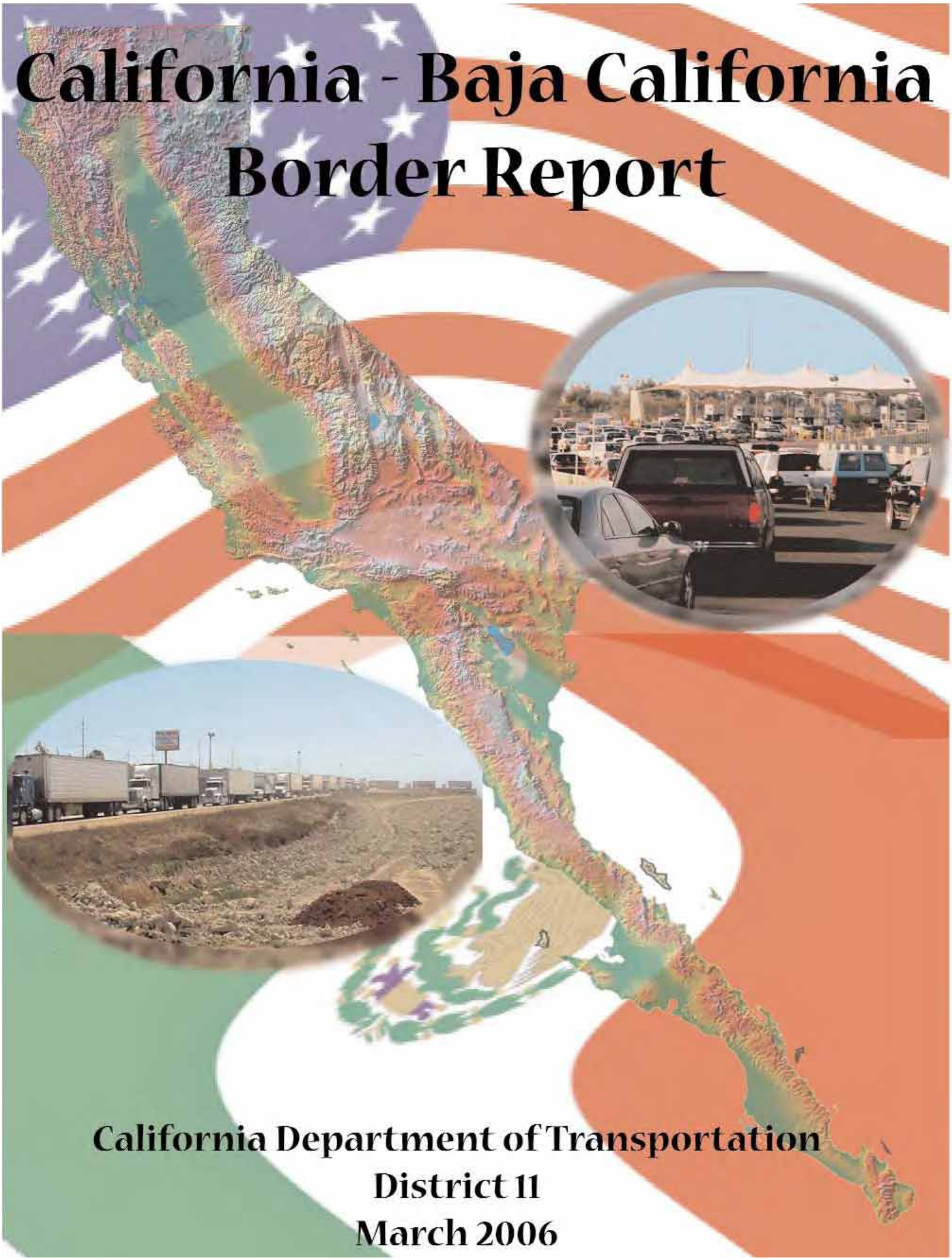
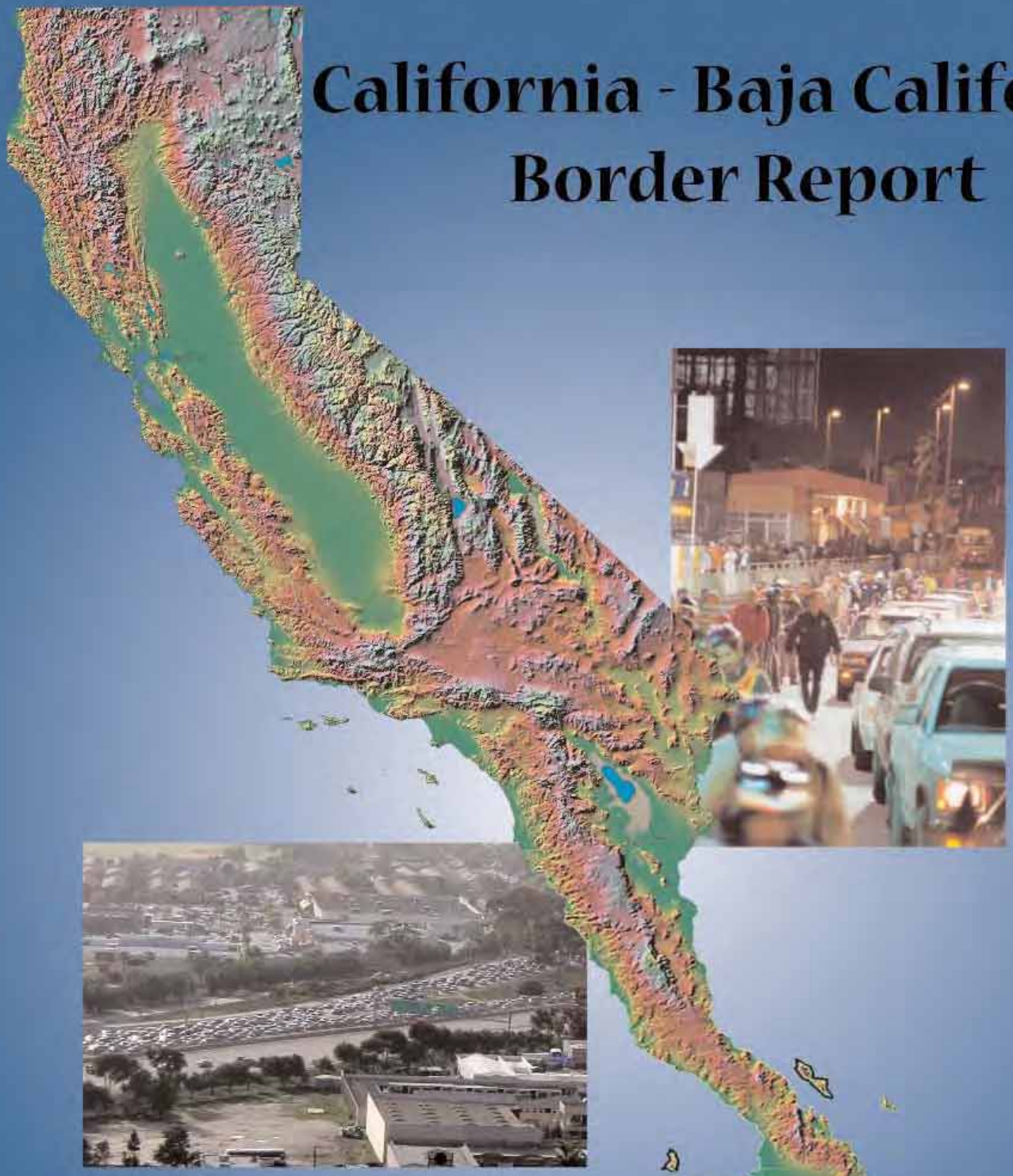
California - Baja California Border Report



California Department of Transportation
District 11
March 2006

California - Baja California Border Report



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March 2006

A Product of Caltrans District 11

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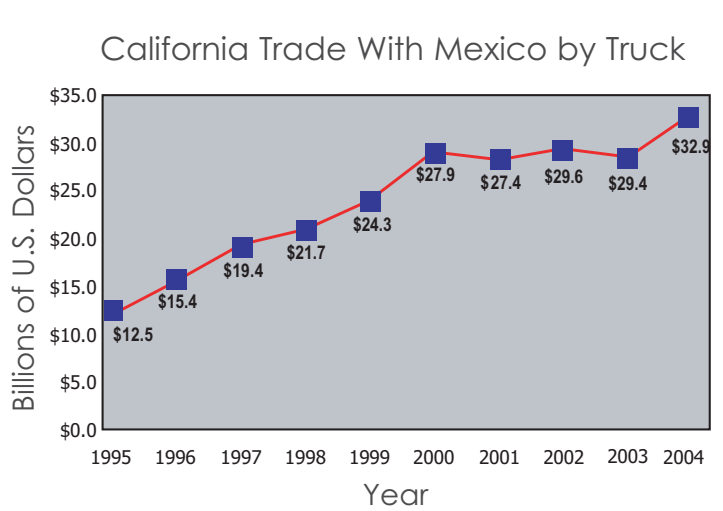
EXECUTIVE SUMMARY

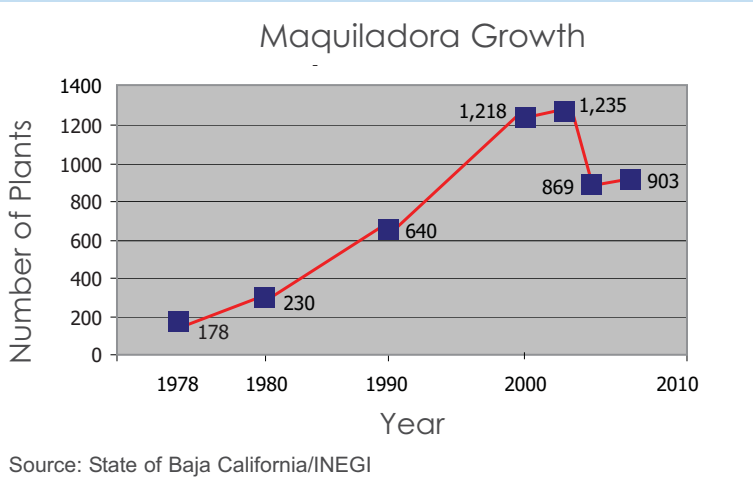
BACKGROUND

For over a decade, cross-border trade activity between the State of California, U.S. and the State of Baja California, Mexico has increased to record levels and resulted in remarkable economic conditions for both countries. These positive results are felt regionally and statewide on both sides of the international border. Mexico surpassed Japan to become California's top export trade market in 1999. Total trade activity through the California Ports of Entry (POEs) exceeded $33.0 billion* in 2004. Commercial trucks account for 98% of the trade.



Source: Bureau of Transportation Statistics (BTS), November 2005

Truck trips at the three major POEs, Otay Mesa, Tecate, and Calexico East, have increased 60%, 77%, and 113%[1] respectively since 1997. In 2004, more than two million trucks crossed the California/Mexico border and the number is expected to increase to approximately 5.6 million by 2030. This increase in truck traffic is mainly due to growth in the maquiladora industry manufacturing/assembly plant operations along the California and Baja California border. The number of maquiladora plants has grown from 178 to nearly 900, representing a 400% increase since 1978. The maquiladora industry has also influenced the overall growth in employment for Baja California. Over 225,000 jobs have been created since 1978.



Source: State of Baja California/INEGI

* Bureau of Transportation Statistics

[1] Calexico East opened in 1997, which will serve as the base year for computational purposes.

