



## STATE ROUTE-98 TRANSPORTATION CONCEPT SUMMARY

This Transportation Concept Summary (TCS) for State Route 98 in District 11 serves as an analysis tool and conceptual long-range guide for future investment decisions in the transportation corridor.

### DISCLAIMER

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CALIFORNIA DEPARTMENT OF TRANSPORTATION  
**PLANNING DIVISION**  
*Planning Leads To Superior Solutions*

**Caltrans**  
DISTRICT 11

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# **SR-98 Transportation Concept Summary May 2008**

## **CORRIDOR PURPOSE**

The primary purpose of SR-98 is to provide east-west access for interregional, intraregional and international travel. SR-98 is an alternative to I-8 for east-west travel through Imperial County. Within Calexico, SR-98 provides for intracity travel, with many businesses, homes, schools and a hospital located adjacent to it in the city limits. SR-98 also provides east-west access for many of the agricultural support roads that connect to agricultural areas.

SR-98 runs parallel to the U.S.A./Mexico International Border and provides the closest east-west access to the Calexico/Mexicali International Border Crossing and to the Calexico/Mexicali East International Border Crossing, approximately 6.5 miles to the east of Calexico. Truck traffic through the Calexico/Mexicali East Port of Entry (POE) serves interregional, interstate, and international trade and goods movement. From 1994 to 1999, the value of trade through Calexico/Mexicali has almost tripled from \$3 billion to \$8.1 billion. Ninety-seven percent of this trade is transported by truck. Most commercial truck traffic crossing the U.S./Mexico border in Imperial County is required to use the Calexico East POE. The majority of auto and truck traffic generated at the Calexico East POE and State Route 7 currently use State Route 98 as an east-west connection to/from the City of Calexico. Beyond the Calexico area these commercial trucks connect with Interstate 8 (I-8) and the Southwest Passage Corridor. Most of this truck traffic will use I-8 to connect with San Diego to the west and the State of Arizona and other destinations to the east. To the north these trucks access primarily SR-86 as an intermediate link to Los Angeles via the NAFTA Farm to Market Highway to I-10 and/or the I-5 and I-15 High Priority Corridors.

## **CORRIDOR NEEDS**

There is a need to improve roadway safety and cross-border efficiency for trade and goods movement between the City of Calexico, California and the Municipality of Mexicali, Baja California, Mexico. Additional roadway capacity on SR-98 is needed to improve traffic flow and safety concerns for the high volume of cars and trucks on the existing two-lane highway. In addition, capacity improvements to SR-98 are also needed to facilitate interregional travel throughout the Imperial and Coachella Valleys, improve intercity and international travel between Baja California, Mexico and Los Angeles, and provide an improved facility for the movement of goods throughout the region. Improvements to SR-98 provide a supporting component to other improvements implemented or proposed within the Calexico border area and throughout the Imperial Valley. These other improvements are well documented in a number of studies, including the Downtown Calexico/Mexicali Border Transportation Study (June 2000) prepared by

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Katz, Okitsu, and Associates, the Cole Road Corridor Study (December 2000) prepared by Dahl, Robins, and Associates, Inc, the San Diego Association of Governments' Border Master Plan (BMP), the 2007 Imperial County Transportation Plan, and the California-Baja California Border Infrastructure Update (April 2008).

A Preliminary Value Analysis (VA) Study Report for the SR-98 corridor was prepared in 2001 by Value Management Strategies, Inc in conjunction with Caltrans District 11 and identified the following alternatives:

- Alternative 1.1 Widen existing SR-98 to four and/or six lanes from SR-7 to Dogwood Road
- Alternative 1.2 Widen SR-98 from SR-7 to Cole road and realign SR-98 along Cole Road to Dogwood Road
- Alternative 1.3 Realign SR-98 to a six lane conventional highway from SR-7 along Jasper Road to Dogwood Road
- Alternative 1.4 Widen SR-98 from SR-7 to Bowker Road and realign SR-98 along Jasper Road to Dogwood Road
- Alternative 1.5 Widen SR-98 from SR-7 to Barbara Worth Road and realign SR-98 along Jasper Road to Dogwood Road

The May 2001 Final VA Report for the SR-98 corridor recommended dropping further study of Alternatives 1.2, 1.3 and 1.5. This decision was based on VA Team discussions with project stakeholders, including representatives from the City of Calexico, local landowners, developers, County of Imperial and Caltrans District 11. The Final VA Report supported further analysis of Alternatives 1.4 and 1.1.

