TRANSPORTATION CONCEPT REPORT

STATE ROUTE 168

DISTRICT 06

APRIL 2015

Disclaimer: The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this Transportation Concept Report (TCR) is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, the District 6 System Planning Division makes every effort to ensure the accuracy and timeliness of the information contained in the TCR. The information in the TCR does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures.

California Department of Transportation

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

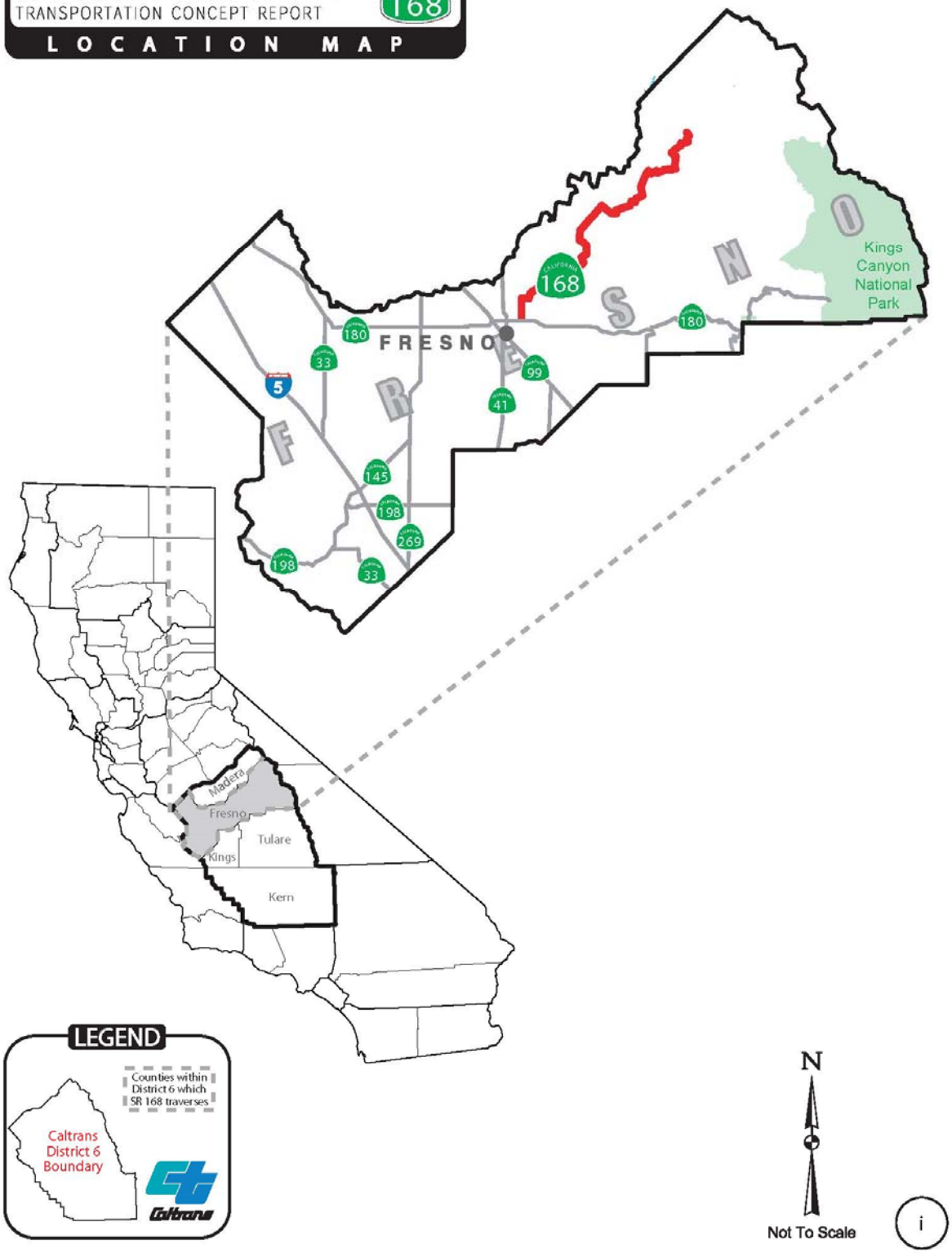
Approvals:

Gail Miller	4-14-15	Sharri Bender Ehlert	4/14/2015
Deputy District Director	Date	District Director	Date
Planning and Local Assistance		Caltrans – District 6	
Caltrans – District 6			

Front cover: SR 168 entering the community of Shaver Lake.

STATE ROUTE 168
TRANSPORTATION CONCEPT REPORT

LOCATION MAP



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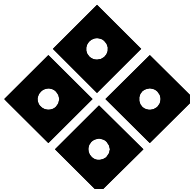


ABOUT THE TRANSPORTATION CONCEPT REPORT

System Planning is the long-range transportation planning process for the California Department of Transportation (Caltrans). The System Planning process fulfills Caltrans' statutory responsibility as owner/operator of the State Highway System (SHS) (Gov. Code §65086) by evaluating conditions and proposing enhancements to the SHS. Through System Planning, Caltrans focuses on developing an integrated multimodal transportation system that meets Caltrans' goals of safety, mobility, delivery, stewardship, and service.

The System Planning process is primarily composed of four parts: the District System Management Plan (DSMP), the Transportation Concept Report (TCR), the Corridor System Management Plan (CSMP), and the DSMP Project List. The district-wide **DSMP** is strategic policy and planning document that focuses on maintaining, operating, managing, and developing the transportation system. The **TCR** is a planning document that identifies the existing and future route conditions as well as future needs for each route on the SHS. The **CSMP** is a complex, multi-jurisdictional planning document that identifies future needs within corridors experiencing or expected to experience high levels of congestion. The CSMP serves as a TCR for segments covered by the CSMP. The **DSMP Project List** is a list of planned and partially programmed transportation projects used to recommend projects for funding. These System Planning products are also intended as resources for stakeholders, the public, and partner, regional, and local agencies.

TCR Purpose

California's State Highway System needs long range planning documents to guide the logical development of transportation systems as required by CA Gov. Code §65086 and as necessitated by the public, stakeholders, and system users. The purpose of the TCR is to evaluate current and projected conditions along the route and communicate the vision for the development of each route in each Caltrans District during a 20-25 year planning horizon. The TCR is developed with the goals of increasing safety, improving mobility, providing excellent stewardship, and meeting community and environmental needs along the corridor through integrated management of the transportation network, including the highway, transit, pedestrian, bicycle, freight, operational improvements and travel demand management components of the corridor.

STAKEHOLDER PARTICIPATION

Stakeholders were consulted with during the research phase of this TCR for their input and the accuracy of the data. Contact was done mainly via e-mail or telephone. Once a draft was completed, it was circulated for comments with internal stakeholders. These stakeholders include: the divisions of Planning, Traffic, Maintenance, Environmental, Design, Right of Way, and the Native American Liaison. As comments were collected, the TCR was further edited and revised. As the TCR became more finely tuned, it was then sent out via e-mail or regular mail for input from external stakeholders. These stakeholders include, within the corridor: Metropolitan Planning Organizations (MPOs), Regional Transportation Planning Agencies (RTPAs), city and county planning and public works agencies, transit agencies, Sierra Club Chapters, California Trucking Association, San Joaquin Valley Air Pollution Control District, Chambers of Commerce, Native American Tribes, Farm Bureaus, and other transportation agencies. Upon signature of both the District 6 Planning Deputy Director and the District 6 Director, thus making the document official and final, copies were emailed, sent by regular mail, and posted to the District 6 Intranet site at: www.dot.ca.gov/dist6/planning/tcrs/[1].

EXECUTIVE SUMMARY

Concept Summary

Route Concept Summary						
Segment *	Segment Description	Existing Facility**	20-25 Year Capital Facility Concept	20-25 Year System Operations and Management Concept	20-25 Year Facility Concept	Post-25 Year Concept
1	SR 180 to Shaw Avenue	6F + aux	6F + aux	Changeable Message Sign	Maintain	Widen to 8F
2	Shaw Avenue to Herndon Avenue	6F + aux	6F +aux	Changeable Message Sign	Maintain	Widen to 8F
3	Herndon Avenue to Temperance Avenue	4F	4F	Changeable Message Sign; Ramp Metering System	Maintain	Widen to 8F
4	Temperance Avenue to Shepherd/ Thompson Avenue	4F	4F	Closed Circuit TV	Maintain	Maintain
5	Shepherd/Thompson Avenue to Academy Avenue	2C	4E	Closed Circuit TV	Widen to 4E	Widen to 4F
6	Academy Avenue to 0.1 mi. N of Tollhouse Rd.	2C	2C with improvements such as turn lanes, signals, passing lanes	Maintain	Maintain	Maintain
7	0.1 mi. N of Tollhouse Rd. to Lodge Road	2C	2C with improvements such as turn lanes, signals, passing lanes	Remote Weather Information Station	Maintain	Maintain
8	Lodge Road to Auberry Road/ Tollhouse Road jct.	4E	4E	Changeable Message Sign; Closed Circuit TV	Maintain	Maintain
9	Auberry Road/ Tollhouse Road jct. to Dinkey Creek Road	2C	2C with improvements such as turn lanes, signals, passing lanes	Remote Weather Information Station	Maintain	Maintain
10	Dinkey Creek Road to Huntington Lake Road	2C	2C with improvements such as turn lanes, signals, passing lanes	Maintain	Maintain	Maintain
11	Huntington Lake Road to 0.1 mile east of the road to Florence Lake	2C	2C with improvements such as turn lanes, signals, passing lanes	Maintain	Maintain	Maintain

**Please see Route Segmentation Map, Page 7.*
***For definitions of facility type, please see Appendix A, Glossary of Terms and Acronyms, Page 34.*

Concept Rationale

Considering reasonable financial and physical constraints, this TCR defines the appropriate route concept level of service (LOS) and facility type(s) for SR 168. Level of service is a qualitative measure used to describe the operational conditions in a stream of traffic and the perception of conditions by users. It is a measure of factors such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations from "A" to "F", with LOS "A" representing the best operating conditions and LOS "F" representing the worst. Each LOS represents a range of operating conditions.

Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, or whichever LOS is feasible to attain. The concept LOS is a target LOS determined by the importance of the route and environmental factors. A deficiency or a need for improvement is triggered when the actual LOS falls below the concept LOS.

Please note: The number of lanes needed to meet the target LOS for the Ultimate Transportation Concept (UTC) for this route is only a guideline. The need to widen the roadway beyond the UTC may be necessary to maintain the target LOS. The local jurisdictions should endeavor to maintain adequate right-of-way (ROW) 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 ROW should be part of the General Plan so as not to adversely affect development.

While it is always Caltrans intent to achieve the UTC, the UTC may not be achievable in some areas due to existing development. In urban areas, it is also possible that the UTC may not reflect the local jurisdiction's vision for community, and that they may not want the highway to be widened. Maintaining the route as it currently exists may necessitate the local jurisdiction accepting a lower level of service. Caltrans will work with our local partners to develop context sensitive solutions for those sections of the Route that serve local communities.

Caltrans is looking into roundabouts at intersections over signals. Caltrans utilizes the intersection control evaluation (ICE) process to assess proposed improvements to intersections on State highways. This requires the evaluation of a roundabout improvement, in addition to signals, and other intersection improvements. Signals have a higher cost and require more maintenance than typical roundabouts. Roundabouts tend to eliminate head-on and broadside collisions.

Proposed Projects and Strategies

The SR 168 Concept Facility varies along the length of the route. The following list shows the Concept Facility for the year 2035. Please see the Segment Map, Page 7, for the location of each segment.

- **Segment 1, from the junction of SR 168/SR 180 eastbound to near Shaw Avenue [Post Mile (PM) 0.0 to PM 4.3]:** The existing 6-lane freeway is proposed to be widened to an 8-lane freeway.

- **Segment 2, between Shaw Avenue eastbound and Herndon Avenue (PM 4.3 to PM R6.9):** The existing 6-lane freeway is proposed to be widened to an 8-lane freeway. Interchanges are proposed at Nees and Shepherd Avenues. Please see the conceptual drawings, Pages 5 and 6.

- **Segment 3, between Herndon Avenue eastbound and Temperance Avenue (PM R6.9 to PM R9.2):** The existing 4-lane freeway is proposed to be widened to an 8-lane freeway.

- **Segment 4, between Temperance Avenue eastbound and Shepherd Avenue/Thompson Avenue (PM R9.2 to PM 11.8):** The existing 4-lane freeway is proposed to remain a 4-lane freeway. Interchanges are

planned at both Nees and Shepherd Avenues. Please see conceptual designs, Pages 3 and 4, for these two new interchanges.

- **Segment 5, between Shepherd Avenue/Thompson Avenue and Academy Avenue (PM 11.8 to PM 16.8):** The existing 2-lane conventional highway is proposed to be widened to a 4-lane freeway.

- **Segment 6, between Academy Avenue and 0.1 mile N of Tollhouse Road (PM 16.8 to PM T22.8):** The existing 2-lane conventional highway is proposed to remain a 2-lane conventional highway.

- **Segment 7, between 0.1 mile N of Tollhouse Road (PM T22.8 to PM T32.9):** The existing 2-lane conventional highway is proposed to remain a 2-lane conventional highway.

- **Segment 8, between Lodge Road and the Auberry Road/Tollhouse Road jct. (PM T32.9 to PM R36.2):** The existing 4-lane expressway is proposed to remain a 4-lane expressway.

- **Segment 9, between Auberry Road/Tollhouse Road jct. and Dinkey Creek Road (PM R36.2 to PM 45.0):** The existing 2-lane conventional highway is proposed to remain a 2-lane conventional highway with improvements such as turn lanes, signals, passing lanes, etc.

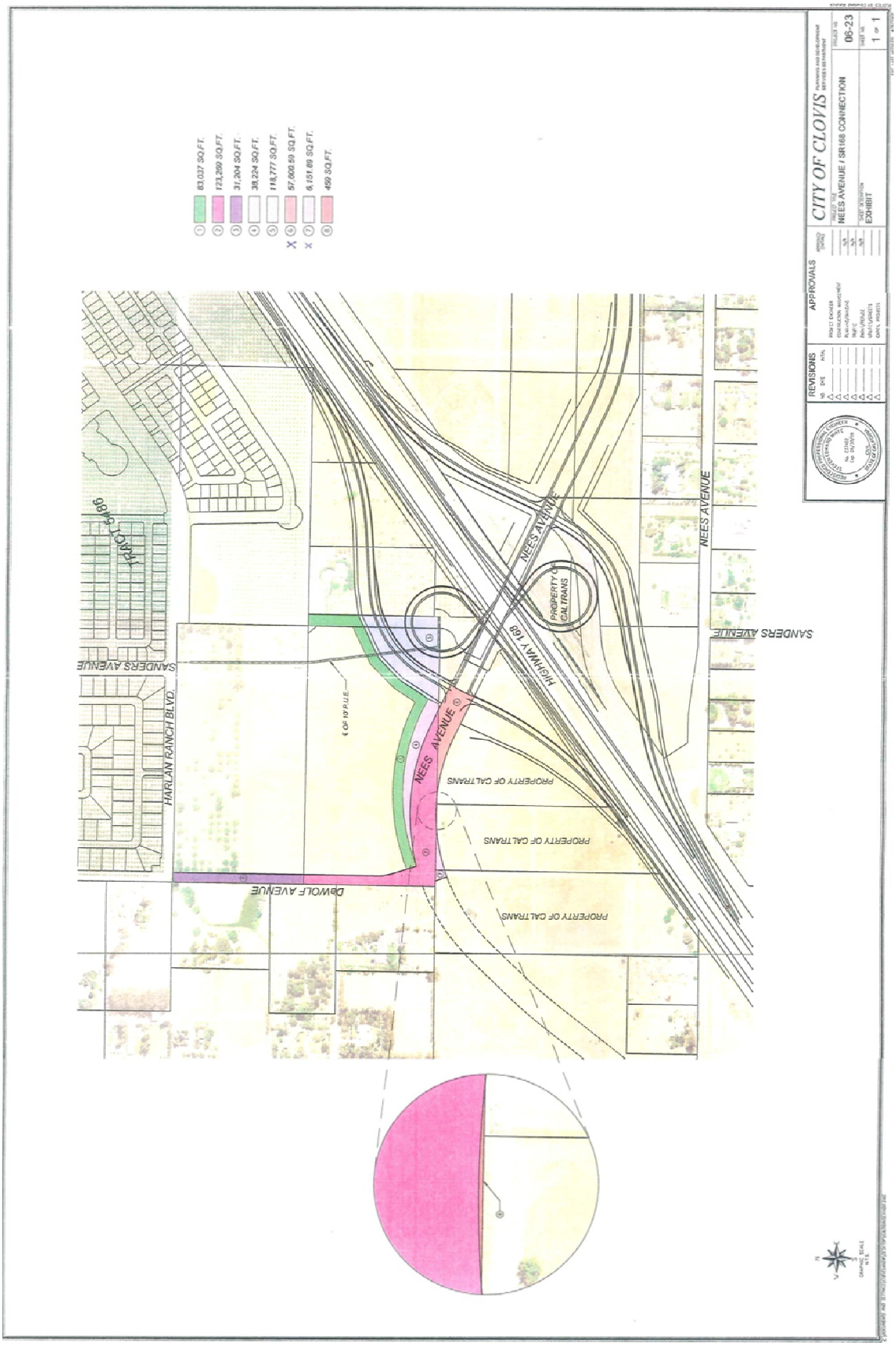
- **Segment 10, between Dinkey Creek Road and Huntington Lake Road (PM 45.0 to PM 49.7):** The existing 2-lane conventional highway is proposed to remain a 2-lane conventional highway with improvements such as turn lanes, signals, passing lanes, etc.