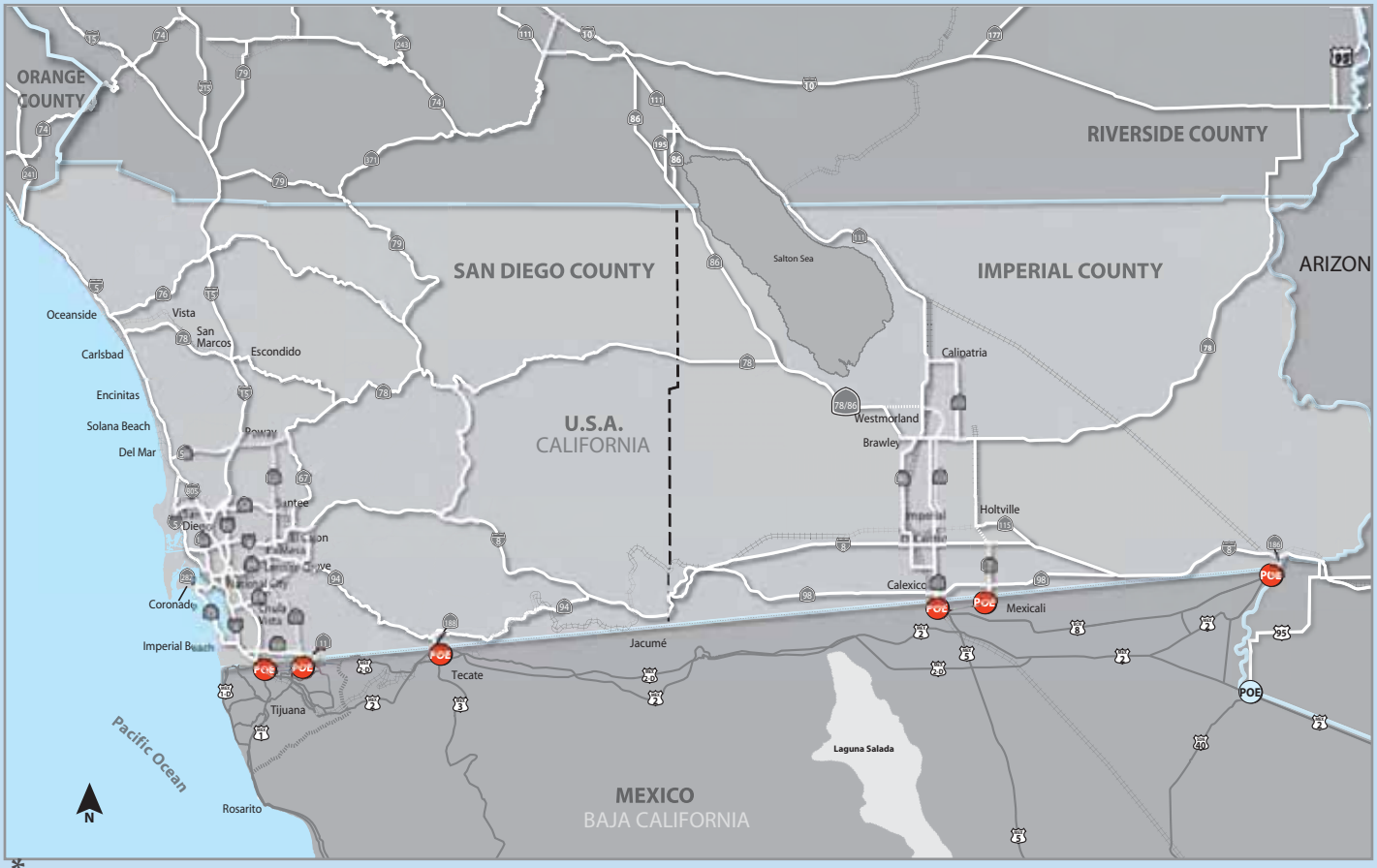
EXECUTIVE SUMMARY

The Border Region

Cross-border activity is contained within a 150-mile border that is shared between California and Baja California, with a combined population of approximately five million people which is projected to grow to over eight million in 20 years. The region includes the Counties of San Diego and Imperial and the five Baja California municipalities of Tijuana, Playas de Rosarito, Ensenada, Tecate and Mexicali.

There are six POEs located in the region, three located in San Diego County (San Ysidro, Otay Mesa, and Tecate) and three in Imperial County (Calexico, Calexico East, and Andrade). The San Ysidro POE handles the largest amount of passenger vehicle and pedestrian crossings making it the busiest land crossing in the world with over 48 million* persons crossing northbound in 2004. Not far behind, the Calexico POE is the second busiest land crossing along the California and Baja California border with almost 17 million people crossing northbound in 2004.

CALIFORNIA/BAJA CALIFORNIA BORDER REGION



* U.S. Customs and Border Protection

EXECUTIVE SUMMARY

Identifying a North American Free Trade Agreement (NAFTA) Network

In 1993, California identified a NAFTA Network (NAFTA-Net) of critical transportation corridors serving trade and traffic through the land POEs between California and Mexico. The resulting network:

- facilitates the movement of goods, services and information,
- insures a safe, efficient and secure cross border trucking industry,
- accommodates recent and anticipated growth in border related movement.

The maps on pages xi-xiii depict District 11's NAFTA Net routes traversing San Diego and Imperial Counties, as well as corresponding routes in Baja California. Many of these improvements have been completed while others are in various stages of their project life.

The State of California has identified approximately $915 million for 16 projects in the San Diego and Imperial County regions. In Mexico, transportation improvements have totaled over $900 million for 14 projects in the Baja California Region. This financial commitment represents a significant funding pledge with the specific objectives of maintaining and maximizing the operation of the existing transportation system, and identifying and implementing new transportation improvements along the California and Baja California border. In California, project improvements include the I-5 Realignment at San Ysidro-POE project. This improvement involves configuration changes to the southbound I-5 lanes near the San Ysidro POE to reduce wait times. In Imperial County, the SR-7 extension project (SR-98 to I-8) has helped to improve service to the Calexico East POE.

However, there are four critical projects in San Diego and Imperial Counties that are not fully funded:

- SR-905 – Construction of a six-lane freeway
- SR-11 – Construction of a four-lane freeway
- Otay Mesa Truck Route – Construction of a southbound truck route
- SR-78/SR-111: The Brawley Bypass – Construction of a four-lane expressway

The funding charts and corresponding maps on pages 3-3 & 3-5 illustrate the four aforementioned projects, as well as other key projects currently underway in District 11.

Addressing the Region's Challenges

Beyond the project cost shortfalls, the State of California recognizes that there are additional challenges that lie ahead. The State of California strongly believes that every attempt should be made to sustain the existing commitment and cooperation among local, regional, state, and federal transportation agencies from both sides of the border for improving the transportation system along the California and Baja California border. Key challenges that lie ahead include:

- Identifying and securing additional funding resources for current project shortfalls.
- Maintaining binational cooperation and commitment between public agencies to work together to address mobility, access, and safety while considering security as a key concern.
- In light of the challenges to the state's cash flow, the development of new and innovative funding concepts is critical to the completion of planned projects. This may include strategies such as pursuing Grant Anticipation Revenue Vehicles bonds (GARVEE), and public/private partnerships.
- Working cooperatively and supporting private sector activities that address cross-border movement deficiencies and improvements.

EXECUTIVE SUMMARY

Documenting Key Issues

The following briefing has been prepared by the California Department of Transportation (Caltrans) in an effort to document and supplement in detail its on-going transportation improvement efforts and challenges along the California and Baja California border. The briefing will serve as an update on the status of transportation facilities and future improvements, provide key facts associated with trade activity, and additional transportation planning activities associated with cross-border movement of goods and people. The sections will address the following key elements:

Section 1- Introduction

The timeline in this section highlights and provides a historical perspective of key events and milestones critical to transportation border issues. These include the passage of SAFETEA-LU, the Transportation Efficiency Act for 21st Century (TEA-21), and its predecessor, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), which formalized the nation's commitment to transportation infrastructure and can be considered the springboard for launching other key legislation that specifically addressed international trade and cross-border issues.

Section 2- Overview of Cross-Border Trade

Cross-border trade through the California/Mexico border has increased significantly since the passage of the NAFTA in 1993. Today, trade activity with Mexico has surpassed that of both Japan and Canada. Mexico, now California's number one export trade partner, receives more than $12.5 billion in annual trade. This value represents an increase in exports of 167% since 1995. The total for all California/Mexico import and export trade exceeds $30 billion*. Approximately 98% of this trade is transported by trucks. The majority of the components and products are from the estimated 900 maquiladora related industries located in this region.

Section 3- Border Transportation Infrastructure needs

The sections listed below provide a comprehensive list of on-going projects and efforts currently funded, or proposed, to improve movement, access, and safety along the California and Baja California border.

- Current and Near-Term Projects
- Additional Proposals
  - Binational Infrastructure Transportation Needs Assessment Study (BINS)
- Baja California Projects

*** Bureau of Transportation Statistics**

EXECUTIVE SUMMARY

Current and Near-Term Projects

As the need for new and/or improved transportation facilities becomes apparent, the State of California is committed to developing improvements for roadways and facilities adjacent to or at the border crossings. This section compiles the region's committed projects over the next ten years. It will highlight the region's transportation needs in both San Diego and Imperial Counties that total approximately $1.5 billion, for which over $900 million is programmed. These projects include the completion of a critical link, SR-905, from the Otay Mesa POE to I-805, and the "Brawley Bypass", which will improve goods movement throughout the region and beyond.

Additional Proposals

This section presents a snapshot of proposed transportation improvements that would substantially improve the region's border transportation network and facilities.

As a key study in identifying projects critical to the border region, BINS provides input to ensure adequate funding for future international transportation needs.

For California, 110 transportation projects were identified; of those 103 are highway related. Of the 103, only 22 are considered to be "fully funded". This leaves an unfunded need of 81 highway projects that are identified as essential to providing a transportation system to handle future cross-border travel demand. These 81 projects indicate a need above and beyond the "Current and Near-Term" and "Additional Proposal" projects identified in other sections of this document.

The total cost of California's transportation needs within the 100 kilometer border zone is estimated at $10.3 billion.

Please refer to Appendix A for a more thorough description of the BINS project, background, study purpose and objectives, as well as the California list of projects.

Other proposals could help meet the surge of passenger travel and commercial goods movement/freight travel expected in the future. Improvements include the proposed Jacumba-Jacumé POE, which would enhance commercial vehicle border access to I-8 and locations east of San Diego; and the IVAG Greater Calexico Area Arterial Needs and Circulation Analysis, which identified the need for defined roadway improvements increasing capacity and access to the Calexico POE as well as enhancing local traffic flow.

Baja California Projects

An aspect that is instrumental in addressing existing and future transportation border deficiencies is working with and developing a binational partnership approach between transportation and planning agencies in the U.S. and Mexico. This coordinated approach also plays a key role in improving overall transportation in the border region. This section lists the projects undertaken by Secretaria Asentamientos Humanos y Obras Publicas del Estado de Baja California (SAHOPE, the State of Baja California's Planning and Public Works Agency) that furthers the region's commitment for improving transportation along, or at, the region's POEs. The estimated funding need for these projects is approximately $900 million.

Section 4- Additional Binational Transportation Activities

This section provides an overview of Caltrans' on-going efforts for continuing its active participation with local, regional, state, and federal agencies from both sides of the border for addressing and improving current and future transportation conditions. The section also identifies a number of key issues currently affecting cross-border transportation, current planning studies underway, and activities undertaken by private industries directly associated with cross-border movement of goods and people.

