



STATE ROUTE-905 TRANSPORTATION CONCEPT SUMMARY

This Transportation Concept Summary (TCS) for State Route 905 in District 11 serves as an analysis tool and conceptual long-range guide for future investment decisions in the transportation corridor.

DISCLAIMER

The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this TCS is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and ever-changing, the District 11 Planning Division makes every effort to ensure the accuracy and timeliness of the information contained in the TCS. The information in the TCS does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures. If you encounter information that you deem to be inaccurate or unreliable, please contact Kim.Sturmer@dot.ca.gov or at 619-688-6967.



CALIFORNIA DEPARTMENT OF TRANSPORTATION
PLANNING DIVISION
Planning Leads To Superior Solutions

Caltrans
DISTRICT 11

SR-905 Transportation Concept Summary September 2008

CORRIDOR PURPOSE

State Route 905 (SR-905) is a partially constructed 12 mile route extending from the International Boundary near Border Field Park, 2.8 miles west of Interstate 5 (I-5), to the International Border Crossing at Otay Mesa. It is the only east-west route serving intraregional traffic between the Otay Mesa/International Border area and the cities of Chula Vista, National City, and Imperial Beach.

SR-905 is a principal east-west route which serves intraregional, interregional, commercial, and commuter traffic between the rapidly developing Otay Mesa area and destinations to the north via I-5 and I-805. SR-905 also carries substantial cross-border traffic by providing access to and from the Otay Mesa International Border crossing.

SR-905 is critical to the flow of goods and services between California and Baja California, as well as between California and the nation. Since the implementation of the North American Trade Agreement (NAFTA) in 1994, trade and travel between the two states has greatly increased in both dollar value and truck crossings.

CORRIDOR NEEDS

The busy local surface street, Otay Mesa Road, which parallels the adopted alignment for SR-905, is presently the primary access to the U.S./Mexico Port of Entry (POE) at Otay Mesa. In 2006, average daily traffic on Otay Mesa Rd. ranged from 45,000-68,000. About 15 percent of these vehicles are trucks. SANDAG expects vehicle border crossings at existing POEs in San Diego County and the proposed East Otay Mesa (EOM) POE to quadruple by 2030. Continued development of more than 6,000 commercial/industrial acres, and the dynamics created by the maquiladora industry across the border, makes it imperative that a full freeway for additional east-west highway capacity be developed in the coming years. In addition, a higher than average accident rate and a high percentage (15%) of trucks on Otay Mesa Road compound congestion and impede cross-border access.

Current congestion at the California/Baja California ports of entry (POEs) and the need to accommodate future growth in trade and travel make POE and related infrastructure improvements a critical issue for California. Land POEs are critical in maintaining the State's economic vitality. In 1999, Mexico surpassed Japan to become California's top trade partner, with exports reaching \$19.6 billion in 2006. Total imports and exports between California and Mexico were valued at \$37 billion in 2006. Existing POEs experience excessive cross-border delays due to operational and infrastructure needs.

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Trade is a key contributor to local, state and national economic growth. Border delays impact the competitiveness of the binational region. Wait times of up to three hours or more (45 minutes per crossing on average based on the survey respondents from the 45 minutes per crossing on average based on the survey respondents and the Imperial Valley – Mexicali Economic Delay Studies) impact goods movement as well as personal trips to and from Mexico. Traffic congestion and delays for cross-border personal trips and goods movement cost the U.S. and Mexican economies an estimated \$7 billion in gross output and more than 62,000 jobs in 2007. The Otay Mesa POE is the second busiest commercial port of entry on the U.S./Mexico border and the busiest in California. It handles more than 1.4 million trucks and \$22.2 billion worth of goods in both directions. Delays often exceed four hours per truck.

Seventy-eight percent of the goods transported through the California/Baja California POEs have origins or destinations outside of San Diego and Imperial counties to/from other California counties, states or international markets. Ninety-eight percent of imports and exports are transported by truck. The benefits of this trade are very important to the California and Baja California economies. Continued growth in binational trade through the Otay Mesa POE further necessitates the completion of the SR-905 freeway.

CORRIDOR ANALYSIS

Improvements are needed in the SR-905 corridor to provide for effective transportation of people, goods, and services between I-805 and the Otay Mesa POE. Future improvements should include alleviating existing traffic congestion, providing adequate transportation facilities for the associated growth from planned and approved developments, and completing a major transportation corridor between I-5 and the Otay Mesa POE.

