



















ROUTE 99 BUSINESS PLAN: FINAL REPORT PREPARED BY:

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Executive Summary

Various efforts have been undertaken to establish a development plan for the 274-mile segment of State Route 99 (Route) found within the San Joaquin Valley. The 2005 Route 99 Business Plan (BP) provided the first comprehensive corridor management document with consensus agreement between all eight Metropolitan Planning Organizations (MPOs) and California Department of Transportation (Caltrans) Districts 6 and 10. The BP and its 2013 Update outlined a strategic approach to achieving the functional goals of transforming the Route into a safe and efficient trade corridor.

The purpose of the BP was to clearly identify Caltrans' and the MPO's long-term goals for the Route—and a corresponding list of categorized projects to achieve those goals—thereby streamlining funding decisions for corridor improvements. Project improvements were identified through a collaborative process and grouped into four categories first by project type then by priority for construction. Major project funding came in 2006 when voters approved Proposition 1B a \$19.9 billion program of which \$1 billion was dedicated for Route 99. Having established a BP, Caltrans and the MPO partners in Districts 6 and 10 were able to capitalize on the new fund source. This report provides an update on the accomplishments of the SR 99 BP, and an account of the projects remaining. We have delivered over 29 projects since establishing the BP. That includes the completion of all projects in Priority Category 1 (conversion to freeway) and nearly 50 percent of the fourlane to six- or more lane widening projects identified in Priority Category 2. 67 candidate (completed PID and planned) projects remain in the BP ranging from capacity-enhancing, to operational improvements, to new interchange projects.

The Valley remains committed to constructing the remaining projects, and Caltrans will use the BP as a foundation for developing each District's Corridor Plan for the Route. These plans will serve as guiding documents for the interconnected, multi-modal, future of the Route. By seeking to integrate all modes, management strategies, and improvement types—including those identified in the BP—Corridor Plans will direct future development of the Route toward becoming a safe, sustainable, integrated and efficient component of the larger transportation system.



Route 99 Business Plan: Final Report

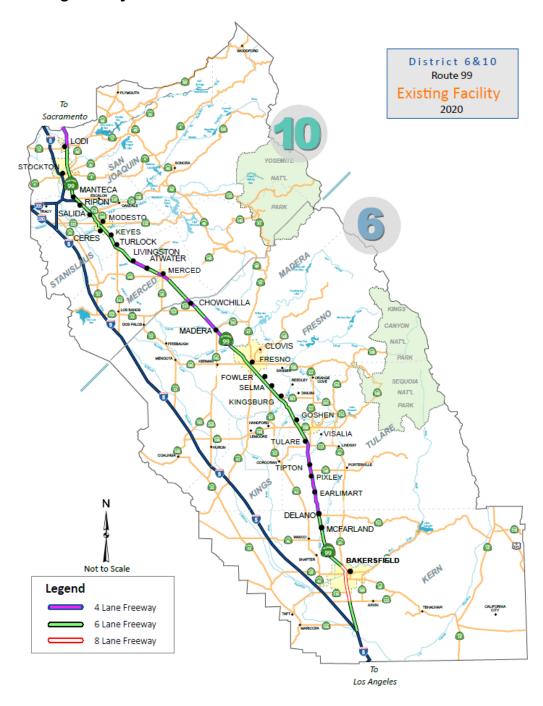
Introduction

Many efforts have been undertaken to develop guidance and planning documents for the improvement of the 274-mile segment of State Route 99 (Route) within the San Joaquin Valley. Route 99 is well established, together with Interstate 5 (I-5) as the backbone of transportation in the San Joaquin Valley playing a critical role in the delivery of timesensitive agricultural goods to market. However, Route 99 has more communities and farms within its sphere of influence than I-5 by an order of magnitude. In the early 2000s it became clear that capacity on the Route was strained by an expanding population and economy. Substantial investment was necessary to maintain the corridor's ability to support development, efficient goods movement, and a growing population. The 2005 Route 99 Business Plan (BP) provided the first comprehensive corridor management document with consensus agreement between all eight MPOs and Caltrans Districts 6 and 10. The 2005 Route 99 BP was updated in 2013.

These plans identified all project improvements thought necessary to attain the primary corridor objective to better support efficient and safe transport of goods and people by achieving full freeway standards on Route 99 and followed by creating a minimum six-lane freeway through the San Joaquin Valley (see Figure 1, Existing Facility 2020).



Figure 1. Existing Facility 2020





Project improvements were grouped into four priority categories, according to project type. Funding came shortly thereafter in 2006 with the \$19.9 billion Proposition 1B bond, of which \$1 billion was dedicated to Route 99. The BP established a strategic approach to achieving the functional goals for the corridor predicated on the Interregional Transportation Strategic Plan, Transportation Concept Reports, Corridor System Management Plans and Regional Transportation Plans. The California Department of Transportation (Caltrans) Districts 6 and 10, and the eight MPOs in the San Joaquin Valley were key leaders and participants in these efforts. The purpose of the BP was to clearly state Caltrans' long-term goals—and a corresponding list of prioritized projects to achieve those goals—thereby streamlining funding decisions for corridor improvements. This report provides an update on the accomplishments of the BP, and an account of the projects remaining.

Business Plan Goals

The Business Plans has focused mainly on major facility improvements that would typically be funded through the State
Transportation Improvement Program (STIP) or similar federally funded programs. The 2005 BP laid out a 20-year program to achieve its ultimate goals (see Figure 2, Facility Concept for 2035). The objective of the Final Report is to summarize the accomplishments, present a status of projects, and support development of Corridor Plans setting future visions for the Route.

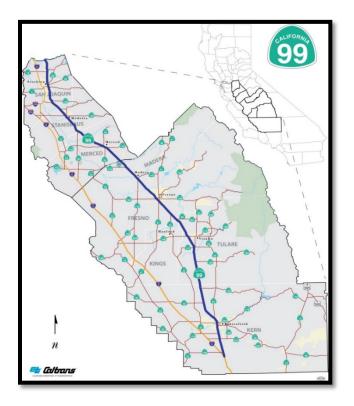
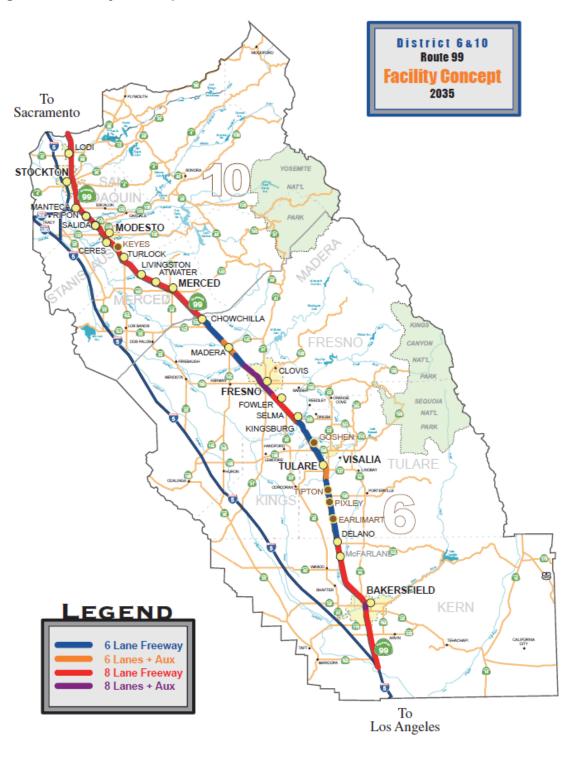




Figure 2. Facility Concept for 2035





Following is a list of the goals for this BP Final Report:

- Update 2013 Business Plan data and projects to year 2019 status.
- Summarize unconstrained BP project improvements.
- Provide an updated comprehensive list of proposed project improvements.

Project Categories in the Business Plan

Route 99 faces many challenges, notably increases in Average Daily Traffic (ADT) including truck traffic, encroaching development, and lack of adequate funding. Current ADT through the corridor ranges from 42,000 to 165,000 trips and it is projected to increase to between 62,000 and 243,000 trips in 2040. The percentage of truck traffic ranges from between 8.25% to 27.30% of total traffic. While the major projects identified in this Business Plan focus on increasing capacity to improve reliability, safety is still the single most important consideration for Route 99. There are several segments on the Route which experience recurrent congestion as a result of bottlenecks in the system. Bottlenecks increase the likelihood of vehicle conflicts. One way to resolve them is through expanding the capacity of an impacted segment to match the capacity of better functioning segments upstream and downstream of the bottleneck. In addition to major construction and safety projects, demand management is addressed through operational improvements—including constructing new interchanges. Safety projects are typically funded through the State Highway Operation and Protection Program (SHOPP), while capacity enhancing projects and functional improvements are funded through the STIP. Projects in the BP have been grouped into four categories based on project type, then by priority for construction (according to project type), as follows:

Priority Category 1—Freeway Conversion

Projects in this Priority Category were necessary to convert non-freeway sections of Route 99 (conventional highways) to freeways. All projects in this category are constructed as a result of the 20-year BP established in 2005.



Priority Category 2—Capacity-Increasing Projects

Priority Category 2 focuses on widening the Route to a minimum of six-lanes throughout the corridor. While the primary goal of these projects is to meet travel demand, there are also safety benefits as well as enhancements of freight movement through the corridor. Projects in this category include capacity-increasing such as 4F to 6F and 6F to 8F/managed lanes reduce recurring congestions, relieves bottlenecks and improve travel time reliability for freight movements.

Priority Category 3—Operational Improvements

This category focuses on projects that will improve operations and consequently improve safety, too. Projects range from constructing High-Occupancy Vehicle (HOV) or auxiliary lanes, to installing Intelligent Transportation System (ITS) architecture components, or rehabilitation of interchanges to meet current design standards.