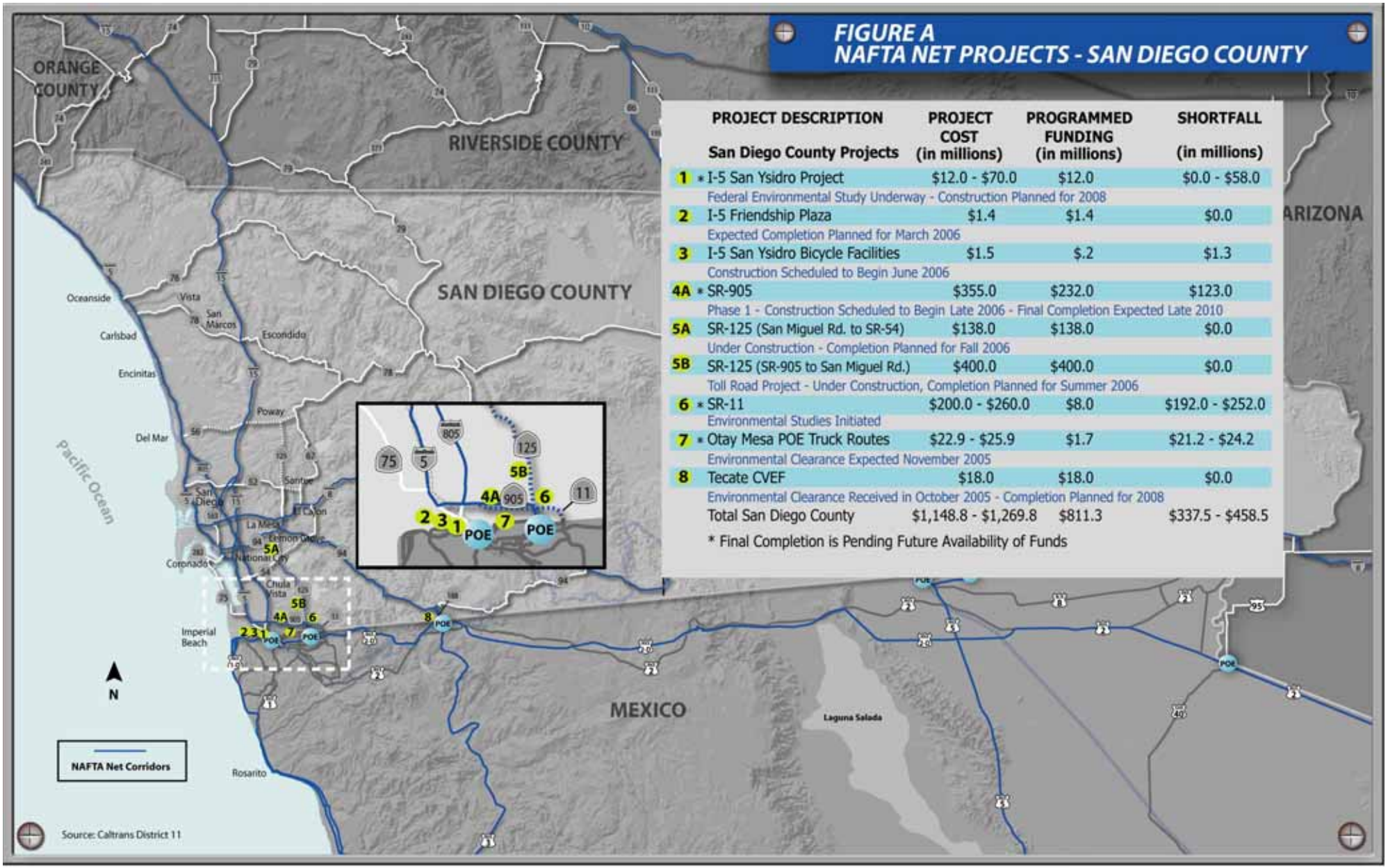


FIGURE A
NAFTA NET PROJECTS - SAN DIEGO COUNTY

	PROJECT DESCRIPTION	PROJECT COST (in millions)	PROGRAMMED FUNDING (in millions)	SHORTFALL (in millions)
	San Diego County Projects			
1	* I-5 San Ysidro Project	$12.0 - $70.0	$12.0	$0.0 - $58.0
	Federal Environmental Study Underway - Construction Planned for 2008			
2	I-5 Friendship Plaza	$1.4	$1.4	$0.0
	Expected Completion Planned for March 2006			
3	I-5 San Ysidro Bicycle Facilities	$1.5	$.2	$1.3
	Construction Scheduled to Begin June 2006			
4A	* SR-905	$355.0	$232.0	$123.0
	Phase 1 - Construction Scheduled to Begin Late 2006 - Final Completion Expected Late 2010			
5A	SR-125 (San Miguel Rd. to SR-54)	$138.0	$138.0	$0.0
	Under Construction - Completion Planned for Fall 2006			
5B	SR-125 (SR-905 to San Miguel Rd.)	$400.0	$400.0	$0.0
	Toll Road Project - Under Construction, Completion Planned for Summer 2006			
6	* SR-11	$200.0 - $260.0	$8.0	$192.0 - $252.0
	Environmental Studies Initiated			
7	* Otay Mesa POE Truck Routes	$22.9 - $25.9	$1.7	$21.2 - $24.2
	Environmental Clearance Expected November 2005			
8	Tecate CVEF	$18.0	$18.0	$0.0
	Environmental Clearance Received in October 2005 - Completion Planned for 2008			
	Total San Diego County	$1,148.8 - $1,269.8	$811.3	$337.5 - $458.5

* Final Completion is Pending Future Availability of Funds

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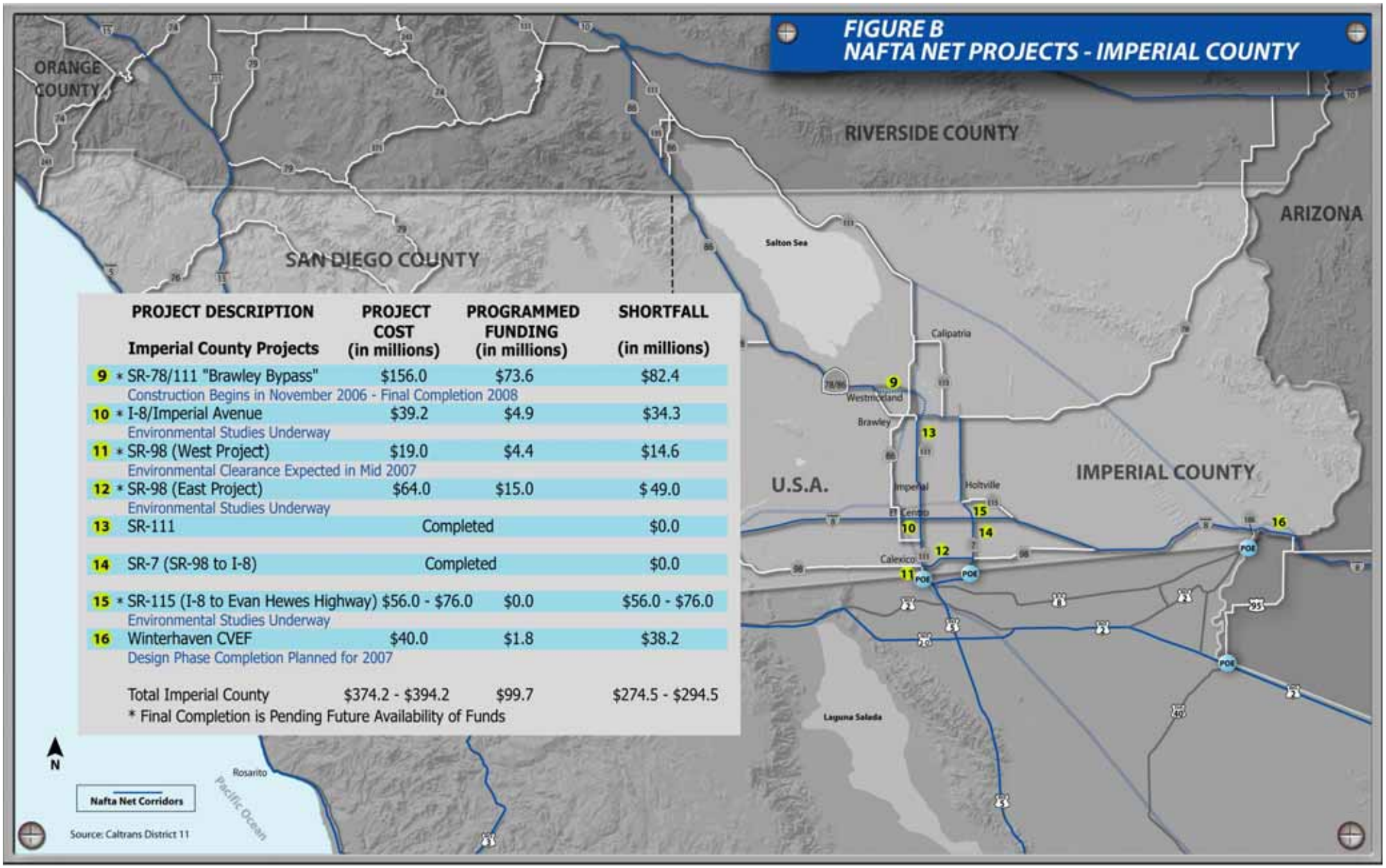

FIGURE B
NAFTA NET PROJECTS - IMPERIAL COUNTY

	PROJECT DESCRIPTION Imperial County Projects	PROJECT COST (in millions)	PROGRAMMED FUNDING (in millions)	SHORTFALL (in millions)
9	* SR-78/111 "Brawley Bypass" Construction Begins in November 2006 - Final Completion 2008	$156.0	$73.6	$82.4
10	* I-8/Imperial Avenue Environmental Studies Underway	$39.2	$4.9	$34.3
11	* SR-98 (West Project) Environmental Clearance Expected in Mid 2007	$19.0	$4.4	$14.6
12	* SR-98 (East Project) Environmental Studies Underway	$64.0	$15.0	$ 49.0
13	SR-111	Completed		$0.0
14	SR-7 (SR-98 to I-8)	Completed		$0.0
15	* SR-115 (I-8 to Evan Hewes Highway) Environmental Studies Underway	$56.0 - $76.0	$0.0	$56.0 - $76.0
16	Winterhaven CVEF Design Phase Completion Planned for 2007	$40.0	$1.8	$38.2
	Total Imperial County	$374.2 - $394.2	$99.7	$274.5 - $294.5

* Final Completion is Pending Future Availability of Funds

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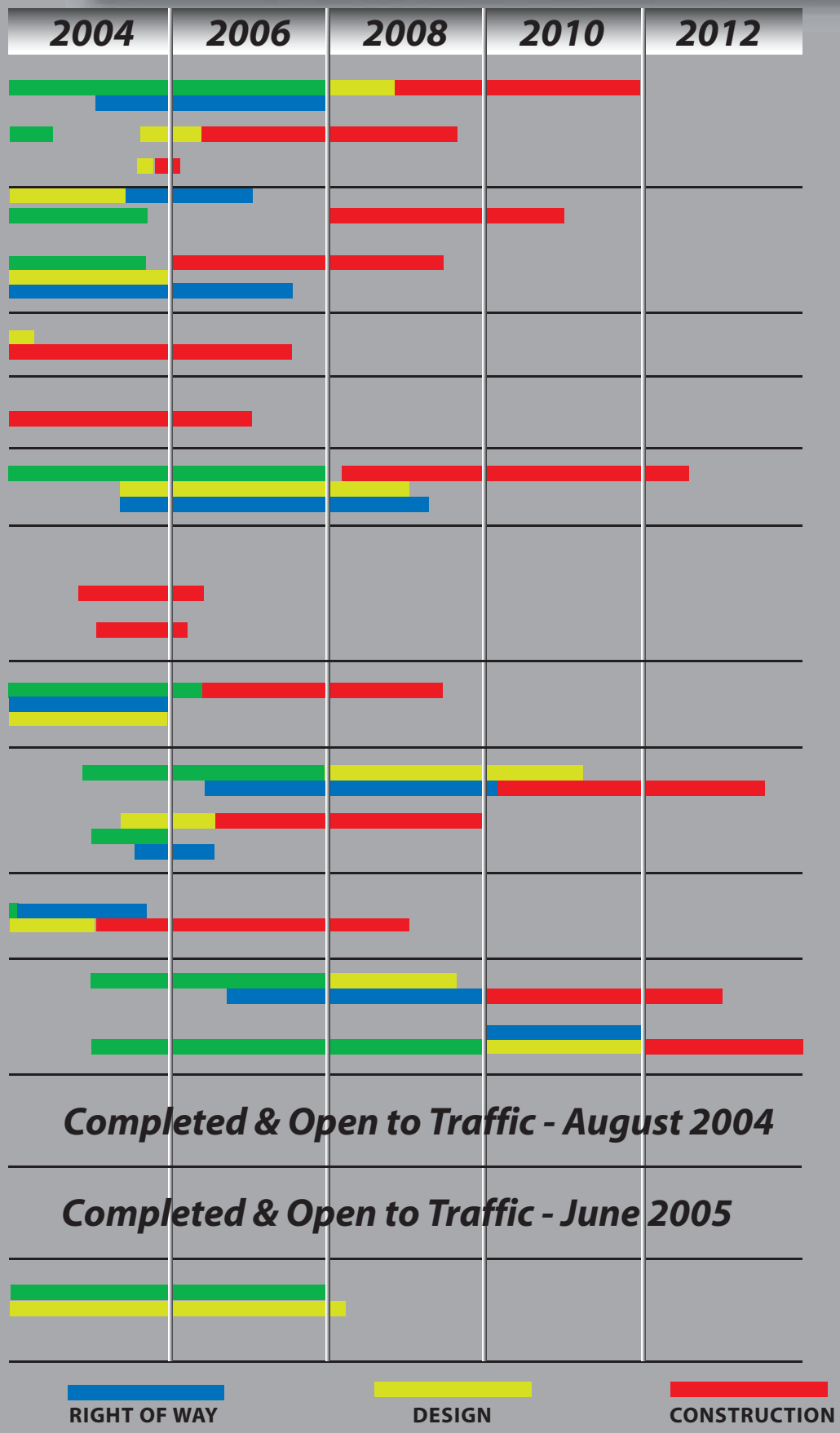
Figure C

BORDER PROJECTS MASTER SCHEDULE



*Final completion is pending based on the future availability of funds.

INTRODUCTION

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INTRODUCTION

Chronology of Key Events

The Intermodal Surface Transportation Efficiency Act (ISTEA) was passed in 1991 and embodied key guidelines to respond to the 1987 General Agreement of Tariffs and Trade (GATT) and concerns that addressed issues on international trade, transportation and border crossings. Following ISTEA, the Transportation Efficiency Act for 21st Century (TEA-21) provided additional emphasis under Sections 1118 and 1119. These sections include discretionary funding for trade corridors, border crossing infrastructure, and the responsibility of conducting a multimodal assessment of existing and emerging international trade corridors. The objective is to improve the safe and efficient movement of people and goods at, or across, the borders between Canada, Mexico and the United States (U.S.). Under these sections, several activities were undertaken including, but not limited to, an assessment of the region's transportation network to identify key traffic and trade flow corridors, and the development of regional advisory committees representing local, regional, and binational perspectives on current and future border transportation deficiencies.