- **Segment 11, between Huntington Lake Road and 0.1 mile east of the road that leads to Florence Lake (PM 49.7 to PM 65.9):** The existing 2-lane conventional highway is proposed to remain a 2-lane conventional highway with improvements such as turn lanes, signals, passing lanes, etc.

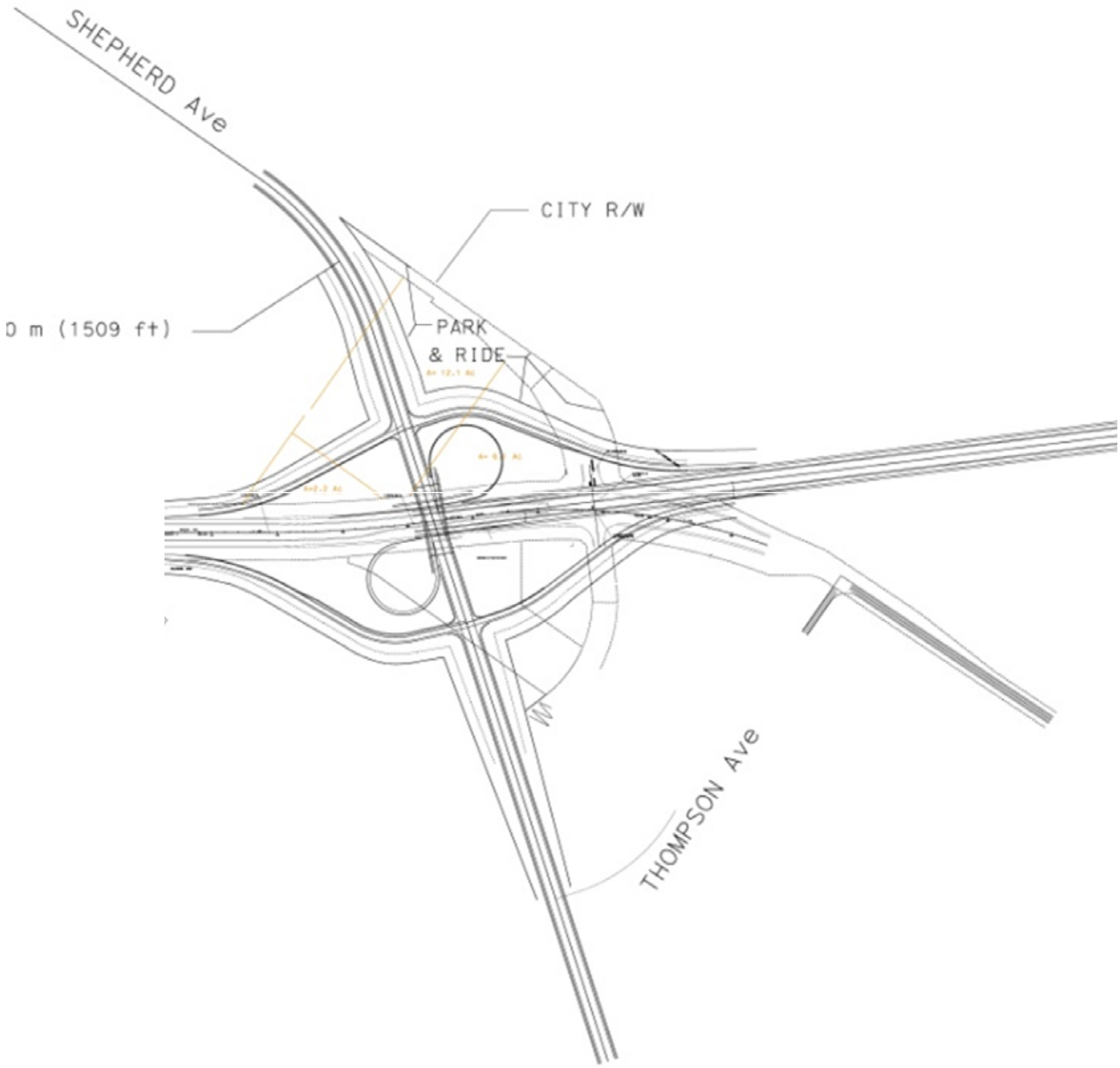
TCRs are typically updated every 3 – 5 years, **or as conditions warrant.** The proposed projects/strategies listed here will be reexamined during the next update and will be adjusted should it be determined that a change is necessary.

Sailboat on Huntington Lake

Proposed interchange at SR 168/Nees Avenue
Conceptual Design, for Planning Purposes Only

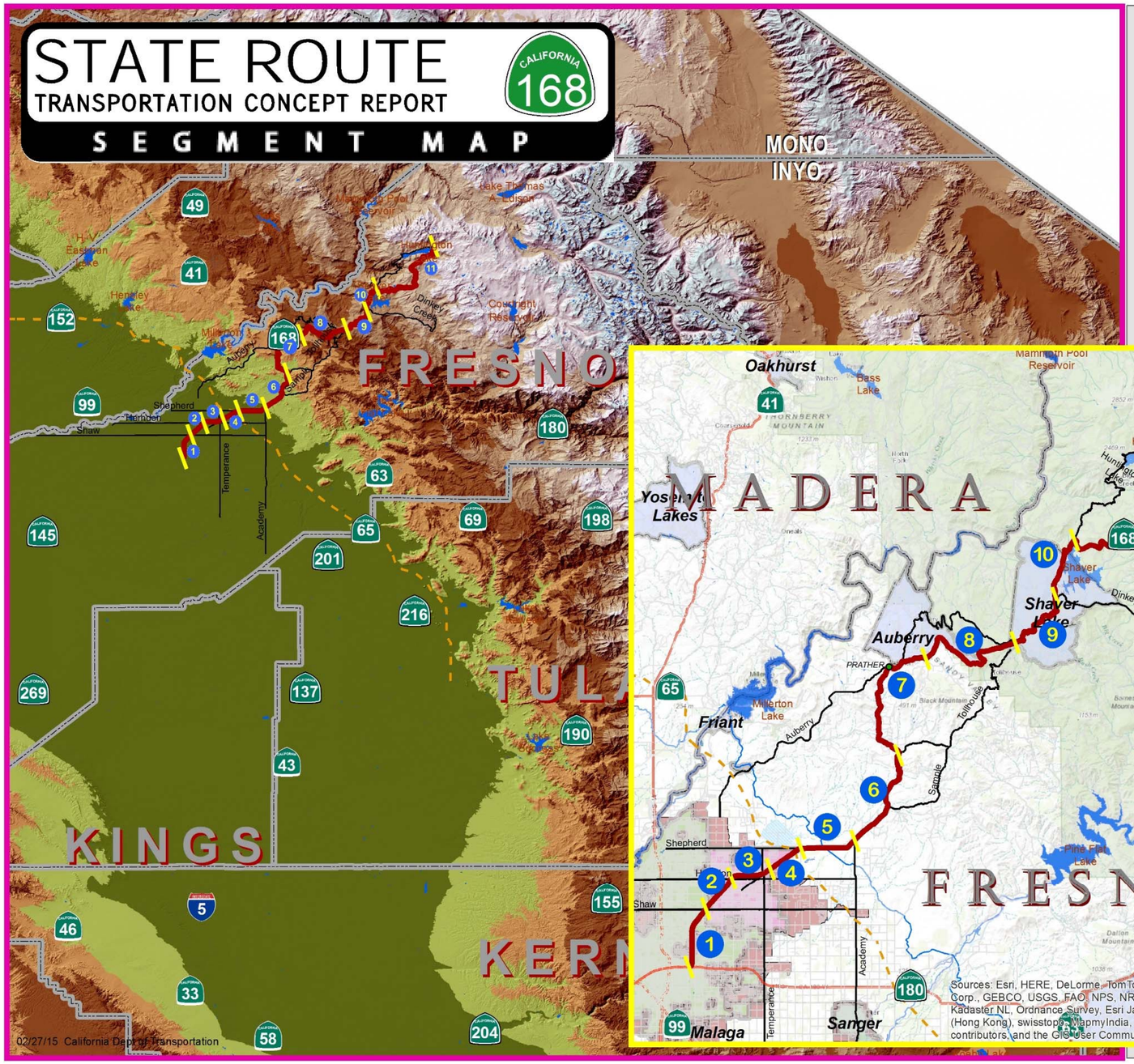


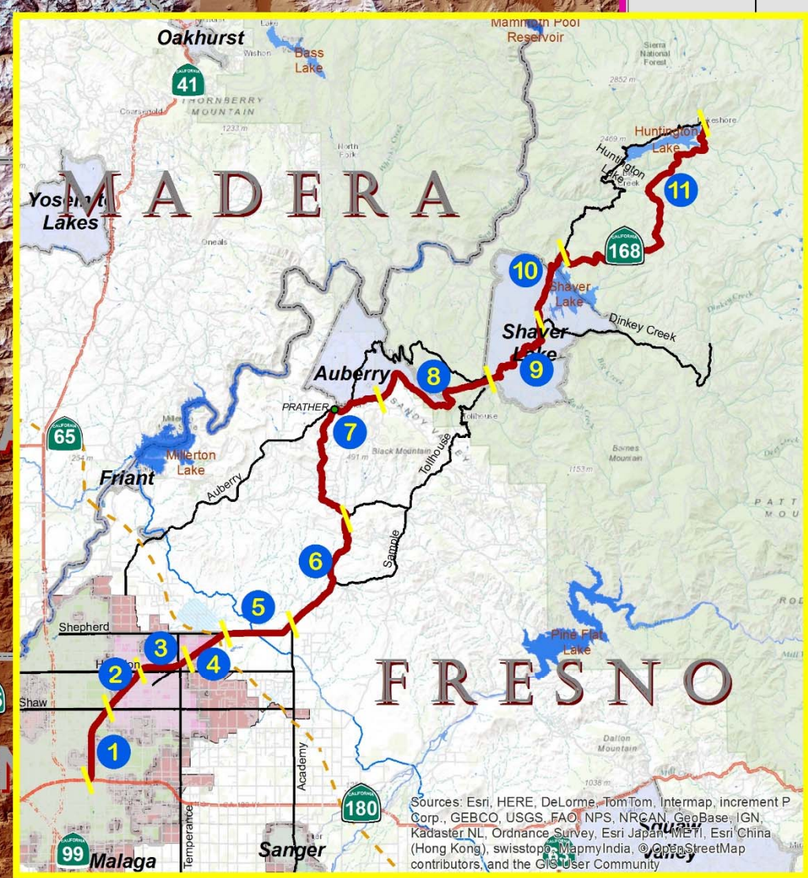
Proposed interchange at SR 168/Shepherd Avenue
Conceptual Design, for Planning Purposes Only

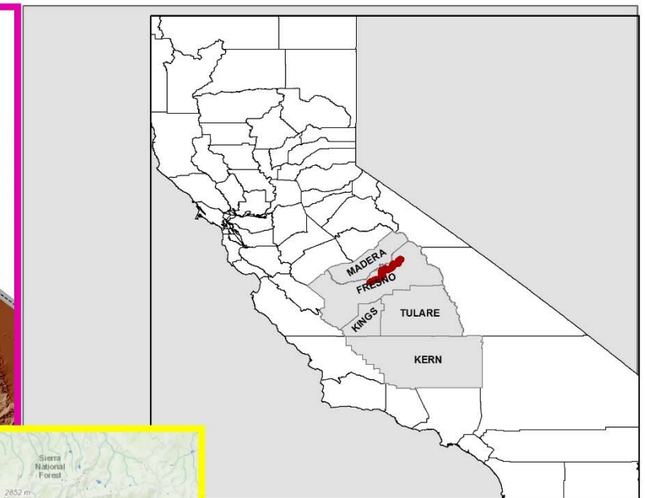


CORRIDOR OVERVIEW

ROUTE SEGMENTATION MAP[2]







Fresno County

Segment 1: SR 168 PM R0.3/R4.3
Jct SR 168 S/SR 180 S to near Shaw Ave

Segment 2: SR 168 PM R4.3/R6.9
Shaw Ave to Herndon Ave

Segment 3: SR 168 PM R6.9/R9.2
Herndon Ave to Temperance Ave

Segment 4: SR 168 PM R9.2/R11.8
Temperance Ave to Shepherd Ave/Thompson Ave

Segment 5: SR 168 PM R11.8/16.8
Shepherd Ave/Thompson Ave to Academy Ave

Segment 6: SR 168 PM 16.8/T22.8
Academy Ave to Tollhouse Rd

Segment 7: SR 168 PM T22.8/T32.9
Tollhouse Rd to Lodge Rd

Segment 8: SR 168 PM T32.9/R36.2
Lodge Rd to Tollhouse Rd/Auberry Rd Jct

Segment 9: SR 168 PM R36.2/45.0
Tollhouse Rd/Auberry Rd Jct to Dinky Creek Rd

Segment 10: SR 168 PM 45.0/49.7
Dinky Creek Rd to Huntington Lake Rd

Segment 11: SR 168 PM 49.7/65.8
Huntington Lake Rd to the road to Florence Lake

ROUTE DESCRIPTION

Route Location:

SR 168 is a 124-mile-long highway located in northeast Fresno County, northern Inyo County, and southeastern Mono County. The constructed portion of the route in District 6 begins at the SR 168/SR 180 junction in the City of Fresno and extends 65.9 miles to Huntington Lake, ending at 0.1 mile north of Sierra National Forest Route 80, the road to Florence Lake. SR 168 resumes more than thirty miles to the east in the Sabrina Basin of Inyo County in District 9 and continues to US 395 in Bishop. Fifteen miles south of Bishop on US 395 in Big Pine, SR 168 resumes and continues to and ends at SR 266 in Oasis near the southeast corner of Mono County, near the Nevada state Line. A connection between Huntington Lake and the Sabrina Basin is not part of the legislative route nor does any traversable road or combination of roads exist that connect the lake to the basin. Moreover, the area between Huntington Lake and the Sabrina Basin is currently within three federally designated wilderness (i.e. roadless) areas; therefore any future highway construction connecting the lake to the basin is very unlikely. This TCR covers the portion of the route in the San Joaquin Valley and western part of the Sierra Nevada Mountain Range located in District 06. At the beginning of this TCR is a map showing the location of SR 168 within District 06 (Location Map). For more information on SR 168 in District 9, including the place names mentioned above, please see http://www.dot.ca.gov/dist9/planning/docs/tcr_sr168.pdf.