Priority Category 4—New Interchanges

Priority Category 4 identifies locations where the construction of new interchanges is recommended. The new interchanges will be better equipped to accommodate growth and development along Route 99.

Summary Status of Projects

There were 67 projects included in the original BP. Three of the original 67 projects were split into two segments each, creating a total of 70 projects. The 2013 Business Plan update added more projects, for a total of 110. Of these, 67 projects (19-Category 2, 45-Category 3 and 3-Category 4) remain as unfunded potential projects, or candidates (refer to: Tables C, D, E and F).

Fourteen Category 2 projects have completed or have begun construction, since work began on the BP. There are nineteen Category 2 candidate projects still needed to relieve bottlenecks and recurrent congestion on the Route. These capacity-enhancing projects propose to convert 4-lane segments to 6-lanes or more lending uniformity to the Route and achieving the ultimate vision of a 6-lane minimum width facility.



Projects that propose improvements to freeway operations are in Category 3. Included in this category are interchange improvement and rehabilitation projects, HOV lane construction, ITS elements installation, and auxiliary lane construction. Twenty-three Category 3 projects are in various phases of construction and 45 are planned or proposed.

Category 4, new interchange projects, are typically prompted by a need to improve local road circulation and access due to ongoing local development. These projects vary in magnitude of scope and cost. However, new interchanges generally require a heavy outlay of capital. The Route 99 BP has proposed five new interchanges: One already constructed (Hosking Road in Kern), one programmed for construction (Veteran's Blvd. in Fresno) and three candidates are planned (Hanawalt Road in Kern, Commercial Avenue in Tulare and Ellis Avenue in Madera).

Existing Facility

Facility Function

Route 99 has two roles: to transport people and to enable commerce. Both functions are equally important, and efficiency is a key measure of success in the Route's operational performance. The Route is the principal north to south goods movement corridor in the State. Capacity and

flow are the two variables that characterize the efficiency of a highway system. Congestion occurs when either variable is impaired. During peak hours of traffic, there are segments of the Route where demand for travel regularly exceeds the available capacity and reduces the speed at which vehicles can travel; this also occurs when there are vehicle incidents on the Route. The mechanisms to address congestions due to reduced capacity include increasing the number of travel lanes, reducing the rate of flow by ramp metering or increasing multi-modal transportation options for users.



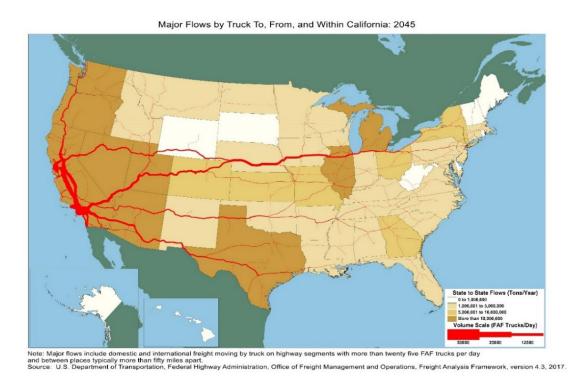
Bottlenecks are expressions of the same issues of capacity and flow on a smaller scale. They may occur at locations where an auxiliary lane ends, or traffic merges from an on ramp, or due to reduced sight distance or other geometric factors. Their impact on the system is typically experienced as travel time delay or vehicle incidents. Inadequate spacing between interchanges can also affect the flow of traffic, especially during commute hours in urbanized areas. This leads to insufficient distances for vehicles to safely and efficiently merge on and off the highway, which in turn leads to queuing and increased accidents. Where substandard spacing exists, interchange spacing should be increased or other operational features, such as auxiliary lanes, constructed to decrease the merging conflicts and improve operations. Resolving the causes of bottlenecks and congestion improves Route performance.

The observed reduction in travel time reliability and persistent bottlenecks along the Route 99 corridor are indications that the current capacity of Route 99 is not adequate to meet demand, especially during peak hours in urbanized areas. Efficient and safe travel through the San Joaquin Valley is essential to the strength of the State's economy overall. Just-in-time goods delivery systems and very large regional distribution centers locating in the San Joaquin Valley provide more responsive customer service and reduced inventory storage costs to the business community.

Route 99 capacity and operational improvements identified in this Business Plan are consistent with the "Goods Movement Action Plan" and represent a key contribution toward statewide goals. However, trucks play a different role in traffic operations than cars. The result of just-in-time delivery from a roadway perspective has been higher than historical growth in truck volumes on Route 99. Currently truck volume ranges between 9,000 to 20,000 Annual Average Daily Truck Traffic. Unlike commuter traffic, the number of trucks traveling throughout the day and evening hours may remain relatively constant. Since they are larger and heavier than cars, their maneuverability and ability to accelerate and decelerate are poorer which impact highway capacity and traffic flow negatively. Trucks further impact capacity by occupying more space; each truck is roughly equivalent to three cars. Wear and tear on the driving surface also



becomes a consideration where high traffic volumes exist-- repairs may be both more frequent and more costly compared to freeways serving commuters only.



Facility Concerns and Needs

While the focus of the BP is improved reliability and throughput, other issues affecting the Route include:

- ITS for demand management and performance monitoring.
- Construction of new interchanges.
- Safety Roadside Rest Areas for the freight network.
- Investment in transit services on or integrated to the Route.
- Land use and quality of life.

Intelligent Transportation Systems

Increased demand for lane space on Route 99 can, in part, be managed by means of ITS architecture. Transportation corridors often contain underutilized capacity in the form



of parallel roadways, single-occupant vehicles, and transit services that could be better leveraged to improve person throughput and reduce congestion. Many projects in Categories 2 and 3 of this BP contain ITS elements to maximize operational performance. ITS encompasses a broad range of wireless and traditional communications-based information and electronic technologies. ITS field elements such as traffic signals, ramp meters, closed-circuit television (CCTV) cameras, and vehicle detection stations transmit data to the District Transportation Management Centers. This field-to-center feedback is the basis for the Transportation Management System which allows Caltrans to centralize traffic monitoring, traffic control, incident management, lane closure operations and traveler information dissemination on state highways. Advanced communications technologies integrated with transportation infrastructure and vehicles have the potential to boost the effectiveness of ITS architectures toward improving transportation safety and mobility.

New Interchanges

Many interchanges on Route 99 were built in the 1950's and 60's, and were designed for significantly lower traffic volumes than those occurring today. Inadequate geometrics at interchanges, as well as limited storage and merge distance all contribute to congestion on the ramps, local roads, and the freeway itself. California has one of the largest agricultural economies in the nation, with much of that located in the San Joaquin Valley. Therefore, the State depends heavily on truck transportation to move these goods from farm to market. Combined with the interstate movement of goods from the major urban centers in Los Angeles and Bay Areas, and the delivery of consumer goods to the residences and businesses nearby to SR 99, the Route carries a high volume of truck traffic. Upgrades of older Route 99 segments and interchanges are necessary to meet the truck access standards of the Federal Surface Transportation Assistance Act. This is particularly important as distribution centers and businesses continue to establish facilities or expand their operations in ways that impact the Route.

Safety Roadside Rest Areas

Truck parking is a national safety concern with impacts felt on parts of Route 99. Shortages in designated truck parking can lead to truckers driving out-of-route to find



parking, parking in undesignated spaces (e.g. on/off ramps, abandoned/isolated areas, shopping centers), and drivers foregoing mandatory breaks for lack of suitable rest areas. These challenges contribute to increases in VMT, unsafe conditions on roads and for resting drivers, and driver fines and penalties. As a result of these challenges Jason's Law legislative language was brought before Congress to require States to evaluate and improve the adequacy of their truck parking on a continual basis.

Jason's Law legislative language was incorporated into The Moving Ahead for Progress in the 21st Centruy (MAP-21) legislation that became effective on October 1, 2012. A 2013 Jason's Law Truck Parking Survey of truck drivers found eighty-eight percent of drivers felt unsafe while parked during mandatory rest or waiting for pickup or delivery of a load within the prior 12 months. Thirty-six percent of respondents felt safer parked at a shipper and receiver location. Drivers stated they worried during their rest period they would be asked to leave or given a citation by law enforcement. Goods movement in and through California is crucial to the economy of the state and the nation. The provision of services in support of that action will have widespread benefits.

Transit Services

High Speed Rail (HSR), Amtrak passenger rail, Altamont Corridor Express (ACE) and local transit providers have a role to play in congestion relief on the Route. Amtrak, ACE, Modesto Area Express (MAX) and San Joaquin Regional Transit District (SJRTD) provide transit services for commuters traveling between the Central Valley to the Bay Area. The California High Speed Rail Authority (CHSRA) was established in 1996 under State law to develop and implement intercity high-speed rail service. Of particular interest is the HSR line connecting Merced to Bakersfield. The promise of HSR is to divert vehicle trips from State routes of significance (including Route 99) as a complementary system in a multimodal transportation network. This network will include traditional rail, lightrail (e.g. BART), local and interregional bus services, as well as first-mile/last-mile services like bike and pedestrian paths, and shared shuttle services. The BP strategies to add capacity, improve operations, and focus on service to the public will work in tandem with these modes of travel to contribute to safer and more efficient travel conditions.



Land Use and Quality of Life

The appearance of Route 99 affects the quality of life for Valley residents and the perceptions of travelers, many of whom are tourists, which can have an impact on the local economy. Communities can use tools such as zoning laws and enforcement of ordinances to remediate the eyesores of abandoned or vandalized structures.

Conversely, they can preserve structures—such as water towers and barns—to create a more interesting view shed. Outside of Caltrans' right-of-way, abandoned buildings, billboards, junkyards, microwave towers, and trash create unsightly views for travelers. A visually appealing transportation corridor should either blend into or complement the landscape.