In 2005, Congress passed the omnibus transportation reauthorization bill called Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This omnibus transportation reauthorization bill built upon many cross border concepts in previous bills as well as restructured the Coordinated Border Infrastructure (CBI) Program (referenced within Section 1303 of the bill). The CBI identified:

- Criteria and formula funding for projects within 100 miles of the U.S-Mexico border
- Improvement of binational coordination
- Transportation planning and vehicle safety
- Mobility efficiencies directly related to international land Ports of Entry.

The legislation also allows funds to be used for eligible projects in Mexico. California's portion is approximately $106 million over the five-year period beginning with federal fiscal year 2005. Another key aspect of SAFETEA-LU is the earmarking of funds for many key border region transportation infrastructure projects located in San Diego and Imperial Counties.

In 1992, a year after the signing of ISTEA, the North American Free Trade Agreement (NAFTA) was signed by Mexico, Canada and the U.S., and was subsequently ratified in 1993. The objectives of NAFTA were to further reduce commercial trade barriers and to increase trade amongst Mexico, Canada, and the U.S. These objectives were made in an effort to go beyond provisions included in the GATT.

INTRODUCTION

In 1993, California identified a NAFTA Network (NAFTA Net) of critical transportation corridors serving trade and traffic through the land POEs between California and Baja California. The resulting network:

- facilitates the movement of goods, services and information,
- insures a safe, efficient and secure cross border trucking industry,
- accommodates recent and anticipated growth in border related movement.

Caltrans has conducted numerous studies in the region that address international trade activity, and/or improvements in border crossing times. But these efforts would not have been successful without the cooperation and participation of local Metropolitan Planning Organizations (MPOs), in addition to local, state and federal transportation and planning agencies on both sides of the border.

The cooperative efforts focused on gathering, documenting and analyzing cross border data, and conducting corridor level studies that address the opening of new POEs. All these efforts have provided background and other fundamental information necessary for identifying and prioritizing border infrastructure needs. As a result, Caltrans identified specific corridors that are critical to the efficient movement of cross-border goods with destinations throughout the world. This is shown in the NAFTA NET figure in Section 3, Border Transportation Infrastructure Needs (page 3-5).

Through these efforts, the region has been successful in securing state and federal funds for near-term projects. As indicated in the accompanying exhibit, these projects include, but are not limited to, SR-905, SR-7, and SR-111. Also highlighted in the exhibit are other key events currently underway or that are expected in the future such as the completion of SR-98 widening and realignment in Imperial County and other proposed improvements to the various POEs. Please see the Border Transportation Infrastructure Needs Section for additional information on specific projects.

With a new focus on safety and security at all ports of entry, the land POEs are a focal point for balancing people and goods movement with security measures. New efforts, such as the US-VISIT program pose new challenges in the construction of facilities at the border. Some of these challenges will be discussed in the Current Cross-Border Issues subsection.

Figure 1-1

TIMELINE OF EVENTS/RESPONSES

1965

- Maquiladora Program Begins

1975

- General Agreement on Trade Tariffs (GATT)

1985

- Otay Mesa POE Opens
- Intermodal Surface Transportation Efficiency Act (ISTEA)

1995

- North American Free Trade Agreement (NAFTA) Ratified
- Otay Mesa CVEF Opens
- Calexico East POE, CVEF & SR-7 Open
- TEA-21 allocates $60.5M to region
- California's Top Trade Partners:
  1 Japan 2 Mexico 3 Canada

2000

- 2 Million Trucks Cross CA Border Annually

2001

- Mexico Bacame California's Number One Trade Partner
- Construction Begins:
  - SR-905
  - SR-125 Tollroad
  - SR-78/111 Brawley Bypass
- USVISIT Program Begins
- Construction Completed:
  - SR-111
  - SR-7 Extension

2005

- I-5/Bicycle Facilities
- Otay Mesa POE Truck Routes
- Tecate CVEF
- Safe, Accountable, Flexible, Efficient Transportation Equality Act: A Legacy for Users (SAFETEA-LU)
- Construction Begins:
  - I-5/Friendship Plaza
- I-5 Realignment at San Ysidro-POE

2010+

Additional Proposals:

- Otay Mesa East POE and SR-11
- I-8/Imperial Ave.
- SR-98
- SR-115
- San Diego & Arizona Eastern Railway Improvements
- Jacumba/Jacume POE & Roadway
- NMorth/South Corridor Study (Forrester Rd.)
- Calexico/Mexicali POE & Transportation Improvements
- Andrade/Algodones POE Improvements
- CVEF at I-8/Winterhaven

CROSS-BORDER TRADE

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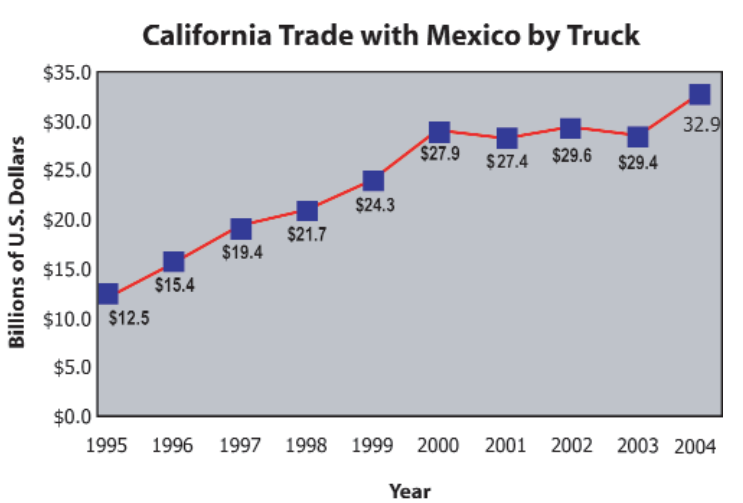
CROSS-BORDER TRADE

Overview of Cross-Border Trade

Since the passage of NAFTA, trade across California and Mexico has increased every year with Mexico surpassing Japan to become California's top export trade market in 1999. Total California exports into Mexico exceeded $15.0 billion in 2004. Total trade activity through the California POEs exceeded $32.9 billion in 2004, and it is estimated that trucks transport approximately 98 percent of the trade. The number of trucks crossing daily between California and Baja California has increased significantly, to record levels, since 1996. This increase in truck traffic is in part due to growth in the maquiladora industry manufacturing/assembly plant operations along the California and Baja California border. The accompanying exhibits provide a brief overview of key facts associated with export activity, the maquiladora industry, and trucking activity.

California Exports to Mexico

- In 1999, Mexico surpassed Japan to become California's top export trade market.
- Exports to Mexico have grown from $4.7 billion to $12.5 billion, an increase of 166% since 1995.
- The value of goods carried through California POEs has grown from $12.5 billion to $32.9 billion, an increase of 160% since 1995.
- The majority of trade is associated with the maquiladora industry, which is located within the municipalities of Tijuana, Tecate, Mexicali, and other locations in Baja California.



Source: Bureau of Transportation Statistics (BTS)

Maquiladora Growth

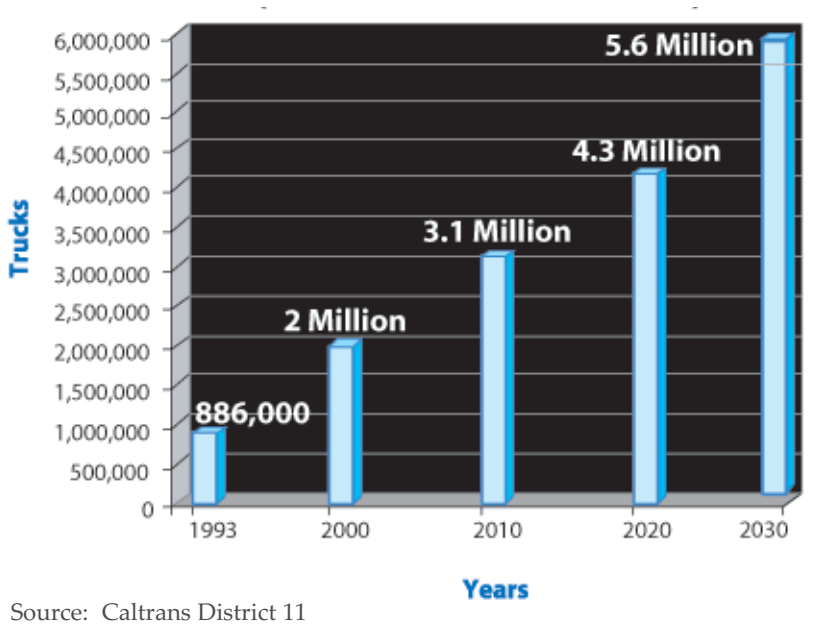
- Approximately 900 maquiladoras are located in the Baja California border region.
- The number of maquiladora plants has grown from 178 to nearly 900, representing a 400% increase increase since 1978.
- The maquiladora industry has also influenced the overall growth in employment for Baja California – over 250,000 jobs have been created since 1978.

CROSS-BORDER TRADE

Annual Truck Crossings

The majority of trade is associated with the maquiladora industry. Although some twin plant operations have relocated to the Pacific Rim, the majority of maquiladoras located within the municipalities of Tijuana, Tecate and Mexicali are producing goods of higher value, such as electronics, computers, automobiles and their components.

- The percent of trade that crosses through California POEs by truck is approximately 98%.
- Commercial trips at the three major POEs, Otay Mesa, Tecate, and Calexico East, have increased 60%, 77%, and 113%, respectively since 1997.
- In 2004, approximately 2 million trucks crossed the California/Mexico border (northbound and southbound). The busiest POE for commercial traffic is Otay Mesa with approximately 1.4 million truck crossings annually. This is followed by Calexico East POE with approximately 600,000 annual truck crossings.
- Total truck crossings are expected to increase to approximately 5.6 million trucks by 2030.



