Transportation Concept Report

State Route 184

District 06

December 2013

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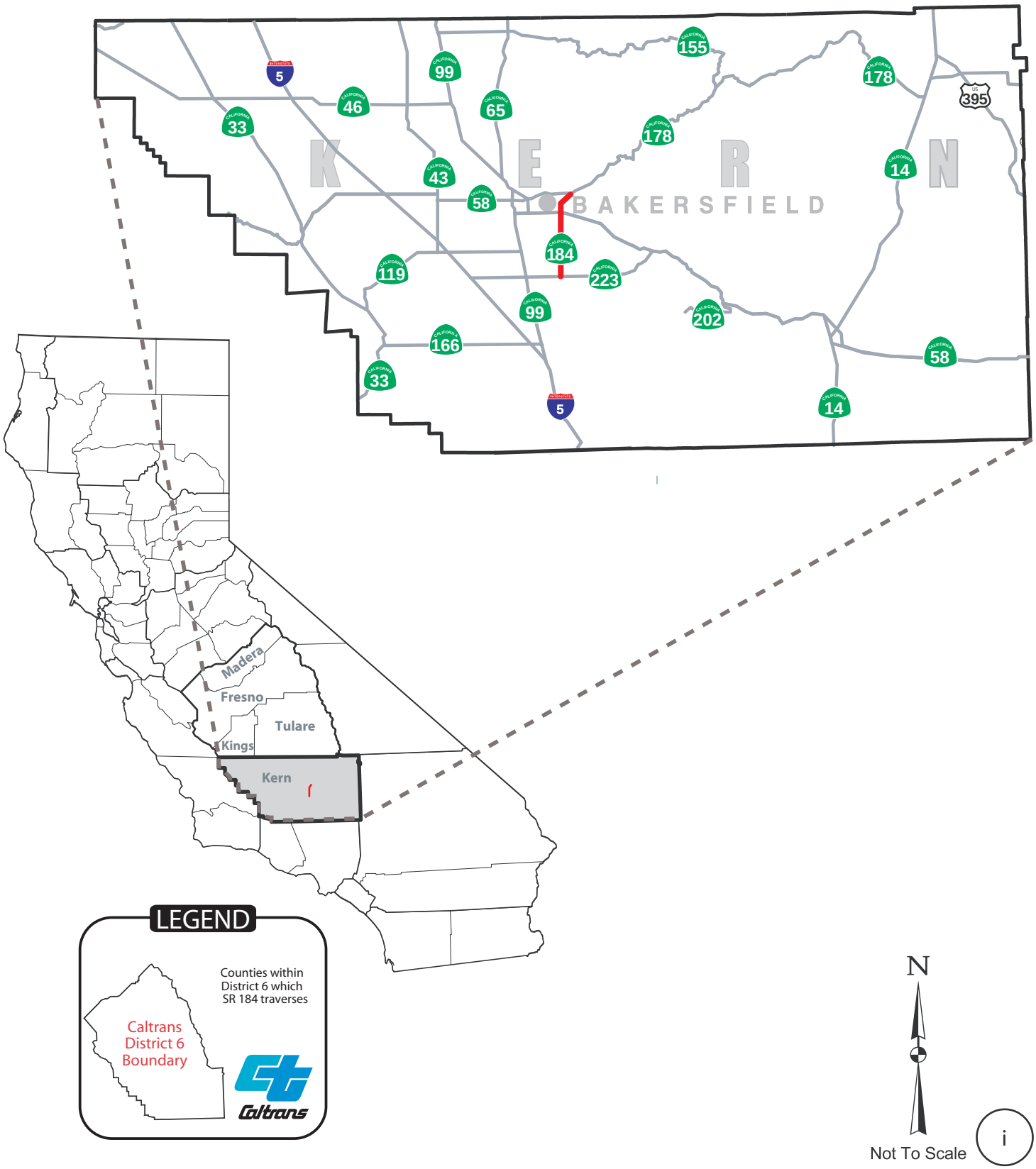
California Department of Transportation
Caltrans Improves Mobility Across California

Approvals:

1-8-14		1-8-2014	
Gail Miller Deputy District Director Planning and Local Assistance Caltrans – District 6	Date	Sharri Bender-Ehlert District Director Caltrans – District 6	Date

On the cover: State Route 184 at its southern junction with SR 223

STATE ROUTE 184
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/.

EXECUTIVE SUMMARY

State Route 184 serves the metropolitan Bakersfield area and points south of the metropolitan area. The route is only fourteen miles in length. The route traverses a wide variety of land uses in its short length; from rural agricultural land, to residential, industrial, and commercial.

Base year is 2012 and Horizon year is 2035.

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 223 to Buena Vista Blvd/Weedpatch Loop	2C	2C with improvements	Maintain Only	Maintain Only	6C
2	Buena Vista Blvd/Weedpatch Loop to DiGiorgio Rd	2C	2C with improvements	Maintain Only	Maintain Only	6C
3	DiGiorgio Rd to Panama Rd	4C	4C	Maintain Only	Maintain Only	4C
4	Panama Rd to Panama Ln	2C	4C	Maintain Only	Maintain Only	6C
5	Panama Ln to Muller Rd	2C	4C	Maintain Only	Widen to four lanes	6C
6	Muller Rd to 0.247 miles south of SR 58	2C	4C	Changeable message sign	Widen to four lanes	6C
7	0.247 miles south of SR 58 to Edison Hwy	2C, 4C	4C	Maintain Only	Widen to four lanes	6C
8	Edison Hwy to Niles St	2C	4C	Grade separations, closed circuit television	Widen to four lanes	6C
9	Niles St to SR 178	2C	4C	Maintain Only	Widen to four lanes	6C

* Please see Segment Map, page 4.
* For definitions of facility type, please see Appendix A, Glossary of Terms and Acronyms, Page 21.

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 184. 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.

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 would 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.

Proposed Projects and Strategies

State Route 184 has no programmed projects. However, due to the widening project on SR 178, SR 184 will be realigned with its connection to SR 178. State Route 184 will be connected approximately 2,500 feet to the west of where it currently connects with SR 178. The City of Bakersfield has identified SR 184, from Panama Road to Brundage Lane as a future bikeway in their Bikeway Master Plan (map dates 2010). The projects listed as planned projects in Kern COG's Regional Transportation Plan (RTP) 2011, will not begin until 2025 at the earliest.