Route 99 is a lifeline to urbanized communities along the corridor, improving the appearance can help reinforce a community's identity and give travelers a good impression of the community, leading them to support local economies. Despite the economic output of the region, levels of concentrated poverty are among the highest in the nation. Thoughtful land use decisions play a role in boosting regional employment rates while reducing VMT by improving access to jobs and attracting employers. Access can be improved by increasing capacity on the Route, and can be further supported by investment to expand transit services, encouraging transit-oriented developments with a variety of land uses organized for easy connections, and shortening the distance between traffic generators so that cycling and walking to destinations become viable mode choices. Improved transportation infrastructure will also contribute toward reduced air pollution by reducing vehicle idling and rates of travel that do not optimize fuel-efficiency targets.

Funding

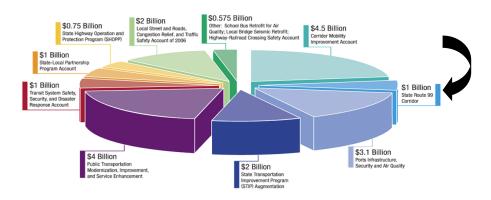
Effects of Proposition 1B

The most significant obstacle to improving the Route has been insufficient funding. Neither the STIP nor the SHOPP have had funding levels adequate to maintain, much less, improve Route 99. On November 7, 2006 voters approved a \$2 billion



augmentation to the State Transportation Improvement Program (STIP) through Proposition 1B the "Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006".

Strategic Growth Plan Pie Chart



Program	Amount
Corridor Mobility Improvement Account	\$4.5 Billion
Public Transportation Modernization, Improvement, and service Enhancement	\$4 Billion
Ports infrastructure, Security, and Air Quality	\$3.1 Billion
State Transportation Improvement Program (STIP) Augmentation	\$2 Billion
Local Streets and Roads, Congestion Relief, and Traffic Safety Account of 2006	\$2 Billion
State Route 99 Corridor	\$1 Billion
State-Local Partnership Program Account	\$1 Billion
Transit System safety, Security, and Disaster Response Account	\$1 Billion
State Highway Operation and Protection Program (SHOPP)	\$0.75 Billion
Other: School Bus Retrofit for Air Quality: Local Bridge Seismic Retrofit: Highway-Railroad Crossing Safety Account	\$0.575 Billion

Under Proposition 1B \$1 billion dollars was also made available for Route 99 as shown in the Strategic Growth Plan Pie Chart and program table above. The eight Valley MPOs and Caltrans initiated numerous projects, as illustrated in Figures 1 and 2, including route widening and interchange improvements to enhance safety, operations and improve air quality throughout the Route 99 corridor. Prop 1B bonds in combination with other fund sources—notably, STIP and measure money—financed 24 projects (20-Category 2, and 4- Category 3) in the SJV that have since been completed or are now pending construction.

In the northern three counties of District 10 (see: Figure 3), Proposition 1B was critical to the delivery of five four-lane to six-lane widening projects and two interchange improvement projects. The widening projects added 15.4 miles of six-lane freeway to Merced County (three projects) while San Joaquin County (two projects) gained 13.7 miles. The section of the Route in Stanislaus County has achieved a six-lane minimum throughout, delivering on the goal of Priority Category 2.



In District 6, Proposition 1B funding supported the completion of six widening projects and two interchange projects in Tulare and Madera counties. Four widening projects (four-lane to six-lane) were completed, two in Tulare, one in Fresno and one in Madera counties (see: Figure 4). These projects added a total of 24.1 lane miles to the Route. The two other widening projects increased capacity from six-lanes to eight-lanes in Kern County along 6.5 miles of the Route.

Prior to Prop 1B nearly 155-miles of the 274-miles of the Route within the Valley was a 4-lane facility. As a result of the widening projects roughly half of the four-lane segments in each District (30.3-miles in District 10, and 47.2-miles in District 6) have been increased in capacity. Prop 1B was also instrumental in financing 5 interchange projects (3 in District 10, and 2 in District 6) on the Route. These projects not only increased capacity to meet demand, but they also substantially enhanced the safety and operations of Route 99 within the project limits. Safety and operational enhancement project features included shoulder widening, construction of median concrete barrier, reconstruction of interchanges (which include complete streets features for bikes and pedestrians), and the elimination of at-grade intersections (e.g. driveways and median crossings).



Figure 3. Prop 1B & STIP Projects Constructed

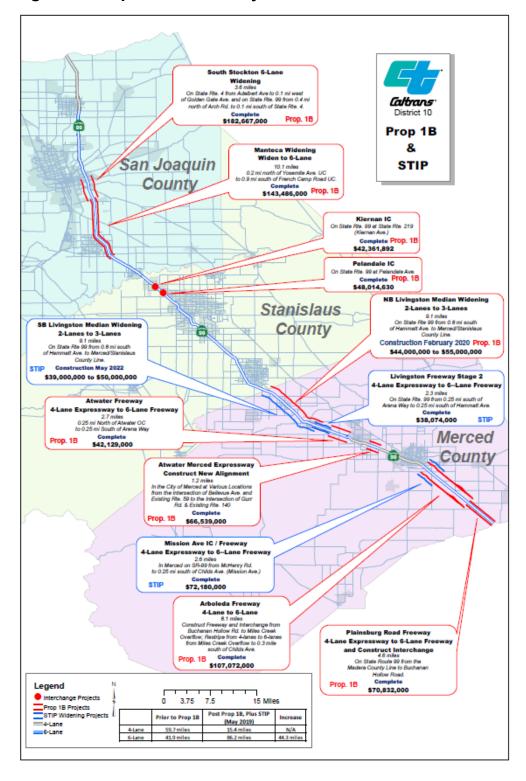
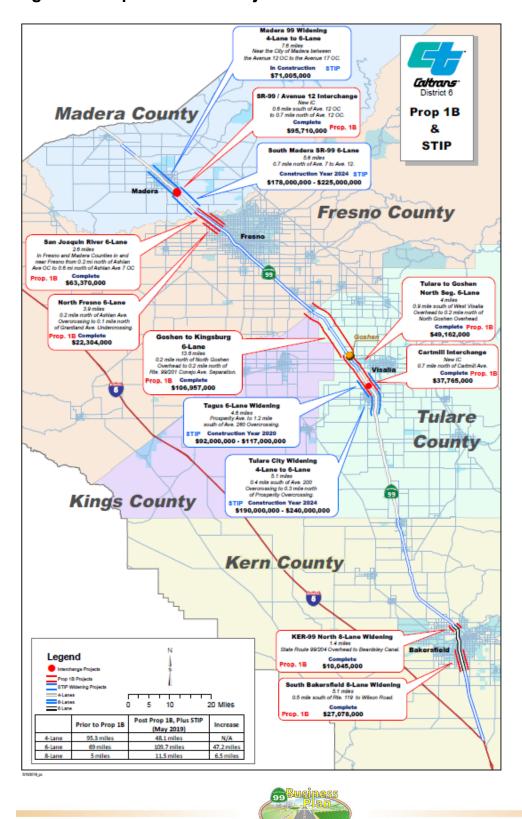




Figure 4. Prop 1B & STIP Projects Constructed



Senate Bill 1

In anticipation of the expiration of Prop 1B revenue, Senate Bill 1 (SB 1) the "Road Repair and Accountability Act of 2017" was signed into law on April 28, 2017. The SB 1 package augmented the SHOPP and the STIP funds and contained statewide grants. While the SHOPP was most greatly reinforced by SB 1, the STIP was also replenished. Before SB 1, the California Transportation Commission (CTC) needed to cut and delay \$1.5 billion in STIP projects due to lack of funding. With the passage of SB 1 the funding is stabilized. Grant programming in the SB 1 package includes the Trade Corridor Enhancement Program (TCEP) that distributes \$300 million annually for projects related to transportation infrastructure vital to California's trade and freight economy.

SB 1 adds \$54 billion in funding over 10 years to the state's transportation budget. Caltrans will receive half of SB 1 revenue: \$26 billion. The other half will go to local roads, transit agencies, and an expansion of the state's network of pedestrian and bicycle routes. Over 10 years, SB 1 will allocate \$15 billion to improve the condition of the state highway system, with an additional \$4 billion to fix or replace bridges and culverts. The new revenue from SB 1 gives Caltrans a massive boost in addressing safety projects, deficiencies, and deferred maintenance. Yet, according to the CTC, the program is oversubscribed by \$52.1 million for counties in the San Joaquin Valley.

Despite an anticipated \$1.1 billion STIP augmentation by SB 1, 2019 STIP share balances show the program is oversubscribed by \$52.1 million for counties in the San Joaquin Valley¹.



Business Plan Progress

Constructed Projects - All Project Categories

Since the 2013 Business Plan update, 10 projects have been completely constructed on the Route (see: Figure 3). In Kern County an interchange was built at Hosking Road and operational improvements were made at Panama Lane and California Avenue. In Tulare County the Route was widened from four-lanes to six-lanes along a two-mile segment near Caldwell Avenue and the Cartmill Avenue interchange was significantly expanded. The Fourth Street interchange in Madera County was modified to accommodate growth in the area.

The Atwater Merced expressway in Merced County was realigned near Buhach Road. The Pelandale interchange received modification, and operational improvements were made to the northbound and southbound ramps at Kiernan Avenue in Stanislaus County. In all, over \$1.6 billion has been spent on implementing projects from the BP. Twenty-nine projects have been completed since 2005 including all priority category 1 projects (all at-grade intersections have been replaced with grade-separated interchanges) accomplishing the goal of converting the full length of the Route to freeway.

After completion of all projects to widen to 6-lanes, the corridor will satisfy the facility concept design. Once this is achieved, the Department can direct funds to maintenance and preservation.