As a result of the VA analysis and other considerations, two major capacity-enhancing projects for SR-98 have been developed.

The first project will widen SR-98 from a two-lane conventional highway to a four-lane conventional highway between Dogwood Road and SR-111. This project will also include intersection improvements. The project is currently in the environmental phase which is scheduled to be completed by 2009. Construction is expected to be completed by 2013.

The second project will widen and/or realign SR-98 from SR-111 to SR-7. This project is currently in the Preliminary Engineering phase. Construction is expected to be completed by 2015.

An additional proposed project in the vicinity of SR-98 is the Calexico West Port of Entry (POE) Reconfiguration project. This project will reconfigure and expand the capacity of the POE to increase security, reduce congestion, and reduce cross-border wait times. Additional components of the project include: grade separated railroad crossings; a new roadway segment from Cesar Chavez (at Grant Street) to Imperial Avenue (at Jasper

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Road), and an extension of Cesar Chavez (from SR-98 to Dogwood Road); as well as other improvements such as intersection signalization and roadway geometry improvements.

Although not directly in the SR-98 corridor, the 2007 Imperial County Transportation Plan includes a project to widen and/or realign Jasper Road over a length of approximately 6.8 miles from SR-111 to SR-7. The route will be constructed as a six lane expressway or prime arterial (depending on jurisdiction) with limited access. The roadway travels parallel to irrigation canals along certain segments, and crosses over irrigation canals in certain locations. The roadway alignment will need to be straightened in several locations in the eastern portion near existing junctions with north-south roadways. Jasper Road is presently constructed as a two lane roadway.

There are also additional consultant-prepared studies underway to determine the feasibility and potential of relinquishing to the City of Calexico the portion of SR-98 from Dogwood Road to Bowker Road. Further studies and coordination with appropriate jurisdictions and agencies are necessary to determine which portions of SR-98 should be relocated to the Jasper Road corridor.

There is a strong interrelationship between SR-98 and SR-7 due to the Calexico East International Border Crossing, also known as the Calexico East Port of Entry (POE).

SR-7 is a new state highway that has been constructed east of Calexico to serve the new Port of Entry (POE). The first phase of SR-7 between the border crossing and SR-98 was completed in March 1996. The second segment of SR-7 from SR-98 to I-8 was completed in 2005. This new POE and SR-7 support trade growth and the approved North American Free Trade Agreement (NAFTA) between the United States and Mexico. It provides adequate border infrastructure to accommodate the anticipated increase in commercial carrier activity between the U.S. and Mexico. The new border crossing also relieves existing congestion at the existing downtown Calexico POE on SR-111 and reduces the environmental effects of border traffic delays. Commercial vehicle traffic from the Calexico East POE currently traverses both SR-7 and SR-98.

## **CORRIDOR ANALYSIS**

For purposes of analysis, most of SR-98 traverses a lightly populated rural desert environment. The remainder of SR-98 passes through the urban area of Calexico. Some specific issues and improvements need to be analyzed separately depending on the urban or rural nature of the route, however, from a corridor perspective, these issues and improvements work together to improve traffic flow throughout the entire corridor and the region.

## **CORRIDOR TRAFFIC**

SR-98 will be experiencing an increase in traffic in the future. In some cases, especially in the Calexico area, traffic is expected to double between 2006 and 2025. The following table shows existing and future traffic conditions for SR-98.

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## Existing and Future Average Weekday Traffic

LOCATION	EXISTING # OF LANES/FACILITY TYPE	2006 AWDT <sup>1</sup>	2006 LOS <sup>2</sup>	FUTURE# OF LANES/FACILITY TYPE	2025 AWDT <sup>3</sup>	2025 LOS <sup>2</sup>
West junction I-8 to Pulliam Road	2C	2,200	B	2C	2,800	B
Pulliam Road to Clark Road	2C	3,600	B	2C	4,500	B
Clark Road to Dogwood Road	2C	4,600	B	2C	7,600	B
Dogwood Road to Navarro Avenue	2C	10,000	B	2C	22,200	E
Navarro Avenue to Ollie Avenue	2C	22,900	E	4C	28,000	C
Ollie Avenue to SR-111	4C	25,400	C <sup>4</sup>	4C	29,300	C <sup>4</sup>
SR-111 to Andrade Avenue	4C	23,000	B	4C	39,000	D
Andrade Avenue to Cole Road	2C	9,500	B	4C	34,000	C
Cole Road to SR-7	2C	12,000	B	4C	53,300	E
SR-7 to Keffer Road	2C	2,300	B	2C	14,800	C
Keffer Road to East Junction I-8	2C	2,000	B	2C	2,500	B

<sup>1</sup> 2006 AWDT's derived from Caltrans District 11 Traffic Volume Book. In some segments, AWDT's are averages.