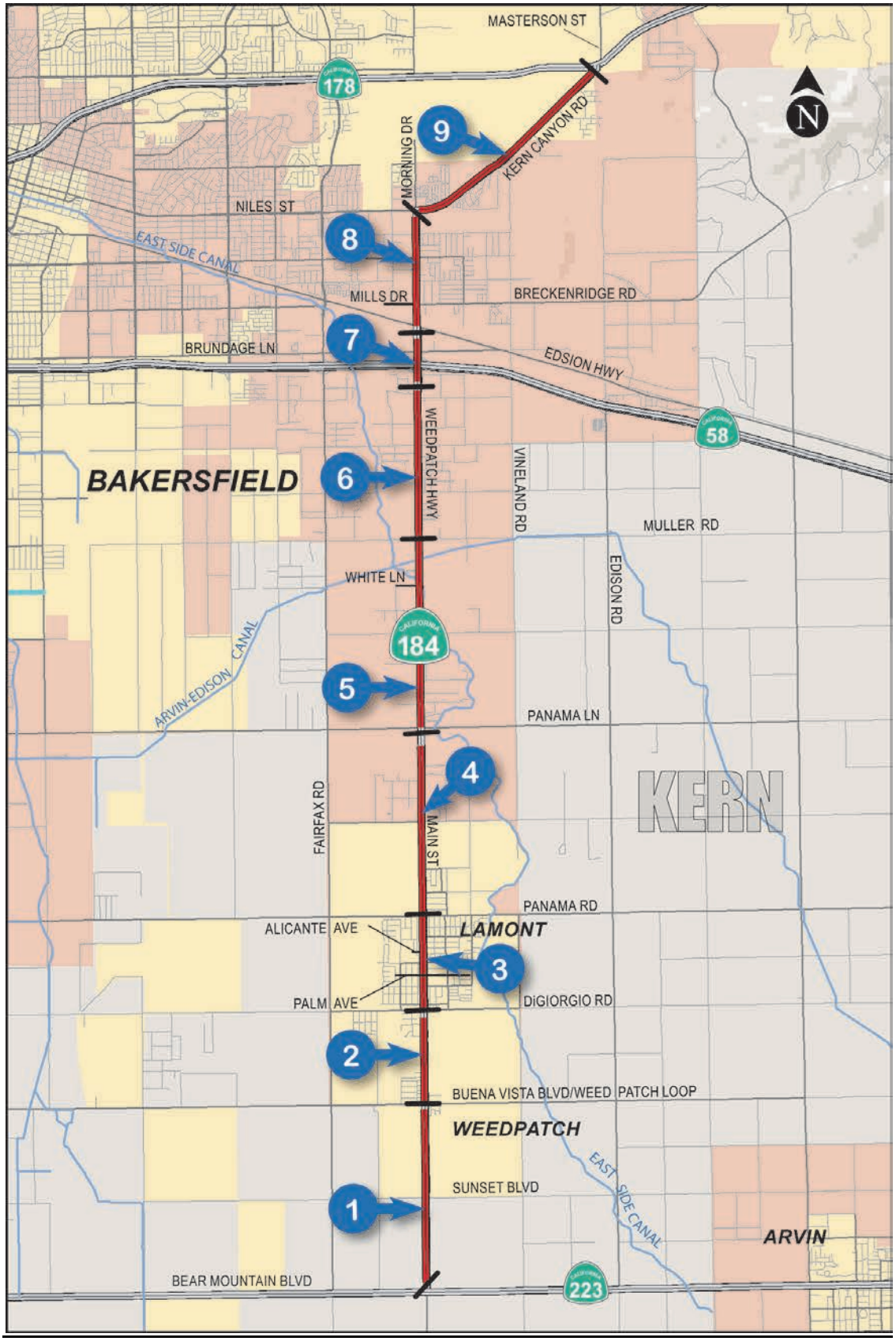
CORRIDOR OVERVIEW

ROUTE SEGMENTATION

Segment #	Location Description	County_Route_ Beg. PM	County_Route_ End PM
1	SR 223/Bear Mountain Blvd to Buena Vista Blvd/Weedpatch Loop	KER_184_L0.0	KER_184_0.0
2	Buena Vista Blvd/Weedpatch Loop to Di Giorgio Rd	KER_184_0.0	KER_184_1.004
3	Di Giorgio Rd to Panama Rd	KER_184_1.004	KER_184_2.035
4	Panama Rd to Panama Ln	KER_184_2.035	KER_184_4.05
5	Panama Ln to Muller Rd	KER_184_4.05	KER_184_6.07
6	Muller Rd to 0.247 miles south of SR 58	KER_184_6.07	KER_184_7.69
7	0.247 miles south of SR 58 to Edison Hwy	KER_184_7.69	KER_184_8.35
8	Edison Hwy to Niles St	KER_184_8.35	KER_184_9.6
9	Niles St to SR 178	KER_184_9.6	KER_184_12.139*

* Ending postmile will change with the realignment of SR 184 and its connection with SR 178.

SEGMENT MAP


MASTERSON ST
178
MORNING DR
KERN CANYON RD
N
9
NILES ST
8
EAST SIDE CANAL
MILLS DR
BRECKENRIDGE RD
7
BRUNDAGE LN
EDSION HWY
58
WEEDPATCH HWY
VINELAND RD
BAKERSFIELD
6
MULLER RD
WHITE LN
EDISON RD
184
ARVIN-EDISON CANAL
5
PANAMA LN
4
KERN
FAIRFAX RD
MAIN ST
PANAMA RD
ALICANTE AVE
LAMONT
3
PALM AVE
DiGIORGIO RD
2
BUENA VISTA BLVD/WEED PATCH LOOP
WEEDPATCH
SUNSET BLVD
EAST SIDE CANAL
1
ARVIN
BEAR MOUNTAIN BLVD
223

ROUTE DESCRIPTION

Route Location: State Route (SR) 184 begins at SR 223 in Kern County and ends at SR 178 also in Kern County. The route is located solely in Caltrans District 6 and Kern County. It is fourteen (14) miles in length.
Route Purpose: The route connects SR 223 to SR 178, and provides a north – south corridor for eastern Bakersfield. The southern part of the route is more rural in nature and connects the less urbanized areas with the Bakersfield metropolitan area. It also connects the southern San Joaquin Valley to recreation areas like Lake Isabella, Bodfish, Kernville, and Ridgecrest via SR 178.
Major Route Features: The route begins at SR 223, intersects SR 58, and ends at SR 178. The route is also known as the "Weedpatch Highway".

Route Designations and Characteristics: In 2009, the route was designated as the "Deputy James Throne Memorial Highway". Born and raised in Shafter, Deputy Throne had been active in law enforcement his entire adult life in the Kern County area. In May 2008, he was killed in the line of duty, while assisting another deputy.

Deputy James Throne Memorial Highway in Bakersfield at the SR 184/SR 58 Interchange

ROUTE DESCRIPTION									
Segment #	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Freeway & Expressway	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
National Highway System	No	No	No	No	No	No	No	No	No
Strategic Highway Network	No	No	No	No	No	No	No	No	No
Scenic Highway	No	No	No	No	No	No	No	No	No
Interregional Road System	No	No	No	No	No	No	No	No	No
High Emphasis	No	No	No	No	No	No	No	No	No
Focus Route	No	No	No	No	No	No	No	No	No
Federal Functional Classification	Principal Arterial	Principal Arterial	Principal Arterial	Principal Arterial	Principal Arterial	Principal Arterial	Principal Arterial	Principal Arterial	Principal Arterial
Goods Movement Route	No	No	No	No	No	No	No	No	No
Truck Designation	Terminal Access	Terminal Access	Terminal Access	Terminal Access	Terminal Access	Terminal Access	Terminal Access	Terminal Access	Terminal Access
Rural/Urban/ Urbanized	Rural	Urbanized	Urbanized	Urbanized	Rural	Urbanized	Urbanized	Urbanized	Urbanized
Metropolitan Planning Organization	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG
Regional Transportation Planning Agency	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG
Congestion Management Agency	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG	Kern COG
County Transportation Commission	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
Local Agency	Kern County	Kern County and Lamont	Kern County and Lamont	Kern County and Lamont	Kern County and City of Bakersfield	Kern County and City of Bakersfield	Kern County and City of Bakersfield	Kern County and City of Bakersfield	Kern County and City of Bakersfield
Tribes*	*	*	*	*	*	*	*	*	*
Air District	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	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat

*Kawaiisu Tribe, Kawaiisu Band of Kern Valley Indians, Kawaiisu Tribe of the Tejon Indian Reservation, Tejon Indian Tribe, Tinoqui-Chalola Council of Kitanemuk and Yowlumne Tejon Indians, Tubutulabals of Kern County, Tule River Reservation and Tribe, Tule River Yokuts

COMMUNITY CHARACTERISTICS

Beginning at the southern end of SR 184, the first community is Weedpatch at the intersection of SR 184 and Buena Vista Boulevard. Weedpatch has a population of 2,658 as of the 2010 U.S. Census. Over 93 percent are of Hispanic descent. Weedpatch was named back in the late 1800s, but was not settled until 1922. It was the location of the Arvin Federal Government Camp, which was a migrant camp leased by the U.S. Department of Agriculture (later deeded to) in the 1930s. The Dust Bowl refugees from Oklahoma, Arkansas, Missouri, and parts of Texas left their homes and farms to work in the fields of central California. The camp was created to offer a better living situation than that of squatters' camps. It provided sanitation and small tin cabins and tents to live in. John Steinbeck's, "The Grapes of Wrath", is based on the Weedpatch Camp and the plight of the 1930's migrant workers. In 1996, the three remaining buildings were added to the National Register of Historic Places and are also included in the California Register of Historical Resources. Most of the camp has since been refurbished and is home to new migrant workers.

Just a short drive north, is the community of Lamont. Lamont's population was 15,120 at the time of the 2010 U.S. Census. Over 94 percent are of Hispanic descent. Lamont was originally settled in 1923.

State Route 184 lies on the eastern side of metropolitan Bakersfield. Bakersfield's population as of the 2010 U.S. Census, was 347,483. Over 45 percent are of Hispanic descent. Bakersfield is also known as California's Country Music Capital and Nashville West due to being home to country music legends Buck Owens and Merle Haggard. It also was noted as an All-American City in 2010.