Figure 5. Constructed Projects: All Project Categories

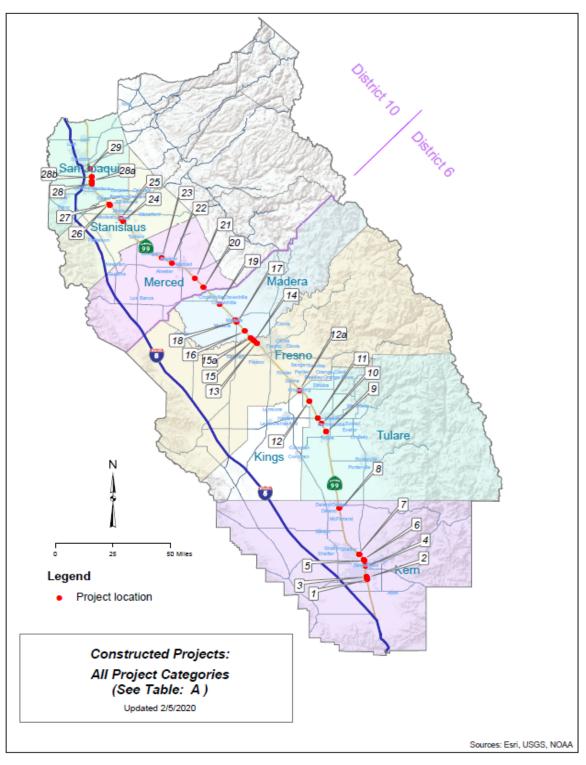


Table A - Constructed Projects: All Project Categories

TABLE A - Co	nstructed	Projects: All	Project Ca	tegories			(Capital Costs	Greater than \$1 mills	on)	Decemb	er 30, 2019
Number on							Construction	R/W and Construction		Total Costs per	Regional
map	Cnty	PMs	EA	Project Name	Location Decription 0.5 mile south of SR 119 to	Proj. Description	Status	\$1,000)	(X \$1,000)	Project (X \$1,000)	Priority Category
2	KER	17.0/22.1	06-0G830 06-0C930	South Bakersfield 8-Lane Hosking Rd Interchange	Wilson Rd. Overcrossing In Bakersfield at Hosking Rd	Widen from 6F to 8F Construct New Interchange	Completed	\$31,500 \$27,400	\$6,800	\$38,300	4
	KER		060N690	Panama Lane Auxiliary	In Bakersfield on SB 99 at				\$9,000		
3		19.5/20.5		Lane California Avenue	Panama Lane Off-Ramp In Bakersfield on SB 99 at	Construct Auxiliary Lane	Completed	\$1,700	+	\$2,600	3
4	KER	24.6	06-0L390	Onramp Improvements	Panama Lane Off-Ramp	Relocate Right Turn Lane Construct SB Auxiliary Lane	Completed	\$1,500	\$1,500	\$3,000	3
5	KER	27.0/27.9	06-0N490	Olive Ave Southbound Auxiliary Lane	In Bakersfield on S8 99 between SR 204 and Olive Drive From SR 99/204 Overhead To	and widen Olive Drive On- Ramp	Completed	\$2,100	\$278	\$2,378	3
6	KER	27.0/28.4	06-0G840	Kem 99 North Widening 7th Standard Road	Beardsley Canal In Bakersfield at 7th Standard	Widen From 6F to 8F	Completed	\$9,600	\$2,900	\$12,500	2
7	KER	R30.5/R31.1	06-43350	Widening	Rd. Interchange	Modify Interchange	Completed	\$18,400	\$1,100	\$19,500	3
8	KER	54.2/54.6	06-0G920	Woollomes Interchange Improvements	At Woolomes Interchange	Modify Interchange	Completed	\$6,300	\$617	\$6,917	3
9	TUL	31.3/32.6	06-33220	Cartmill Ave Interchange	In Tulare at Cartmill Ave	Modify Interchange	Completed	\$33,300	unknown	\$33,300	3
10	TUL	35.2/37.3	06-36023	Middle Segment (Caldwell) 6- Lane(Combined)	1.2 mile south of Ave 280 Overcrossing to 0.9 mile south of W. Visalia Overhead	Widen from 4F to 6F	Completed	\$18,900	\$5,000	\$23,900	2
11	TUL	37.3/41.3	06-36021	Tulare to Goshen North Segment 6-Lane	0.9 mile south of West Visalia Overhead to 0.2 mile north of North Goshen Overhead	Widen from 4F to 6F	Completed	\$42,000	\$10,900	\$52,900	2
12	TUL	41.3/53.9	06-32450	Goshen to Kingsburg 6- Lane	N of Goshen to N of Sierra Ave Overcrossing	Widen from 4F and 5F to 6F	Completed				
12a	FRE	0.0/1.0	06-32450	Goshen to Kingsburg 6- Lane	N of Goshen to N of Sierra Ave Overcrossing	Widen from 4F and 5F to 6F	Completed	\$78,800	\$24,000	\$102,800	2
13	FRE	26.7/30.6	06-44261	North Fresno 6-Lane	In Fresno from Ashlan Avenue to 0.2 miles N of Grantland Ave Overcrossing	Widen from 4F to 6F	Completed	\$17,500	\$5,700	\$23,200	2
14	FRE	30.0/30.8	06-01030	Herndon Avenue Interchange Improvements	In Fresno at Herndon Ave Interchange	Remove Off-Ramp and Intersection Improvements	Completed	\$3,000	\$200	\$3,200	3
15	FRE	30.3/31.6	06-44262	Island Park 6-Lane	Grantland to Avenue 7	Widen from 4F to 6F	Completed	\$42,000	\$10,900	\$52,900	2
15a	MAD	0.0/1.6	06-44262	Island Park 6-Lane	Grantland to Avenue 7	Widen from 4F to 6F	Completed	*		*	
16	MAD	R1.7/R7.9 10.1/10.4	06-47100	Avenue 12 Interchange Route 145 Widening at	South of Madera at Avenue 12 In Madera at Route 145	Reconstruct Interchange	Completed	\$56,700	\$11,300	\$68,000	3
				SR99 Fourth Street		Widen Bridge	Completed	\$6,100		\$7,900	
18	MAD	10.7/11.2	06-0/320	Interchange Improvements	In Madera at Fourth Street	Modify Interchange	Completed	\$5,100	\$862	\$5,962	3
19	MAD	19.5/22.8	06-29330	Fairmead Freeway and Interchange	Ave 21 to the Rte 99/152 Separation	Widen 4E to 6F with Interchange at Ave 22	Completed	\$62,000	\$9,000	\$71,000	1
20	MER	0.0/4.6	10-41580	Plainsburg Road Freeway	Near Chowchilla from Chowchilla River Bridge to Buchanan Hollow Road	Widen from 4E to 6F on 8 Lane R/W Alignment	Completed	\$100,700	\$18,000	\$118,700	1
21	MER	4.6/10.5	10-41570	Arboleda Drive Freeway	Buchanan Hollow Road to 0.3 mile north of McHenry Rd	Widen from 4E to 6F on 8 Lane R/W Alignment	Completed	\$150,900	\$25,900	\$176,800	1
22	MER	19.3/20.9	10-0G440	Atwater Merced Expressway (AME)	Near Atwater from 1.2 mile S Buhach Road to 0.3 mile N of Buhach Road	Construct new alignment	Completed	\$54,033	\$6,977	\$61,010	3
23	MER	23.8/R26.5	10-41481	Atwater Freeway	0.4 km (0.5 mile) N. of Atwater OH to 0.4 km (0.5 mi) S of Arena Way	Widen from 4E to 6F on 8 Lane R/W Alignment	Completed	\$58,200	\$12,100	\$70,300	1
24	STA	R11.9	10-2A770	Rte 99/Whitmore Interchange	City of Ceres from 0.5 km S Whitmore Ave. Overcrossing to 0.7 km N.	Reconstruct Interchange	Completed	\$32,400	\$9,600	\$42,000	3
25	STA	21.0/22.4	10-47210	Pelandale IC	State Route 99 at Pelandale Ave.	Modify Interchange	Completed	\$49,317	\$4,398	\$53,715	3
26	STA	R21.9/R22.3	10-0K700	SR99/SR219 Klernan Ave NB/SB Off-Ramps	At Salida at SR99/219 Separation	Widen Roadway and Ramps	Completed	\$1,700	\$1,200	\$2,900	3
27	STA	13.4/13.6	10-0L330	Kleman IC	On SR 99 between SR 219 and Palandale	Construct NB and SB Auxiliary Lanes	Completed	\$35,701	\$7,148	\$42,849	3
28	LZ	4.9/14.2	10-05611	Manteca Widening Mainline Phase 1	From Austin Rd. Overcrossing to 0.4 mile S. of Arch Rd Undercrossing	Widen from 4F to 6F	Completed	\$45,000	\$9,500	\$54,500	
28a	SJ.	6.9/15.0	10-0E613	Manteca Widening- Lathrop IC Phase 3	In Manteca SR 99 From 0.6 mile S of Cottage Ave Rd to 0.4 mile N of Arch Rd	Lathrop Rd. Interchange Phase 3	Completed	\$105,000	\$16,100	\$121,100	2
28b	SJ	10.6/15.0	10-0E612	Manteca Widening- French Camp IC Phase 2	In Manteca SR 99 From 1.4 mile N. of Lathrop Rd to 0.4 mile N. of Arch Rd	French Camp Interchange Phase 2	Completed	\$60,700	\$12,500	\$73,200	
29	SJ	15.0/18.6	10-3A100	South Stockton 6-Lane	0.4 Mile N of Arch Rd to Rte 4 West to 0.1 S of Rte 4 West/SR99 N Conctr.	Widen from 4F to 6F	Completed	\$214,000	\$36,500	\$250,500	2
									Total	\$1,634,231	



Programmed Projects – All Project Categories

At the time of this writing, fourteen projects are programmed to continue delivering on the vision established in the BP. Twelve of these projects are fully funded and the others are partially funded and programmed to go to construction. Five projects are widening projects from priority category 2; eight projects are operational improvements drawn from priority category 3; and one new interchange is proposed from priority category 4. Approximately \$1.1 billion in projects are programmed for construction within the next five years.