History and Background:

The portion of SR 168 in District 6 was added to the State Highway System in 1931. It began on an alignment starting at SR 41 and Shaw Avenue in the City of Fresno, running along Shaw Avenue to Clovis Road. The route then assumed the alignment of Clovis Road until it reached Tollhouse Road, then on continued on Tollhouse Road until it reached Huntington Lake.

SR 168 underwent some major alignment changes between 1955 and 1974. The old routing through Humphreys and Tollhouse was replaced with the existing Morgan Canyon and Auberry roads up to Prather. Just outside of Prather a four-lane segment of about 9 miles was built constructed to climb the approximately 2,700 feet to an area near Tollhouse; this is locally known as “the four-lane”. A new freeway portion, parallel to and east of SR 41, begins at SR 180 and is now open from this freeway-to-freeway junction all the way to Shepard Ave.

The segment in Fresno County from SR 180 to Armstrong Avenue is named the "*Sierra*" Freeway.

The Bullard Avenue Interchange in the City of Clovis is named the "*Peter Hillman Memorial Interchange*". Peter Hillman was a Deputy United States Marshal serving in the federal Eastern District of California (Fresno) when he was killed in the line of duty. He was a 14-year veteran of the United States Marshal's Service, having entered that service in the federal Northern District of California in 1986 and serving in the Fresno office since 1988.

The segment within the City of Clovis, from the Herndon Avenue Interchange to the Temperance Avenue Interchange is officially named the "*Deputy Sheriff Erik Jon Telen Memorial Highway*". Deputy Erik Jon Telen was born in Clovis, California. He attended the Fresno City Police Academy. In the fall of 2000 he joined the Fresno County Sheriff's Department. Deputy Telen was mortally wounded when he was gunned down while protecting the public on August 21, 2001.

The SR 168/Herndon Avenue Interchange in the City of Clovis is named the "*William H. "Harry" Armstrong Interchange*". William H. "Harry" Armstrong was a Council Member of the City of Clovis between 1970 and 2002, and served as Mayor of Clovis for four terms: 1982-84, 1990-92, 1994-97, and 1999-01. He worked diligently to bring the SR 168 freeway project to fruition when he was the Chairman of the Fresno County Transportation Authority.

The SR 168/Shaw Avenue interchange is named the "*Robert L. Binger Interchange*". Robert Binger was a graduate of California State University, Fresno (Fresno State). He began his career with the Department of Transportation

as a Junior Civil Engineer in 1953, and by 1992, after working his way through the ranks in the department, became the District Director for District 6. When he retired from the department in 1997, he left behind a legacy of transportation improvements, including more than $250,000,000 worth of construction projects in the Fresno metropolitan area.

The portion of SR 168 from the Temperance Avenue interchange to Shepherd Avenue in the City of Clovis is officially named the "*Deputy Sheriff Dennis E. Phelps Memorial Highway*". It was named in honor of Deputy Sheriff Dennis E. Phelps of the Fresno County Sheriff's Department, who was killed on May 19, 2002 while in the performance of his duty. Deputy Phelps was assigned to the Field Training Program where he successfully completed his training. During his second week of patrol, Deputy Sheriff Phelps stopped a suspicious vehicle and was gunned down by the driver, a 21 year-old Clovis man who had been involved in a shooting incident in the City of Clovis a short time before. Deputy Sheriff Phelps was transported to Clovis District Hospital for treatment but his wounds proved fatal.

The portion of SR 168 from the intersection of Dragonfly Lane and Tollhouse Road to Ockenden Ranch Road in Fresno County is officially named the "*Deputy Sheriff Joel B. Wahlenmaier Memorial Highway*" This segment was named in honor of Deputy Sheriff Joel B. Wahlenmaier of the Fresno County Sheriff's Office, who was killed on February 25, 2010, while in performance of his duties. On February 25, 2010, Deputy Sheriff Wahlenmaier was investigating a felony assault case in the town of Minkler, California, in eastern Fresno County. While serving a search warrant, the suspect ambushed the law enforcement officers with gunfire. Wahlenmaier suffered gunshot wounds that resulted in his death.

Route Purpose:
This route serves as a major route for commuting in the Fresno-Clovis Metropolitan Area (FCMA) and for recreational travel from the FCMA to Shaver Lake, Huntington Lake, and other destinations in the Sierra Nevada Mountains. SR 168 also serves the foothill communities of Prather and Auberry.

Major Route Features:
Generally flat in the Fresno-Clovis Metropolitan Area (FCMA), the terrain changes to rolling and mountainous as it traverses the foothills and into the Sierra Nevada Mountains.

ROUTE DESIGNATIONS AND CHARACTERISTICS:

Route Designations and Characteristics											
Segment #	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
Freeway & Expressway[3]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
National Highway System[4]	No	No	No	No	No	No	No	No	No	No	No
Strategic Highway Network	No	No	No	No	No	No	No	No	No	No	No
Scenic Highway[5]	No	No	No	No	Yes	No	No	No	No	No	No
Interregional Road System[6]	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
High Emphasis[7]	No	No	No	No	No	No	No	No	No	No	No
Focus Route[8]	No	No	No	No	No	No	No	No	No	No	No
Federal Functional Classification[9]	Freeway	Freeway	Freeway	Freeway/ Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial
Goods Movement Route	No	No	No	No	No	No	No	No	No	No	No
Truck Designation[10]	Terminal access	Terminal Access	Terminal Access	Terminal Access	Terminal Access	Terminal Access	CA Legal	CA Legal	CA Legal Advisory	CA Legal Advisory	CA Legal
Rural/Urban/Urbanized[11]	Urban	Urban	Urban	Urban	Rural	Rural	Rural	Rural	Rural	Rural	Rural
Metropolitan Planning Organization[12]	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG
Regional Transportation Planning Agency[13]	Fresno COG	Fresno COG	Fresno CXOG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG
Congestion Management Agency[14]	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG	Fresno COG
County Transportation Commission[15]	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA
Local Agency	Fresno County, City of Fresno	Fresno County, City of Clovis	Fresno County, City of Clovis	Fresno County	Fresno County	Fresno County	Fresno County	Fresno County	Fresno County	Fresno County	Fresno County
Tribes[16]	Big Sandy Band of Western Mono Indians, California Choinumni Tribal Project, Traditional Choinumni Tribe, Choinumni Tribe, Haslet Basin Traditional Committee, Kings River Choinumni Tribe, Table Mountain Rancheria Tribe, Picayune Rancheria of Chukchansi Indians, Cold Springs Rancheria of Mono Indians of California, Dumna Wo Wah Tribe, Dunlap Band of Mono Indians, Michahai Wuksachi Band of Eshom Valley, Mono Nation, North Fork Mono Tribe, North Fork Rancheria of Mono Indians, Sierra Nevada Native American Coalition (Mono / Yokut), Squaw Valley Tribe, Wuksachi Tribe Sierra Foothills, Owens Valley Paiute Shoshone.										
Air District[17]	San Joaquin Valley APCD	San Joaquin Valley APCD	San Joaquin Valley APCD	San Joaquin Valley APCD	San Joaquin Valley APCD	San Joaquin Valley APCD	San Joaquin Valley APCD	San Joaquin Valley APCD	San Joaquin Valley APCD	San Joaquin Valley APCD	San Joaquin Valley APCD
Terrain[18]	Flat	Flat	Flat	Flat	Rolling	Rolling	Mountainous	Mountainous	Mountainous	Mountainous	Mountainous

COMMUNITY CHARACTERISTICS

Fresno was founded by the Central Pacific Railroad Company in 1872. In 1875, the Central California Colony was established south of Fresno which set the model for a system of development that was used throughout the San Joaquin Valley. Tracts of land were subdivided into 20-40 acre parcels, irrigated from a system of canals and often landscaped with boulevards of palms, eucalyptus or other drought-resistant trees. By 1903 there were 48 separate colonies or tracts in Fresno County which drew farmers and their families from other lands and from across the United States.[19]

Fresno became the county seat in 1874 and was incorporated in 1885. By 1890 the population was over 10,000. The first streetcars were introduced in 1892 and streetcar suburbs soon followed. The area has had an ethnic mix from the earliest years with Chinese railroad workers, European and Asian farmers, Germans from Russia, Japanese, Armenians, and by the early 20th century, a large Hispanic population.[20]

Fresno is now the fifth largest city in the state of California[21]. Centrally located, Fresno is the financial, industrial, trade, and commercial capital in the Central San Joaquin Valley. This dynamic city is the hub of a region rich in heritage, resources, and people.[22]

The City of Clovis was named after its public spirited pioneer, Clovis M. Cole, a man who spent nearly all of his life in the vicinity. The area was known for its thousands of acres of wheat, which he had developed in the Fresno County area. The first thoughts of settlement, however, are credited to Padre Martin, who explored the area in 1806 while searching for a mission site.[23]

Another earlier settler, Marcus Pollasky, proposed and coordinated the construction of a railroad through the grain, cattle, and mining country and into the timber-rich forests of the nearby Sierra. The City eventually grew up around the San Joaquin Division of the Southern Pacific Railroad, which played an important role in the founding and growth of Clovis. In addition to the arrival of the "Iron Horse," factors such as completing the 42 mile-long Shaver log flume, developing the 40-acre Clovis mill and finishing plant, and raising livestock all combined to ensure the founding of Clovis in 1891.[24]

The Save Mart Center, California State University Fresno

Clovis has maintained a small town community spirit as envisioned by its early founders, which is exemplified by such community events as the annual Rodeo Days, Big Hat Days, Old Town Clovis Farmers Market, and Clovisfest celebration. This community pride, combined with Clovis' unique growth opportunities, continues to attract new residents, developers, businesses, and industries to the city.[25]

Outside of the City of Clovis, the route passes through the historical site known as the "Academy." According to the historical marker located at this location, the Academy was first established in a grove of oak trees on the south bank of Dog Creek in 1871. It was the first secondary school in Fresno County. J.D. Collins, who later became sheriff, was the first teacher. East of the Academy stood the small Methodist-Episcopal South Church, built in 1869 and still in use. The stage route from Visalia to Millerton passed nearby and soon a small village developed. At one point, Academy included a hotel,

store, stables and a post office. Many of the County's earliest families settled hereabout engaging first in sheep and later in cattle business. Many of them and their descendants now rest in the nearby pioneer cemetery.[26]

SR 168 continues eastward, passing next through the unincorporated community of Prather which lies twenty-five miles northeast of Fresno. The community was named after Joseph L. Prather who came to California in 1872 and whose ranch eventually became the site of the town.[27]

In the Sierra Nevada Mountains, the route traverses the unincorporated community of Shaver Lake. The town was named in honor of C.B. Shaver, founder of the Fresno Flume and Irrigation Company. In 1893, the 50-foot-tall, 300-foot-long, rock-fill dam was constructed by the Company for its lumber mill operation dam, creating the lake. The lake served as a mill pond for the Shaver Sawmill and the source for a flume that ran for 42 miles to Clovis, California. The original town of Shaver was buried under the lake when the Thomas A. Edison Company purchased and enlarged the lake in 1919. [28, 29]

Huntington Lake is a reservoir in Fresno County, accessed via SR 168. It is located in the Sierra Nevada at an elevation of 6,955 feet. Several smaller streams flow into the lake and it receives additional water from the underground tunnels of Southern California Edison's Big Creek hydroelectric project. Water from the lake flows into Big Creek, but some is diverted by underground tunnels to the Eastwood Powerhouse, which discharges into Shaver Lake. Huntington Lake was constructed in 1912 as a part of the enormous Big Creek Hydroelectric Project envisioned by John S. Eastwood to provide power for a growing California. The lake was named for Henry Edwards Huntington, the railroad magnate who financed the earliest work to develop the Big Creek project which includes a system of lakes, tunnels, steel penstocks and power houses.

Four dams form the lake, which has a capacity of 88,834 acre feet and a surface area of 1,441 acres. There were originally three dams, completed in 1913, but a fourth dam, completed in 1919, was built to increase the lake's capacity. The other three dams were raised and covered with concrete. SR 168 passes along the east shore of the lake where China Peak, a ski resort, is located.[30]

Huntington Lake hosts an annual sailing event, the High Sierra Regatta, which is organized by the Fresno Yacht Club.[31] 2013 represented the 60th year of racing on Huntington Lake. The regatta spans two weekends during July. The High Sierra Regatta attracts Olympic gold medalists, and national champions. The consistent winds and beautiful scenery are popular with sailors from all over the country.

Land Use

In the Fresno Clovis Metropolitan Area (FCMA), SR 168 provides access to commercial and industrial uses at several interchanges. It provides access to major trip generation attractions including California State University-Fresno (CSUF), the CSUF Save Mart Center, auto retail sales, and community shopping centers. Between SR 180 and Shepherd Avenue, residential developments cluster along this corridor as it provides access to parts of northeast Fresno and the Clovis area.

From the FCMA, SR 168 provides access to the Shaver Lake/Huntington Lake recreation areas and the increasingly growing foothill/mountain residential developments. As SR 168 continues northeast, out of the Clovis area and into the Sierra National Forest, it becomes more rural in nature.

Land Use	
Segment	**Place Type**
1	Urban core
2	Urban core
3	Urban core
4	Residential
5	Rural settlements and Agricultural lands
6	Rural settlements and Agricultural lands
7	Rural
8	Rural
9	Rural
10	Rural
11	Rural

LONG TERM RIGHT-OF-WAY NEEDS:

The amount of right-of-way identified in this document (Appendix B, Summary Chart, Page 44) is based on the typical amount needed for this type of facility and is only meant to serve as a guideline. The TCR identifies the future right-of-way needs as a range of width with the intent to accommodate site-specific variations. These include site conditions (slope, utilities, etc.), operational needs, and potential design features that may require additional right-of-way. These design features include, but are not limited to, roundabouts, turn-lanes, on-street parking, bike lanes, and passing lanes. Additional right-of-way may also be needed on the facility to mitigate potential air quality impacts. Exact right-of-way needs will be determined on a case-by-case basis.