Settlement in the area began in the Gold Rush years. In 1851, gold was discovered along the Kern River. In 1865, oil was discovered in the area. Bakersfield was founded in 1869 and originally incorporated in 1873. However, in 1876, the city disincorporated. In 1898, it once again became an incorporated community. The city was named after Thomas Baker. His homestead was along the Kern River and travelers would stay and rest in the area that became known as Baker's Field, then Bakersfield.

From 1970 to 2010, Bakersfield's population has more than quadrupled, and has become one of the fastest growing cities in California. Oil and agriculture are the main industries in the area. Kern County produces nearly 10% of the United States' domestic oil. It also is one of the leading counties in agricultural production, with almonds, carrots, alfalfa, cotton, and grapes being the major crops. Major employers in the Bakersfield area include: Kern County, Giumarra Companies (a fruit and vegetable grower and supplier), Grimmway Farms (carrot growers), Bolthouse Farms (producers of carrots, juices, and dressings), Bakersfield Memorial Hospital, City of Bakersfield, Mercy Hospitals of Bakersfield, Air Resources Board, Kern Medical Center, State Farm Insurance, Sun World (grower, marketer, and breeder of seedless grapes, sweet peppers, stone fruits, and other fruits and vegetables), and Chevron Oil Company. For a large metropolitan area, it is noteworthy that Bakersfield is not linked to any interstate.

An Environmental Justice grant, "Improving Safety and Mobility in South Kern County," was completed in February 2013. The project focused on the City of Arvin and the unincorporated communities of Lamont and Weedpatch, which SR 184 serves. The goal of the project was to help create a safer, more comfortable, and aesthetically pleasing transportation environment that accommodates all users and all abilities through a process that engaged a diverse set of community members. In Lamont and Weedpatch, the project focused mainly on pedestrian safety and mobility in the vicinity of SR 184. The project found key opportunities for Lamont and Weedpatch, including: 1) foundations for a better, safer main street; 2) improve streetscape and frontage to stimulate commercial activity; 3) identify activity nodes; 4) reinforce complete streets network; and 5) improve gateways. The options for SR 184 improvements that were discussed and placed in the report were: 1) Preferred Option - keep five travel lanes, and add bicycle lanes; 2) Alternative 1 – reduce to three travel lanes,

and add buffered bicycle lanes; 3) Alternative 2 – reduce to three travel lanes, add bicycle lanes, and reverse angle parking. Potential intersection improvements on crossings with SR 184 in Lamont were raised medians as pedestrian refuges, highly visible crosswalk markings, advance yield lines, curb extensions, and universally accessible curb ramps. The group desires to maintain an advisory committee or working group involving Kern County, Caltrans, and other interested parties to develop strategies to fund and implement needed improvements.

LAND USE

The route traverses agricultural land at its southern end. On the northeast corner of SR 223 and SR 184 is a service station and mini-mart. The southeast corner of Sunset Avenue and SR 184 is home to Sunset Middle School. As one travels north, one finds medium density residential, interspersed with general commercial and a Cal-Organic warehouse operated by Grimmway Farms. Kern County Superior Court, its administration offices, and a post office are located just north of the warehouse. Continuing north, various residential uses occur with some general commercial. On the southeast corner of SR 184 and Palm Avenue in Lamont is the Lamont Elementary School. On the east side of the school is Lamont Park. Along the corridor, general commercial exists, along with some residential. Alicante Elementary School is located on the northwest corner of Alicante Avenue and SR 184. Generally, as the highway continues north it becomes urban, however, there are some agricultural pockets. On the northeast corner of Mountain View Road and SR 184 is Mountain View Middle School. More residential and some pockets of agricultural land exist north of Panama Road. At Panama Lane there exists heavy and service industrial uses, such as the Kern Oil and Refining Company. The East Side Canal crosses under SR 184 near White Lane. Near the SR 58/SR 184 Interchange there are storage and warehouses, along with a truck wash and highway commercial services. North of Edison Highway, the pockets of agricultural land cease to exist. On the northwest corner of Mills Drive and SR 184 is Foothill High School. Residential and commercial services are found on up to Niles Street. As SR 184 turns into Kern Canyon Road, on the southeast corner is a swap meet. The remainder of the route is mainly new development of residential, a cemetery on the south side, and the Mesa Marin Industrial Park.

As noted previously, Bakersfield has grown more than 400% since 1970 and is one of the fastest growing cities in the state. Growth rates are between two (2) and three (3) percent annually. Much of the growth is along SR 184 is in the north, from Niles Street to SR 178. Hence, the planned widening to a four-lane highway from Morning Drive to SR 178, identified in Kern COG's 2011 Regional Transportation Plan (RTP).

Only in Segment 3 is the facility fully built out to the Ultimate Transportation Concept (UTC). The remaining segments are to be widened to six lanes. Since most of the route is a two-lane highway, right-of-way will be needed to meet the UTC in the future. In Segment 1, 2, 4, 5, 6, and 7, as much as 68 feet will be needed. Segment 8 will need as much as 55 feet, and Segment 9 will need as much as 48 feet. For further details, please see Appendix B, Summary Charts.

Bakersfield and Kern County have some of the worst air pollution in the country. The air pollutants of critical concern consist of particulate matter (PMs) and ozone.

LAND USE	
Segment #	**Place Type**
1	Rural settlements and Agricultural Lands/Rural Town
2	Close-in Neighborhoods
3	Close-in Centers
4	Rural Town
5	Rural Town/Rural settlements and Agricultural Lands
6	Rural Settlements and Agricultural Lands
7	Suburban Corridor
8	Suburban Neighborhoods
9	Suburban Neighborhoods

SYSTEM CHARACTERISTICS

State Route 184 will remain a conventional highway. To meet the 2035 Concept, it will have to be widened to four lanes in all but the two southernmost segments. Segments 5, 6, 8, and parts of 4, 7, and 9 will need widening to four lanes to meet the 2035 Concept.

Since the route traverses flat land, no truck climbing lanes will be needed. No auxiliary or passing lanes are planned.

SYSTEM CHARACTERISTICS										
Segment #		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Existing Facility										
Facility Type		C	C	C	C	C	C	C	C	C
General Purpose Lanes		2	2	4	2 – 4	2	2	2 – 4	2	2 – 4
Lane Miles		4.0	2.008	4.124	4.03 – 8.06	4.04	3.24	1.32 – 2.64	2.5	5.078 – 10.156
Centerline Miles		2.0	1.004	1.031	2.015	2.02	1.62	0.66	1.25	2.539
Auxiliary Lanes		0	0	0	0	0	0	0	0	0
Passing Lanes		0	0	0	0	0	0	0	0	0
Truck Climbing Lanes		0	0	0	0	0	0	0	0	0
Concept Facility										
Facility Type		C	C	C	C	C	C	C	C	C
General Purpose Lanes		2	2	4	4	4	4	4	4	4
Lane Miles		4.0	2.008	4.124	8.06	8.08	6.48	2.64	5.0	10.156
Centerline Miles		2.0	1.004	1.031	2.015	2.02	1.62	0.66	1.25	2.539
TMS Elements										
TMS Elements (BY)		Traffic count station	Signal, traffic count station	Signals, traffic count stations	Signal, traffic count stations	Signal	Signal	Signals, traffic count stations	Signals, traffic count stations	Traffic count station
TMS Elements (HY)		None	None	None	None	None	Changeable message sign	None	Closed circuit television	None

*For definitions of facility types, please see Appendix A, Glossary of Terms and Acronyms, Page 21
**BY = Base Year, 2012
***HY = Horizon Year, 2035

Bicycle Facility

The entire route is open to bicycle traffic. Segments 8 and 9 north of Brundage Lane are Class II Bike Lanes. The City of Bakersfield in its Bikeway Master Plan identifies Segments 4 through 8, from Panama Road to Brundage Lane as a future bikeway. Most of the route has wide shoulders. Safe bicycle travel is a major concern to the citizens in the communities of Lamont and Weedpatch (Segments 1 through 4). The Environmental Justice grant (mentioned in the Community Characteristics section), "Improving Safety and Mobility in South Kern County," addressed the need for bicycle lanes. Please see Appendix B: Bicycle Information, Page 28, for further details.