One project is programmed in Kern County: an operational improvement to extend a connection of the Route to State Route 204. There are two projects programmed in Tulare County: an interchange projects at Betty Drive, and a widening project near Tagus expanding from four-lanes to six-lanes a segment approximately six and a half miles long within the county. In Fresno County two projects are programmed: a new interchange proposed at Veteran's Boulevard, and the construction of auxiliary lanes in the northbound and southbound directions to the newly realigned segment between Clinton Avenue and Ashlan Avenue. Two widening projects are programmed in Madera County to expand the Route from four-lanes to six-lanes from Avenue 7 to Avenue 12, and from Avenue 12 to Avenue 17 with a separate project to improve the interchange at 4th Street.

The Livingston median widening project is programmed in Merced County. This project will widen the Route from four-lanes to six-lanes in both the northbound and the southbound directions. Five projects are programmed in Stanislaus County: interchange improvements at Fulkerth Road and Mitchell Road/Service Road, and the Route 132 West Expressway project (a new alignment of a four-lane expressway) complete with auxiliary lanes in both directions. The auxiliary lane projects have been programmed since the 2013 Business Plan update.



Figure 6. Programmed Projects: All Project Categories

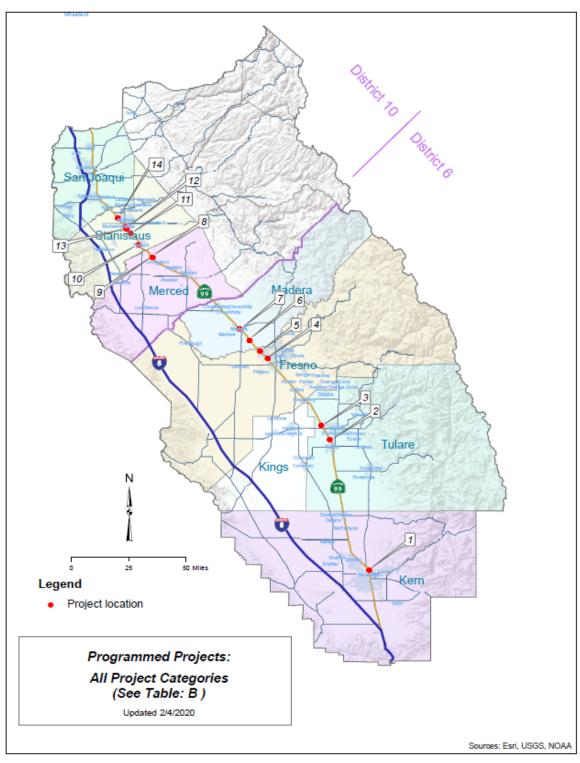




Table B - Programmed Projects: All Project Categories

TARI F	B . Pr	ogrammed P	roiects: A	II Project Categories			(Capital Costs	Greater than \$1 million)	Decemb	er 30, 2019
Numbe r on map	Cnty	P M s	EA	Project Name	Project Location	Project Description	ADVERTIS E SCHEDULE	R/W and Construction Capital Costs (X \$1,000)	Support Cost X \$1,000	Total Cost per Project X \$1,000	REGIONAL PRIORITY Cat.
1	KER	27.3	06-48450	Hageman Road Flyover	On 99 between Golden State Ave and Airport Drive	Extention and Connection to Rte 204	2022	\$51,800	\$17,700	\$69,500	3
2	TUL	30.6/35.2	06-36024	South Segment (Tagus) 6- Lane	From Prosperity Ave to 1.2 mile south of Ave 280 Overcrossing	Widen from 4F to 6F	2020	\$77,600	\$19,700	\$97,300	2
3	TUL	39.6/41.3	06-47150	Betty Drive Interchange	In Goshen at Betty Drive	Reconstruct Interchange	2020	\$46,600	\$10,800	\$57,400	3
4	FRE	23.7/26.2	06-2HT10	Route 99 Realignment	In Fresno from Clinton Ave to Ashlan Ave	Realign Freeway and Const. NB and SB Auxiliary Lanes	Construction	\$160,000	\$19,500	\$179,500	3
5	FRE	28.8/30.1	06-0H360	Veteran's Blvd Interchange	In Fresno between Shaw Ave and Herndon Ave	New Interchange	2020	\$54,900	\$12,300	\$67,200	4
6	MAD	1.7/7.5	06-H220	South Madera 6-Lane	Avenue 7 to Avenue 12	Widen from 4F to 6F	2023	\$159,000	\$29,000	\$188,000	2
7	MAD	R7.5/15.1	06-47090	Madera 6-Lane	Avenue 12 to Avenue 17	Widen from 4F to 6F and Reconstruct Interchange	Construction	\$53,000	\$9,000	\$62,000	2
8	MER	28.8/R37.3	10-0Q121	NB Livingston Median Widening	In Merced County in Livingston on State Route 99 from 0.8 mile south of Hammatt Ave to Merced/Stanislaus County Line.	Lane Widening from 2 to 3 Lanes	Construction	\$36,747	\$9,203	\$45,950	2
9	MER	28.8/R37.3	10-0Q122	SB Livingston Median Widening	In Merced County in Livingston on State Route 99 from 0.8 mile south of Hammatt Ave to Merced/Stanislaus County Line.	Lane Widening from 2 to 3 Lanes	2022	\$29,650	\$9,300	\$38,950	2
10	STA	4.3	10-0T910	Fulkerth IC Improvements	State Route 99 at Fulkerth Road	Interchange Improvements	Construction	\$14,023	\$1,296	\$15,319	3
11	STA	9.7/10.9	10-1A690	Mitchell Rd / Service Rd Interchange	On 99 in Ceres, Stanislaus County from 0.5 Km S to 1.0 Km N. of Mitchell Rd	Reconstruct Interchange	2022	\$109,500	\$24,000	\$133,500	3
12	STA	R11.3/R14.7, R16.2/R17.0	10-40350	Route 132 West Expressway	In Modesto on new alignment from Dakota to SR99	Construct 4-lane Expressway on new alignment	Construction	\$137,048	\$21,345	\$158,393	3
13	STA	13.4/13.8	10-0L870	Stanislaus Auxiliary Lane	In Modesto between Hatch Rd Overcrossing and South Street Off-Ramp	Construct NB Auxiliary Lane	2020	\$2,818	\$1,600	\$4,418	3
14	STA	18.5/R20.2	10-0V110	SR 99 Beckwith Rd & Carpenter Rd Accel/Decel Lanes	In Modesto from Carpenter Rd/Briggsmore to Beckwith/Standiford Ave	Improve On/Off Ramps and Construct NB and SB Auxiliary Lanes	Construction	\$8,317	\$4,400	\$12,717	3
									Total	\$1,130,147	
				Note:	Shaded = Fully Funded Unshaded = Partially Funded						

Candidate Projects

Priority Category 2: Capacity-Increasing Candidate Projects

While much has been accomplished since the release of the 2013 Business Plan update there is still much work to do. The candidate projects in Category 2 are unfunded capacity-enhancing projects necessary to implement the ultimate design concept for Route 99. Nineteen widening projects remain to be constructed (some projects have been combined over multiple phases). Of these, ten projects are proposed to expand the Route to an eight-lane facility in the most populous regions (Kern, Fresno, San Joaquin, and Stanislaus counties). Significantly, eight candidate projects are identified to satisfy one of the major goals of the BP, increasing the capacity of any segments containing fewer than six-lanes. The total estimated cost to construct the candidate Category 2 projects is \$4.3 billion.



Figure 7. Priority Category 2: Capacity Increasing Candidates

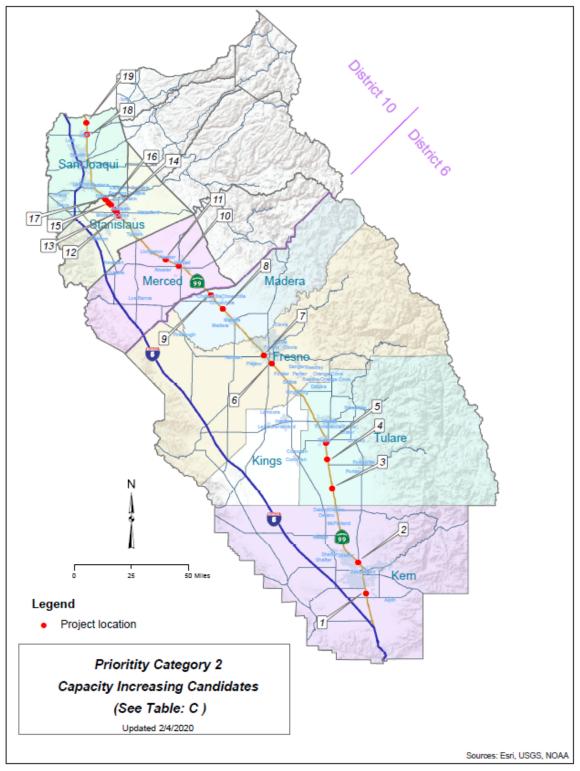




Table C - Priority Category 2: Capacity Increasing Candidates

Table C - Pr	able C - Priority Category 2: Capacity Increasing Candidates											December 30), 2019
Number on Map	Cnty	PMs	EA	Project Name	Project Location	Project Description	CONSTRUCT CAPITAL COST X \$1,000	R/W CAPITAL COST X \$1,000	SUPPORT COST X \$1,000	TOTAL COSTS PER PROJECT X \$1,000	PID DELIVERY STATUS	RTP STATUS C=CONSTRAINED NC=NOT CONSTRAINED	REGIONAL PRIORITY CATEGORY
1	KER	13.4/17.0	N/A	N/A	Bear Mountain Blvd to SR 119	Widen from 6F to 8F	\$40,000	\$0	\$12,000	\$52,000	Need PID	In RTP - C	2
2	KER	28.4/31.1	06-0Q600K	Kern 99 Norh Widening Phase II	Beardsley Canal to 7th Std Rd (Phase 2)	Widen from 6F to 8F	\$25,000	\$2,000	\$9,000	\$36,000	PID Completed	In RTP - C	2
3	TUL	0.0/16.0	N/A	N/A	Kern Co Line to south of Tipton	Widen from 4F to 6F	\$149,000	\$1,000	\$45,000	\$195,000	Need PID	In RTP - NC	2
4	TUL	16.0/25.5	N/A	N/A	South of Tipton to Avenue 200	Widen from 4F to 6F	\$105,000	\$1,000	\$31,500	\$137,500	Need PID	In RTP - C	2
5	TUL	25.4/30.5	06-48950K	Tulare City Widening	Avenue 200 to Prosperity Ave	Widen from 4F to 6F	\$124,000	\$47,000	\$29,150	\$200,150	PID Completed	In RTP - C	2
6	FRE	15.8/18.5	N/A	N/A	Central Ave to Jensen Ave	Widen from 6F to 8F	N/A	N/A	N/A	N/A	Need PID	Removed	2
7	FRE	18.5/26.6	N/A	N/A	Jensen Ave to Ashlan Ave	Widen from 6F to 8F	N/A	N/A	N/A	N/A	Need PID	Removed	2
8	MAD	15.1/20.5	06-0Y360	North Madera 99 Widening	Avenue 17 to Avenue 211/2	Widen from 4F to 6F	\$134,000	\$14,500	\$17,100	\$165,600	PID Completed	In RTP - NC	2
9	MAD	22.5/29.4	N/A	N/A	SR 152 Interchange to Merced Co Line	Widen from 4F to 6F	N/A	N/A	N/A	N/A	Need PID	In RTP - NC	2
10	MER	12.8/19.3	10-0U230K	Merced 99 Widening	S of Childs Ave to Weber Canal	Widen from 4F to 6F	\$1,280,000	\$236,000	\$16,000	\$1,532,000	PID Completed	In RTP - NC	2
11	MER	20.9/R23.8	10-1J350	MER 99 Atwater Applegate IC	1.9 mi south of Applegate Rd OC to 1.04 mi north of Applegate Rd OC	Widen from 4F to 6F	\$700,000	\$100,000	\$10,000	\$770,000	PID Completed	In RTP - NC	2
12	STA	R10.9/R13.2	10-0E560K	Ceres/Modesto 8-Lane Feasibility Study	Mitchell Road to Hatch Road	Widen from 6F to 8F	\$67,500	\$20,000	\$25,000	\$138,400	Need PID	In RTP - C	2
13	STA	R13.2/R15.1	10-0E560K	Ceres/Modesto 8-Lane Feasibility Study	Hatch Road to Tuolumne Blvd	Widen from 6F to 8F	\$55,000	\$0	\$20,000	\$93,000	Need PID	In RTP - C	2
14	STA	R15.1/R16.8	10-0E560K	Ceres/Modesto 8-Lane Feasibility Study	Tuolumne Blvd to Kansas Avenue	Widen from 6F to 8F	\$49,000	\$10,000	\$20,000	\$97,000	Need PID	In RTP - C	2
15	STA	R16.8/R18.5	10-0E560K	Ceres/Modesto 8-Lane Feasibility Study	Kansas Avenue to Carpenter Road	Widen from 6F to 8F	\$35,000	\$10,000	\$10,000	\$67,700	Need PID	In RTP - C	2
16	STA	R18.5/R24.7	10-0E560K	Ceres/Modesto 8-Lane Feasibility Study	Carpenter Road to San Joaquin County Line	Widen from 6F to 8F	\$48,100	\$0	\$18,000	\$81,300	Need PID	In RTP - C	2
17	STA/SJ	R22.5/R24.8, 0.0/6.7	10-1J900	STA/SJ99HOV	SR-219 to SR-120	Construct HOV Lane	\$518,000	\$125,000	\$15,000	\$658,000	PID Completed	In RTP-NC	2
18	SJ	28.3/31.6	10-1F070	Lodi 99 Widening	Harney Road to Turner Road	Widen from 4F to 6F	\$50,000	\$1,000	\$3,000	\$54,000	PID Completed	In RTP - NC	2
19	SJ	31.6/38.8	N/A	North Lodi Widening	Turner Road to Sacramento County Line	Widen from 4F to 6F	\$70,000	\$20,000	\$5,000	\$77,000	Need PID	In RTP - NC	2
									Total	\$4,354,650			

Priority Category 3: Operational Improvement Candidate Projects – Capital Costs Above \$8 Million

Candidate projects in Category 3 are potential operational improvements and are sub-categorized according to estimated individual project cost. The first sub-category contains those projects estimated to cost greater than \$8 million each and the second sub-category contains projects estimated to cost less than \$8 million. There are 26 projects that will cost more than \$8 million each to build. The majority of these projects (22) propose to modify existing interchanges while four projects propose adding auxiliary lanes to the Route. Total estimated cost to construct all 26 projects is over \$1.6 billion.



Figure 8. Priority Category 3: Operational Improvement Candidates – Capital Costs Above \$8 Million

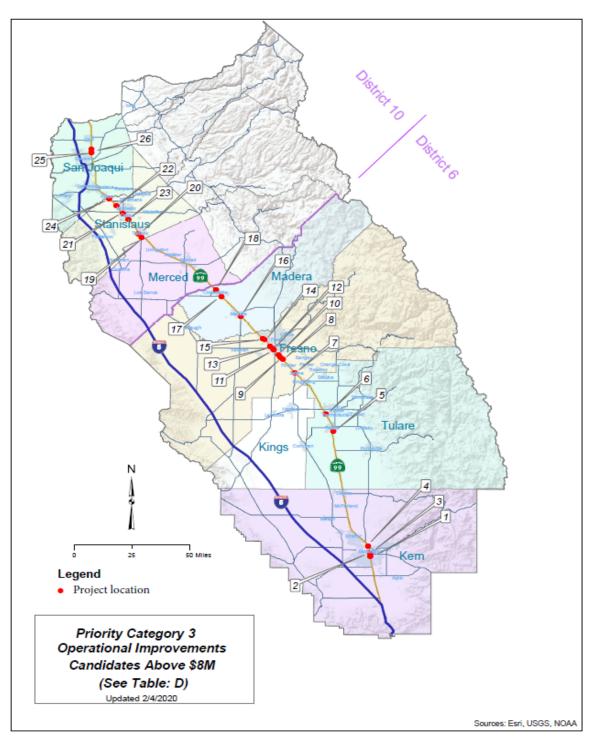




Table D - Priority Category 3: Operational Improvement Candidates – Capital Costs Above \$8 Million