The SR-905 improvement project calls for the construction of a six-lane freeway from the Otay Mesa POE at the International Border to I-805. The project will ultimately include grade separated local access interchanges at Caliente Road, Heritage Road, Britannia Boulevard, La Media Boulevard, and a freeway-to-freeway interchange with SR-125 (South Bay Expressway) as well as an ultimate facility buildout to eight lanes.

A Final Environmental Initial Statement/Report has been completed for the project, and the Record of Decision was approved in September 2004. The Siempre Viva Road Interchange was completed in fall 2005. Caltrans is in the process of acquiring right of way from I-805 to Siempre Viva Road for Phase 1 of the six lane freeway project. Due to escalated costs for right of way acquisition, the Department has decided to split Phase 1 into two parts: Phase 1A, the eastern segment from Britannia Boulevard to Siempre Viva Road and Phase 1B, the western segment from just east of I-805 to Britannia Boulevard.

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Construction of Phase 1A began in April 2008 and anticipated completion is expected by the end of 2010. Phase 1B is currently scheduled to begin construction in spring 2009 and be completed by spring 2012.

CORRIDOR TRAFFIC

SR-905 will be experiencing a doubling or tripling of traffic in the future. This increased traffic will lead to higher levels of congestion unless corridor improvements are developed. The following table shows existing and future traffic conditions for SR-905.

Existing and Future Average Weekday Traffic

LOCATION	2007 AWDT¹	2007 LOS²	2030 AWDT³	2030 LOS⁴
International Boundary to west of I-5 ⁵	N/A	N/A	N/A	N/A
West of I-5 to I-805	60,400	C	89,100	B
I-805 to future Caliente Boulevard	72,600	D	118,700	D
Caliente Boulevard to Heritage Road	66,100 ⁶	N/A ⁷	110,800	D
Heritage Road to Britannia Blvd	67,500 ⁶	N/A ⁷	104,500	C
Britannia Blvd to La Media	45,800 ⁶	N/A ⁷	99,800	C
La Media to future SR-125/11 I/C	45,800 ⁶	N/A ⁷	87,400	B
Future SR-125/905/11 Interchange to Siempre Viva Rd	37,100	B	67,800	B
Siempre Viva Road to Otay Mesa POE	30,500	B	70,200	B

¹ 2007 Average Weekday Daily Traffic (AWDT) volumes are derived from Caltrans District 11 Traffic Census Branch Average Annual Daily Traffic (AWDT) volumes.

² 2007 Level of Service (LOS) is based on sketch level planning analysis and is not to be used for design purposes.

³ 2030 AWDT's are from the SANDAG 2007 RTP Regional Transportation Model, November 2007.

⁴ 2030 LOS based on sketch level planning analysis and is not to be used for design purposes. 2030 LOS is based on ultimate 8 lane freeway concept.

⁵ Unadopted/ Unconstructed.

⁶ Unconstructed, AWDTs shown for Otay Mesa Road are from 2006.

⁷ LOS not calculated for existing Otay Mesa Road.