BICYCLE FACILITIES					
Segment #	State Bicycle Facility		Parallel Bicycle Facility within ½ mile of route (if bike prohibited only)		
	Bicycle Access Prohibited	Facility Type	Parallel Facility Present	Seg ID	Name
1	No	No bikeway designation	No		
2	No	No bikeway designation	No		
3	No	No bikeway designation	No		
4	No	No bikeway designation	No		
5	No	No bikeway designation	No		
6	No	No bikeway designation	No		
7	No	No bikeway designation	No		
8	No	From PM 8.583 Class II Bike Lane	No		
9	No	Class II Bike Lane	No		

Pedestrian Facility

Pedestrians are permitted along the route. In the urban areas, sidewalks exist. On the southeast corner of Sunset Boulevard and SR 184 is Sunset Middle School. There is no crosswalk for this school. Also, there is no crosswalk for crossing SR 184 to Lamont Elementary School, located on the southeast corner of Palm Avenue and SR 184. There is a crosswalk for crossing Palm Avenue, however. Alicante Elementary School located on the northwest corner of Alicante Avenue and SR 184, only has a crosswalk for crossing Alicante, and none for crossing SR 184. Mountain View Middle School located on the northeast corner of Mountain View Road and SR 184 has a full school crosswalk at the intersection.

The Environmental Justice grant, "Improving Safety and Mobility in South Kern County," addressed pedestrian issues in the communities of Lamont and Weedpatch. Possible solutions to improving the safety for pedestrians crossing SR 184 include raised medians for pedestrian refuges, highly visible crosswalk markings, extended curbs, and universally accessible curb ramps.

PEDESTRIAN FACILITIES				
Segment	Pedestrian Access Prohibited	Sidewalk Present	Junction	
			Location	Type
1	No	No	SR 223	Warning light, at-grade
				No crosswalks, no sidewalks
			Sunset Blvd	Not signalized, at-grade
				No crosswalks, no sidewalks
2	No	Varies	Weedpatch Loop Rd/Buena Vista Blvd	Not signalized, at-grade
				No crosswalks, sidewalk on NE corner
			Whitlock Ln	Not signalized, at-grade
				No crosswalks, no sidewalk
			Maxey Dr	Not signalized, at-grade
				No crosswalks, no sidewalk
			Phillips St	Not signalized, at-grade
				No crosswalk, sidewalk on NW corner
			Harold St	Not signalized, at-grade
				No crosswalk, no sidewalk
			Middleton Ln	Not signalized, at-grade
				No crosswalk, sidewalk at NW corner
			Dunsmere St	Not signalized, at-grade
				No crosswalk, no sidewalk, curb on west side
3	No	Varies	Di Giorgio Rd	Signalized, at-grade
				Crosswalk, sidewalk, railroad crossing with arms
			Wharton Ave	Not signalized, at-grade
				No crosswalk, sidewalk
			Kearney Ave	Not signalized, at-grade
				No sidewalk, crosswalk
			Segrue Rd	Signal, at-grade
				Crosswalk, sidewalk
			Palm Ave	Not signalized, at-grade
				No crosswalk, sidewalk
			Bernard Ave	Not signalized, at-grade
				No crosswalk, sidewalk
			Hall Rd	Signal, at-grade
				Crosswalk, sidewalk
			Alicante Ave	Not signalized, at-grade
				No crosswalk, sidewalk
			Gail Marie Dr	Not signalized, at-grade
				No crosswalk, sidewalk
			School St	Not signalized, at-grade
				No crosswalk, sidewalk
			Bonita Rd	Not signalized, at-grade
				No crosswalk, sidewalk
			Paradise Rd	Not signalized, at-grade
				No crosswalk, sidewalk
4	No	Varies	Panama Rd	Signalized, at-grade
				Crosswalk, sidewalk
			Lana St	Not signalized, at-grade
				No crosswalk, sidewalk
			Montal St	Not signalized, at-grade
				No crosswalk, sidewalk on east side only
			Bertal St	Not signalized, at-grade
				No crosswalk, sidewalk on east side only
			Collison St	Not signalized, at-grade
				No crosswalk, sidewalk on east side only
			Lamont Ave	Not signalized, at-grade
				No crosswalk, sidewalk on east side only
			McKee Rd	Not signalized, at-grade
				No crosswalk, sidewalk on SE corner only
			Mountain View Rd	Signalized, at-grade
				Crosswalk, sidewalk
			Reynolds St	Not signalized, at-grade
				No crosswalk, no sidewalk
			Kam Ave	Not signalized, at-grade
				No crosswalk, no sidewalk
5	No	No	Panama Ln	Signalized, at-grade
				No crosswalk, no sidewalk
			Hilltop Dr	Not signalized, at-grade
				No crosswalk, no sidewalk, curb
			Brooks Rd	Not signalized, at-grade
				No crosswalk, no sidewalk
			Fuller Dr	Not signalized, at-grade
				No crosswalk, no sidewalk, minimal curb
			Farmers Ln	Not signalized, at-grade
				No crosswalk, no sidewalk
			Silva St	Not signalized, at-grade
				No crosswalk, no sidewalk, some curb
			Blackburn St	Not signalized, at-grade
				No crosswalk, no sidewalk
			Dublin Ln	Not signalized, at-grade
				No crosswalk, no sidewalk
			Hermosa Rd	Not signalized, at-grade
				No crosswalk, sidewalk SW corner only
			Doney St	Not signalized, at-grade

PEDESTRIAN FACILITIES				
Segment	Pedestrian Access Prohibited	Sidewalk Present	Junction	
			Location	Type
				No crosswalk, no sidewalk
6	No	Varies	Muller Rd	Not signalized, at-grade
				No crosswalk, no sidewalk
			Choate St	Not signalized, at-grade
				No crosswalk, no sidewalk
			East Wilson Rd	Not signalized, at-grade
				No crosswalk, sidewalk on NE corner only
			Bengston Ave	Not signalized, at-grade
				No crosswalk, sidewalk on east side
			Vera Ave	Not signalized, at-grade
				No crosswalk, no sidewalk
			Redbank Rd	Not signalized, at-grade
				No crosswalk, no sidewalk, some curb
			Smith Rd	Not signalized, at-grade
				No crosswalk, sidewalk on west side
			Kernita Rd	Not signalized, at-grade
				No crosswalk, no sidewalk, curb on west side
			DeMiller Dr	Not signalized, at-grade
				No crosswalk, no sidewalk, curb on west side
7	No	Varies	Kimber Ave	Not signalized, at grade
				No crosswalk, sidewalk on east side, curb on west side
			SR 58	Not signalized, grade separated (ramps are at-grade)
				No crosswalk, no sidewalk, curb
			Brundage Ln	Signalized, at-grade
				Crosswalk, sidewalk
8	No	Varies	Edison Hwy (railroad crossing just to north)	Signalized, at-grade
				No crosswalks, some sidewalk, some curb
			Mills Dr (west)/Breckenridge Rd (east)	Signalized, at-grade
				Crosswalks, some sidewalk, curb
			Eucalyptus Dr	Not signalized, at-grade
				Crosswalk (school on west side), sidewalk on NE corner, curb
			Lanora Ave	Not signalized, at-grade
				No crosswalk, no sidewalk
			Foothill Rd	Not signalized, at-grade
				No crosswalk, sidewalk on east side
			Pioneer Dr	Signalized, at-grade
				Crosswalk, some sidewalk, curb
			Fillmore Ave	Not signalized, at-grade
				No crosswalk, some sidewalk, curb
			Lexington Ave	Not signalized, at-grade
				No crosswalk, sidewalk on east side
			Rosewood Ave	Not signalized, at-grade
				No crosswalk, sidewalk on east side
			Polaris Ave	Not signalized, at-grade
				No crosswalk, sidewalk on east side, curb on west side
9	No	Varies	Niles St (west)/Kern Canyon Rd (east)	Signalized, at-grade
				Crosswalk, sidewalk on SE corner
			Shalane Ave	Not signalized, at-grade
				No crosswalk, sidewalk
			Watergrass Rd	Not signalized, at-grade
				No crosswalk, sidewalk on SE side
			Chase Ave	Not signalized, at-grade
				Crosswalk, some sidewalk, curb
			Mesa Marin Dr	Not signalized, at-grade
				Crosswalk, sidewalk
			SR 178	Not signalized, at-grade
				No crosswalk, no sidewalk

TRANSIT FACILITY

Kern Regional Transit (KRT) operates bus services in the southern segments of the route. Kern Regional Transit provides two (2) fixed routes, one from Lamont to Bakersfield, and the other Lamont to Weedpatch, which serves the Lamont area. They also operate a demand-response service, the Lamont Dial-A-Ride. The Lamont to Bakersfield route had nearly 100,000 riders in the 2011/2012 Fiscal Year.