Table	D - Priori	ty Category 3:	Operational I	mprovement Candidates-Capital	Costs Above \$8M							December 30,	2019
NO	CNTY	ROUTE 99 POSTMILE	EA	PROJECT NAME	PROJECT LOCATION	PROJECT DESCRIPTION	CONSTRUCT CAPITAL COST X \$1,000	R/W CAPITAL COST X \$1,000	SUPPORT COST X \$1,000	TOTAL COSTS PER PROJECT X \$1,000	PID DELIVERY STATUS	RTP STATUS C=CONSTRAINED NC=NOT CONSTRAINED	REGIONAL PRIORITY CATEGORY
1	KER	22.6/25.6	N/A	N/A	At SR 99/58 Interchange	Freeway to Freeway Connector	150,000	20,000	15,000	\$185,000	Need PID	In RTP - C	3
2	KER	22.7/23.2	06-46011K	Ming Auxiliary Lane	Ming Ave to SR58	Construct N/B Auxiliary Lane	\$19,000	\$1,100	\$4,300	\$24,400	PID Completed	In RTP - C	3
3	KER	23.9/24.6	06-46012K	California Auxiliary Lane	58/Stockdale to California Ave	Construct S/B Auxiliary Lane	\$21,800	\$2,200	\$4,800	\$28,800	PID Completed	In RTP - C	3
4	KER	27.8/28.1	06-49710K	Olive Drive Interchange	Olive Dr. Interchange	Expand Interchange	\$7,700	\$300	\$2,600	\$10,600	Need PID	In RTP - C	3
5	TUL	27.6/28.0	06-33990K	Page Ave Interchange	Paige Ave Interchange	Reconstruct Interchange	\$38,000	\$6,000	\$10,000	\$54,000	PID Completed	In RTP - C	3
6	TUL	36.1/36.8	06-48740K	Caldwell Interchange	Caldwell Interchange	Reconstruct Interchange	\$25,000	\$4,500	\$7,300	\$36,800	PS&E	In RTP - C	3
7	FRE	6.5	06-0H410K	Floral Rd/SR 43 Interchange	Floral Rd/SR 43 Interchange	Replace Bridge Structure and Floral Rd	\$10,000	\$0	\$3,000	\$13,000	Need PID	In RTP - C	3
8	FRE	14.1/14.9	06-0H240 formally 06- 0H230K	South Fresno Interchange Project Formally American Ave Interchange	In and near Fresno from 0.4 mi south of American Ave Over- crossing to 0.4 mi north of North Ave Over-crossing	Modify Interchange	\$21,000	Unknown	\$6,900	\$27,900	Need PID	In RTP - C	3
9	FRE	15.8	N/A	Central Ave/Chestnut Ave Interchange	Central Ave/Chestnut Ave Interchange	Interchange Improvements	\$42,000	\$20,000	\$12,600	\$74,600	Need PID	In RTP - NC	3
10	FRE	16.7/17.5	06-0H240K	Cedar Ave/North Ave Interchange	Cedar Ave/North Ave Interchange	Interchange Improvements	\$50,000	\$18,000	\$14,700	\$82,700	PA&ED	In RTP - C	3
11	FRE	20.3	N/A	Ventura Ave Interchange	Ventura Ave Interchange	Interchange Improvements	\$42,000	\$20,000	\$12,600	\$74,600	Need PID	Not in RTP	3
12	FRE	20.7/24.4	06-39210K	Roeding Auxiliary Lane	Fresno St to Clinton Ave	Add NB and SB Auxiliary Lanes	\$37,000	\$69,000	\$19,000	\$125,000	PID Completed	In RTP - NC	3
13	FRE	20.5/21	N/A	N/A	Toulumne St to Stanislaus St	Interchange Improvements	\$10,000	\$0	\$3,000	\$13,000	Need PID	Not in RTP	3
14	FRE	23.0/30.4	06-0K290K	Southbound 99 Ramp Metering	Belmont Ave to Herndon Ave	Ramp Metering and Auxiliary Lanes	\$5,997	\$3,627	\$9,624	\$19,248	In Construction	Not in RTP	3
15	FRE	27.3/28.3	06-442700	Shaw Ave Interchange	N/A	Interchange Improvements	\$29,000	\$25,000	\$8,700	\$62,700	PID Completed	In RTP - NC	3
16	MAD	9.7/10.7	N/A	N/A	Route 99/145	Reconstruct Interchange	\$32,000	\$7,200	\$7,500	\$46,700	Need PID	Not in RTP	3
17	MAD	21.7/23.7	N/A	N/A	SR 152 Interchange	Reconstruct Interchange and Rail Crossing	\$69,400	\$3,200	\$18,200	\$90,800	Need PID	In RTP - NC	3
18	MAD	26.2/26.9	06-0C910K	Chowchilla 99/233 Interchange	Route 99/233	Reconstruct Interchange	\$49,700	\$2,600	\$7,000	\$59,300	PID Completed	In RTP - C	3
19	STA	R1.4	N/A	Lander I/C	SR99 @ SR165 (Lander Ave)	Modify Interchange	\$35,000	\$5,000	\$12,000	\$52,000	Need PID	In RTP - C	3
20	STA	R3.2/R4.0	10-0F410K	Main Street I/C	West Main Street	Reconstruct Interchange	\$11,900	\$6,700	\$2,000	\$20,600	PID Completed	In RTP - C	3
21	STA	R11.3	10-0E560K	Pine St. I/C	Pine Street	Reconstruct Interchange	\$50,000	\$25,000	\$15,000	\$90,000	PID Completed	Not in RTP	3
22	STA	R14.9/R15.6	10-0H770K	SR132/99 I/C	SR99 @ SR132 to SR132 East	New Freeway to Freeway Interchange	\$70,000	\$6,000	\$20,000	\$96,000	Need PID	In RTP - C	3
23	STA	R19.9	N/A	Staniford I/C	SR99 @ Standiford	Modify Interchange	\$75,000	\$10,000	\$20,000	\$105,000	Need PID	In RTP - C	3
24	STA	R23.9/R25.1	10-0L3200	Sta-99 @ Hammett Rd	Between 0.4 mile 5 of Hammett Rd OC and 0.8 mile N of Hammett Rd OC	Reconstruct Interchange	2013	\$43,600	\$13,700	\$59,313	PID Completed	In RTP - C	3
25	SJ	23.5/24.5	10-0L1400	Morada/99 Interchange	At Morada Lane in Stockton	Reconstruct Interchange	2017	\$88,000	\$13,000	\$103,017	PID Completed	In RTP - C	3
26	SJ	24.9/25.9	10-011300	Eight Mile/99 Interchange	At Eight Mile Rd in Stockton	Reconstruct Interchange	2017	\$63,000	\$10,000	\$75,017	PID Completed	In RTP - C	3
									Total	\$1,630,095			

Priority Category 3: Operational Improvement Candidate Projects – Capital Costs Below \$8 Million

There are 19 candidate projects to address operational improvements on the Route, estimated to cost less than \$8 million each. All of these projects are in District 10 except for one in Fresno County and range from constructing auxiliary lanes to implementing ramp improvements. The estimated total cost for this sub-category is nearly \$109 million.



Figure 9. Priority Category 3: Operational Improvement Candidate
Projects – Capital Costs Below \$8 Million

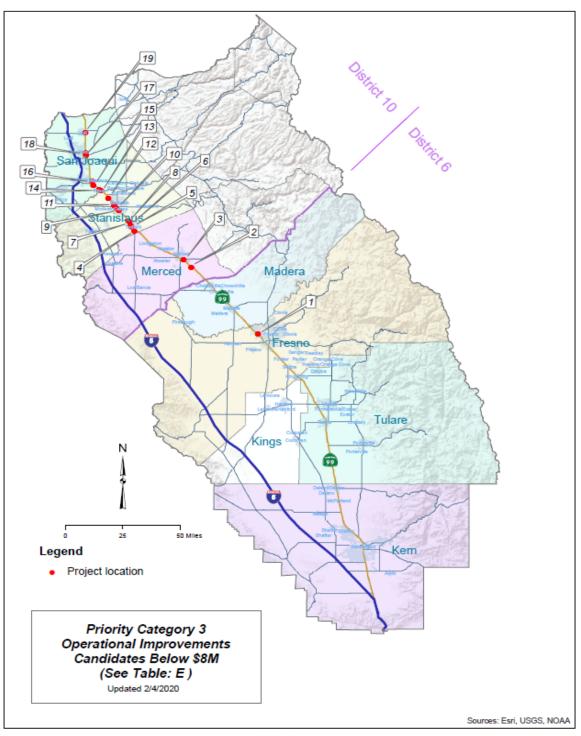


Table E – Priority Category 3: Operational Improvement Candidate Projects Below \$8 Million

able	e E - Prid	rity Categor	y 3: Operation	onal improvement	Candidates-Capital Costs Below \$8	SM .					Decem	ber 30, 2019	
NO	CNTY	ROUTE 99 POSTMILE	EA	PROJECT NAME	PROJECT LOCATION	PROJECT DESCRIPTION	CONSTRUCT CAPITAL COST X \$1,000	R/W CAPITAL COST X \$1,000	SUPPORT COST X \$1,000	TOTAL COSTS PER PROJECT X \$1,000	PID DELIVERY STATUS	RTP STATUS C=CONSTRAINED NC=NOT CONSTRAINED	REGIONA PRIORITY CATEGOR
1	FRE	26.2/26.6.	06-46140	NB Ramp Upgrade	In Fresno at Ashlan Ave NB Off-Ramp	Construct Additional Lane for Off-Ramp	\$3,000	\$0	\$1,000	\$4,000	PID Completed	N/A	3
2	MER	5.1/11.4	N/A	N/A	South of Merced	Construct NB and SB Acceleration/Deceleration Lanes at 13 Locations	\$3,200	\$0	N/A	\$3,200	Need PID	N/A	3
3	MER	12.9/13.3	N/A	N/A	In Merced on the SR99/Child Interchange	Improve NB and SB On/Off Ramps	\$1,000	\$0	N/A	\$1,000	Need PID	N/A	3
4	STA	R1.3/R2.2	N/A	N/A	In Turlock at Central Turlock/SR 165 (Lander Ave)	Improve NB and SB On/Off Ramps	\$1,000	\$0	N/A	\$1,000	Need PID	N/A	3
5	STA	R3.7/R4.3	N/A	N/A	In Turlock from West Main St to Fulkerth Ave	Construct NB Auxiliary Lane	\$3,800	\$0	N/A	\$3,800	Need PID	N/A	3
6	STA	R4.7/R5.5	N/A	N/A	In Turlock from Fulkerth Rd to Monte Vista Rd	Construct NB and SB Auxiliary Lanes	\$4,500	\$0	N/A	\$4,500	Need PID	N/A	3
7	STA	R5.3/R7.9	N/A	N/A	In Turlock from Monte Vista Rd to Taylor Rd	Construct NB and SB Auxiliary Lanes	\$7,900	\$0	N/A	\$7,900	Need PID	N/A	3
8	STA	R6.9/R8.0	N/A	N/A	In Turlock at SR 99/Keyes Rd Interchange	Improve NB On/Off Ramps	\$1,000	\$0	N/A	\$1,000	Need PID	N/A	3
9	STA	R13.3	N/A	N/A	In Modesto at SR 99/Hatch Rd Interchange	Improve NB and SB On/Off Ramps	\$1,000	\$0	N/A	\$1,000	Need PID	N/A	3
10	STA	R14.6/R15.1	N/A	N/A	From Crowslanding Rd to Toulumne Blvd/B St	Improve NB and SB On/Off Ramps and Construct Auxiliary Lanes	\$7,100	\$0	N/A	\$7,100	Need PID	N/A	3
11	STA	R16.8	N/A	N/A	In Modesto	Improve NB and SB On/Off Ramps and Construct Auxiliary Lanes	\$3,200	\$0	N/A	\$3,200	Need PID	N/A	3
12	STA	R20.5/21.5	N/A	N/A		Improve On/Off Ramps and Construct NB and SB Auxiliary Lanes	\$7,900	\$0	N/A	\$7,900	Need PID	N/A	3
13	SJ	0.6/1.4	N/A	N/A	In Ripon from Main St to Milgeo Ave	Improve NB and SB On/Off Ramps at Main St and Construct Auxiliary Lane	\$37,100	\$0	N/A	\$37,100	Need PID	N/A	3
14	SJ	1.4/2.1	N/A	N/A	In Ripon from Milgeo Ave to Jacktone Rd	Improve NB and SB On/Off Ramps at Milgeo Ave and Construct Auxiliary Lane	\$5,900	\$0	N/A	\$5,900	Need PID	N/A	3
15	SJ	5.0/5.4	N/A	N/A	Near Manteca from Austin Rd to Jot SR 120 West	Improve NB and SB On/Off Ramps at Milgeo Ave and Construct Auxiliary Lanes	\$3,800	\$0	N/A	\$3,800	Need PID	N/A	3
16	SJ	6.8/7.1	N/A	N/A	In Manteca at the Jot of SR 120 East (Yosemite Ave)	Improve NB and SB On/Off Ramps	\$1,200	\$0	N/A	\$1,200	Need PID	N/A	3
17	SJ	19.4/20.2	N/A	N/A	In Stockton between Freemont St and Waterloo Rd	Construct NB and SB Auxiliary Lanes	\$6,100	\$0	N/A	\$6,100	Need PID	N/A	3
18	SJ	20.5/20.9	N/A	N/A	In Stockton from Waterloo Rd to Cherokee Rd	Construct NB Auxiliary Lane	\$2,000	\$0	N/A	\$2,000	Need PID	N/A	3
19	SJ	29.7/30.7	N/A	N/A	Between SR 12 (Kettleman Ln) and SR 12 East to San Andreas	Construct NB and SB Auxiliary Lanes	\$7,000	\$0	N/A	\$7,000	Need PID	N/A	3
ote									Total	\$108,700			