Source: Caltrans District 11

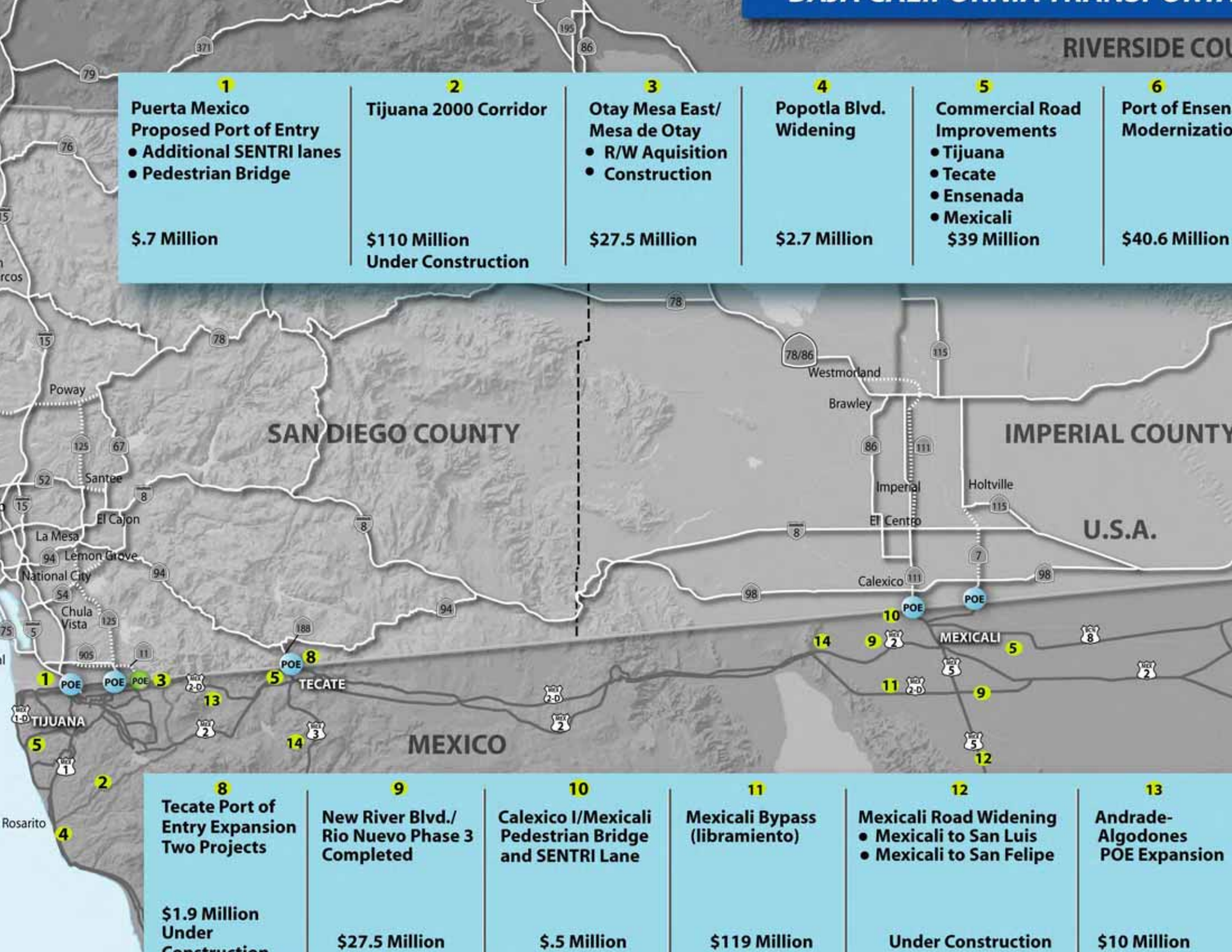
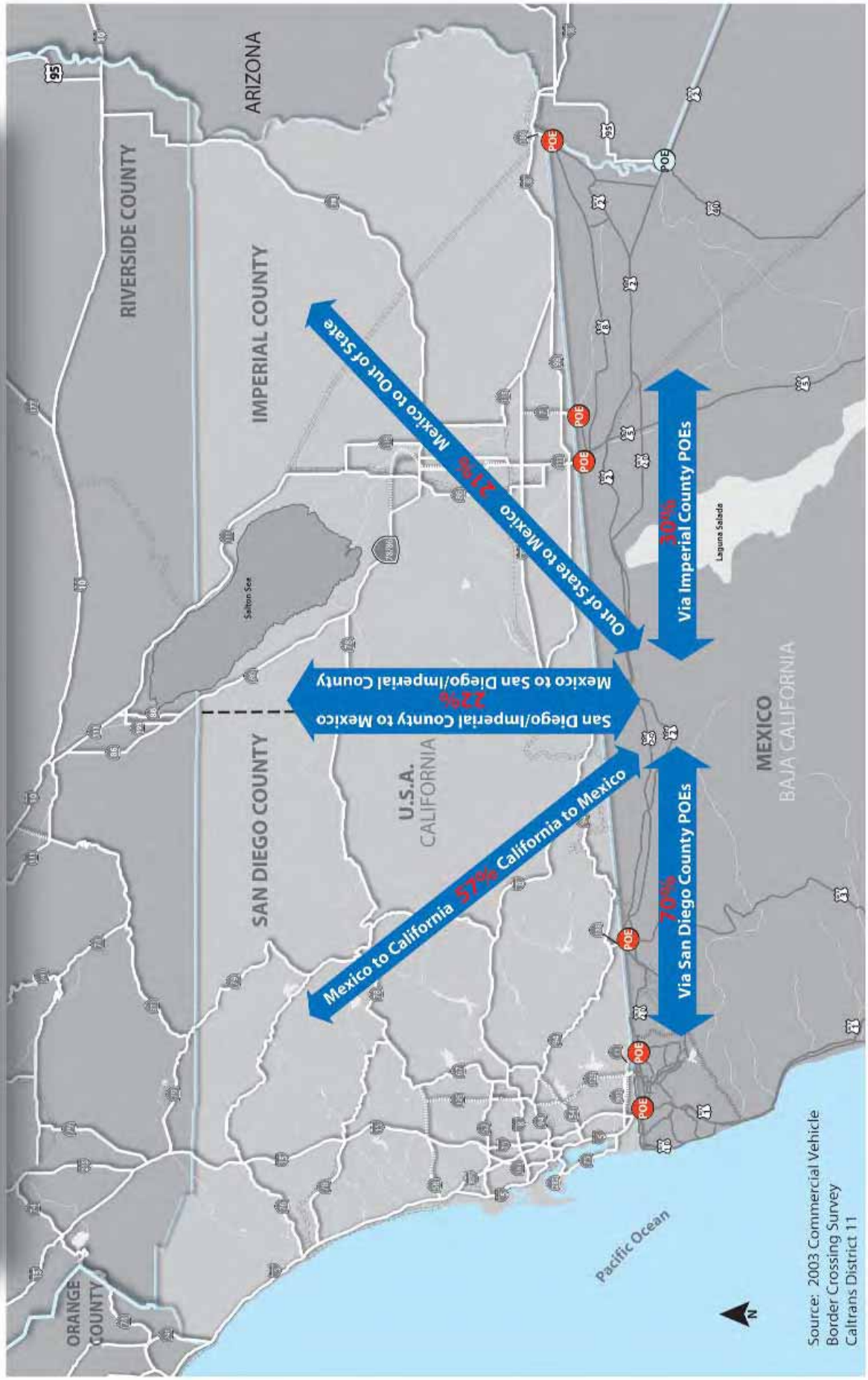

RIVERSIDE COU
1
Puerta Mexico
Proposed Port of Entry
• Additional SENTRI lanes
• Pedestrian Bridge
$.7 Million
2
Tijuana 2000 Corridor
$110 Million
Under Construction
3
Otay Mesa East/
Mesa de Otay
• R/W Aquisition
• Construction
$27.5 Million
4
Popotla Blvd.
Widening
$2.7 Million
5
Commercial Road
Improvements
• Tijuana
• Tecate
• Ensenada
• Mexicali
$39 Million
6
Port of Ensen
Modernizatio
$40.6 Million
SAN DIEGO COUNTY
IMPERIAL COUNTY
U.S.A.
MEXICO
Poway
Santee
El Cajon
La Mesa
Lemon Grove
National City
Chula Vista
Westmorland
Brawley
Imperial
El Centro
Holtville
Calexico
MEXICALI
TECATE
TIJUANA
Rosarito
POE
8
Tecate Port of
Entry Expansion
Two Projects
$1.9 Million
Under
Construction
9
New River Blvd./
Rio Nuevo Phase 3
Completed
$27.5 Million
10
Calexico I/Mexicali
Pedestrian Bridge
and SENTRI Lane
$.5 Million
11
Mexicali Bypass
(libramiento)
$119 Million
12
Mexicali Road Widening
• Mexicali to San Luis
• Mexicali to San Felipe
Under Construction
13
Andrade-
Algodones
POE Expansion
$10 Million

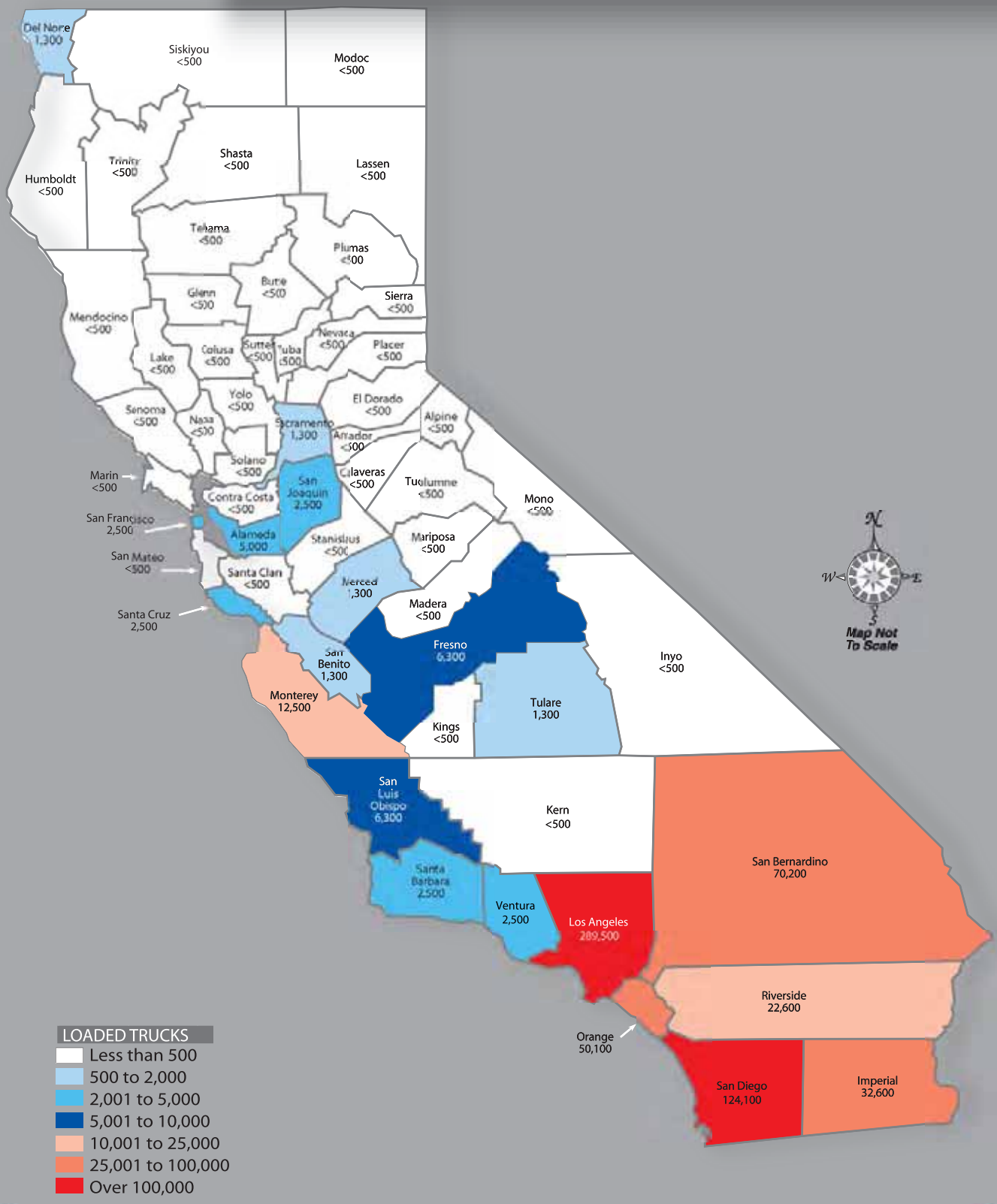
FIGURE 2-1 CALIFORNIA/MEXICO DISTRIBUTION OF TRUCKS



Source: 2003 Commercial Vehicle Border Crossing Survey
Caltrans District 11

Figure 2-2

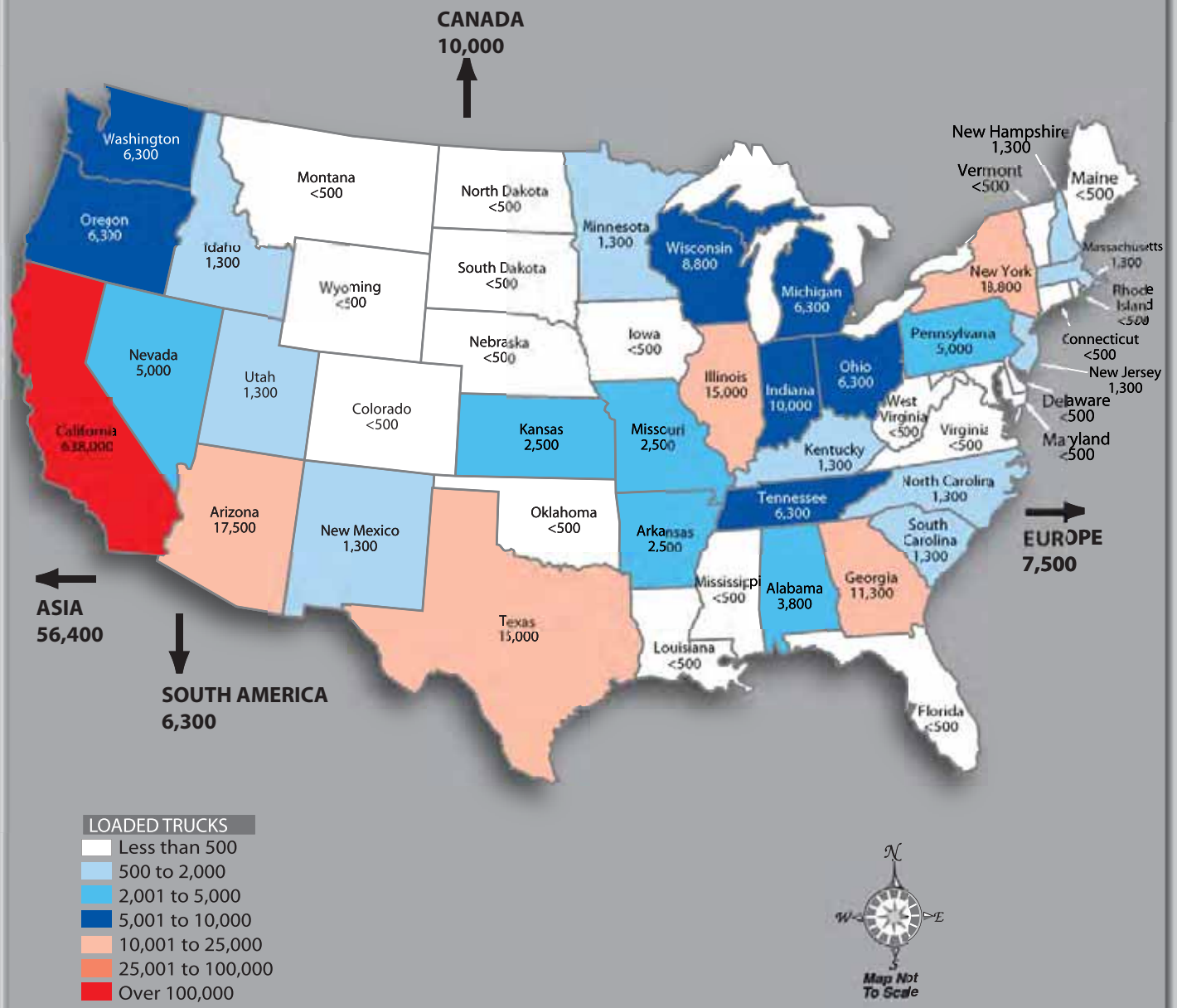
CALIFORNIA/MEXICO BORDER ANNUAL DISTRIBUTION OF LOADED TRUCKS To and From California Counties