SYSTEM CHARACTERISTICS

System Characteristics												
Segment #		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
Existing Facility												
Facility Type[32]*		F	F	F	F/E	C	C	C	E	C	C	C
General Purpose Lanes[33]		6	6	4	4	2	2	2	4	2	2	2
Lane Miles[34]		25.8	16.0	9.2	10.4	13.6	8.4	20.2	35.2	17.6	9.4	32.4
Centerline Miles[35]		4.3	2.6	2.3	2.6	6.8	4.2	10.1	8.8	8.8	4.7	16.2
Auxiliary Lanes[36]		Yes	Yes	Yes	No	No	No	No	No	No	No	No
Concept Facility												
Facility Type		F	F	F	F	E	E	C	E	C	C	C
General Purpose Lanes		6	6	4	4	4	4	4	4	2	2	2
Lane Miles		25.8	16.0	9.2	10.4	27.2	16.8	40.4	35.2	17.6	9.4	32.4
Centerline Miles		4.3	2.6	2.3	2.6	6.8	4.2	10.1	8.8	8.8	4.7	16.2
TMS Elements												
TMS Elements (BY)**		Closed circuit televisions, changeable message signs, ramp metering stations, signals, traffic count stations, vehicle detection systems	Closed circuit televisions, changeable message sign, ramp metering stations, signals, traffic count stations, vehicle detection systems	Closed circuit televisions, ramp metering stations, signals, traffic count stations, vehicle detection systems	Signal, traffic count stations, vehicle detection systems	Changeable message sign, signal, traffic count stations	Traffic count station	Highway advisory radio, traffic count stations	Traffic count station	Traffic count station	Traffic count stations	Traffic count stations
TMS Elements (HY)***		Changeable message signs	Changeable message sign	Ramp metering station	Closed circuit television	Closed circuit television	None	Closed circuit television, changeable message sign, remote processing unit/roadside weather information system	None	None	Remote processing unit/roadside weather information system	None

*For definitions of facility types, please see Appendix A, Glossary of Terms and Acronyms, Page 34.
**BY = Base Year, 2012
***HY = Horizon Year, 2035

Bicycle Facility[37]

California's transportation system cannot meet the State's needs by just accommodating vehicle travel. Caltrans supports guidance meant to provide flexibility for bicycle facility design. The American Association of State Highway Transportation Officials and the National Association of City Transportation Officials publications help as a guide to Caltrans' philosophy and flexible approach toward designing multimodal transportation projects. For more information, please see: http://www.dot.ca.gov/Documents/2014-4-2-Flexibility-in-Design.pdf

These guides promote a network of Class I, Class II and Class III bicycle facilities that connect major origins and destinations. These guides should be considered in all transportation system developments so as to include flexibility in future design options.

Please see Appendix A: Glossary of Terms and Acronyms, Page 34, for a definition of the different bicycle facility types. Also, please see Appendix D, Bicycle Map, Page 46, for more information.

Bicycle Facility Information					
Segment	State Bicycle Facility		Parallel Bicycle Facility within ½ mile of route? (only if bikes are prohibited)		
	Bicycle Access Prohibited	Facility Type	Parallel Facility Present	Segment ID	Name
1	*Yes*		*Yes*	*1*	*Maple Ave*
2	*Yes*		*Yes*	*2*	*Willow Avenue; Villa Avenue*
3	*Yes*		*Yes*	*3*	*Herndon Avenue*
4	*No*	No classification	*No*		
5	*No*	No classification	*No*		
6	*No*	No classification	*No*		
7	*No*	No classification	*No*		
8	*No*	No classification	*No*		
9	*No*	No classification	*No*		
10	*No*	No classification	*No*		
11	*No*	No classification	*No*		

Where SR 168 traverses through the urban core of Fresno, bike use is prohibited because of the amount of motor vehicle traffic. However, when SR 168 exits the urban area of Fresno and continues into the foothills, bike access is allowed on the shoulder as traffic is less dense. Segments 1, 2, and 3 have parallel streets that allow bikes.

Pedestrian Facility[38]

Pedestrian Information	
Segment	**Sidewalk Present**
1	*No; pedestrians prohibited*
2	*No; pedestrians prohibited*
3	*No; pedestrians prohibited*
4	*No*
5	*No*
6	*No*
7	*No*
8	*No*
9	*No*
10	*No*
11	*No*

SR 168 through the dense urban core of Fresno and Clovis is freeway. When SR 168 continues north of the urban area there is less development and sidewalks have not been constructed.

Please see Appendix E, Pedestrian Map, Page 47, for more information.

Transit Facility[39]

A direct relationship exists between the size and density of a population and mass transit ridership. High density residential, coordinated commercial and retail development, and major employers located near existing or planned transit lines provide benefits by tying land use, compact growth, and modal enhancement to existing infrastructure. If residential densities within the metropolitan areas increase as expected, this could result in conditions more favorable for increasing use of transit. Mass transit may become a more important component of the transportation network in future years.

As congestion increases, creative solutions to ease this congestion will need to be considered. One alternative would be improvements and/or expansion of the existing transit system. A major advantage of transit over single-occupancy vehicle facilities is that adding transit, such as an additional bus, to a corridor that has reached capacity is more economical than it is to add another roadway lane. The bus is only needed during peak periods, making it more efficient than providing a travel lane that is under-used during non-peak hours. However, transit can only provide relief for congestion if the bus is not stuck in the same traffic as single occupancy vehicles. A solution to reduce the amount of time buses are stuck in congestion would be to create a dedicated transit lane. Investment in carpool and bus lanes on freeways, ramps, and arterial streets is not much more expensive than adding free-flow lanes; however, these alternatives can provide vital relief from the congestion associated with peak travel times. The dedicated transit lane would allow buses to move much faster than the congested traffic in other lanes, possibly making this an attractive alternative to commuters.

The major provider of urban public transportation in Fresno County is Fresno Area Express (FAX), a department of the City of Fresno. FAX provides two types of public transportation service in the Fresno County Metropolitan Area: the fixed-route service for general public riders, and Handy Ride, a demand-responsive service designed for individuals who, because of an impairment or disability, are unable to use the regular fixed-route bus service. The fixed-route network follows a modified grid pattern with intersecting north-south and east-west bus lines. The Handy Ride demand-responsive system provides complementary paratransit service as required by the Americans with Disabilities Act (ADA) of 1990 to paratransit certified people with disabilities.

The City of Clovis also provides public transportation in the Fresno-Clovis metropolitan area. Clovis operates two types of service: Clovis Stageline, a general public fixed-route service, and Clovis Round-Up, a demand-response paratransit service. Stageline operates on four routes, Monday through Friday with limited Saturday service, and one express route that operates on school days only. The routes are scheduled to coordinate with FAX service whenever feasible, in order to facilitate transfers between Stageline routes and FAX routes.

Clovis Round-Up provides demand-responsive transportation service for the elderly and disabled persons within the city's existing sphere of influence. Demand-response service is provided Monday through Friday in Clovis and Fresno and seven days a week within Clovis using wheelchair lift-equipped vehicles.

The Fresno County Regional Transit Agency (FCRTA) offers both fixed route and dial-a-ride services. FCRTA services the outlying areas of Fresno County including the thirteen rural incorporated cities of Fresno County: Coalinga, Firebaugh, Fowler, Huron, Kerman, Kingsburg, Mendota, Orange Cove, Parlier, Reedley, Sanger, San Joaquin, and Selma. There is limited service to communities in neighboring counties including: Granville, Hardwick, and Hanford in Kings County; Dinuba in Tulare County; Madera and Children's Hospital - Central Valley in Madera County; and Dos Palos in Merced County. Many unincorporated rural communities are also served, including the following: Alder Springs, Auberry, Burrough Valley, Cantua Creek, Caruthers, Dunlap, Easton, El Porvenir, Five Points, Friant, Halfway, Jose Basin, Lanare, Laton, Marshall Station, Meadow Lakes, Mile High, Miramonte, New Auberry, O'Neills, Pinehurst, Prather, Raisin City, Riverdale, Squaw Valley, Sycamore, Three Rocks, Tollhouse, Tranquillity, and the American Indian Rancherias of Big Sandy, Cold Springs, and Table Mountain. FCRTA offers connections to the following area transportation providers: FAX scheduled fixed route service with connections to Valley Children's Hospital in Madera County; FAX's Handy Ride ADA demand responsive services; Clovis Transit's Stageline scheduled, fixed route service; and Clovis Round-Up's demand responsive ADA services. Urban areas of Fresno are serviced by the FAX, Clovis Round-Up, and the Clovis Stage Line.

Greyhound and Orange Belt Stages provide transit services to areas outside the county. Greyhound provides frequent daily service from Fresno to a variety of points within California. Destinations served north of Fresno include Hayward, Sacramento, San Francisco, San Jose and Stockton. Destinations south of Fresno include Visalia, Bakersfield and Los Angeles. Connecting service is available to San Diego (via Los Angeles) and Yosemite National Park (via Merced).

Transportes Intercalifornias provides three daily trips from Fresno to Los Angeles, with connecting services onward to Santa Ana, San Ysidro and Tijuana. There are also two daily trips to San Jose with service to the west side of Fresno County, and two daily trips to Stockton with service to the northern Central Valley.

Please see Appendix F, Transit Map, Page 48, for more information.

The success of any mass transit service is largely dependent on the proximity of the service to where the population is located. To encourage the use of mass transit as an alternative to single-occupancy vehicles, it is essential that these facilities are linked to the appropriate land uses, with adequate parking facilities. Planning for pedestrian access to transit stops as future developments are proposed would also make it more likely that a mass transit system would be successful.

The California High Speed Rail Authority (CHSRA) is a State agency responsible for planning, designing, building, and operating a high speed rail system consistent with the Safe, Reliable High-Speed Passenger Train Bond Act. As such, CHSRA has developed a plan to build a high-speed rail line to service the major metropolitan areas of California by connecting San Diego and Los Angeles to San Francisco and Sacramento via the San Joaquin Valley. A large part of the Initial Operating Section (IOS) will be constructed in the San Joaquin Valley and will connect proposed stops in Fresno, Kings County (servicing Hanford/Tulare/Visalia), and Bakersfield, all of which lie within Caltrans District 6. From Fresno to Bakersfield, the system will cover 114 miles. This initial system may spur the

need to modify or relocate some portions of some state highways. Caltrans is working closely with the CHSRA to identify those impacts and is planning both systems accordingly.

The future of California's High-Speed Train (HST) service will be dependent on funding and is slated to become a part of the State's transportation system. It therefore should be considered in concert with local and regional non-motorized transportation, transit, airports, and highways. Moreover, the HST stations should be situated and built as multimodal transportation hubs.

The Caltrans Division of Transportation Planning's High-Speed Rail Transit Connectivity Program was created on July 1, 2012 to assist Caltrans California Intercity Rail (CIR), CHSRA, regional and local agencies, and transit operators in providing connectivity to HSR and feeder services. Caltrans District contacts are available to provide support of connectivity activities.

TRANSIT AND PARK AND RIDE FACILITIES										
Segment	Mode & Collateral Facility	Name	Route End Points	Annual Ridership	Operating Period	Stations		Bikes Allowed on Transit	Location Description	# Parking Spaces
						Cities	Postmiles			
1 -3	Traditional Bus	Clovis Transit – Stageline Route 10	Nees/Willow – Shaw/Cedar	108,061	Monday through Friday, limited service Saturday	Clovis, Fresno	VAR	Y		
3	Traditional Bus	Clovis Transit – Stageline Route 80	Sunnyside/ Fifth – Teague/ Minnewawa	25,051	Monday through Friday, limited service Saturday	Clovis	VAR	Y		
3	Traditional Bus	Clovis Transit – Stageline Route 50	Alluvial/ Temperance – Ashlan/ Peach	60,330	Monday through Friday, limited service Saturday	Clovis	VAR	Y		
2 - 4	Traditional Bus	Clovis Transit – Round Up Dial-A-Ride	Various	59,006	Monday through Friday, limited service on weekends/no Fresno trips on weekends	Clovis, Fresno	VAR			
3	Park & Ride	Temperance Ave				Clovis	R9.1		Temperance Avenue	110
7	Park & Ride	Auberry Rd				Fresno County	T31.2		Auberry Road	15
7	Park & Ride	Lodge Rd				Fresno County	T32.8		Lodge Road	27

Freight

Freight Facilities				
Facility Type/Freight Generator	**Location**	**Mode**	**Name**	**Major Commodity/ Industry**
Intermodal Freight Facilities	On SR 99, south of SR 168	Rail and Truck	Group Warehouse Company, BNSF-Fresno, Integrated Grain and Milling, J.B. Hunt, Rancher's Cotton Oil, Kach Transportation, Inc, Budway Enterprises, Inc.	General Commodities, including agriculture, food, grain, cottonseed Oil, paper products, building materials, refrigerated food
Air Freight	Segment 1, east of SR 168	Air/Truck	Fresno-Yosemite Airport	High-value, perishable commodities
Truck companies	Segments 1 - 3	Truck	Numerous trucking companies including, but not limited to: Evergreen Associates Express Inc., Lyons Transportation Inc., Golden Key Express, Advance Trucking Inc., Kiwi Transport	Forestry, mining, agriculture, transportation, warehousing, Building materials, beverages, agricultural products, refrigerated food, motor vehicles, paper products

This route is a STAA terminal access route. There are no "Weight in Motion" or weight scales of any type on this route. There are no truck stops along SR 168.

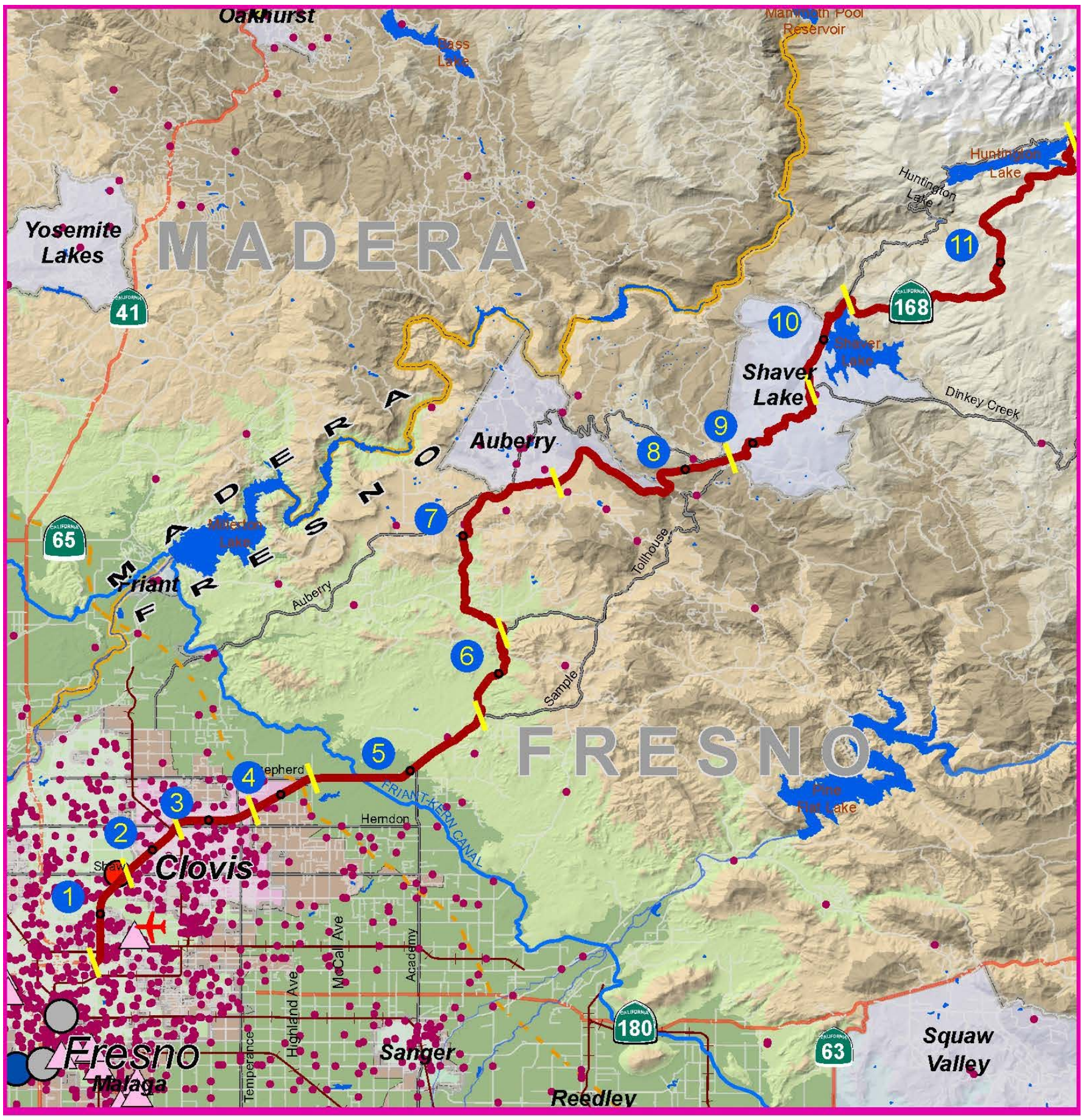
Segments 1-3, house many local truck companies. Segment 1 is also home to a large amount of retail, warehousing and agricultural uses, in addition to a smaller amount of wholesale land use.