Golden Empire Transit (GET) which operates bus services in Bakersfield has two (2) routes cover SR 184. These routes are new and the ridership numbers are from October 7, 2012 to March 31, 2013. These routes have well over 100,000 riders in just under six months and operate daily.

Caltrans has two (2) park and ride lots off of the SR 184/SR 58 interchange. Both lots have 18 spaces each. One is located on the southeast quadrant, the other at the northwest quadrant.

TRANSIT FACILITIES													
Seg	Mode & Collateral Facility	Name	Route End Points	Ridership	Headway	Operating Period	ITS & Technology	Stations		Amenities	Bikes Allowed on Transit	Location Description	# Parking Spaces
								Cities	Postmiles				
1-7	Traditional Bus	Kern Regional Transit – Lamont/ Bakersfield Route	Lamont to Bakersfield circuit	97,885	NA	Daily	NA	Lamont and Bakersfield	NA	NA	Y	NA	NA
2-4	Traditional Bus	Lamont Dial-A-Ride	Within Lamont	20,561	NA	Daily	NA	Lamont	VAR	NA	Y	NA	NA
4-7	Traditional Bus	Kern Regional Transit – Lamont/ Weedpatch (Lamont Community fixed route)	Apple Market (Panama Rd/SR 184) to Grimmway (Di Giorgio Rd/Edison Hwy)	16,192	NA	Monday through Saturday	NA	Lamont	PM 4.024, 1.618, 1.519, L1.999, L0.998	NA	Y	NA	NA
7	Park and Ride Lot	Caltrans						Bakersfield	PM 7.896 and PM 7.983	NA		SR 58 and SR 184 NW and SE quadrants	18 spaces at each lot
8	Traditional Bus	Golden Empire Transit – Route 45 Oildale/ Foothill	North Chester/China Grade to Foothill/SR 184	323,583	NA	Daily	NA	Bakersfield	PM 8.957	NA	Y	NA	NA
8	Traditional Bus	Golden Empire Transit – Route 46 Stockdale/ Foothill	Village Ln/Stockdale to Foothill/SR 184	129,764	NA	Daily	NA	Bakersfield	PM 8.957	NA	Y	NA	NA

Caltrans Park and Ride Lot at the southeast quadrant of the SR 184/SR 58 Interchange

The California High Speed Rail Authority (CHSRA) is a State agency responsible for planning, designing, building, and operating the first high-speed rail system in the nation. 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 Central Valley. Extensive portions of the system will lie within, or adjacent to, existing rail or highway right-of-way to reduce potential environmental impacts and minimize land acquisition. 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.

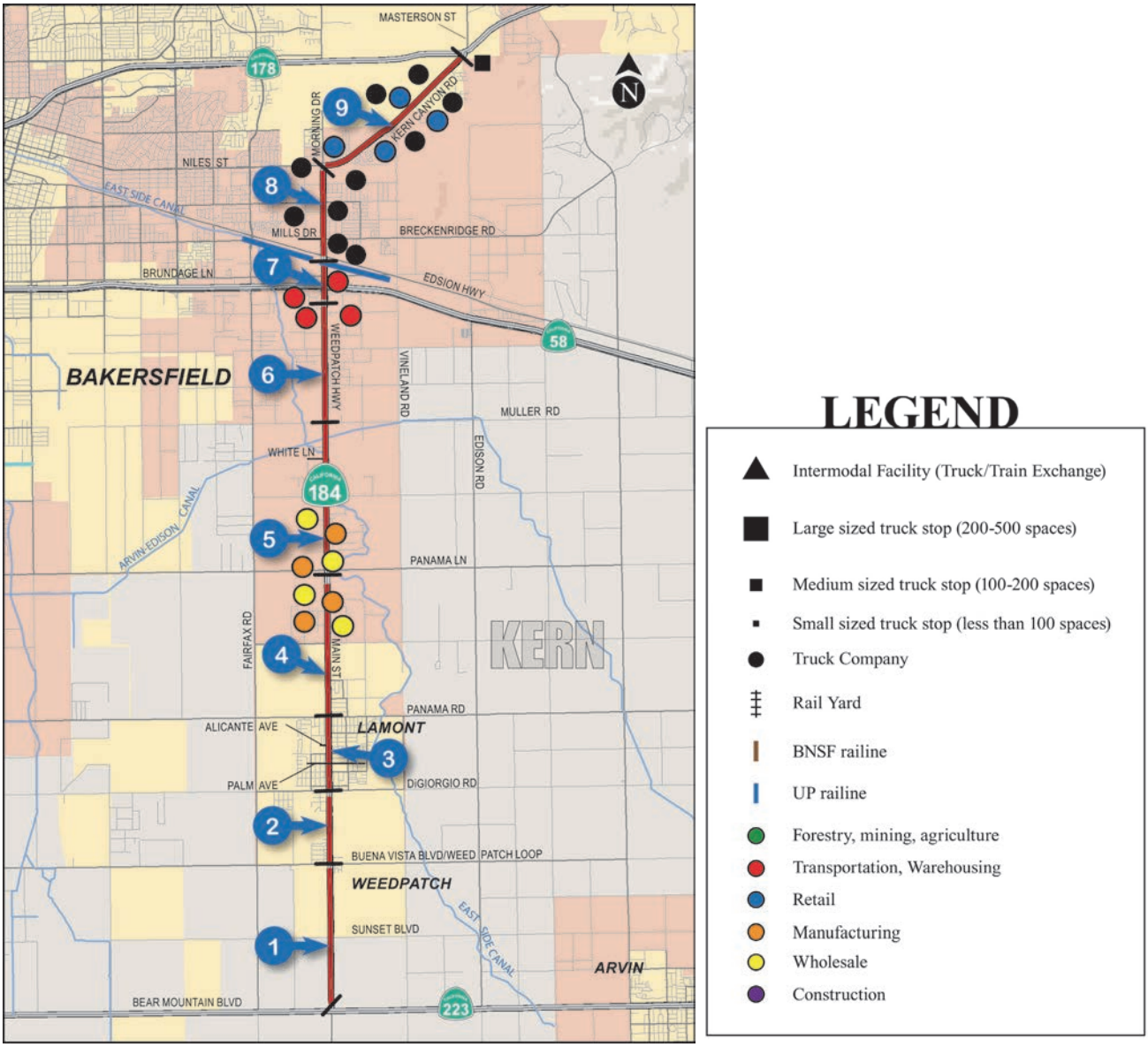
The future of California's High-Speed Rail (HSR) service will be a part of the State's transportation system and should be considered in concert with local and regional non-motorized transportation, transit, airports, and highways. Moreover, the HSR stations are envisioned to be multimodal transportation hubs, and the success of the HSR service will be critically affected by the degree to which healthy, sound multimodal transportation connections are established.

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.

FREIGHT

FREIGHT FACILITIES				
Facility Type/Freight Generator	**Location**	**Mode**	**Name**	**Major Commodity/ Industry**
Medium truck stop	On Brundage Ln, just east of SR 184	Truck	Bruce's Truck Stop	NA
Truck companies	Segments 8, 9	Truck	CVC Environmental Inc., Dango Express Inc., Heredia Trucking, Del Toro Trucking, E L Cummings Transportation Inc., G E Inc., Cox Petroleum Transport, SPJ Corporation, Stevens Trucking Co	Waste water, agricultural products, paper products, refrigerated food, US mail, beverages, lumber, building materials, motor vehicles, machinery, oilfield equipment, utilities, liquid gas
Freight generator	Segment 9	Truck	Various	Retail companies
Freight generator	Intersection of SR 58 and SR 184	Truck	Various	Transportation, Warehousing companies
Freight generator	Segments 4, 5	Truck	Various	Manufacturing, Wholesale companies

FREIGHT MAP



This route is a STAA terminal access route. There are no “Weigh in Motion” or weight scales of any type on this route.