Source: 2003 Commercial Vehicle Border Crossing Survey
Caltrans District 11

Figure 2-3

CALIFORNIA/MEXICO BORDER ANNUAL DISTRIBUTION OF LOADED TRUCKS To and From U.S. /Out of Country



Source: 2003 Commercial Vehicle Border Crossing Survey
Caltrans District 11

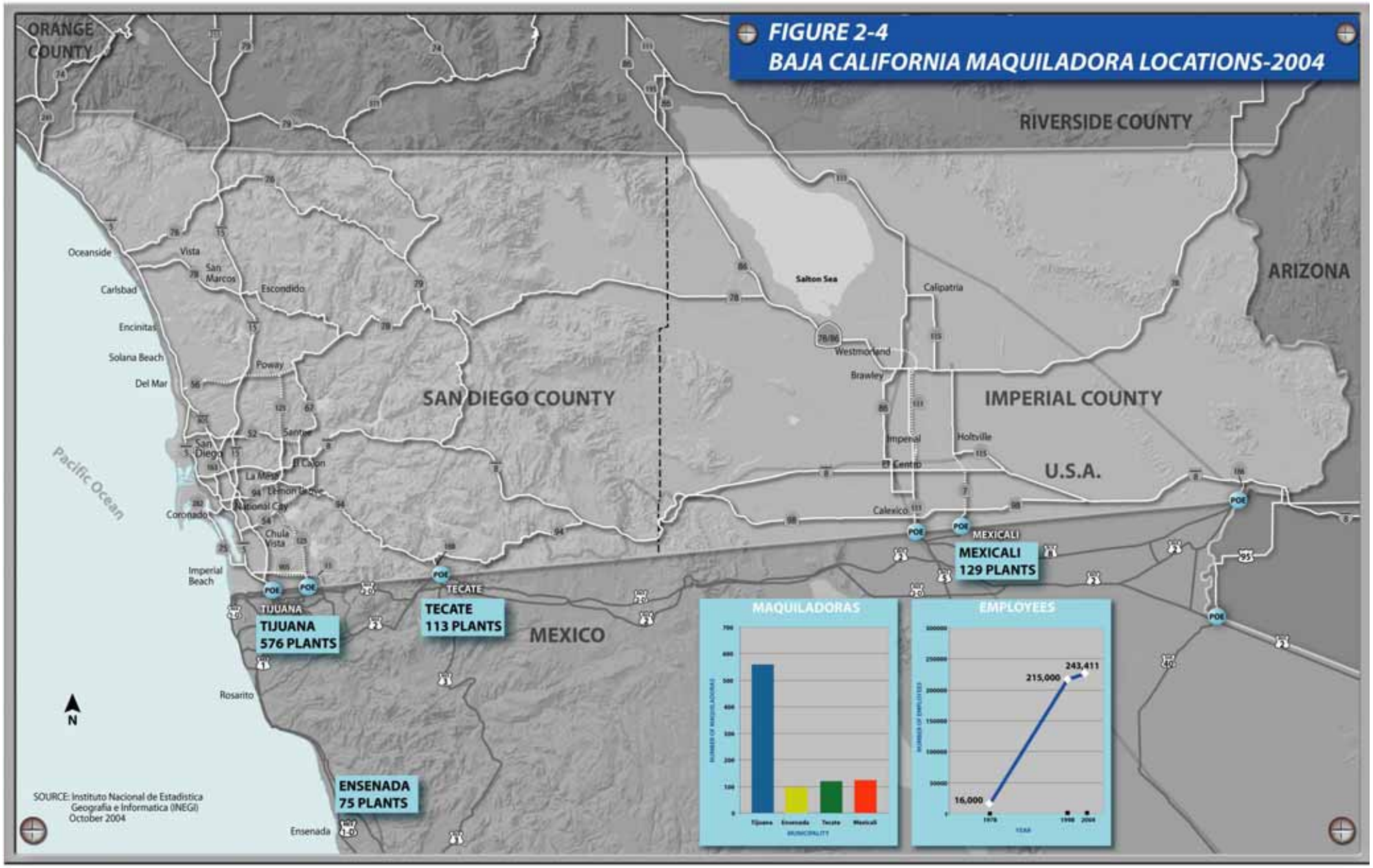


FIGURE 2-4
BAJA CALIFORNIA MAQUILADORA LOCATIONS-2004
ORANGE COUNTY
RIVERSIDE COUNTY
ARIZONA
SAN DIEGO COUNTY
IMPERIAL COUNTY
U.S.A.
MEXICO
Pacific Ocean
Salton Sea
Oceanside
Vista
San Marcos
Escondido
Carlsbad
Encinitas
Solana Beach
Del Mar
Poway
Santee
San Diego
El Cajon
La Mesa
Lemon Grove
National City
Coronado
Chula Vista
Imperial Beach
Rosarito
Ensenada
Calipatria
Westmorland
Brawley
Imperial
Holtville
El Centro
Calexico
TIJUANA
TECATE
MEXICALI
POE
TIJUANA
576 PLANTS
TECATE
113 PLANTS
MEXICALI
129 PLANTS
ENSENADA
75 PLANTS
N
MAQUILADORAS
Tijuana
Ensenada
Tecate
Mexicali
EMPLOYEES
16,000
215,000
243,411
1978
1998
2004
YEAR
SOURCE: Instituto Nacional de Estadistica Geografia e Informatica (INEGI) October 2004

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BORDER TRANSPORTATION INFRASTRUCTURE NEEDS

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BORDER TRANSPORTATION INFRASTRUCTURE NEEDS

Cross-border activity contributes significantly to the California and Baja California region including the creation of new jobs and attraction of new industries. These benefits have also translated to several challenges to the land POEs in the form of increased congestion and longer wait times for both passenger and commercial vehicles. Responding to these challenges, Caltrans has been successful in identifying key projects that will have the greatest effect on reducing traffic congestion and improving existing deficiencies. By setting investment priorities devoted to improving transportation conditions along the border, these critical projects can be realized. The following sections provide a comprehensive list of ongoing and proposed projects devoted to improving movement, access, and safety along the California and Baja California border.

Leading this discussion under *Current and Near Term Projects*, are Caltrans' identified projects. The total cost of the sixteen projects throughout San Diego and Imperial Counties is approximately $1.6 billion. As indicated in the following table, not all projects are fully funded and there remains a total shortfall of between $612.0 - $753.0 million. Despite the remaining shortfalls, Caltrans is devoted to working together with local, regional, state, and federal agencies to identify the financial resources needed to close the shortfall gap.

As the region continues to grow, forecasts suggest that both passenger and commercial vehicle crossings will nearly double at all POEs along the California and Baja California border. With this growth the need for new and/or improved transportation facilities becomes ever more important. The section *Additional Proposals* provides a list of future transportation proposals identified by Caltrans to address the surge in population and transportation movement along the border.

The following table provides information on project costs, committed funding and funding shortfalls for each project or proposal.

Figure 3-1

NEAR-TERM PROJECT FUNDING SUMMARY

SAN DIEGO COUNTY PROJECTS	PROJECT COST	PROGRAMMED FUNDING	SHORTFALL
I-5 San Ysidro Project	$12.0-$70 million	$12.0 million	$0.0-58.0 million
I-5 Friendship Plaza	$1.4 million	$1.4 million	$0.0
I-5 San Ysidro Bicycle Facilities	$1.5 million	$.2 million	$1.3 million
SR-905 (Phase 1)	$355.0 million	$232.0 million	$123.0 million
SR-125 (San Miguel Rd. to SR-54)	$138.0 million	$138.0 million	$0.0
SR-125 (SR-905 to San Miguel Rd.)	$400.0 million	$400.0 million	$0.0
SR-11	$200.0-$260.0 million	$8.0 million	$192.0-252.0 million
Otay Mesa POE Truck Routes	$22.9-25.9 million	$1.7 million	$21.2-24.2 million
Tecate CVEF	$18.0 million	$18.0 million	$0.0
SUBTOTAL	$1,148.8-$1,269.8 million	$811.3 million	$337.5-$458.5 million

IMPERIAL COUNTY PROJECTS	PROJECT COST	PROGRAMMED FUNDING	SHORTFALL
SR-78/111 Brawley Bypass	$156.0 million	$73.6 million	$82.4 million
I-8/Imperial Avenue	$39.2 million	$4.9 million	$34.3 million
SR-98 Corridor (West Project)	$19.0 million	$4.4 million	$14.6 million
SR-98 Corridor (East Project)	$64.0 million	$15 million	$49 million
SR-115	$56.0-$76.0 million	$0.0 million	$56.0-$76.0 million
CVEF at I-8/ Winterhaven	$40.0 million	$1.8 million	$38.2 million
SUBTOTAL	$374.2-$394.2 million	$99.7 million	$274.5-$294.5 million

GRAND TOTAL	$1,523.0 -$1,664.0 million	$911.0 million	$612.0-$753.0 million

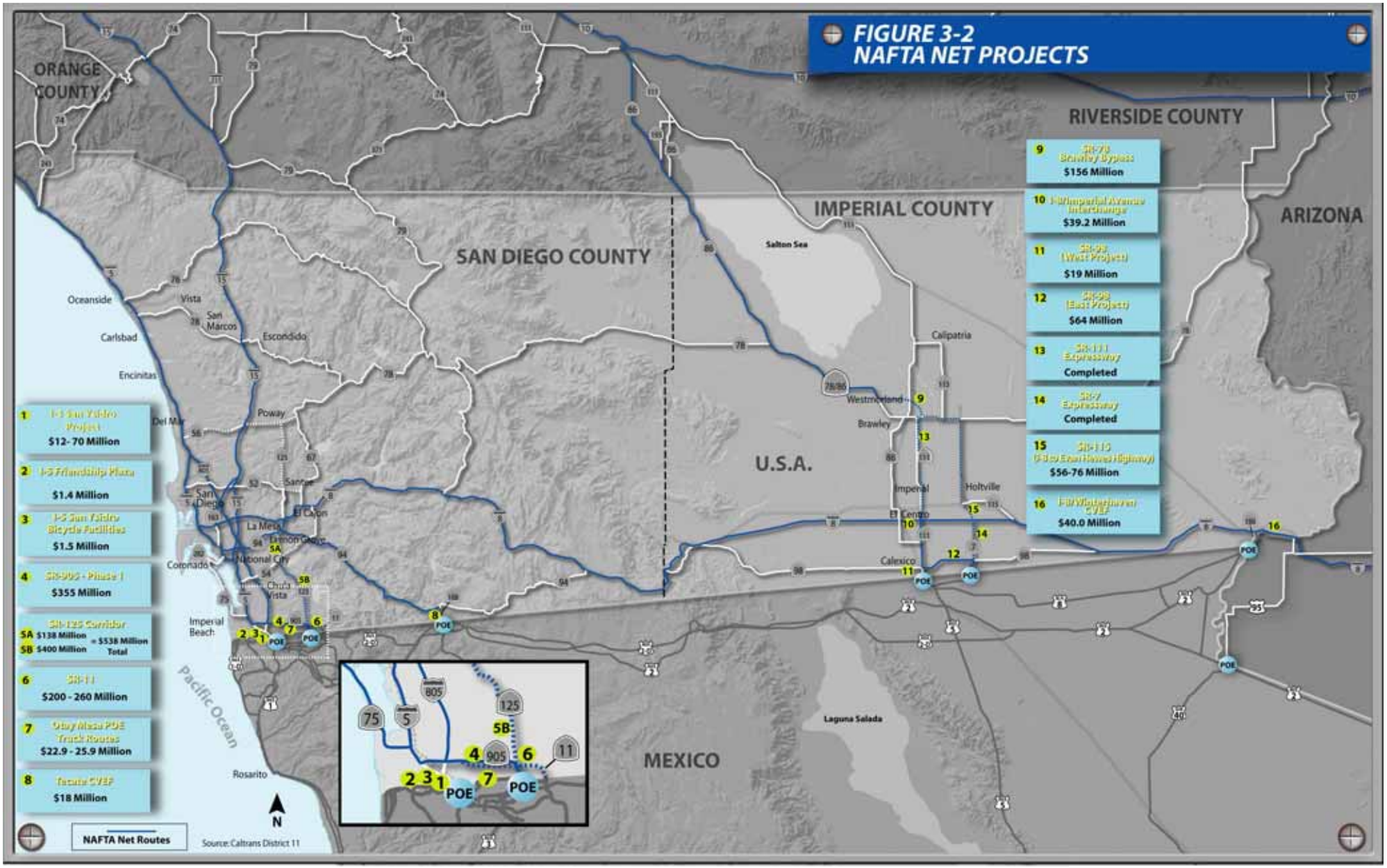
FIGURE 3-2
NAFTA NET PROJECTS
ORANGE COUNTY
RIVERSIDE COUNTY
IMPERIAL COUNTY
SAN DIEGO COUNTY
ARIZONA
U.S.A.
MEXICO
Salton Sea
Laguna Salada
Pacific Ocean
Oceanside
Carlsbad
Encinitas
Del Mar
Vista
San Marcos
Escondido
Poway
Sorrento
San Diego
El Cajon
La Mesa
Lemon Grove
National City
Coronado
Chula Vista
Imperial Beach
Rosarito
Calipatria
Westmorland
Brawley
Imperial
El Centro
Holtville
Calexico
POE
1 I-5 San Ysidro Project
$12- 70 Million
2 I-5 Friendship Plaza
$1.4 Million
3 I-5 San Ysidro Bicycle Facilities
$1.5 Million
4 SR-905 - Phase 1
$355 Million
SR-125 Corridor
5A $138 Million
5B $400 Million
= $538 Million Total
6 SR-11
$200 - 260 Million
7 Otay Mesa POE Truck Routes
$22.9 - 25.9 Million
8 Tecate CVEF
$18 Million
9 SR-78 Brawley Bypass
$156 Million
10 I-8/Imperial Avenue Interchange
$39.2 Million
11 SR-98 (West Project)
$19 Million
12 SR-98 (East Project)
$64 Million
13 SR-111 Expressway
Completed
14 SR-7 Expressway
Completed
15 SR-110 (I-8 to Evan Hewes Highway)
$56-76 Million
16 I-8/Winterhaven CVEF
$40.0 Million
NAFTA Net Routes
Source: Caltrans District 11
N