The largest airport within District 06 is Fresno-Yosemite International (FYI), located east of SR 168. FYI features an air cargo park, located on approximately 87 acres on the north side of the airport. The park includes two aircraft ramps and over 500,000 square feet of air cargo building space to accommodate the needs of air freight companies and to capitalize on Fresno's mid-state location. The park was built to consolidate air cargo in that strategic location and provide room to expand, as cargo needs demand. It is feasible that, with the current facilities and an opportunity to expand, air freight carriers will consider FYI a favorable alternative location as the Los Angeles basin continues to grow.

The maps on pages 25 and 26 provide a description of freight facilities for this facility and show the approximate locations of freight infrastructure because exact locations of goods movement facilities are not provided for in the *San Joaquin Valley Interregional Goods Movement Plan: Task 1: Existing Conditions Assessment Technical Memorandum* study. Freight companies traditionally do not share location data with government agencies, so the description of facilities along this route, and the corresponding map are designed to show approximate location of freight uses, and not exact locations of specific facilities. By identifying the approximate locations of these facilities, the TCR provides a tool to determine the types of traffic that might be anticipated in a particular segment of the highway. This data that is useful for an initial investigation, but more detailed information may necessary depending on the purpose of the analysis.

Improving the movement of goods in California is a high priority. The State's economy and quality of life depend upon the efficient, safe delivery of goods to and from our ports and borders. It is important to ensure a dependable level of service for movement into and through major gateways and to ensure connectivity to key intermodal transfer facilities, seaports, air cargo terminals, and freight distribution centers. Improving goods movement infrastructure is also pivotal to relieve congestion on freeways and increase mobility for everyone in California.

Freight Map, Entire Route



Legend

- Truck Companies
- Airports
- Intermodal Facility

Businesses

Industry Type

- Farming/Agriculture and Mining
- Manufacturing
- Other Goods Movement Sector
- Transportation and Warehousing
- Wholesale and Retail Trade

top_businesses_in_SJV_region

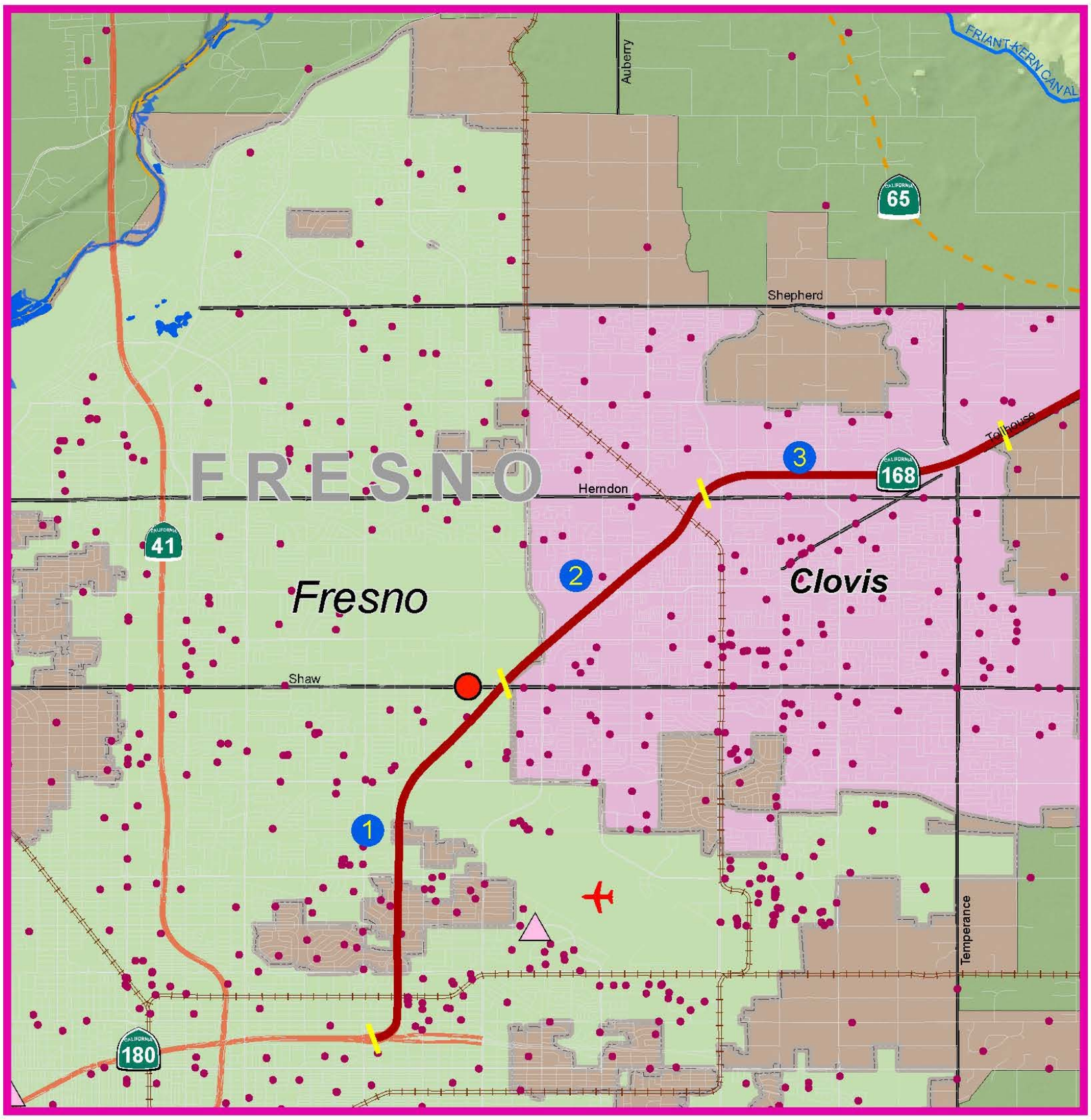
No. of Employees

- 100-249
- 250-499
- 500-999
- 1,000-4,999

Rail

01/07/15 California Dept of Transportation

Freight Map, Fresno and Clovis



01/16/15 California Dept of Transportation

Legend

- Truck Companies
- Intermodal Facility
- Airports
- Rail

Businesses
Industry Type

- Farming/Agriculture and Mining
- Manufacturing
- Other Goods Movement Sector
- Transportation and Warehousing
- Wholesale and Retail Trade

Businesses
No. of Employees

- 100-249
- 250-499
- 500-999
- 1,000-4,999

STATE ROUTE 168
TRANSPORTATION CONCEPT REPORT
SEGMENT MAP

Caltrans has the responsibility for developing, maintaining, and operating a multi-modal transportation network. This network must function at a high-level with respect to goods movement, interregional, interstate, and cross-border travel. In addition to continuing support for the regional Blueprint Planning programs, Caltrans has developed a statewide interregional, multi-modal blueprint known as the *California Interregional Blueprint (CIB).* It is being incorporated into the California Transportation Plan (CTP) 2040 update, scheduled for completion in December 2015. The CIB analyzes the benefits of multi-modal, interregional projects on the transportation system, and helps to expand understanding of the interactions between land use and transportation investments in meeting critical strategic growth and sustainability goals. The benefit of this effort will be stronger partnerships with regional and local agencies and tribal governments, as well as better data for improved decision making at the State, regional, and local level. The CIB establishes a basis for integrating the interregional system into the Smart Mobility Framework, and delivers support for economic stewardship, connectivity, and reliability valued by freight shippers and carriers. The Inter-regional Blueprint will synthesize the Blueprint Planning work by regional agencies while focusing on the interregional system that is Caltrans' responsibility.

Additional information on the Goods Movement infrastructure along this route is located in Appendix C, Goods Movement Links, Page 45.

Environmental Considerations[40, 41]

The chart on page 29 shows the critical species and habitats by segment. Some of the species are not listed with a special status, i.e. endangered or threatened, federally or by the state. Regardless, they are all crucial and are impacted.

ENVIRONMENTAL CRITICAL SPECIES AND HABITAT			
Segment	**Flora**	**Fauna**	**Habitat**
1	Caper-fruited tropidocarpum, California jewelflower*, Madera leptosiphon, succulent owl's clover*, Sanford's arrowhead, California satintail, San Joaquin Valley Orcutt grass*	California tiger salamander*, western spadefoot, Swainson's hawk*, tricolored blackbird, western mastiff bat, San Joaquin pocket mouse, Fresno kangaroo rat*, molestan blister beetle, Antioch efferian robberfly, Hurd's metapogon robberfly	Northern Hardpan Vernal Pool
2	Caper-fruited tropidocarpum, California jewelflower*, Madera leptosiphon, Sanford's arrowhead, California satintail, Greene's tuctoria*	California tiger salamander*, Swainson's hawk*, western yellow-billed cuckoo*, American badger, vernal pool fairy shrimp*, California linderiella, molestan blister beetle, Antioch robberfly, Hurd's metapogon robberfly	None
3	Caper-fruited tropidocarpum, California jewelflower*, Madera leptosiphon, Sanford's arrowhead, California satintail, Greene's tuctoria*	California tiger salamander*, Swainson's hawk*, western yellow-billed cuckoo*, American badger, vernal pool fairy shrimp*, California linderiella, molestan blister beetle, Antioch robberfly, Hurd's metapogon robberfly	None
4	Spiny-sepaled button-celery, forked hare-leaf, San Joaquin adobe sunburst*, succulent owl's clover*, Greene's tructoria*	California tiger salamander*, western spadefoot, western yellow-billed cuckoo*, burrowing owl, tricolored blackbird, vernal pool fairy shrimp*, California linderiella	Northern Hardpan Vernal Pool
5	Spiny-sepaled button-celery, forked hare-leaf, San Joaquin adobe sunburst*, succulent owl's clover*, Greene's tructoria*	California tiger salamander*, western spadefoot, western yellow-billed cuckoo*, burrowing owl, tricolored blackbird, vernal pool fairy shrimp*, California linderiella, western pond turtle	Northern Hardpan Vernal Pool
6	None	California tiger salamander*, tricolored blackbird, western pond turtle, vernal pool fairy shrimp*, California linderiella	None
7	Orange lupine, Keck's checkerbloom*, succulent owl's clover*, slender-stalked monkey flower	California tiger salamander*, foothill yellow-legged frog, San Joaquin kit fox*, western pond turtle, Dry Creek cliff strider bug	None
8	Orange lupine, Keck's checkerbloom*, succulent owl's clover*, slender-stalked monkey flower, oval-leaved viburnum, tree-anemone*, Tracy's eriastrum*, Mariposa pussypaws*, Abrams' onion	California tiger salamander*, foothill yellow-legged frog, San Joaquin kit fox*, western pond turtle, Dry Creek cliff strider bug, western mastiff bat, Sierra Nevada red fox*, an isopod, valley elderberry longhorn beetle*, molestan blister beetle, Tulare cuckoo wasp	Central Valley Drainage Hardhead/Squawfish Stream
9	Orange lupine, tree-anemone*, Madera leptosiphon, Yosemite lewisia, Yosemite ivesia, slender-stalked monkey flower	Foothill yellow-legged frog, Sierra Nevada yellow-legged frog*, osprey, bald eagle*, great gray owl*, willow flycatcher*, Sierra Nevada red fox*, Sierra marten, fisher*, western pond turtle, an isopod	None
10	Orange lupine, tree-anemone*, Madera leptosiphon, Yosemite lewisia, Yosemite ivesia, slender-stalked monkey flower, short-leaved hulsea, subalpine fireweed, Rawson's flaming trumpet, grey-leaved violet, Abrams' onion	Foothill yellow-legged frog, Sierra Nevada yellow-legged frog*, osprey, bald eagle*, great gray owl*, willow flycatcher*, Sierra Nevada red fox*, Sierra marten, fisher*, western pond turtle, an isopod, northern goshawk, Yuma myotis, long-eared myotis, fringed myotis, long-legged myotis, spotted bat, Townsend's big-eared bat*, pallid bat, western mastiff bat	None
11	Short-leaved hulsea, orange lupine, subalpine fireweed, Rawson's flaming trumpet, Madera leptosiphon, grey-leaved violet, Abrams' onion, Bolander's brachia, tundra thread moss, flat-leaved bladderwort, Yosemite ivesia, mud sedge	Foothill yellow-legged frog, Sierra Nevada yellow-legged frog*, osprey, northern goshawk, great gray owl*, Yuma myotis, long-eared myotis, fringed myotis, long-legged myotis, spotted bat, Townsend's big-eared bat*, pallid bat, western mastiff bat, Sierra Nevada red fox*, Sierra marten, fisher*, western pond turtle, an isopod, Lahontan cutthroat trout*, western small-footed myotis, Yosemite toad*, hoary bat	None

* Species with a special federal or state status

POSSIBLE CONTAMINATION SITES			
Segment	**Name**	**Location**	**Contaminants**
1	None	NA	NA
2	Abe's Liquor and Food	On Barstow Ave, near Peach Ave – about 0.25 miles east of SR 168	Benzene, gasoline, MTBE/TBA/other fuel oxygenates, toluene, xylene
3	None	NA	NA
4	None	NA	NA
5	None	NA	NA
6	None	NA	NA
7	None	NA	NA
8	None	NA	NA
9	None	NA	NA
10	None	NA	NA
11	None	NA	NA

Native American Considerations

Many California roads and highways originated along Tribal hunting and trading routes. The study, "*California Central Valley Tribal Transportation Environmental Justice Collaborative Project*" identified a number of Tribes that consider portions of the counties of the Central Valley as their ancestral lands. This study was funded by a Caltrans Environmental Justice grant and was prepared for the Kern County Council of Governments (KCOG) and the Tubatulabals of Kern Valley Tribe on behalf of the eight San Joaquin Valley Metropolitan Planning Organizations (MPOs). These consist of the San Joaquin Council of Governments (SJCOG), Stanislaus Council of Governments (StanCOG), Merced County Association of Governments (MCAG), Madera County Transportation Commission (MCTC), Fresno Council of Governments (FCOG), Kings County Association of Governments (KCAG), KCOG, and the Tulare County Association of Governments (TCAG), in coordination with the tribal governments and communities of the region. The final report is available at: http://www. kerncog.org/attachments/265_SJV Tribal EJSummary.pdf).

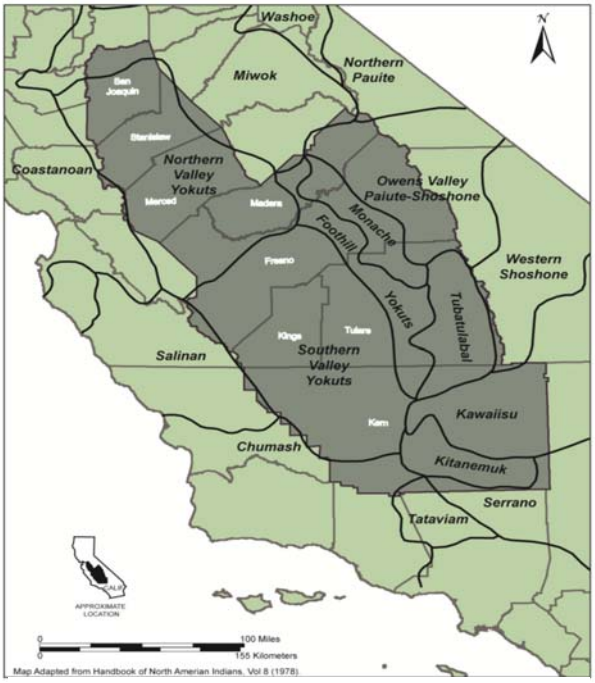


Figure 1: Ethnographic Territories in Eight County Study Area; from "California Central Valley Tribal Transportation Environmental Justice Collaborative Project"

According to the *"Map of Ethnographic Territories in Eight County Study Area*" from the "*California Central Valley Tribal Transportation Environmental Justice Collaborative Project"* report, SR 168 passes through areas considered to be the traditional indigenous territories of the Southern Valley Yokuts, Foothill Yokuts, Monache, Owens Valley Paiute Shoshone. Please note that many of the ethnographic territories overlap.