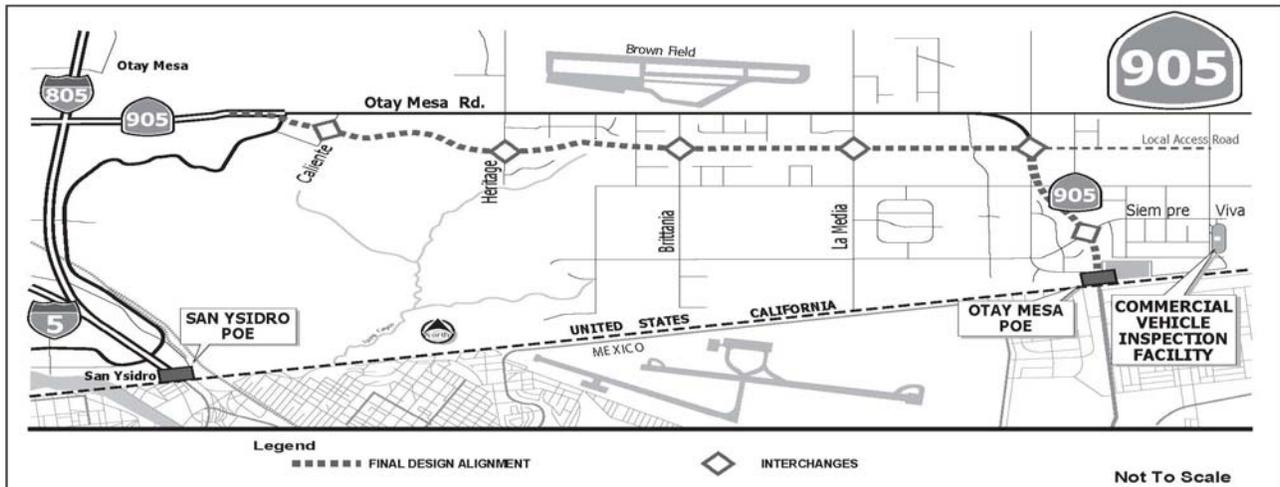
RECOMMENDED CORRIDOR IMPROVEMENTS

There are many types of improvements planned for SR-905, both highway and transit-related. Improvements are from previously developed Project Initiation documents, the 2008 State Transportation Improvement Program (STIP), the 2008 State Highway Operation and Protection Plan (SHOPP), the District 11 Project Information Reporting System (PIRS), and the District 11 2007 Ten-Year SHOPP Needs Plan, and the most recent Status of Projects.

The following table shows recommended major freeway improvements for SR-905. Further information on project staging details and the updated schedule can be obtained from the Caltrans SR-905 Project Manager.

POST MILE	LOCATION	IMPROVEMENT DESCRIPTION
3.2 -5.2	I-5 to I-805	Add four main lanes
5.2-12.0	I-805 to the POE	Construct 6 lane freeway; ultimate eight lane freeway
10.6	SR-905/SR-125	Freeway to freeway interchange
Various	Caliente Rd, Heritage Rd, Britannia Blvd, and La Media Blvd,	Grade-separated local access interchanges

The following map shows the proposed location of the SR-905 freeway and interchanges.



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The following table shows projects included in the 2008 SHOPP and the District 11 PIRS for SR-905.

POST MILE	LOCATION	IMPROVEMENT DESCRIPTION	SOURCE/ PHASE
11.7	0.3 mile west of Otay Mesa POE	Mitigation site preservation	PIRS/PA&ED
11.7-12.0	From 0.3 mile west of Otay Mesa POE to Otay Mesa POE	Bicycle/pedestrian facilities-transportation enhancement	PIRS
11.9-12.0	Otay Mesa POE northbound cargo border crossing	Add "Empty Truck" lane	PIRS/PSR

The following table shows the 2007 10-Year SHOPP Needs Plan Projects for SR-905.

POST MILE	LOCATION	IMPROVEMENT DESCRIPTION	CATEGORY/ FISCAL YEAR
3.2 -12.0	I-5 to Otay Mesa POE	Upgrade 100 signs (Materials and Exit #s) and Overhead Lighting to Inductive Technology	Roadway Preservation 2014/2015

Transit Improvements

The Metropolitan Transit Development Board (MTDB) coordinates transit service in the South Bay area. Transit providers in the South Bay area include the San Diego Transit Corporation (SDTC), MTDB Contract Services, San Diego Trolley Incorporated (SDTI), and Chula Vista Transit (CVT).

Bus service in the SR-905 corridor is provided by San Diego Transit. Bus Route 905/905A traverses Otay Mesa Road between the Iris Avenue station and the international border. Bus Route numbers 901, 929, 932, 933 and 934 provide service to areas north and south of SR-905, with links to the San Diego Trolley and the 700 series Chula Vista Transit Bus Routes. These connections link the SR-905 corridor with the San Ysidro/Tijuana POE, Otay Mesa POE, and the communities of San Ysidro, Palm City, Imperial Beach, Coronado, Otay Mesa, Chula Vista, and San Diego.

Four park and ride locations exist north of SR-905: Iris Avenue Trolley Station (near I-5); Palm Avenue Trolley Station (near I-5); Telegraph Canyon Road at Paseo del Rey (near I-805); and, East H Street at Buena Vista Way (near Otay Lakes Road). In addition, two park and ride locations are located south of SR-905: Beyer Blvd and the

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San Ysidro POE, both of which are trolley stations. Trolley stations also provide bicycle storage lockers for bicycle commuters in conjunction with the SANDAG Ride Link Program. However, bike lockers are not available at the Telegraph Canyon and East H Street park and ride locations. An additional park and ride lot, with provisions for public bus service, is proposed in the northeast quadrant of the Caliente Avenue interchange and would provide approximately 210 parking spaces in a 2.2 acre lot. This location would conform to long-range transit plans since it would coincide with a potential future light rail station.

Future transit services in the SR-905 corridor include the provision of "Rapid Bus" service between the Otay Mesa POE and Imperial Beach via Airway Road, SR-905, and Palm Avenue. This service is expected to operate at 10 minute peak and off-peak headways.