<sup>2</sup> 2006 and 2025 Levels of Service (LOS) are based on sketch level planning analysis and are not to be used for design purposes.

<sup>3</sup> 2025 AWDT's are from the Imperial County Transportation Model. These numbers are estimates based on current and proposed regional growth and are subject to change based on potentially different growth estimates. These AWDT's also do not reflect potential realignment of SR-98 based on ongoing studies.

<sup>4</sup> Level of Service at the intersection of SR-98 and SR-111 may be E or F during peak periods.

## RECOMMENDED CORRIDOR IMPROVEMENTS

The following table shows major capacity improvements for SR-98. These improvements are from the 2007 Imperial County Transportation Plan (February 2008).

POST MILE	LOCATION	DESCRIPTION	SOURCE/ PHASE/ FISCAL YEAR
30.3 - 32.3	Dogwood Road to SR-111	Upgrade to 4-lane conventional highway	Near-Term (2007- 2015)
32.3 - 39.6	SR-111 to SR-7	Upgrade to 4 lane conventional highway (6 lanes in some sections)	Near-Term (2007- 2015)
TBD	Jasper Road- SR-111 to SR-7	Widen and/or realign Jasper Road as a 6-lane expressway or prime arterial (owner/operator to be determined)	Near-Term (2007- 2015)

The following table shows additional proposed improvements to SR-111. These improvements are from the District 11 Status of Projects (April 2008), the District 11

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2007 Ten-Year State Highway Operation and Protection Plan (SHOPP) Needs Plan, and the Caltrans Project Information Reporting System (PIRS).

Post Mile	Location	Description	Phase/ Fiscal Year
0.0 -22.0	Junction SR-98/I-8 (West) to West Main Canal	Apply 20MM Asphalt Rubber Open Graded Overlay	PA&ED
22.0 -31.3	West Main Canal Bridge to Kloke Road	Pavement Rehabilitation	2007 10-Year SHOPP Plan-FY2016/2017
30.3	Dogwood Road	Construct signal	2007 10-Year SHOPP Plan-FY2016/2017
0.0 – 57.2	Junction SR-98/I-8 (West) to Junction SR-98/I-8 (East)	Upgrade 71 Signs (Materials and Exit #s)	2007 10-Year SHOPP Plan-FY2017/2018
0.0 –R57.2	Junction SR-98/I-8 (West) to Junction SR-98/I-8 (East)	Provide centerline rumble strips and upgrade end treatments	2007 10-Year SHOPP Plan-FY2011/2012
Various	Various	Bridge Rail Upgrade and Deck Rehabilitation	2007 10-Year SHOPP Plan-FY2012/2013

PA&ED = Project Approval/Environmental Document

Other operational and safety improvements should also be provided if needed.

## TRANSIT SERVICE

The majority of transit service in Imperial Valley is provided by Imperial Valley Transit (ICT). ICT is an intercity fixed route system subsidized by the Imperial Valley Association of Governments (IVAG), administered by the County Department of Public Works, and operated by Laidlaw Transit Services, Inc., a private-for-profit service. ICT operates six fixed-routes which serve the communities of Brawley, Calexico, Calipatria, El Centro, Holtville, Niland, Seeley, and Westmorland, Monday through Saturday. Additionally, ICT operates limited service to Winterhaven (each Wednesday), Bombay Beach (each Thursday), and two express round-trips to Imperial Valley College (IVC Express), which supplements the regularly scheduled service. The IVC Express offers one round trip from Niland and one round-trip from Calexico on IVC school days only. Passenger ridership currently averages 23,000 passengers a month. ICT Routes 150 and the Calexico to Imperial Valley College Express traverse portions of SR-98 between Kloke Road and Encinas Avenue.

The County also administers Americans With Disabilities Act (ADA) paratransit service known as Areawide Independent Mobility (AIM) Transit. AIM Transit offers a curb-to-curb Dial-A-Ride service for the disabled who are not able to use the traditional fixed-route service. While the Dial-A-Ride service remains available to seniors over the age of 60, priority is given to those certified under the Americans with Disabilities Act (ADA).