Caltrans consulted and coordinated with Tribal Governments and Communities in developing the TCR. The Tribal Governments and Communities are listed under "Tribes" in the chart on Page 11.

CORRIDOR PERFORMANCE[42]

CORRIDOR PERFORMANCE											
Segment #	1	2	3	4	5	6	7	8	9	10	11
Basic System Operations											
AADT (BY)	87,400	64,200	35,900	14,000	7,100	5,400	5,600	7,000	8,000	3,600	940
AADT (HY)	149,500	112,500	75,000	44,000	24,500	10,000	9,800	13,100	10,300	4,800	1,400
AADT: Growth Rate/Year	.04	.04	.06	.08	.13	.5	.03	.38	1	.25	5
LOS Method	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM	HCM
LOS (BY)	C	C	C	A	C	C	C	A	D	C	B
LOS (HY)	F	F	F	D	C	D	D	B	D	C	B
LOS Concept	D	D	D	D	D	D	D	D	D	D	D
Truck Traffic											
Total Average Annual Daily Truck Traffic (AADTT) (BY)	2,622	2,568	2,154	980	497	378	392	490	560	252	66
Total Trucks (% of AADT) (BY)	3	4	6	7	7	7	7	7	7	7	7
5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY)	1,415	359	65	59	298	8	4	5	0	0	0
5+ Axle Trucks (as % of Truck AADT)(BY)	54	14	3	6	6	2	1	1	0	0	0

*For definitions of facility types, please see Appendix A, Glossary of Terms and Acronyms, Page 34
**BY = Base Year, 2012
***HY = Horizon Year, 2035

Note: Table above contains only the applicable and required data for a TCR, based on the Caltrans, HQ TCR guidelines 2012. The route does not have Performance Monitoring System (PeMS) detection.

KEY CORRIDOR ISSUES

CORRIDOR CONCEPT

Concept Rationale

Planned and Programmed Projects and Strategies

Planned Project: A planned improvement or action is a project in a fiscally constrained section of a long-term plan, such as an approved Regional or Metropolitan Transportation Plan (RTP or MTP), Capital Improvement Plan, or measure.

Programmed Project: A programmed improvement or action is a project in a near-term programming document identifying funding amounts by year, such as the State Transportation Improvement Program or the State Highway Operations and Protection Program.

Planned and Programmed Projects on SR 168				
Segment	**Description**	**Planned or Programmed**	**Location**	**Source**
1 - 4	Freeway maintenance access	Programmed	In Fresno and Clovis, from SR 180 to Shepherd Ave	Caltrans District 6 Status of Projects
1 - 2	Interchange improvements	Concept	In Fresno, at Shaw Ave	Fehr and Peers Study
2	Interchange improvements	Concept	In Fresno and Clovis, at Bullard Ave	Fehr and Peers Study
2 - 3	Construct median barrier	Programmed	In Clovis, from the Herndon Ave UC to the Clovis Ave UC	Caltrans District 6 Status of Projects
7	Realign curve	Programmed	Near Prather, near Auberry Rd	Caltrans District 6 Status of Projects
7	Intersection improvement	Programmed	At the Auberry Rd intersection	Caltrans District 6 Status of Projects
8	Enhance vista point	Programmed	East of Prather, at Maynard Munger Vista Point	Caltrans District 6 Status of Projects
9 - 11	Pavement Rehabilitation	Programmed	In Fresno County, in and near Shaver from 0.10 mile East of Warbler Rd to End of Route at Huntington Lake	Caltrans District 6 Status of Projects

Projects and Strategies to Achieve Concept

Projects to Achieve Concept					
Segment	**Description**	**Location**	**Source**	**Purpose**	**Implementation Phase**
1 - 11	No Projects	No Projects	No Projects	No Projects	No Projects

APPENDIX A
GLOSSARY OF TERMS AND ACRONYMS

Acronyms

2C – Two-lane conventional highway
2E – Two-lane expressway
4C – Four-lane conventional highway
4E – Four-lane expressway
6C – Six-lane conventional highway (rare)
6E – Six-lane expressway
6F – Six-lane freeway
8E – Eight-lane expressway (rare)
8F – Eight-lane freeway
10F – Ten-lane freeway
AADT- Annual Average Daily Traffic
ADA – Americans with Disabilities Act of 1990
ADT- Average Daily Traffic
BRT-Bus rapid transit
CALTRANS – California Department of Transportation
CAPM-Capital Preventative Maintenance
CCTV-Closed Circuit Television Cameras
CEQA- California Environmental Quality Act
CMA- Congestion Management Agencies
CMAQ-Congestion Mitigation and Air Quality
CMIA-Corridor Mobility Improvement Account
CMS-Changeable Message Sign
COG-Council of Governments
CSMP-Corridor System Management Plan
CSS – Context Sensitive Solutions
CT-Caltrans
CTC-California Transportation Commission
FHWA – Federal highway Administration
FSR – Feasibility Study Report
FSTIP- Federal Statewide Transportation Improvement Program
FTIP – Federal Transportation Improvement Program
GHG- Green House Gas
GIS – Geographic Information System
HAR-Highway Advisory Radio
HCP- Habitat Conservation Plan
HOT-High occupancy toll lane
HOV-High occupancy vehicle lane
IIP-Interregional Improvement Plan
IGR-Intergovernmental Review
IRRS-Interregional Road System
ITIP-Interregional Transportation Improvement Program
ITMS-Intermodal Transportation Management System
ITS – Intelligent Transportation System
ITSP-Interregional Transportation Strategic Plan
LOS – Level of Service

MAP-21-Moving Ahead for Progress in the 21st Century Act
MOU-Memorandum of Understanding
MPO- Metropolitan Planning Organizations
MTC-Metropolitan Transportation Commission
MTCE-Maintenance (State program)
NA-Not available
NHS-National Highway System
NOA – Naturally Occurring Asbestos
NCCP- Natural Community Conservation Plan
NEPA- National Environmental Policy Act
OC-Overcrossing
OH-Overhead
PeMS-Performance Monitoring System
PID-Project Initiation Document
PM-Post mile
PSR- Project Study Report
PSSR-Project Scope Summary Report
RCR-Route Concept Report
RHNA- Regional Housing Needs Allocation
RIP-Regional Improvement Program
ROW or R/W-Right-of-Way
RPU-Remote Processing Unit – was known as RWIS (Remote Weather Information Station)
RTIP – Regional Transportation Improvement Program
RTP- Regional Transportation Plan
RTPA- Regional Transportation Planning Agencies
SAFETEA - Safe, Accountable, Flexible and Efficient Transportation Equity Act of 2005
SCS- Sustainable Community Strategies
SHOPP- State Highway Operation Protection Program
SJVUAPCD-San Joaquin Valley Air Pollution Control District
STIP – State Transportation Improvement Program
TASAs-Traffic Accident Surveillance and Analysis System
TCM-Transportation Control Measure
TCR-Transportation Concept Report
TCS-Traffic Count Station
TDM – Transportation Demand Management
TEA-21 Transportation Equity Act for the 21st Century
TMC-Transportation Management Center
TMS – Transportation Management System
TSN- Transportation System Network
UC-Undercrossing
UTC-Ultimate Transportation Concept
VDS-Vehicle Detection System
VHT-Vehicle Hours Traveled
VMT – Vehicle Miles Traveled

Definitions

AADT – Annual Average Daily Traffic is the total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th. Traffic counting is generally performed by electronic counting instruments moved from location throughout the state in a program of continuous traffic count sampling. The resulting counts are adjusted to an estimate of annual average daily traffic by compensating for seasonal influence, weekly variation and other variables which may be present. Annual ADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways and other purposes.

Arterial Highway - A general term denoting a highway primarily for through travel usually on a continuous route.

Auxiliary Lane – The portion of the roadway for weaving, truck climbing, speed change, or for other purposes supplementary to through movement.

Base year – The year that the most current data is available to the Districts

Bikeway Class I (Bike Path) – Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.

Bikeway Class II (Bike Lane) – Provides a striped lane for one-way bike travel on a street or highway.

Bikeway Class III (Bike Route) – Provides for shared use with pedestrian or motor vehicle traffic.

Bottlenecks – A bottleneck is a location where traffic demand exceeds the effective carrying capacity of the roadway. In most cases, the cause of a bottleneck relates to a sudden reduction in capacity, such as a lane drop, merging and weaving, driver distractions, a surge in demand, or a combination of factors.

Bypass – An arterial highway that permits users to avoid part or all of a city or town center, a suburban area or an urban area.

Capacity – The maximum sustainable hourly flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, environmental, traffic, and control conditions.

Capital Facility Concept – The 20-25 year vision of future development on the route to the capital facility. The capital facility can include capacity increasing, State Highway, bicycle facility, pedestrian facility, transit facility (Intercity Passenger Rail, Mass Transit Guideway etc.), grade separation, and new managed lanes.

Channelization - The separation or regulation of conflicting movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movement of vehicles, bicycles, and pedestrians.

Collector Road – A route that serves travel of primarily intra-country rather than statewide importance in rural areas or a route that serves both land access and traffic circulation within a residential neighborhood, as well as commercial and industrial areas in urban and suburban areas.

Concept LOS – The minimum acceptable LOS over the next 20-25 years

Conceptual Project – A conceptual improvement or action is a project that is needed to maintain mobility or serve multimodal users, but is not currently included in a fiscally constrained plan and is not currently programmed. It could be included in a General Plan or in the unconstrained section of a long-term plan.

Conventional Highway - A highway without control of access which may or may not be divided. Grade separations at intersections or access control may be used when justified at spot locations.

Corridor – A broad geographical band that follows a general directional flow connecting major sources of trips that may contain a number of streets, highways, bicycle, pedestrian, and transit route alignments. Off system facilities are included as informational purposes and not analyzed in the TCR.

Crosswalk – That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersections where the intersecting roadways meet at approximately right angles, except the prolongation of such lines from an alley across a street. Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface.

Divided Highway – A highway with separated roadbeds for traffic traveling in opposing directions.

Expressway – An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections.

Facility Concept – Describe the Facility and strategies that may be needed within 20-25 years. This can include capacity increasing, State Highway, bicycle facility, pedestrian facility, transit facility, Non-capacity increasing operational improvements, new managed lanes, conversion of existing managed lanes to another managed lane type or characteristic, TMS field elements, Transportation Demand Management and Incident Management.

Facility Type – The facility type describes the State Highway facility type. The facility could be freeway, expressway, conventional, or one-way city street.

Freeway – A highway in respect to which the owners of abutting lands have no right or easement of access to or from their abutting lands or in respect to which such owners have only limited or restricted right or easement access. A divided arterial highway with full control of access and with grade separations at intersections.

Freight Generator – Any facility, business, manufacturing plant, distribution center, industrial development, or other location (convergence of commodity and transportation system) that produces significant commodity flow, measured in tonnage, weight, carload, or truck volume.

Frontage Street or Road – A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

Grade Separation – A crossing of two highways, highway and local road, or a highway and a railroad at different levels.

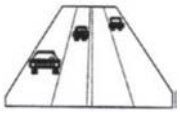
Headway – The time between two successive vehicles as they pass a point on the roadway, measured from the same common feature of both vehicles.

Horizon Year – The year that the future (20-25 years) data is based on.

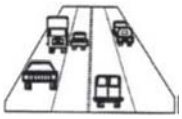
Intermodal Freight Facility – Intermodal transport requires more than one mode of transportation. An intermodal freight facility is a location where different transportation modes and networks connect and freight is transferred (or "transloaded") from one mode, such as rail, to another, such as truck.

ITS – Intelligent Transportation System improves transportation safety and mobility and enhances productivity through the integration of advanced communications technologies into the transportation infrastructure and in vehicles. Intelligent transportation systems encompass a broad range of wireless and wire line communications-based information and electronics technologies to collect information, process it, and take appropriate actions.

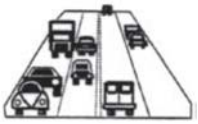
LOS – Level of Service is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. A LOS definition generally describes these conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort, and convenience. Six levels of LOS can generally be categorized as follows:



LOS A describes free flowing conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway.



LOS B is also indicative of free-flow conditions. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.



LOS C represents a range in which the influence of traffic density on operations becomes marked. The ability to maneuver with the traffic stream is now clearly affected by the presence of other vehicles.

LOS D demonstrates a range in which the ability to maneuver is severely restricted because of the traffic congestion. Travel speed begins to be reduced as traffic volume increases.

LOS E reflects operations at or near capacity and is quite unstable. Because the limits of the level of service are approached, service disruptions cannot be damped or readily dissipated.

LOS F a stop and go, low speed conditions with little or poor maneuverability. Speed and traffic flow may drop to zero and considerable delays occur. For intersections, LOS F describes operations with delay in excess of 60 seconds per vehicle. This level, considered by most drivers unacceptable often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection.

Median – The portion of a divided highway separating the traveled ways in opposite directions.

Multi-modal – The availability of transportation options using different modes within a system or corridor, such as automobile, subway, bus, rail, or air.

Shoulder – The portion of the roadway contiguous with the traveled way for the accommodation of stopped vehicles, for emergency use, for errant vehicle recovery, and for lateral support of base and surface courses. The shoulder may accommodate bicyclists and pedestrians.

Sidewalk – A surfaced pedestrian way contiguous to a roadbed used by the public where the need for which is created primarily by the local land use.

System Operations and Management Concept – Describe the system operations and management elements that may be needed within 20-25 years. This can include Non-capacity increasing operational improvements (Aux. lanes, channelization's, turnouts, etc.), conversion of existing managed lanes to another managed lane type or characteristic (e.g. HOV land to HOT lane), TMS Field Elements, Transportation Demand Management, and Incident Management.

Peak Hour – The hour of the day in which the maximum volume occurs across a point on the highway.

Peak Hour Volume – The hourly volume during the highest hour traffic volume of the day traversing a point on a highway segment. It is generally between 6 percent and 10 percent of the ADT. The lower values are generally found on roadways with low volumes.

Peak Period – Is a part of the day during which traffic congestion on the road is at its highest. Normally, this happens twice a day, once in the morning and once in the evening; the time periods when the most people commute. Peak Period is defined for individual routes, not a District or statewide standard.

Planned Project – A planned improvement or action is a project in a fiscally constrained section of a long-term plan, such as an approved Regional or Metropolitan Transportation Plan (RTP or MTP), Capital Improvement Plan, or measure.

Post-25 Year Concept – This dataset may be defined and re-titled at the District's discretion. In general, the Post-25 Year concept could provide the maximum reasonable and foreseeable roadway needed beyond a 20-25 year horizon. The post-25 year concept can be used to identify potential widening, realignments, future facilities, and rights-of-way required to complete the development of each corridor.

Post Mile – A post mile is an identified point on the State Highway System. The milepost values increase from the beginning of a route within a count to the next county line. The milepost values start over again at each county line. Milepost values usually increase from south to north or west to east depending upon the general direction the route follows within the state. The milepost at a given location will remain the same year after year. When a section of road is relocated, new milepost (usually noted by an alphabetical prefix such as "R" or "M") are established for it. If relocation results in a change in length, "milepost equations" are introduced at the end of each relocated portion so that mileposts on the reminder of the route within the county will remain unchanged.