The northern half of Segment 4 and the southern half of Segment 5, just north of Lamont, have wholesale and manufacturing uses. Clustered around the SR 58/SR 184 intersection, are warehouses and transportation services. The Union Pacific rail line crosses SR 184, just north of SR 58. Several local truck companies exist north of SR 58. Segment 9 has a strong showing of retail land use and Bruce’s Truck Stop is found on Brundage Lane, east of SR 184.

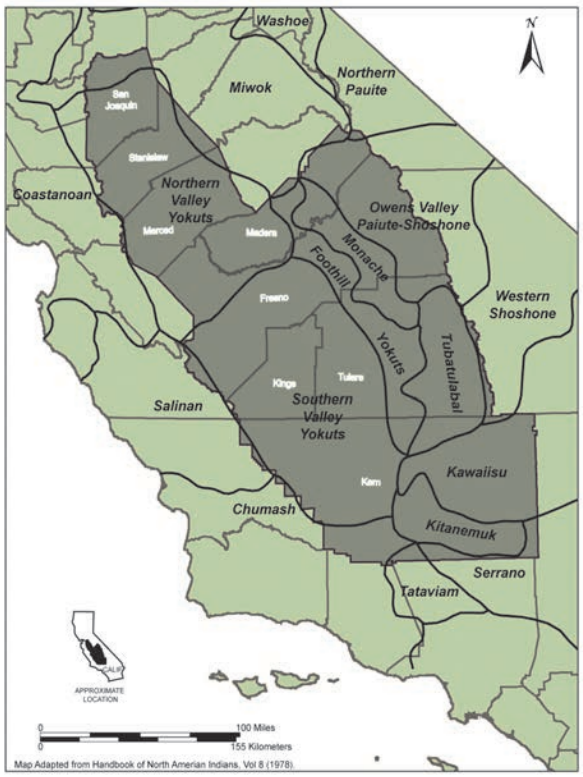
On average, 11% of the total traffic on this route is trucks and 30% of all of these trucks are 5-axle trucks. A typical highway is considered to have significant regional goods movement traffic if 10% of the total traffic on a

freeway is composed trucks, and is considered to be a significant interregional goods movement route if 30% of the total trucks on a particular route are 5-axle, or "big haul" trucks. State Route 184 just meets this criteria.

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.

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 is developing a statewide interregional, multi-modal blueprint to be known as the *California Interregional Blueprint (CIB).* It will be incorporated into the existing California Transportation Plan (CTP) at the time that plan is updated. The CIB will analyze the benefits of multi-modal, interregional projects on the transportation system, and will 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 will establish a basis for integrating the interregional system into the Smart Mobility Framework, and to deliver 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.

NATIVE AMERICAN CONSIDERATIONS



Map of Ethnographic Territories in Eight County Study Area

Native Americans, mainly of the Southern Valley Yokuts, have inhabited this area for thousands of years. They lived along the waterways of the Kern River.

The Tejon Indian Tribe, ethnically Kitanemuk, was federally reaffirmed in January 2012, thus making the tribe a new federally acknowledged tribal government. The tribal office is located in Bakersfield where their efforts have been focused on securing a federal trust land base for tribal members.

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 Fresno, Kern, Kings, Madera, and Tulare 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), Tulare County Association of Governments (TCAG), and KCOG in coordination with the tribal governments and communities of the region. The final report is available at: http://www.kerncog. org/attachments/265_SJVTribal EJSummary.pdf).

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 184 passes through areas considered to be the traditional indigenous territories of the Southern Valley Yokuts. 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 above.

CORRIDOR PERFORMANCE

Traffic growth rates along the route ranged from 2.9% to 4.2%, with Segment 6 having the highest growth rate. In that segment, LOS is expected to drop to an "F" by 2020 with no improvements. The rest of the route will be at LOS "D" and "E" in 2020 and 2035 without improvements.

Truck traffic ranges from 5% to 20%, with Segment 6 having the highest percentage of trucks. The majority of all trucks traversing along the route are five or more axles.

CORRIDOR PERFORMANCE									
Segment #	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Basic system operations									
AADT (BY) 2012	10,000	11,000	18,880	11,600	11,500	18,700	18,700	10,900	5,700
AADT (HY) 2035	19,000	22,500	43,600	26,800	28,500	52,300	45,300	26,400	13,800
Truck Traffic									
Total Average Annual Daily Truck Traffic (AADTT) (BY) 2012	857	1,099	1,099	1,099	1,099	1,099	1,108	839	930
Total Trucks (% of AADT) (BY) 2012	17%	17%	5%	6%	10%	20%	18%	6%	8%
5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY) 2012	484	604	604	604	604	604	725	115	121
5+ Axle Trucks (as % of AADT)(BY) 2012	56.43%	55%	55%	55%	55%	55%	54%	14.28%	13%

**BY = Base Year, 2012
***HY = Horizon Year, 2035

KEY CORRIDOR ISSUES

State Route 184 will have increasing loads of traffic, as the City of Bakersfield continues to grow with added residential land use along the route predominantly near its connection with SR 178. Much of the route south of the SR 178 connection and within the City of Bakersfield is built out.

There is also the possibility of a new alignment onto Morning Drive on through to SR 178. However, the City of Bakersfield is not in concurrence with this idea.

There are a number of schools along the route and students crossing the route can be a concern.

Air quality will long be a concern, not just to the SR 184 corridor, but to the entire county and air basin. While the Los Angeles area's air quality is improving, the San Joaquin Valley's air quality continues to worsen. Without drastic measures, it most likely will continue to decline.

CORRIDOR CONCEPT

CONCEPT RATIONALE

State Route 184 will require widening to four lanes from Segment 4 through with the exception of Segment 7 to meet the 2035 Concept. Segment 3 and 7 are already at the concept of a four lane. Segments 1 and 2 require improvements, such as turn lanes, passing lanes, auxiliary lanes, or signals, to meet the concept of a two-lane highway with improvements.

According to the Kern COG 2011 RTP, widening projects for four lanes are planned throughout much of the route to achieve the 2035 Concept, with the exceptions being Segments 4 and 8. Two railroad grade separations, both in Segment 8, are planned for the highway.

There are no programmed projects at this time for SR 184.

PLANNED AND PROGRAMMED PROJECTS AND STRATEGIES

Segment	Description	Planned or Programmed	Location	Source
4 – 8	Construct bikeway	Planned	From Panama Rd to Brundage Ln	City of Bakersfield's Bikeway Master Plan (map 2010)
5 - 6	Widen to four lanes	Planned	From Panama Ln to SR 58	Kern COG 2011 RTP
7 - 9	Widen to four lanes	Planned	From SR 58 to SR 178	Kern COG 2011 RTP
8	Construct grade separation	Planned	In Bakersfield, at the UPRR	Kern COG 2011 RTP
8	Construct grade separation	Planned	In Bakersfield, at Morning Dr and the UPRR	Kern COG 2011 RTP
9	Widen to four lanes	Planned	From Morning Dr to SR 178	Kern COG 2011 RTP

PROJECTS AND STRATEGIES TO ACHIEVE CONCEPT

Seg.	Description	Location
5 - 6	Widen to four lanes	From Panama Ln to SR 58
7 - 9	Widen to four lanes	From SR 58 to SR 178
9	Widen to four lanes	From Morning Dr to SR 178

APPENDIX

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
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
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 intracountry 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.

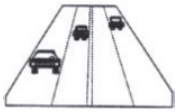
Horizon Year – The year that the future (20-25 years) data is based on.

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.

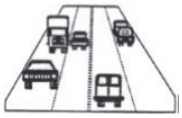
ITS – Intelligent Transportation System improves transportation safety and mobility and enhances productivity through the integration of advanced communications technologies into the transportation infrastructure and in

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.