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ADA Paratransit will transport users anywhere within a ¾ mile corridor of Imperial County Transit routes.

Additional, individual agency public transit services include demand-responsive Dial-A-Ride services offered by the Cities of Brawley, Calexico, El Centro, and Imperial.

Future transit service improvements will include expanding and/or restructuring current transit service to improve efficiency and productivity, adding new services such as the El Centro Circulator Shuttle, and conducting additional Circulator Bus Feasibility studies.

## **NONMOTORIZED TRANSPORTATION**

The County of Imperial's bicycle facilities program is designed to enhance environmental and social benefits for the citizens of Imperial County by providing an integrated network system of bicycle and pedestrian facility for the safe and efficient movement in and through the County of Imperial. This includes an integrated bicycle circulation system which includes facilities to promote the environmental and social benefits of commuter and recreational bicycling. Class II bikeways shall be planned into appropriate Prime, Major, and Secondary arterials. The County shall cooperate with other governmental agencies to provide connection and continuation of bicycle corridors. The bicycle circulation system will be integrated with auto, pedestrian, and transit systems.

The County of Imperial Bicycle Master Plan Update (September 2003) recommends implementation of a 252 mile system of bicycle lanes, routes and pathways that will link to schools, shopping, employment and future expanding residential areas. In addition, Bicycle Master Plans were developed in 2002 and 2003 for the Cities of Brawley, Calexico, El Centro, Calipatria, Holtville, Imperial, and Westmorland. In many of these plans, bicycle facilities are proposed for routes parallel to SR-98. Currently, bicycle travel is permissible on all segments of SR-98 in Imperial County.

## **DEVELOPMENT REVIEW**

Caltrans District 11 Development Review staff in the Planning Division review federal, state, and local planning or proposed development activity that has the potential to impact state transportation facilities or other resources under Caltrans' jurisdiction, and to recommend conditions of project approval that eliminate those impacts or reduce them to a level of insignificance. Typically, this involves the review of development proposals in which Caltrans is either a responsible (permitting) or commenting (reviewing) agency, but has no discretionary approval power over the project other than permit authority. Development Review staff work cooperatively with local lead agencies and developers in determining the type and level of mitigation needed to offset project impacts. They are also responsible for identifying other functional areas within District 11 that are affected by the proposal, and coordinating the circulation of appropriate documents with other functional areas for review and comment.

Based on the Caltrans Traffic Impact Study (TIS) guidelines, a 1,000 Average Daily Traffic (ADT) threshold size triggers the need for developers to prepare a traffic study for their project. The following information generally includes projects for which an

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Environmental Document, a Specific Plan or a Master Plan has been or will be prepared. There are approximately 11 potential major development projects within and adjacent to the SR-98 corridor that will each generate more than the 1,000 ADT threshold. Total cumulative projected ADT from these developments is expected to be approximately 188,000 ADT. There may be an additional number of smaller development projects that may have additional cumulative impacts on traffic in the corridor. Because of uncertainties associated with future demographic, socioeconomic, and political climates, the scale of development may be subject to change. Changes in land use prompting rapid housing and commercial development growth will need to be monitored closely by all impacted jurisdictions and agencies. Appropriate traffic studies for proposed developments will need to be conducted and reviewed carefully by Caltrans staff. Land development and local capital improvement projects should also be coordinated with Caltrans projects.

The following table shows proposed projects in the Imperial County SR-98 corridor currently in the development review process. Construction of some of these developments may either be underway or complete.

<b>POST MILE</b>	<b>PROJECT NAME</b>	<b>DESCRIPTION</b>	<b>ADT</b>
30.27	Los Lagos Specific Plan	Mixed Use	27,455
30.81	Riverview Condo Project	Residential, single-family, commercial	4,022
31.31	Linda Plaza	Retail and Office Ctr.	2,912
31.6	Remington Condominium	Residential	2,176
31.9	Gas Station SR-98/Cesar Chavez	Gas Station and Convenience Store	2,550
31.92	Ortega Gas Station #2	Gas Station and Convenience Store	2,000
32.1	Crossroads Plaza	Mixed Use	15,000
34	CM Ranch Specific Plan	Residential + 4 new schools + 2.2 million sq.ft. commercial	99,999
34.46	Venezia	Mixed Use	2,490
39.65	Procalamos Residential Develop	Residential	12,809
39.65	Procalamos Industrial Park	Industrial	16,667