Programmed Project – A programmed improvement or action is a project in a near-term programming document identifying funding amounts by year, such as the State Transportation Improvement Program or the State Highway Operations and Protection Program.

Railroad Class I – The Surface Transportation Board (STB) defines a Class I railroad in the U.S. as a carrier having annual operating revenues of $250 million or more. This class includes the nation's major railroads. In California, Class I railroads include Union Pacific Railroad (UP) and Burlington Northern Santa Fe Railway (BNSF).

Railroad Class II – STB defines a Class II railroad in the U.S. as having annual carrier operating revenues of less than $250 million but more than $20 million. Class II railroads are considered mid-sized freight-hauling railroad in terms of operating revenues. They are considered "regional railroads" by the Association of American Railroads.

Railroad Class III – Railroads with annual carrier operating revenues of $20 million or less. The typical Class III is a short line railroad, which feeds traffic to or delivers traffic from a Class I or Class II railroad.

Roadbed – That portion of the roadway extending from curb line to curb line or shoulder line to shoulder line. Divided highways are considered to have two roadbeds.

Roadway – That portion of the highway included between the outside lines of the sidewalks, or curbs and gutters, or side ditches including the appertaining structures, and all slopes, ditches, channels, waterways, and other features necessary for proper drainage and protection.

Route Designation – A route's designation is adopted through legislation and identifies what system the route is associated with on the State Highway System. A designation denotes what design standards should apply during project development and design. Typical designations include but not limited to National Highway System (NHS), Interregional Route System (IRRS), Scenic Highway System,

Rural – Fewer than 5,000 in population designates a rural area. Limits are based upon population density as determined by the U.S. Census Bureau.

Scenic Highway – A State or county highway, in total or in part, that is recognized for its scenic value, protected by a locally adopted corridor protection program, and has been officially designated by the Department.

Segment – A portion of a facility between two points.

TDM – Transportation Demand Management programs designed to reduce or shift demand for transportation through various means, such as the use of public transportation, carpooling, telework, and alternative work hours. Transportation Demand Management strategies can be used to manage congestion during peak periods and mitigate environmental impacts.

TMS – Transportation Management System is the business processes and associated tools, field elements and communications systems that help maximize the productivity of the transportation system. TMS includes, but is not limited to, advanced operational hardware, software, communications systems and infrastructure, for integrated Advanced Transportation Management Systems and Information Systems, and for Electronic Toll Collection System.

Urban – 5,000 to 49,999 in population designates an urban area. Limits are based upon population density as determined by the U.S. Census Bureau.

Urbanized – Over 50,000 in population designates an urbanized area. Limits are based upon population density as determined by the U.S. Census Bureau.

VMT – Is the total number of miles traveled by motor vehicles on a road or highway segments.

APPENDIX B
SUMMARY CHART

Transportation Concept Report

State Route 168

SUMMARY CHART 1A

LEGEND

Existing Lanes: Conventional, Expressway, Freeway

Number of Lanes: 2, 4, 6

Add Through Lanes

* Not to scale

Route 180	Shaw Ave	Herndon Ave	Temperance Ave	Shepherd Ave	Academy Ave	Millerton Rd	Lodge Rd	Auberry/Tollhouse Rd Jct	Dinkey Creek Rd	Huntington Lake Rd	0.1 mi E of Rd to Florence Lake
PM R0.0	PM R4.3	PM R6.9	PM R9.2	PM R11.8	PM 16.8	PM T22.8	PM T32.8/(L27.4)	PM R36.2	PM 45.0	PM 49.7	PM 65.9
F	R E	S	N	O	C O	U	N	T		Y	

F R E S N O / C L O V I S

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 (2035 Concept) by 2035-RTPAs and Caltrans, and the Ultimate Facility to preserve ROW and plan line beyond 2035. 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 2035. The 2035 Concept is the target LOS desired, i.e., LOS C, for attainment by 2035.

Deficiency: Occurs when the target LOS is degraded 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 2035 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).

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

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.

N/A- Deficient, no project recommended.

* UTC is generally the same as the existing ROW

** UTC will be developed as Fresno County General Plan landuse develops.

SEGMENT	1	2	3	4	5	6	7	8	9	10	11
County / State Route	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168
Description Begin	ROUTE 180	SHAW AVE	HERNDON AVE	TEMPERANCE AVE	SHEPHERD AVE	ACADEMY AVE	0.1 MI. N OF TOLLHOUSE RD.	LODGE RD	AUBERRY-TOLLHOUSE RD JCT	DINKEY CREEK RD	HUNTINGTON LAKE RD
Description End	SHAW AVE	HERNDON AVE	TEMPERANCE AVE	SHEPHERD AVE	ACADEMY AVE	0.1 MI. N OF TOLLHOUSE RD.	LODGE RD	AUBERRY-TOLLHOUSE RD JCT	DINKEY CREEK RD	HUNTINGTON LAKE RD	0.1 MI E OF RD TO FLORENCE LAKE
Postmile Limits Begin/End (PM)	R0.0 / R4.3	R4.3 / R6.9	R6.9 / R9.2	R9.2 / R11.8	R11.8 / 16.8	16.8 / T22.8	T22.8 / T32.9	T32.9 / R36.2	R36.2 / 45.0	45.0 / 49.7	49.7 / 65.9
Length (MI)	4.3	2.6	2.3	2.6	5.0	6.0	10.1	3.3	8.8	4.7	16.2
Rural / Urban	Urban	Urban	Urban	Urban	Rural	Rural	Rural	Rural	Rural	Rural	Rural
Terrain	Flat	Flat	Flat	Flat	Rolling	Rolling	Mountainous	Mountainous	Mountainous	Mountainous	Mountainous
ROW: Range Existing (FT)	*	*	*	*	60 / 100	60 / 110	60 / 100	130 / 500	40 / 120	45 / 200	80 / 200
Median Range (FT)	40 / 40	39 / 39	39 / 39	59 / 88	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
Shoulder Range (FT) Treated	10 / 10	10 / 10	10 / 10	10 / 10	2 / 8	2 / 10	2 / 8	6 / 8	2 / 8	2 / 2	2 / 2
Lane Width (FT)	12	12	12	12	12	12	12	12	12	12	12
Ultimate ROW (FT)	*	*	*	*	246**	246	246	*	*	*	*
Facility: Existing	6F	6F	4F	4F/4E	2C	2C	2C	4E	2C	2C	2C
2035 Concept	6F	6F	4F	4F	4E	2C(I)	2C(I)	4E	2C(I)	2C(I)	2C(I)
UTC	8F	8F	8F	4F	4F**	2C(I)	2C(I)	4E	2C(I)	2C(I)	2C(I)
LOS: 2012	C	C	C	B	C	C	C	A	D	C	B
LOS: 2020	D	D	D	C	D	C	D	B	D	C	B
LOS: 2035	F	F	F	D	C	D	D	B	D	C	B
LOS: Concept 2035	D	D	D	D	D	D	D	D	D	D	D
Deficiency/Year Deficient	2035	2035	2035	N/A	N/A	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	No	No	No
LOS W/ Concept Improvement	N/A-	N/A-	N/A-	N/A	N/A-	N/A	N/A	N/A	N/A	N/A	N/A
Directional Split (Peak Hour)	56/44	60/40	60/40	67/33	68/32	66/34	60/40	62/38	57/43	57/43	65/35
AADT: 2012	87,400	64,200	35,900	14,000	7,100	5,400	5,600	7,000	8,000	3,600	940
AADT: 2020	109,000	81,000	49,500	24,400	13,000	7,000	7,100	9,100	8,800	4,000	1,100
AADT: 2035	149,500	112,500	75,000	44,000	24,500	10,000	9,800	13,100	10,300	4,800	1,400
Peak Hour: 2012	8,000	6,400	3,900	1,220	650	500	525	700	675	350	100
Peak Hour: 2020	9,900	8,000	5,400	2,130	1,200	640	650	900	750	375	110
Peak Hour: 2035	13,600	11,100	8,200	3,830	2,200	920	900	1,300	875	450	140
% Trucks: AADT	3%	4%	6%	7%	7%	7%	7%	7%	7%	7%	7%
% Trucks: Peak Hour	1%	2%	1%	1%	1%	1%	4%	3%	2%	2%	3%

Transportation Concept Report

State Route 168

SUMMARY CHART 1B

LEGEND

Existing Lanes: Conventional, Expressway, Freeway

Number of Lanes: 2, 4, 6

Add Through Lanes

* Not to scale

Route 180	Shaw Ave	Herndon Ave	Temperance Ave	Shepherd Ave	Academy Ave	Millerton Rd	Lodge Rd	Auberry/Tollhouse Rd Jct	Dinkey Creek Rd	Huntington Lake Rd	0.1 mi E of Rd to Florei
PM R0.0	PM R4.3	PM 6.9	PM 9.2	PM R11.8	PM 16.8	PM T22.8	PM T32.8/(L27.4)	PM R36.2	PM 45.0	PM 49.7	PM 65.9
F	R E	S	N	O	C O	U	N	T	Y		

F R E S N O / C L O V I S

SEGMENT	1	2	3	4	5	6	7	8	9	10	11
County / State Route	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168
Description Begin	ROUTE 180	SHAW AVE	HERNDON AVE	TEMPERANCE AVE	SHEPHERD AVE	ACADEMY AVE	0.1 MI. N OF TOLLHOUSE RD.	LODGE RD	AUBERRY-TOLLHOUSE RD JCT	DINKEY CREEK RD	HUNTINGTON LAKE RD
Description End	SHAW AVE	HERNDON AVE	TEMPERANCE AVE	SHEPHERD AVE	ACADEMY AVE	0.1 MI. N. OF TOLLHOUSE RD.	LODGE RD	AUBERRY-TOLLHOUSE RD JCT	DINKEY CREEK RD	HUNTINGTON LAKE RD	0.1 MI E OF RD TO FLORENCE LAKE
Postmile Limits Begin/End (PM)	R0.0 / R4.3	R4.3 / R6.9	R6.9 / R9.2	R9.2 / R11.8	R11.8 / 16.8	16.8 / T22.8	T22.8 / T32.9	T32.9 / R36.2	R36.2 / 45.0	45.0 / 49.7	49.7 / 65.9
Length (MI)	4.3	2.6	2.3	2.6	5.0	6.0	10.1	3.3	8.8	4.7	16.2
Functional Classification	Freeway	Freeway	Freeway	Freeway/ Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial
National Highway System (NHS) (Y/N)	No	No	No	No	No	No	No	No	No	No	No
Freeway/Expressway System (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Regionally Significant (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
STRAHNET (Y/N)	No	No	No	No	No	No	No	No	No	No	No
Lifeline (Y/N)	No	No	No	No	No	No	No	No	No	No	No
IRRS (Yes: HE=High Emphasis, F=Focus, G=Gateway or No)	No	No	No	HE	HE	HE	HE	HE	HE	HE	HE
TRUCK NETWORK, STAA: (NN=National Network, TA=Terminal Access, CL= California Legal, R= Special Restrictions, or A=Advisory)	TA	TA	TA	TA	TA	TA	CL	CL	A	A	CL
Scenic (Yes: Officially Designated, Eligible or No)	No	No	No	No	No	Eligible	Eligible	Eligible	Eligible	Eligible	Eligible
ICES (Intermodal Corridor of Economic Significance) (Y/N)	No	No	No	No	No	No	No	No	No	No	No
General Plan/RTP LOS Standard	Fresno Co LOS D for RTP Regionally Significant System	Fresno Co LOS D for RTP Regionally Significant System	Fresno Co LOS D for RTP Regionally Significant System	Fresno Co LOS D for RTP Regionally Significant System	Fresno Co LOS D for RTP Regionally Significant System	Fresno Co LOS D for RTP Regionally Significant System	Fresno Co LOS D for RTP Regionally Significant System	Fresno Co LOS D for RTP Regionally Significant System	Fresno Co LOS D for RTP Regionally Significant System	Fresno Co LOS D for RTP Regionally Significant System	Fresno Co LOS C for RTP Regionally Significant System
General Plan/RTP Standard Highway Classification	Freeway	Freeway	Freeway	Freeway	Freeway	Freeway	Freeway	Freeway	Expressway	Expressway	Collector
Passing Lanes (Y/N)	No	No	No	No	No	No	No	No	No	No	No
Bike Use Allowed (Y/N)	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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

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

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 accommodate 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 facilites most directly, conveniently and efficiently to intrastate, interstate, and international markets.

APPENDIX C
GOODS MOVEMENT LINKS

Map of Caltrans "Weight in Motion" scales, Caltrans, District 6
http://www.dot.ca.gov/hq/traffops/trucks/datawim/wim06.pdf

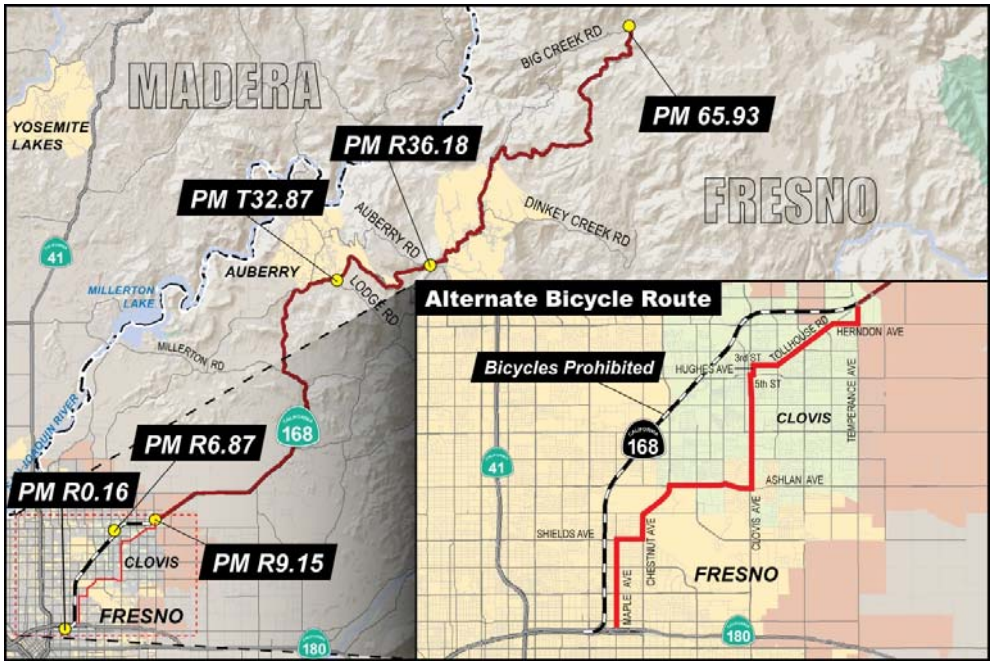
Map of Caltrans "weight stations" scales
http://www.dot.ca.gov/hq/traffops/trucks/weigh-stations/weigh-sta-map.pdf

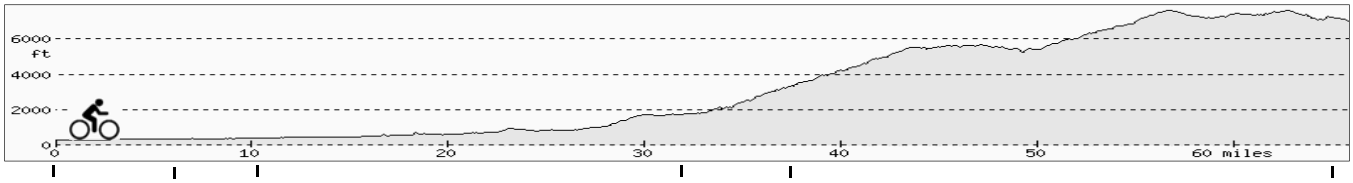
2011 Annual Average Daily Truck Traffic on California State Highways, Caltrans, Traffic Data branch (Most current data set for truck volumes in 2013)
http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm

"*San Joaquin Valley Interregional Goods Movement Plan: Task 1: Existing Conditions Assessment Technical Memorandum*" Prepared for San Joaquin Valley Regional Transportation Planning Agencies *Prepared by* Cambridge Systematics, Inc. January 2012, Specifically charts: 4.3, 4.10, 5.1,5.2 ,5.5,5.9
http://sjvcogs.org/pdfs/2012/goodsEC021712.pdf

Appendix D: Bicycle Map

STATE ROUTE 168 FRESNO COUNTY BICYCLE MAP

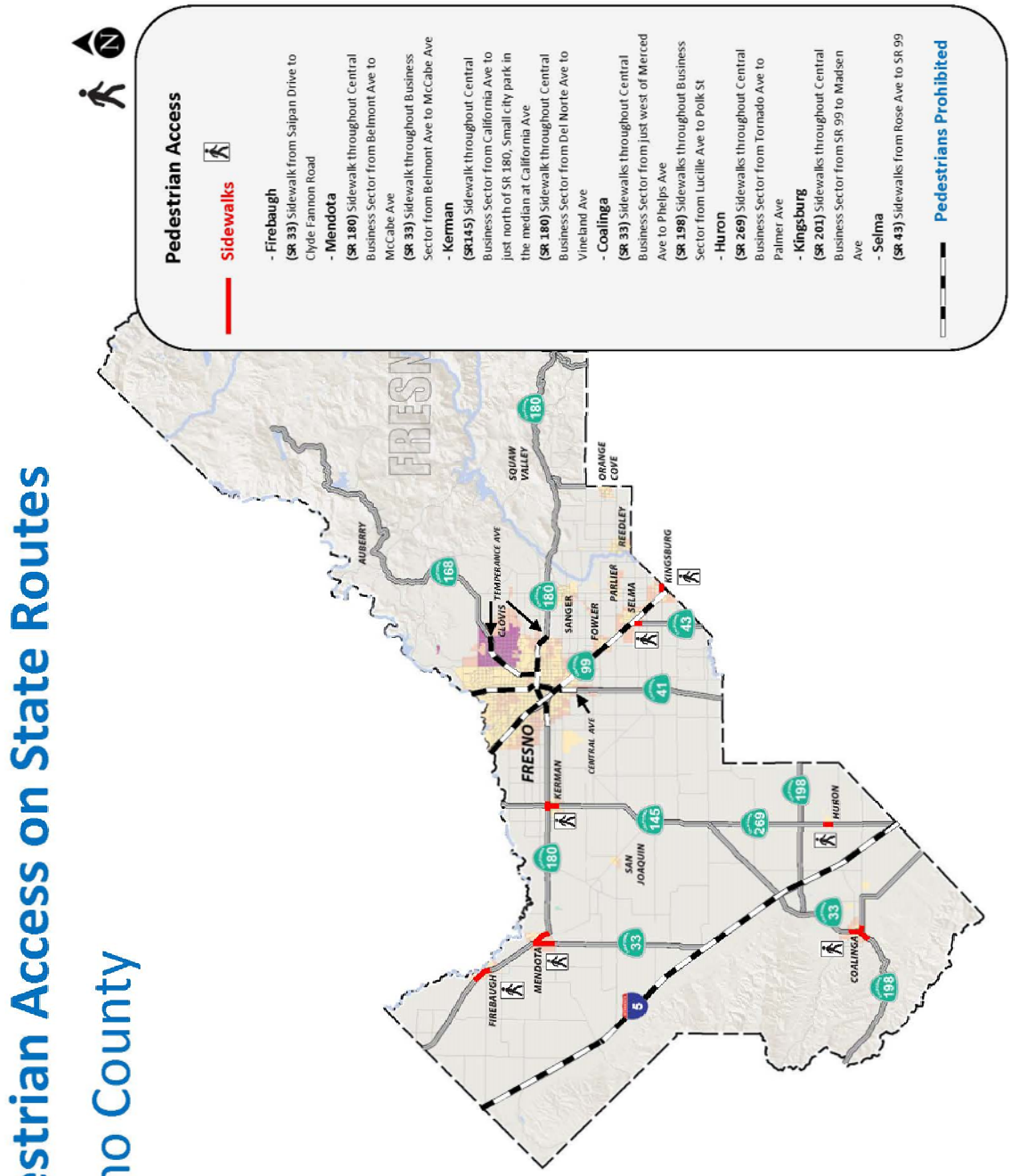




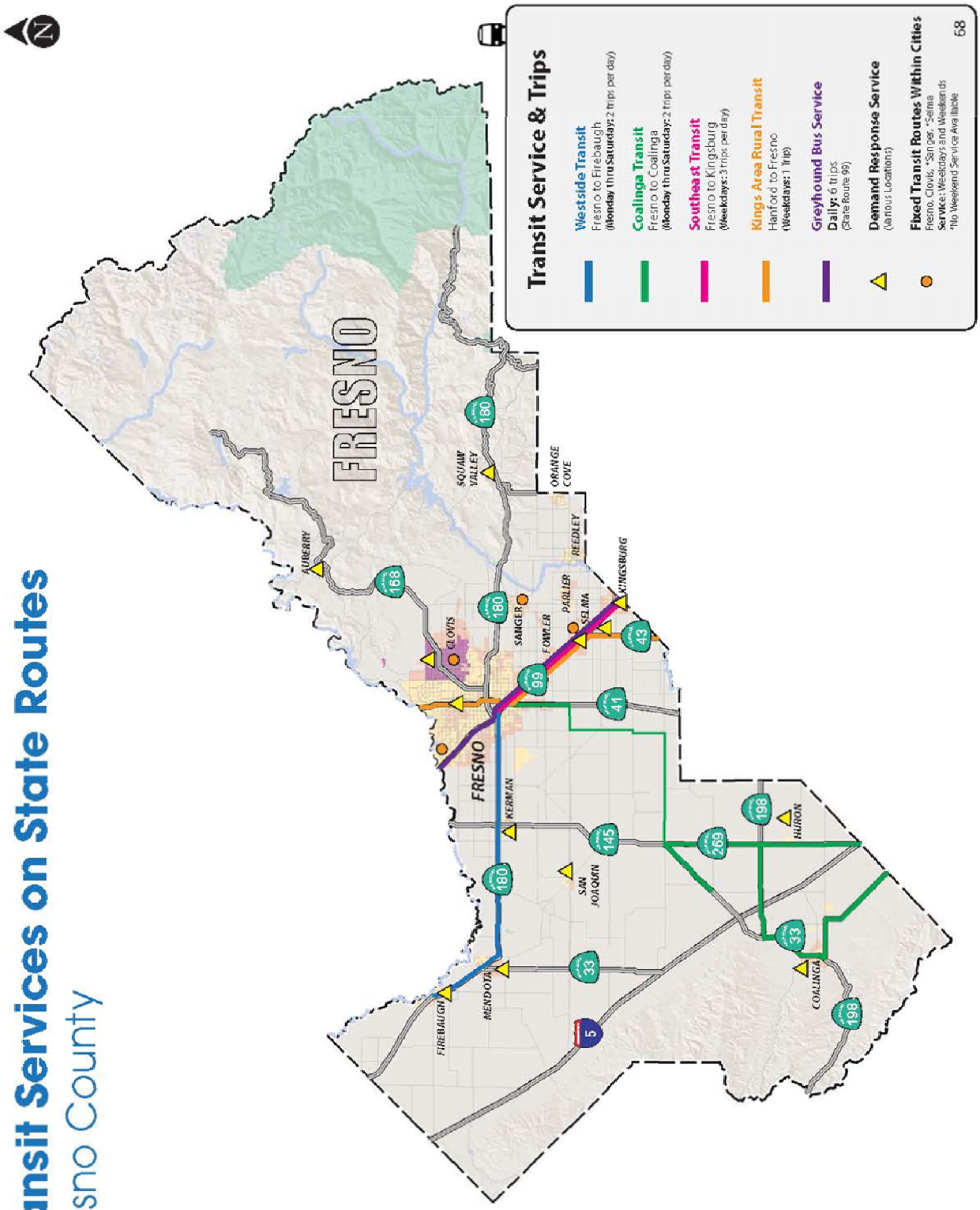
SR 180 PM R0.16 | Herndon Ave PM R6.87 | Temperance Ave PM R9.15 | Lodge Rd PM T32.87 | Auberry/Tollhouse Rd PM R36.18 | E end of Huntington Lake PM 65.93

Location *(Postmile)*	Facility (Lanes)	Rural/ Urban	Shoulder (Treated)	Terrain	Speed Limit Posted	Facility Description
State Route 180 to Herndon Avenue *(PM R0.16 – R6.87)*	6 lane Freeway	Urban	10 feet	Level	65	BICYCLE AND PEDESTRIAN ACCESS **PROHIBITED** ON FREEWAY
Herndon Avenue to Temperance Avenue *(PM R6.87 – R9.15)*	4 Lane Freeway	Urban	10 feet	Level	65	BICYCLE AND PEDESTRIAN ACCESS **PROHIBITED** ON FREEWAY
Temperance Avenue to Lodge Road *(PM R9.15 – T32.87)*	4 Lane Expressway to 2 lane Highway	Urban/ Rural	0 - 10 feet	Rolling/ Mountainous	55 & 65	Wide shoulders on 3.25 miles of 4 lane expressway within Clovis but narrows the remaining rural winding road, Community of Prather *PM T30.0* with gas station and restaurants, Surrounding grazing land
Lodge Road to Auberry/ Tollhouse Road *(PM L27.37 – R36.18)*	4 lane Expressway	Rural	4 - 6 feet	Mountainous	55	Wide shoulders mostly, Surrounding mountains with scenic vista points, 1 Callbox available
Tollhouse Road to East End of Huntington Lake *(R36.18 – 65.93)*	2 lane Highway	Rural	0 - 8 feet	Mountainous	55	Winding roads with narrow shoulders mostly, Gas station and food mart at *PM 39.4*, Community of Shaver Lake at *PM 44.4*, Huntington Lake recreational area at end of route

Appendix E: Pedestrian Map



Appendix F: Transit Map



Appendix G
Resources

[1] http://www.dot.ca.gov/dist6/planning/tcrs/
[2] http://onramp.dot.ca.gov/tsi/ohsip/seqlisting.php
[3] http://www.leginfo.ca.gov/cgi-bin/displaycode?section=shc&group=00001-01000&file=250-257
[4] http://www.dot.ca.gov/hq/tsip/hseb/highway_systems/NHS_statehighways.pdf
[5] http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm
[6] http://www.leginfo.ca.gov/cgi-bin/displaycode?section=shc&group=00001-01000&file=163-164.56
[7] http://www.dot.ca.gov/hq/tpp/corridor-mobility/documents/library/Caltrans_High_Emphasis_Routes_HER.doc
[8] http://www.dot.ca.gov/hq/tpp/corridor-mobility/documents/library/List_of_Focus_Routes.doc
[9] http://www.dot.ca.gov/hq/tsip/hseb/crs_maps/
[10] http://www.dot.ca.gov/hq/traffops/trucks/truckmap/
[11] http://www.dot.ca.gov/hq/tsip/gis/datalibrary/gisdatalibrary.html
[12] http://www.dot.ca.gov/hq/tpp/offices/orip/list/agencies_files/regional_6-12.xls
[13] http://www.dot.ca.gov/hq/tpp/offices/orip/list/agencies_files/regional_6-12.xls
[14] http://www.dot.ca.gov/hq/tpp/offices/orip/list/agencies_files/regional_6-12.xls
[15] http://www.dot.ca.gov/hq/tpp/offices/orip/list/agencies_files/regional_6-12.xls
[16] http://dot.ca.gov/hq/tpp/offices/ocp/nalb/District_Contacts_and_Maps.html
[17] http://www.arb.ca.gov/ei/gislib/gislib.htm
[18] http://onramp.dot.ca.gov/tsi/ohsip/tasas/districtinformation/distphone.pdf#xml=http://ctsearch.dot.ca.gov/cgibin/texis/webinator/search/pdfhi.txt?query=district+TASAS+coordinator&pr=default&prox=page&rorder=250&rprox=500&rdfreq=500&rwfreq=750&rlead=1000&sufs=0&order=r&cq=&id=4fc4f246153
[19] http://www.fresno.gov/Government/DepartmentDirectory/DARM/HistoricPreservation/History.htm
[20] http://www.fresno.gov/Government/DepartmentDirectory/DARM/HistoricPreservation/History.htm
[21] www.dof.ca.gov
[22] www.dof.ca.gov
[23] http://www.ci.clovis.ca.us/About/Clovis-Facts/History-of-Clovis
[24] http://www.ci.clovis.ca.us/About/Clovis-Facts/History-of-Clovis
[25] http://www.ci.clovis.ca.us/About/Clovis-Facts/History-of-Clovis
[26] http://ceres.ca.gov/geo_area/counties/Fresno/landmarks.html
[27] Durham, David L. (1998). *California's Geographic Names: A Gazetteer of Historic and Modern Names of the State*. Clovis, Calif.: Word Dancer Press. p. 1092. ISBN 1-884995-14-4.
[28] Durham, David L. (1998). *California's Geographic Names: A Gazetteer of Historic and Modern Names of the State*. Clovis, Calif.: Word Dancer Press. p. 1105. ISBN 1-884995-14-4.
[29] http://www.fresnobee.com/2011/12/18/2653359/shaver-lakes-history-exposed-as.html
[30] http://en.wikipedia.org/wiki/Huntington_Lake
[31] http://www.fresnoyachtclub.org/hsrdetails.htm
[32] http://onramp.dot.ca.gov/tsi/ohsip/tasas/districtinformation/distphone.pdf#xml=http://ctsearch.dot.ca.gov/cgibin/texis/webinator/search/pdfhi.txt?query=district+TASAS+coordinator&pr=default&prox=page&rorder=250&rprox=500&rdfreq=500&rwfreq=750&rlead=1000&sufs=0&order=r&cq=&id=4fc4f246153
[33] http://onramp.dot.ca.gov/tsi/ohsip/tasas/districtinformation/distphone.pdf#xml=http://ctsearch.dot.ca.gov/cgiin/texis/webinator/search/pdfhi.txt?query=district+TASAS+coordinator&pr=default&prox=page&rorder=250&rprox=500&rdfreq=500&rwfreq=750&rlead=1000&sufs=0&order=r&cq=&id=4fc4f246153
[34] http://onramp.dot.ca.gov/tsi/ohsip/tasas/districtinformation/distphone.pdf#xml=http://ctsearch.dot.ca.gov/cgiin/texis/webinator/search/pdfhi.txt?query=district+TASAS+coordinator&pr=default&prox=page&rorder=250&rprox=500&rdfreq=500&rwfreq=750&rlead=1000&sufs=0&order=r&cq=&id=4fc4f246153
[35] http://onramp.dot.ca.gov/tsi/ohsip/tasas/districtinformation/distphone.pdf#xml=http://ctsearch.dot.ca.gov/cgiin/texis/webinator/search/pdfhi.txt?query=district+TASAS+coordinator&pr=default&prox=page&rorder=250&rprox=500&rdfreq=500&rwfreq=750&rlead=1000&sufs=0&order=r&cq=&id=4fc4f246153
[36] http://onramp/hq/traffops/otrafopr/branch/managed_lanes_pr/hov/files/contact.pdf
[37] http://www.dot.ca.gov/hq/oppd/hdm/pdf/english/chp0100.pdf
[38] http://pems.dot.ca.gov/?dnode=photolog
[39] http://www.fresnocog.org/sites/default/files/publications/RTP/Final_RTP/Fresno_COG_2014_RTP-SCS_Final.pdf
[40] http://env.dot.ca.gov/bio/wildlife/special_status.shtml
[41] http://www.dfg.ca.gov/biogeodata/cnddb/
[42] http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm