.

**ROW:** (Right-of-Way). Denotes the *total* width allocated for a highway, including shoulders and adjacent land.

**RCR:** See TCR

**Route:** The California Legislature establishes the framework for the State Highway System by describing each state roadway in the Streets and Highway Code. This description establishes the official beginning and ending points of a state highway and in some cases intermediate control points.

**Route Adoptions:** Route Adoptions are needed for the following reasons: (1) any new alignment of an existing legislative route, (2) to establish the location of an unconstructed route, (3) to allow for the conversion of any conventional highway to a freeway or other form of controlled access route, (4) designating a traversable highway and (5) for any temporary alignments along an established state route. Route adoptions are approved by the CTC prior to submission to the FHWA for final approval.

**Route Designations:** Identifies whether or not the subject segment of a route is designated as being part of a system. Examples of systems include Freeway/Expressway System, Highways of Regional Significance, Interregional Highway System (IRRS), National Highway System (NHS), National Truck Network (NTN), and Terminal Access Route for

the National Truck Network, Scenic Highway, or Strategic Highway Network (STRAHNET).

- **Freeway/Expressway System:** The Statewide system of highways declared by the Legislature to be essential to the future development of California. The F&E System has been constructed with a large investment of funds for the ability of control access, in order to ensure the safety and operational integrity of the highways.

- **IRRS:** (Interregional Road System) Caltrans developed an Interregional Road System Plan that identified projects which will provide the most adequate interregional road system to all economic centers in the State. IRRS is a series of Interregional State highway routes, outside the urbanized areas, that provide access to, and links between, the State's economic centers, major recreational areas, and urban and rural regions. Due to the high number of routes and capacity improvements needed on the IRRS, the most critical IRRS routes were identified as *High Emphasis Routes*. High Emphasis Routes are a priority for programming and construction and are critically important to interregional travel and the State as a whole. *Focus Routes* are a subset of the High Emphasis Routes. These routes represent 10 IRRS corridors that should be of the highest priority for completion to minimum facility standard in the 20 year period.

- **Lifeline Routes:** (Earthquake Emergency Response) A Lifeline Route is a route on the State highway system that is deemed so critical to emergency response/life-saving activities of a region or the state that it must remain open immediately following a major earthquake, or for which pre-planning for detour and/or expeditious repair and reopening can guarantee through-movement. The focus is on highly critical routes that allow for the immediate movement of emergency equipment and supplies into a region or through a region.

- **NHS:** (National Highway System) The purpose of the NHS is to provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities and other intermodal transportation facilities. Additionally, such highways meet National defense requirements and serve to facilitate interstate and interregional travel. The NHS consists of 155,000 miles, (plus or minus 15 percent), of the major roads in the U.S. Included in the NHS are all interstate routes, a large percentage of urban and rural principal arterial, the defense strategic highway network, and strategic highway connectors.

- **NTN:** (National Truck Network) A list of truck route segments and their truck access designations (such as National Network (NN), Terminal Access, California Legal, Advisory, or Restricted) with each segment's beginning and ending post miles, and beginning and ending cross streets.

- **Regionally Significant:** A transportation corridor that serves regional transportation needs and would normally be included in the modeling of a metropolitan area's transportation network. Such corridors, at minimum, would include all principal arterial highways and all fixed guideway transit facilities located within the region.

- **Scenic Highway:** A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. The State Scenic Highway System includes a list of

highways that are either eligible for designation as scenic highways or have been so designated. These highways are identified in Section 263 of the Streets and Highways Code. For a highway to be considered *Officially Designated* the local jurisdiction is required to develop and adopt protection measures in the form of ordinances to apply to the area of land within the scenic corridor. Additions and deletions to the list of highways eligible for scenic designation can only be made through legislative action.

- **STAA Truck:** In 1982, the Federal government passed the Surface Transportation Assistance Act (STAA). This act requires states to allow certain longer trucks on a network of Federal highways, referred to as the National Network (NN). A STAA truck is, in many cases, longer than a "California legal" truck, and may operate only on specific highways in California.

- **State Highway Primary System:** State Routes that are functionally classified as Principal Arterials and some Minor Arterials that meet the following criteria:

  1. Connect major centers of population;
  2. Connect primary centers of industrial production, agricultural production, and natural resource activities with centers of supply of labor and materials and major shipping and distribution points;
  3. Provide access to major recreational regions, national parks and monuments (over 1,000,000 visitors per year).
  4. Provide for continuity of travel into, through, and around urban areas from rural freeway approaches;
  5. Provide for large traffic movements between population and employment centers within urban areas;
  6. Connect with major highways of adjacent states;
  7. Provide international border crossings;
  8. Provide access to important military installations and defense activities; and
  9. Provide an integrated system with a minimum of stubs or spurs to permit general traffic circulation.

- **State Highway Secondary System:** State Routes that are functionally classified as Local, collectors, and some Minor Arterial that meet the following criteria:

  1. Provide access to national parks and monuments, state beaches and parks, lakes, hunting and fishing areas, and state institutions of less than 1,000,000 per year;
  2. Connect seats of county governments;
  3. Provide for continuity of travel into, through, and around urban areas from rural highway approaches;
  4. Provide access to less important military installations and defense activities; and
  5. Provide for needed capacity in the traffic corridors.

- **STRAHNET:** (Strategic Highway Corridor Network) STRAHNET is a National system of public highways that are key elements in U.S. strategic policy. This network provides defense access, continuity, and emergency capabilities for movements of personnel and equipment during both peace time and war. STRAHNET is comprised of about 61,000 miles of highway, including the 45,400-mile system of Interstate and Defense Highways and 15,600 miles of other important public highways. STRAHNET "connectors" (about 1,700 miles) are additional highway routes linking over 200 important military installations and ports to the STRAHNET. Generally, these "connector" routes end at the port

boundary or installation gate and are typically used only when moving personnel and equipment during a mobilization or deployment.

- **Terminal Access Route:** Terminal Access (TA) routes are portions of State or local highways that Caltrans or a local government granted access to STAA trucks. The purpose of TA routes is to allow STAA trucks (1) to travel between NN routes, (2) to reach a truck's operating facility, or (3) to reach a facility where freight originates, terminates, or is handled in the transportation process.

**Route Numbering:** South-north state and interstate routes normally carry odd number designations (e.g. I-5, Route 43, Route 99 etc.) while west-east routes normally carry even number designations (e.g. I-10, Route 58, Route 168 etc.).

**RTIP:** See Project Programming

**RTP:** (Regional Transportation Plan) The RTP is a comprehensive 20 year plan for the region, updated every four years by the regional transportation planning agency (RTPA). The RTP includes goals, objectives, and policies and recommends specific transportation improvements.

**RTPA:** (Regional Transportation Planning Agency) The RTPA is an association of city and county governments created to address regional transportation issues while protecting the integrity and autonomy of each jurisdiction. The RTPA serves as the forum for cooperative decision making by principal elected officials of general local government and is responsible for
the preparation and adoption of a Regional Transportation Improvement Program (RTIP). There are 43 RTPAs in California. In smaller counties, usually the County Transportation Commission; in urban counties, usually the Metropolitan Planning Organization (MPO) is the RTPA. RTPAs produce the RTIPs for the approval of the California Transportation Commission (CTC).

**MPOs and COGs:** RTPAs can be an MPO (Metropolitan Planning Organization) or a COG (Council of Governments) or all three. Some COGs also serve as MPOs, under Federal transportation rules, and this designation carries considerable power in allocating Federal and State funds for transportation projects. For example, Fresno COG is the MPO for Fresno County.

According to U.S. Code, an MPO is the organization designated by the governor and local elected officials as responsible, together with the State, for preparing a comprehensive transportation plan for both highway and transit modes, with long range (10 – 20 years) and shorter range (five year) elements in an urbanized area (population 50,000 or greater). The major role of the MPO is to foster inter-governmental communications and cooperation, undertake comprehensive regional planning with an emphasis on transportation, provide for citizen involvement in the planning process and provide technical services to the member agencies. MPOs are created by elected officials of counties and their incorporated cities as a means of providing a cooperative body for the discussion and resolution of issues that go beyond their individual boundaries.

State and Federal laws encourage such efforts. In each of these areas, MPOs act as a consensus-builder to develop an acceptable approach on how to handle problems that do not recognize jurisdictional boundaries.

**R/U:** (Rural *or* Urban location) Areas designated as rural are those lying outside the U.S. Census urban area boundary with a population less than 2,500 (less than 5,000 population

for Federal Aid highway purposes). Areas designated as urban are those lying inside the U.S. Census urbanized boundary.

**Scenic Highway:** See Route Designation

**Secondary System:** See Route Designation

**Separation:** See Structures, Types of

**SHOPP:** See Project Programming

**SR:** (State Route) Highways within the State which are distinctively designed to serve intrastate and interstate travel.

**STAA:** See Route Designation

**STIP:** See Project Programming

**STRAHNET:** See Route Designation

**STRUCTURES, Types of:**

- **Overcrossing:** (O/C) A configuration where the State highway crosses below the grade of a local road**.**
- **Separation:** (Sep) A configuration where a State highway crosses over a State highway.
- **Undercrossing:** (U/C) A configuration where a State highway crosses above the grade of a local road.
- **Underpass:** A configuration where the State highway crosses below the grade of a railroad line**.**

**TCR:** Transportation Concept Report. Formerly called a Route Concept Report or RCR, this document analyzes a transportation corridor service area, establishes a 20 year transportation planning concept, and identifies modal transportation options and applications needed to achieve the 20 year concepts.

**TCRP:** (Traffic Congestion Relief Program) The TCRP was enacted as part of AB 2928 (2000). Through the TCRP, the Governor and Legislature allocated $4.9 billion for projects to relieve congestion, provide safe and efficient movement of goods, improve intermodal connectivity, and make further investments in transit and rail facilities within the State.

**Undercrossing:** See Structures, Types of

**Underpass:** See Structures, Types of

**UTC:** (Ultimate Transportation Corridor) Highest predictable build-out beyond 20 years.

**V/C:** (Volume/Capacity ratio) A ratio of demand flow rate (volume) to capacity for a traffic facility. Also see Density.