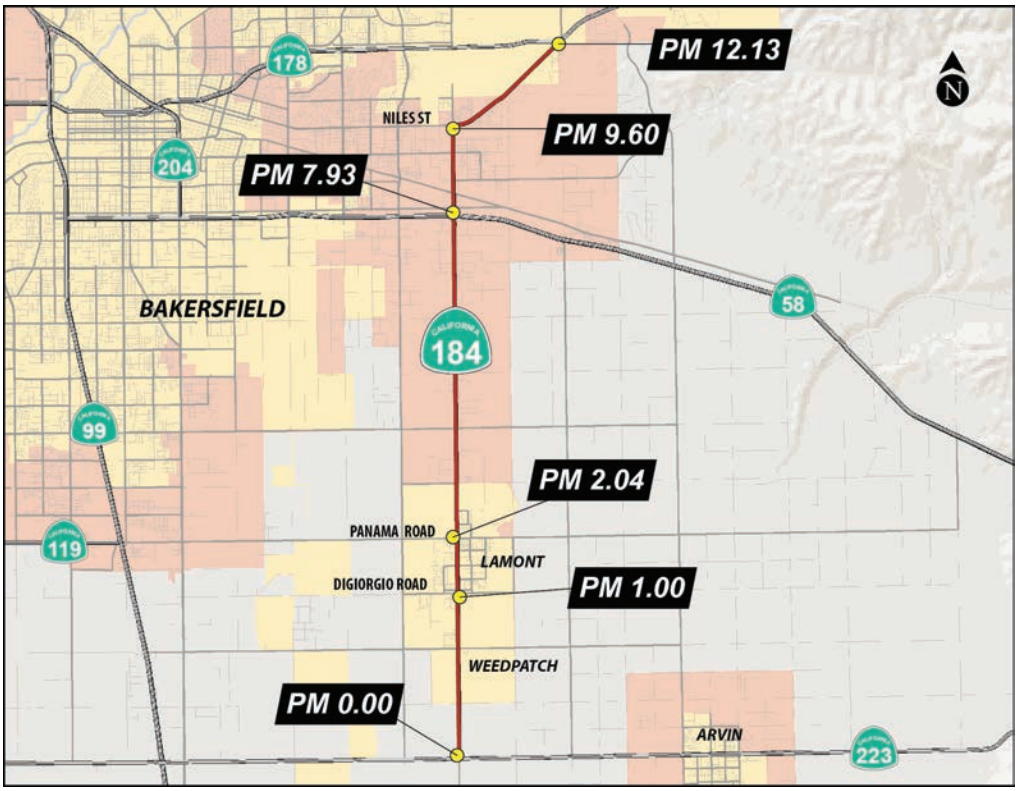
TMS – Transportation Management System is the business processes and associated tools, field elements and communications systems that help maximize the productivity of the transportation system. TMS includes, but is not limited to, advanced operational hardware, software, communications systems and infrastructure,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

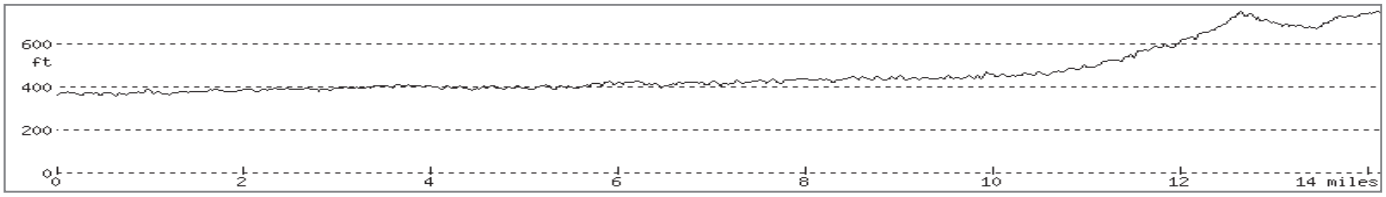
Urban – 5,000 to 49,999 in population designates an urban area. Limits are based upon population density as determined by the U.S. Census Bureau.

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.

STATE ROUTE 184 Kern County Bicycle Map





SR 223 PM L0.0 | Digiorgio Rd PM 1.0 | Panama Rd PM 2.04 | SR 58 PM 7.93 | Niles St PM 9.60 | SR 178 PM 12.14

Location *(Postmile)*	Facility (Lanes)	Rural/ Urban	Shoulder (Treated)	Terrain	Speed Limit Posted	Facility Description
State Route 223 to Digiorgio Road *(PM L 0.00 – 1.00)*	2 Lane Highway	Rural	2 – 8 feet	Level	45 & 55	Mostly 8 foot wide shoulders, Surrounding agricultural land use, Very flat land
Digiorgio Road to Panama Road *(PM 1.00 – 2.04)*	4 Lane Highway	Urban	8 feet	Level	55	Mostly wide shoulders, Community of Lamont, Flat land
Panama Road to State Route 58 *(PM 2.04 – 7.93)*	2 Lane Highway	Rural/ Urban	2 – 8 feet	Level	35, 50 & 55	Shoulders narrows between *PM 5.0 – 7.9*, Agriculture land with some buildings alongside, Very flat land
State Route 58 to Niles Street *(PM 7.93 – 9.60)*	2/4 Lane Highway	Urban	0 – 8 feet	Level	45	Wide shoulders mostly, Industrial area south of Bakersfield city limits, Shoulder width varies, Gas stations and fast food restaurants, Some existing sidewalks
Niles Street to State Route 178 *(PM 9.60 – 12.14)*	2 Lane Highway	Urban	0 – 8 feet	Slightly Rolling	45 & 55	Narrow shoulders mostly, Mixture of housing, industrial and vacant land use

Transportation Concept Report

State Route 184

SUMMARY CHART 1A

LEGEND

Existing Lanes — Conventional

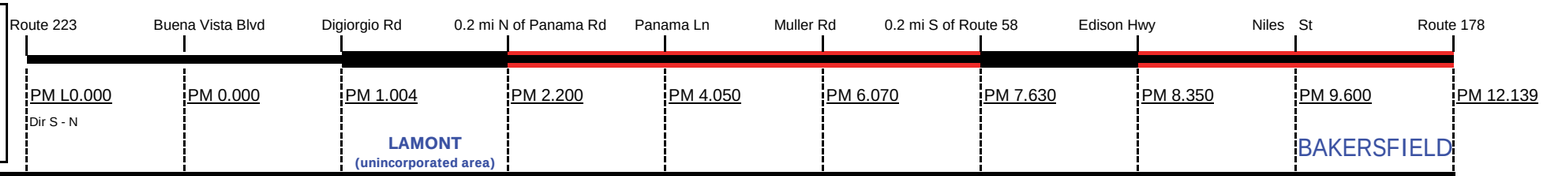
Programmed by 2035 or Planned — Expressway

Add Through Lanes

Number of Lanes: 2, 4

* Length of segments not to scale

Dir = Direction



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: Range of treated surface (8' standard) for both inside and outside shoulders.

Ultimate Transportation Corridor (UTC): Typical ROW needed for the ultimate facility. Feet is the standard typical measure. UTC ROW - will be updated upon corridor plan lining on specific sections of highway.

Facility: Shows the Existing Facility and the desired facility type (2035 Concept) by 2035. RTPA's and Caltrans discuss Ultimate Facility to preserve ROW and plan line beyond 2035. 2C(I) indicates that the highway has been improved in select locations with operational and safety improvments.

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, i.e., LOS D worse than LOS C, with the year of occurrence shown. It also shows whether a capacity improving project is in the STIP, and what the LOS would be with the 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).

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.