Other Transportation Improvements

Additional modal option improvements such as non-motorized, park and ride, transportation demand management, and transportation system management should also be developed for the SR-905 corridor. Additional corridor mobility management strategies and Intelligent Transportation Systems (ITS) that can reduce daily vehicle hours of recurrent delay on SR-905 include continuing implementation of the Transportation Management System (TMS) and Traffic Operations Strategies (TOPS). TMS is the "wiring" needed to provide real-time corridor performance information, and TOPS includes a variety of near-term corridor improvements such as the provision of intelligent infrastructure and auxiliary lanes.

Bicycle riders and pedestrians have a legal right to access most public roads in California. While pedestrians are prohibited from virtually all freeways, bicycles are permitted on the outside shoulders of nearly 25 percent of all freeways located within the state. The legal authority to prohibit bicycle and pedestrian use from freeways and expressways is specified in the California Vehicle Code section 21960. Bicycle riders will continue to have legal access to riding on parallel Otay Mesa Road once the SR-905 freeway is completed.

PROJECT INITIATION DOCUMENT INFORMATION - CORRIDOR AND SYSTEM COORDINATION

State Route 905 (SR-905) is a partially constructed 12 mile route extending from the International Boundary near Border Field Park, 2.8 miles west of Interstate 5 (I-5), to the International Border Crossing on Otay Mesa. It is the only east-west route serving intraregional traffic between the Otay Mesa/International Border area and the cities of Chula Vista, National City and Imperial Beach.

SR-905 was adopted as a freeway, originally as SR-75, by the California Transportation Commission (CTC) in 1965. A freeway agreement was executed with the County of San

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Diego in 1969. Additionally, four freeway agreements were signed with the City of San Diego between 1969 and 1972 extending SR-75 to cover most of the route. In 1973 SR-75 was redesignated as SR-117 and in 1973 the freeway opened between I-5 and I-805. In 1987 the route designation changed from SR-117 to SR-905.

Two existing State highways intersect with SR-905. They are I-5 and I-805. In addition, proposed SR-125 will also intersect SR-905. The nearest parallel freeway to SR-905 is SR-54, located approximately six miles to the north.

The federal functional classification for SR-905 is shown in Table 1 for each segment of the route. SR-905 is functionally classified as an Other Freeway or Expressway from I-5 (P.M. SD 3.2) to Otay Mesa Road (P.M. SD 6.5). From Otay Mesa Road to the International Boundary (P.M. SD 12.0) SR-905 is functionally classified as an Other Principal Arterial. SR-905 will also be included in the proposed National Highway System (NHS) from I-5 (P.M. SD 3.2) to the International Border (P.M. SD 12.0). Additionally, from .5 miles east of Cactus Road (P.M. SD 8.9) to the International Boundary (P.M. SD 12.0), SR-905 is part of the Interregional Road System (IRRS).

From I-5 (P.M. SD 3.2) to I-805 (P.M. SD 5.2), SR-905 is designated as part of the national network for Surface Transportation Assistance Act (STAA) Trucks. From I-805 (P.M. SD 5.2) to Otay Mesa Road (P.M. SD 6.5), SR-905 is part of the State Highway Terminal Access Route System. It is expected that these designations will be extended to the other segments of SR-905 upon their completion.

SR-905 is not on the California State Scenic Highway System.

SANDAG's 2030 Regional Transportation Plan (November 2007) includes the following corridor improvements for SR-905 under the Revenue Constrained Plan, the Reasonably Expected Revenue scenario, and the Unconstrained Needs Network:

LOCATION	REVENUE CONSTRAINED	REASONABLY EXPECTED	UNCONSTRAINED
I-5 to I-805	4F	4F	8F
I-805 to Otay Mesa POE	6F	8F	8F

DEVELOPMENT REVIEW

Caltrans District 11 Development Review staff in the Planning Division review federal, state, and local planned or proposed development activities that have the potential to impact state transportation facilities or other resources under Caltrans' jurisdiction, and 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,

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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 Environmental Document, a Specific Plan, or a Master Plan has been or will be prepared. There are currently seven potential major development projects within and adjacent to the proposed SR-905 corridor that will generate almost 50,000 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 commercial and industrial 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 by developers 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 currently within the development review process:

Post Mile	Project Name	ADT	Lead Agency
6.43	Candlelight Condos	3,300	City of San Diego
6.56	Dillard & Judd Roll (Enrico Fermi Industrial Project)	6,800	County of San Diego
8.0	South Bay Distribution	1,700	San Diego
8.30	Las Californias Center	16,500	City of San Diego
9.90	Lonestar Ridge	13,000	City of San Diego
10.63	Piper Otay Park	2,500	County of San Diego
11.59	Siempre Viva Industrial Park	6,000	San Diego