Priority Category 4: New Interchange Candidate Projects

Remaining Priority Category 4 projects exist in District 6 only. One new interchange is proposed in each of Kern (Hanawalt Road), Tulare (Commercial Avenue), and Madera (Ellis Avenue) counties. The individual construction costs for new interchanges can pose a significant challenge to materialization. The total estimated cost for the three Priority Category 4 projects is \$189 million.



Figure 10. Priority Category 4: New Interchange Candidate Projects

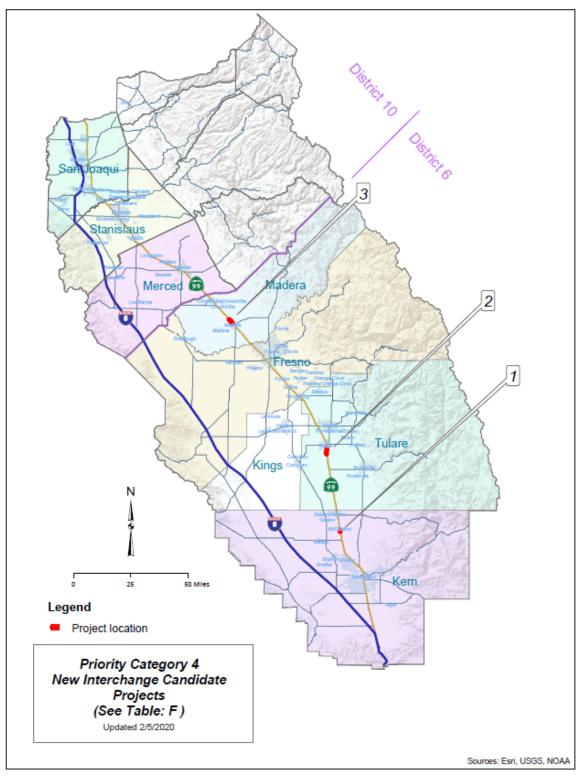




Table F – Priority Category 4: New Interchange Candidate Projects

able F	- Prior	ity Categor	y 4: New I	nterchange Can	didate Proje	cts					December 30, 2019		
NO	CNTY	PMs	EA	PROJECT LOCATION	PROJECT DESCRIPTION	CONSTRUCT CAPITAL COST X \$1,000	R/W CAPITAL COST X \$1,000	SUPPORT COST X \$1,000	TOTAL COSTS PER PROJECT X \$1,000	PID DELIVERY STATUS	RTP FINANCIALLY CONSTRAINED?	REGIONAL PRIORITY CATEGORY	
1	KER	48.4/48.9	N/A	At Hanawalt Road	Construct New Interchange	\$50,000	\$10,000	\$10,000	\$70,000	Need PID	In RTP - NC	4	
2	TUL	25.4/27.6	06-43040K	at Commercial Avenue at Agri- Center	Construct New Interchange	\$36,000	\$3,000	\$5,000	\$44,000	Need PID	In RTP - C	4	
3	MAD	R12.3/R14.3	06-48920K	at Ellis Avenue	Construct New Interchange	\$46,000	\$9,000	\$20,000	\$75,000	PID Completed	In RTP - NC	4	
								Total	\$189,000				



Conclusion

Primarily, the focus of the BP was to build enough capacity on the Route to accommodate the safe and efficient movement of goods and people to enhance California's economy and livability. Several four-lane segments still exist throughout the corridor awaiting a significant funding source. Within District 6, there are three gaps in capacity totaling nearly 37 miles where bottlenecks regularly occur. One is a large 25.4-mile segment from southern Tulare County line to Tulare City, and there are two additional gaps in Madera County. District 10 contains three gaps covering a total of 22.2 miles in the City of Merced, near the City of Atwater, and in San Joaquin County from the south side of the City of Lodi to the northern county line (details of these projects are shown in Table C).

Importantly, operational improvements work in tandem with the capacity enhancing projects to deliver safety, traffic reduction, improved air quality, and travel time reliability on the Route. Operational improvements range from shoulder widening, to installation of median concrete barrier, to reconfiguration of existing interchanges. Many of the interchanges on Route 99 were built in the 1950's and 60's and were designed for significantly lower volumes than those encountered today. Inadequate geometrics, as well as limited storage and merge distance all contribute to congestion on the ramps, local roads, and the highway itself. There is a need to modify or replace these interchanges to improve the safety and operation of the Route.

As a result of the BP, all at-grade intersections have been replaced with grade-separated interchanges, bolstering safety outcomes for motorists on the Route.



Long-Range Plans for Route 99

To better align with the Department's modern mission and vision, going forward, Caltrans Districts will manage the Route through a comprehensive planning approach. Corridor Planning is a multimodal transportation planning approach that recognizes transportation needs are based on the sum of geographic, demographic, economic, and social characteristics of communities. Regional variation, including the different conditions between rural and urban areas, shape the character of the Route, so Corridor Plans will be developed in each District together with adjoining jurisdictions to ensure those nuances are addressed. By seeking to integrate all modes, management strategies, and improvements—including those identified in the BP—Corridor Plans will direct future development of the Route to be a safe, sustainable, integrated and efficient component of the larger transportation system. The Corridor Plans will carry forward the objective of the BP to enhance the Route's functionality as a trade corridor and improve the mobility of all users by connecting the projects in the BP to new multimodal strategies that can transform the way people and freight are transported. Overriding considerations will be needed to create a viable trade corridor to enhance the economy and livability of the Valley. The end goal is to build upon the foundation of the BP and provide one unified concept for managing, operating, preserving, and improving the Route in a wholistic manner.



List of Abbreviated Terms

AADT Annual Average Daily Traffic

AADTT Annual Average Daily Truck Traffic

AASHTO American Association of State Highway and Transportation Officials

California Transportation Commission

AC Asphalt concrete

CTC

ADA Americans with Disabilities Act

ADT Average Daily Traffic

Caltrans California Department of Transportation

CE Categorical Exceptions/Exemptions
CEQA California Environmental Quality Act
CHSRA California High Speed Rail Authority
CSMP Corridor System Management Plan

DED Draft Environmental Document

EIR Environmental Impact Report

EIS Environmental Impact Statement
FED Final Environmental Document
FHWA Federal Highway Administration

FONSI Finding of No Significant Impact

HES Hazard Elimination and Safety Program

HBRR Highway Bridge Replacement/Rehabilitation Program

HDM Highway Design Manual

IIP Interregional Improvement Program

ISTEA Intermodal Surface Transportation Efficiency Act

ITS Intelligent Transportation Systems

HOV High Occupancy Vehicle

HSR High speed Rail

ITIP Interregional Transportation Improvement Program

ITSP Interregional Transportation Strategic Plan

LOS Level of Service

MAP-21 Moving Ahead for Progress in the 21st Century



MPO Metropolitan Planning Organization
NEPA National Environmental Policy Act

ND Negative Declaration

NHS National Highway System

PA&ED Project Approval and Environmental Documentation

PCC Portland cement concrete
PID Project Initiation Document

PM Particulate Matter

PM Post mile

PSR Project Study Report

PS&E Plans, Specifications, and Estimates

PSSR Project Scope Summary Report
REMI Regional Economics Models, Inc
RIP Regional Improvement Program

RTIP Regional Transportation Improvement Program

RTP Regional Transportation Plan

R/W Right-of-way

SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity Act: A

Legacy for Users

SHOPP State Highway Operation and Protection Program

SJV San Joaquin Valley

SRRA Safety Roadside Rest Area

STIP State Transportation Improvement Program

TAP Transportation Alternatives Program

TCR Transportation Concept Report

TCRP Transportation Congestion Relief Program

TE Transportation Enhancement

TIFIA Transportation Infrastructure Finance and Innovation Act

TMS Transportation Management System

VMT Vehicle Miles Traveled



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Resources

Jason's Law -

https://ops.fhwa.dot.gov/freight/infrastructure/truck_parking/jasons_law/truckparkingsurvey/ch1.htm

Poverty - https://www.citylab.com/equity/2019/09/affordable-housing-fresno-california-home-real-estate-

rent/598840/?utm medium=offsite&utm source=yahoo&utm campaign=yahoo-non-hosted&yptr=yahoo

1. SB1 Program Demands based on CTC's "Summary of STIP Share Balances Through June 30, 2019".