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

***** Concept Facility meets Concept LOS.

** Possible realignment onto Morning Dr from Niles St to Route 178.

SEGMENT	1	2	3	4	5	6	7	8	9
County / Route	KERN / 184	KERN / 184	KERN / 184	KERN / 184	KERN / 184	KERN / 184	KERN / 184	KERN / 184	KERN / 184
Description Begin	ROUTE 223	BUENA VISTA BLVD	DIGIORGIO RD	0.2 MI N OF PANAMA RD	PANAMA LN	MULLER RD	0.2 MI S OF ROUTE 58	EDISON HWY	NILES ST
Description End	BUENA VISTA BLVD	DIGIORGIO RD	0.2 MI N OF PANAMA RD	PANAMA LN	MULLER RD	0.2 MI S OF ROUTE 58	EDISON HWY	NILES ST	ROUTE 178
Postmile Limits Begin/End (PM)	L0.000 / L2.000	0.000 / 1.004	1.004 / 2.200	2.200 / 4.050	4.050 / 6.070	6.070 / 7.630	7.630 / 8.350	8.350 / 9.600	9.600 / 12.139
Length (MI)	2.000	1.004	1.196	1.850	2.020	1.560	0.720	1.250	2.539
Rural / Urban	Rural	Urban	Urban	Urban	Rural	Urban	Urban	Urban	Urban
Terrain	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat
ROW: Range Existing (FT)	60 / 85	60 / 110	110 / 110	60 / 110	60 / 110	60 / 110	60 / 110	73 / 100	80 / 100
Median Range (FT)	0 / 0	0 / 0	21 / 21	0 / 21	0 / 14	0 / 22	0 / 22	0 / 0	0 / 0
Shoulder Range (FT) - Treated	2 / 8	2 / 8	10 / 10	2 / 8	2 / 8	2 / 10	6 / 8	6 / 8	8 / 8
Lane Width (FT)	12	12	12	12	12	12	12	12	12
Ultimate ROW (FT)	128 / 138	128 / 138	110	128 / 138	128 / 138	128 / 138	128 / 138	128 / 138	128 / 138**
Facility: Existing	2C	2C	4C	2C	2C	2C	4C	2C	2C
2035 Concept	2C(I)+	2C(I)+	4C	4C	4C	4C	4C	4C	4C
UTC	6C	6C	4C	6C	6C	6C	6C	6C	6C**
LOS: 2012	D	D	C	D	D	E	B	D	C
LOS: 2020	D	E	D	E	E	F	D	E	D
LOS: 2035	E	E	E	E	E	F	E	E	E
LOS: Concept 2035	D	D	D	D	D	D	D	D	D
Deficiency/Year Deficient	2035	2035	2035	2020	2020	2012	2020	2020	2035
Project in STIP/RTP (Y/N)	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
LOS W/ Concept Improvement	N/A -	N/A -	N/A -	B*	B*	D*	N/A -	B*	B*
Directional Split (Peak Hour)	70/30	70/30	52/48	56/46	52/48	60/40	65/35	54/46	53/47
AADT: 2012	10,000	11,000	18,880	11,600	11,500	18,700	18,700	10,900	5,700
AADT: 2020	14,700	15,500	31,200	19,200	19,800	34,700	31,800	18,500	9,700
AADT: 2035	19,000	22,500	43,600	26,800	28,500	52,300	45,300	26,400	13,800
Peak Hour: 2012	940	1,000	1,900	1,150	1,050	1,850	1,850	1,150	530
Peak Hour: 2020	1,380	1,410	3,140	1,900	1,810	3,430	3,150	1,960	900
Peak Hour: 2035	1,790	2,040	4,380	2,650	2,600	5,170	4,480	2,780	1,280
% Trucks: AADT	17%	17%	5%	6%	10%	20%	18%	6%	8%
% Trucks: Peak Hour	7%	7%	4%	5%	6%	4%	5%	3%	8%

Transportation Concept Report

State Route 184

LEGEND

Existing Lanes

Programmed by 2035 or Planned

Add Through Lanes

Conventional

Expressway

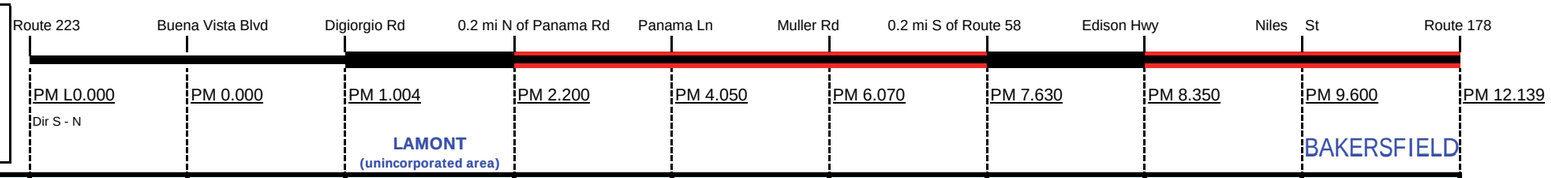
Number of Lanes

2

4

* Length of segments not to scale

Dir = Direction



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.

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

SEGMENT	1	2	3	4	5	6	7	8	9
County / Route	KERN / 184	KERN / 184	KERN / 184	KERN / 184	KERN / 184	KERN / 184	KERN / 184	KERN / 184	KERN / 184
Description Begin	ROUTE 223	BUENA VISTA BLVD	DIGIORGIO RD	0.2 MI N OF PANAMA RD	PANAMA LN	MULLER RD	0.2 MI S OF ROUTE 58	EDISON HWY	NILES ST
Description End	BUENA VISTA BLVD	DIGIORGIO RD	0.2 MI N OF PANAMA RD	PANAMA LN	MULLER RD	0.2 MI S OF ROUTE 58	EDISON HWY	NILES ST	ROUTE 178
Postmile Limits Begin/End (PM)	L0.000 / L2.000	0.000 / 1.004	1.004 / 2.200	2.200 / 4.050	4.050 / 6.070	6.070 / 7.630	7.630 / 8.350	8.350 / 9.600	9.600 / 12.139
Length (MI)	2.000	1.004	1.196	1.850	2.020	1.560	0.720	1.250	2.539
Functional Classification	Minor Arterial	Principal Arterial	Principal Arterial	Principal Arterial	Minor Arterial	Principal Arterial	Principal Arterial	Principal Arterial	Minor Arterial
National Highway System (NHS) (Y/N)	No	No	No	No	No	No	No	No	No
Freeway/Expressway System (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regionally Significant (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
STRAHNET (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lifeline (Y/N)	No	No	No	No	No	No	No	No	No
IRRS (Yes: HE=High Emphasis, F=Focus, G=Gateway or No)	No	No	No	No	No	No	No	No	No
TRUCK NETWORK, STAA: (NN=National Network, TA=Terminal Access, CL= California Legal, R= Special Restrictions, or A=Advisory)	TA	TA	TA	TA	TA	TA	TA	TA	TA
Scenic (Yes: Officially Designated, Eligible or No)	No	No	No	No	No	No	No	No	No
ICES (Intermodal Corridor of Economic Significance) (Y/N)	No	No	No	No	No	No	No	No	No
General Plan/RTP LOS Standard	Kern Co LOS D for CMP & RTP Regionally Significant System	Kern Co LOS D for CMP & RTP Regionally Significant System	Kern Co LOS D for CMP & RTP Regionally Significant System	Kern Co LOS D for CMP & RTP Regionally Significant System	Kern Co LOS D for CMP & RTP Regionally Significant System	Kern Co LOS D for CMP & RTP Regionally Significant System	Kern Co LOS D for CMP & RTP Regionally Significant System	Kern Co LOS D for CMP & RTP Regionally Significant System	LOS C for the Metropolitan Bakersfield General Plan
General Plan/RTP Standard Highway Classification	Arterial	Arterial	Arterial	Arterial	Arterial	Arterial	Arterial	Arterial	Arterial
Passing Lanes (Y/N)	No	No	No	No	No	No	No	No	No
Bike Use Allowed (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

LONG TERM RIGHT-OF-WAY NEEDS:

The amount of right-of-way identified in this summary chart 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.

APPENDIX D
RESOURCES

1) California Department of Finance, Demographic Research Unit, "Table 3A: Total Population by Race (1) and Hispanic or Latino: April 1, 2010 – Incorporated Cities and Census Designated Place (CDP) by County in California," Census 2010
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6) California Department of Transportation: District 6, "Transportation Management Center (TMC) Element Search Engine
7) California Department of Transportation: District 6, "Weigh in Motion Scales," www.dot.ca.gov/hq/traffops/trucks/datawim/wim06.pdf
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9) Cambridge Systemics, Inc., "San Joaquin Valley Interregional Goods Movement Plan: Task 1: Existing Conditions Assessment Technical Memorandum," January 2012
10) City of Bakersfield, "History of Bakersfield," www.bakersfieldcity.us/admistration/mayor_council/History.htm
10) City of Bakersfield, "Metropolitan Bakersfield General Plan," December 11, 2007
11) Countries and their Cultures, "Yokuts History and Cultural Relations," www.everyculture.com/North-America/Yokuts-History-and-Cultural-Relations.html
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12) Lutz, Margaret, "History of Weedpatch Camp," Arvin Tiller/Lamont Reporter – 10/20/99, www.weedpatchcamp.com/History/history.com and www.weedpatchcamp.com/Camp/camp.htm
13) Rubin, Rachel and Jeffrey Paul Melnick, "American Popular Music: New Approaches to the Twentieth Century," June 2001