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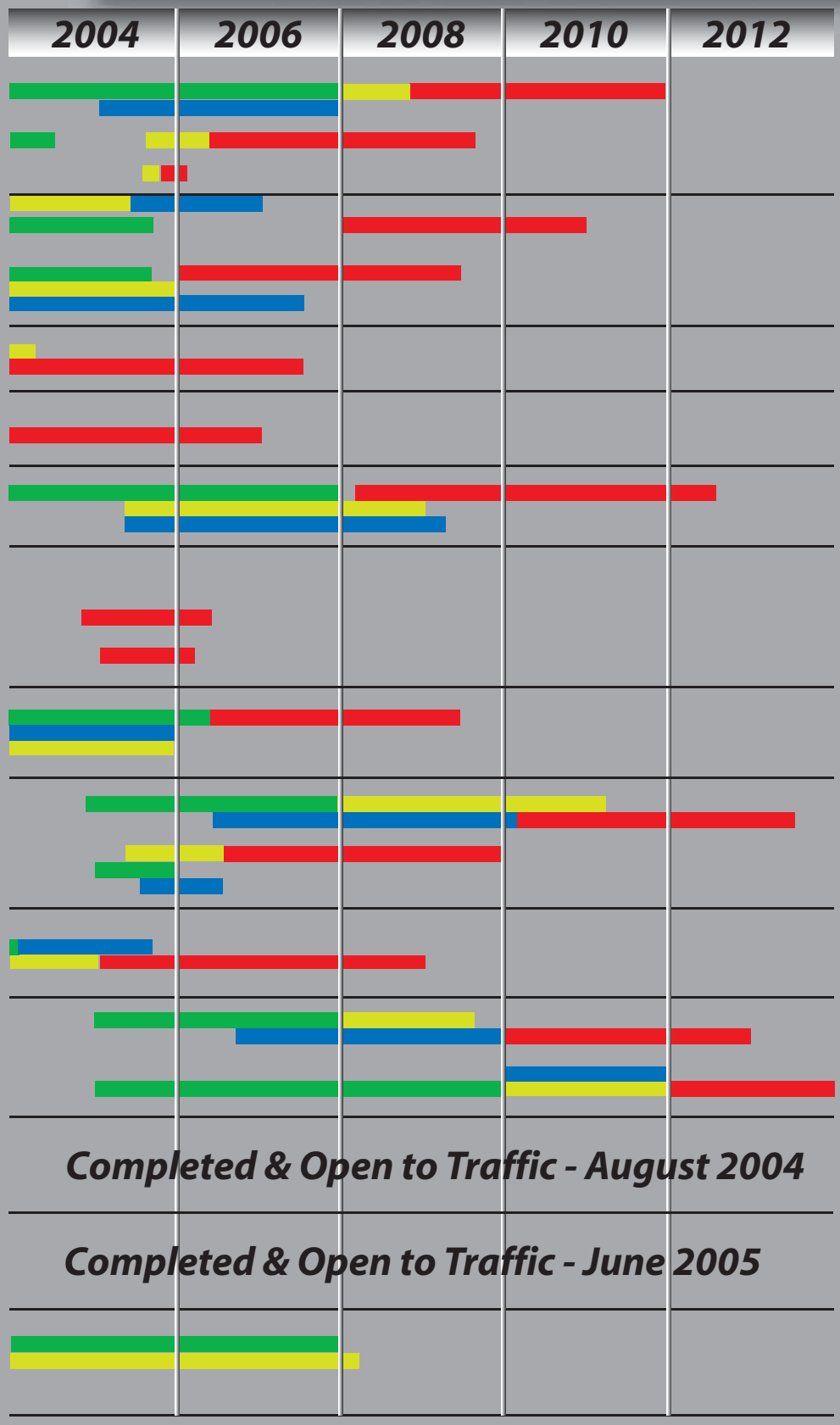
Figure 3-3

BORDER PROJECTS MASTER SCHEDULE



ENVIRONMENTAL RIGHT OF WAY DESIGN CONSTRUCTION

*Final completion is pending based on the future availability of funds.

CURRENT AND NEAR-TERM PROJECTS - INTRODUCTION

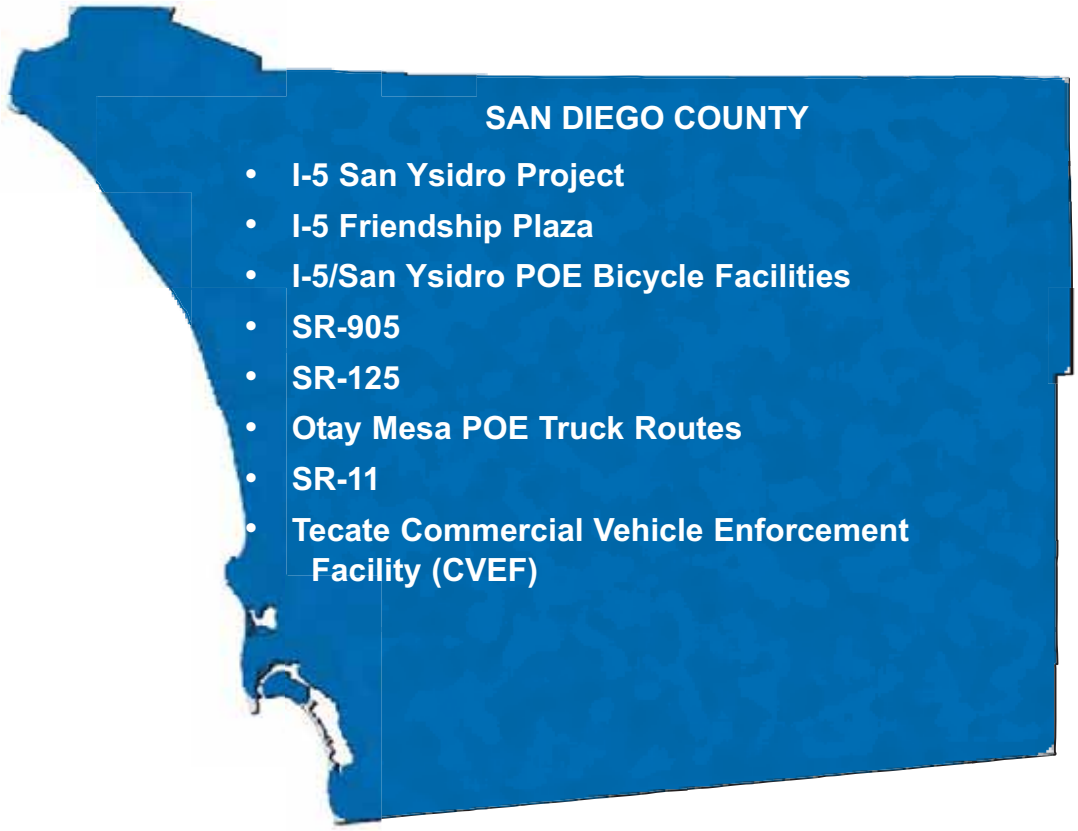
In 1993, Caltrans and partner agencies, in response to provisions in ISTEA, identified the NAFTA Net. This task was key to enhancing the region's position for obtaining financial support for border transportation related projects. This network of interstate and state routes was deemed critical for the efficient movement of goods and services from the international border region through California, and beyond (see map NAFTA Net Projects on page 3-5). The NAFTA Net is characterized as the transportation network which links the POEs and border regions to the existing transportation system with the objectives of:

- facilitating and increasing trade (goods, services, and information)
- ensuring a safe cross-border trucking industry
- improving the multi-modal transportation network leading to the major international border crossings

This section highlights 16 projects that are a part of the NAFTA Net in both San Diego and Imperial Counties. The dollar investment for these projects totals approximately $1.6 billion, with a wide spectrum of funding resources including state, federal, and local funds. The project fact sheets provide detailed information on project description, project goals, schedule, and funding estimates.

OTAY MESA SOUTHBOUND TRUCK ROUTE

CURRENT AND NEAR-TERM PROJECTS



SAN DIEGO COUNTY

- I-5 San Ysidro Project
- I-5 Friendship Plaza
- I-5/San Ysidro POE Bicycle Facilities
- SR-905
- SR-125
- Otay Mesa POE Truck Routes
- SR-11
- Tecate Commercial Vehicle Enforcement Facility (CVEF)

I-5 SAN YSIDRO PROJECT

The Project

The U.S. General Services Administration (GSA) has proposed improving the San Ysidro Port of Entry (POE) to provide for the increasing level of congestion this POE experiences. The GSA environmental study examines increasing the inspection lane capacity to reduce border waits. The I-5 Realignment at San Ysidro POE project is proposed near the San Ysidro POE in San Diego County. This project will provide the necessary transportation improvements to support the POE expansion.

The proposed realignment of I-5, as it approaches a new POE facility, has two configurations.

- The Hook Alternative: This alternative requires a right turn immediately south of Camino de la Plaza and travels west for approximately 1/4 mile in the El Chaparral area (U.S. side).

- The Straight Alternative: This alternative requires the realignment of I-5 to the west of the I-5 and I-805 split, new bridge construction and reconstruction of Camino de la Plaza.

Southbound bicycle and bus lanes will be added to facilitate crossings. This service will be the first one along the entire Southwest Border.

Benefits

The San Ysidro POE is the busiest land border crossing in the world. This project promises to help reduce border waits for commuters and others, which currently averages 30-45 minutes on weekdays and up to two hours on weekends.

Under Section 110 of the Immigration and Naturalization Service (INS), GSA will begin performing southbound vehicle inspections in the near future. By providing additional southbound lanes, bicycle and bus lanes, and SENTRI lanes, delays will be decreased.

Congestion Relief

On a daily basis, nearly 90,000 vehicles (45,000 each direction) crossed the San Ysidro POE last fiscal year. This figure is expected to climb to nearly 120,000 vehicles by the year 2010. This is in addition to the nearly 15 million pedestrians and 210,000 buses that crossed at the POE in both directions last fiscal year. This project is expected to help improve existing as well as future traffic operations in this area.

Cost and Schedule

The cost estimates for this project vary from $12 million to $70 million depending on the alternative chosen. To date, nearly $12 million has been identified for the highway portion of the project.

The federal environmental draft document is expected to be completed by January 2007, with construction occurring over a four-year period from April 2008 to 2012.

Issues

Issues include the state budget shortfall, budgetary constraints for this project as well as the need for U.S. Congressional approval for improvements to the POE. After reorganization, the federal government is moving forward with meetings planned to resolve issues with POE services. The type of improvements selected for the POE will determine what is feasible regarding state highway improvements. The options available for the state highway element will be determined by the final decision.

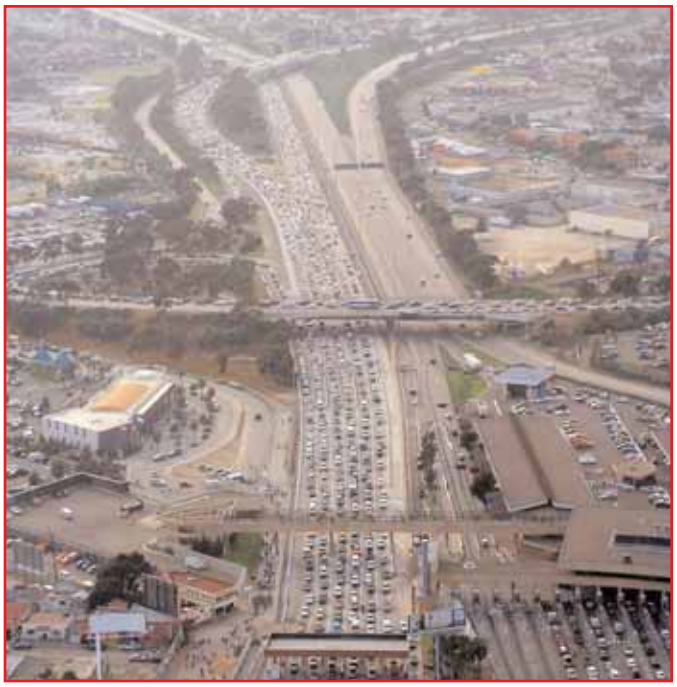
I-5 SAN YSIDRO PROJECT

Our Partners

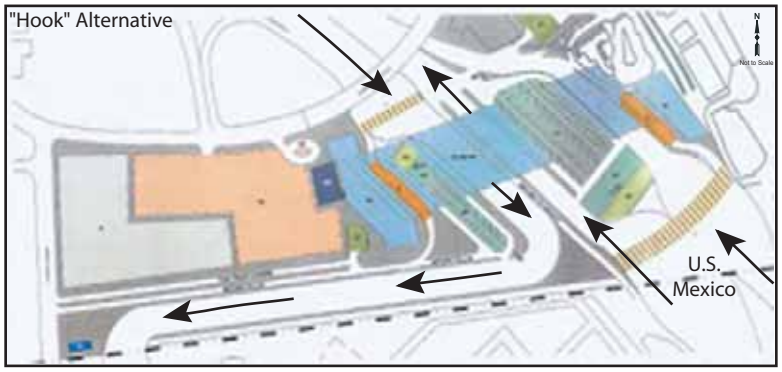
Caltrans is working closely with the GSA, the Federal Highway Administration (FHWA), the City of San Diego and the federal, state and local Mexican governments on this project.

Community Involvement

Caltrans is continuing to meet with government agencies at all levels to determine the level of support for the project. The GSA and Caltrans continue to make joint presentations to community groups and chambers of commerce as options are considered.



EXISTING SAN YSIDRO POE



SAN YSIDRO POE ALTERNATIVE

I-5/FRIENDSHIP PLAZA

The Project

The I-5/Friendship Plaza Project is adjacent to Interstate 5 in San Ysidro. More than 20,000 pedestrians and bicyclists travel through this area on a daily basis, crossing between California and Baja California, Mexico. The project will vastly improve the circulation of all types of traffic in this area and will offer a visual and cultural centerpiece named "Friendship Plaza/La Plaza de La Amistad" as a gateway between the two countries. This unique gateway will include a bus transit center, new landscaping and irrigation, stained concrete walkways, improved disability access, and a bicycle parking area. It will also feature a colorful graphic walkway that shows the El Camino Real from the tip of Baja California to the San Francisco Bay Area.

The project also includes the striping of bicycle lanes, sidewalk widening, and railing on the Caminoes Way overcrossing at I-5 connecting Friendship Plaza/bike parking to the trolley station/bike parking.

Benefits

Besides serving as a gateway between California and Baja California, the project will improve traffic circulation, as well as safety, at the POE.

Congestion Relief

The San Ysidro POE has the highest crossing volume of any POE in the world. The project will provide better circulation for motorists, bicyclists, and pedestrians.

Project Limits

The construction limits stretch about 300 meters (900 feet) between southbound I-5 on the east and along Caminones Way on the west.

Cost and Schedule

The I-5/Friendship Plaza Project, with a price tag of $1.4 million, is funded though the state's allocation of Transportation Enhancement Act (TEA) dollars. Construction began in March 2005 with the majority of the improvements completed in October 2005. Final completion is expected in March 2006

Our Partners

Caltrans is working on this project in partnership with the San Diego Chamber of Commerce, the San Ysidro Transit Collaborative, the City of San Diego, and the Metropolitan Transit Development District Board (MTDB).

Community Involvement

The project has had numerous community and agency reviews, including those performed by the San Diego Chamber of Commerce, the San Ysidro Transit Collaborative, the U.S. Border Patrol, the City of San Diego, the Metropolitan Transit Development District Board, as well as local and state elected representatives.

I-5 SAN YSIDRO BICYCLE FACILITIES

The Project

The bicycle facilities project encompasses four parts:

1. The construction of a southbound bicycle path. The interim four foot bicycle path along the southbound shoulder separated by a barrier was constructed. Long term, the bicycle path would extend from the intersection of I-5 and the Camino de la Plaza off-ramp through the POE.
2. A bicycle lane through the northbound check-point at the POE, terminating at San Ysidro Boulevard, was constructed.
3. Bicycle parking would be created in proximity to the San Ysidro Trolley Station.
4. Additional related improvements.

Benefits

The implementation of additional security measures at the POE immediately after the terrorists incidents on September 11, 2001 increased wait times for motorized vehicles dramatically. Travelers discovered that bicycle trips allowed for swifter passage to and from Mexico. The number of bicycle rental shops on both sides of the border crossing has increased significantly indicating additional demand for this mode of traversing the border.

Congestion Relief

On a daily basis, nearly 90,000 vehicles (45,000 each direction) crossed the San Ysidro POE last fiscal year. This figure is expected to climb to nearly 120,000 vehicles by the year 2010. By providing improvements for alternative means of crossing the border, the potential to decrease single passenger auto trips and vehicle wait times is anticipated.

Cost and Schedule

The total cost of the project is estimated at $1.5 million. TransNet funds in the amount of $200,000 will go towards the total bicycle parking costs of $500,000. The remaining portion is funded by the state's transportation enhancement program. Construction is anticipated to begin in June 2006 with completion planned for Spring 2010. Currently, MTDB is completing a separate project, which will redesign the San Ysidro Trolley Station.

Issues

This multi-agency, multi-jurisdictional project presents some challenging issues including how to raise the level of aesthetics and integrate design concepts between projects, as well as timing and coordination. Caltrans, the City of San Diego and MTDB are working closely together on the transfer of funds, timing of surveys and conceptual design phases, preliminary design and final project elements.

Our Partners

Caltrans is working closely with SANDAG, the City of San Diego, MTDB, and the GSA on this project. Other stakeholders include the Border Patrol, the CHP, the San Diego Police Department, the San Ysidro Chamber of Commerce, the Mexican Consulate, and the San Ysidro Transportation Collaborative.

Community Involvement

The participation of local community groups has been solicited. Meetings of the Transportation Collaborative, which includes staff representatives of the area elected officials, are open to the public.

BICYCLE RENTAL BOOTH

STATE ROUTE 905

The Project

The State Route 905 project calls for the construction of a six-lane freeway from the Otay Mesa POE at the International Border to I-805 in San Diego County. The project will include interchanges with local streets and a freeway-to-freeway interchange at SR-125. It will also provide the right-of-way for an ultimate eight-lane facility.

Benefits

The SR-905 project will complete a critical link in the region's international border trade corridor. About 39,600 to 60,400 vehicles per day travel on various segments of SR-905/Otay Mesa Road between I-805 and the border. About 15 percent of those vehicles are trucks. This project promises to accommodate future growth, estimated at 80,000 to 153,000 vehicles per day by 2025.

Congestion Relief

The new highway will not only improve mobility for border trade traffic by providing for efficient movement of goods and services through the Otay Mesa POE, but it will also benefit local and regional travelers.

Cost and Schedule

A Final Environmental Initial Statement/Report has been completed for the project, and the Record of Decision was approved in September 2004.

The portion of the project from the Otay Mesa POE to Airway Road was completed in 2005. Construction of Phase 1, six lane freeway from Airway to just east of the 805/905 interchange, is schedule to begin in late 2006 and completed by late 2010.

The estimated cost of Phase 1 of the project is $355 million. To date, a total of $232 million has been programmed, which covers environmental, design, right-of-way and a portion of the construction costs.

Additional phases are planned including:
Phase 2 Interchange at I-805/SR-905
Phase 3 Interchange at SR-905/SR-125
Phase 4 Interchange at SR-905 and Heritage Road.

While Phase 4 construction is funded via a developer agreement, phase 2 and 3 are unfunded at this time.

Issues

Caltrans continues to seek the remaining funds required for completion of this project from a variety of sources, such as: TEA-21 reauthorization, the extension of the Transnet sales tax, and the federal Borders & Corridors Program.

Our Partners

Caltrans is working closely with the Federal Highway Administration, the City of San Diego, the Otay Mesa Chamber of Commerce and the San Diego Association of Governments (SANDAG) on this project.

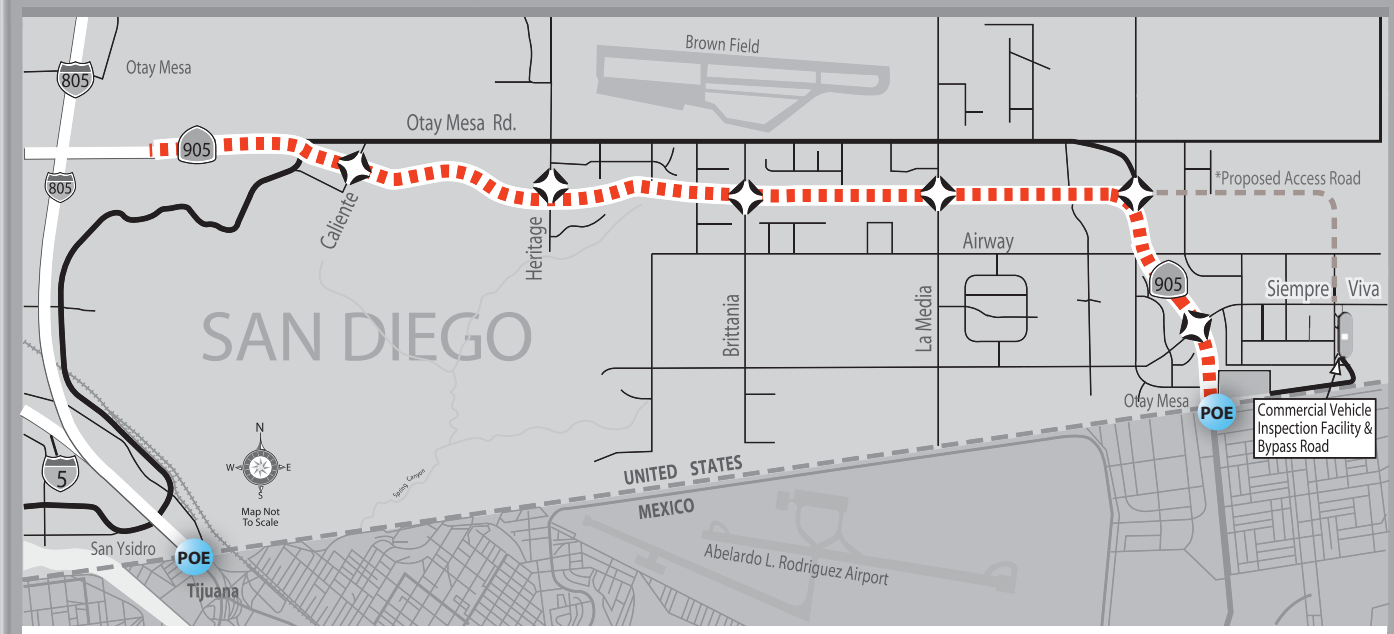
Community Involvement

The SR-905 project has earned wide support from the State of Baja California, Mexico, the cities of San Diego and Chula Vista, the international business community, trucking organizations, environmental groups and many key legislators. Caltrans will continue to work with these groups and the public as the project progresses.

CONSTRUCTION OF PHASE 1

Figure 3-4

STATE ROUTE 905



Planned Route

Proposed Interchange

STATE ROUTE 125

The Project

The State Route 125 corridor consists of three segments in San Diego County, from the international border to the State Route 52. The overall corridor plans call for the ultimate construction of a six-to-eight lane highway. The northern-most and first segment, between I-8 and SR-52, opened in 2003. The southern-most segment is the SR-125 South Toll Road, which will stretch from SR-905 near the international border to SR-54 in Spring Valley. This 11-mile four-lane freeway segment will be built by a private consortium and operated as a toll road. The middle segment of five miles of new six-lane freeway from SR-54 to SR-94 opened to traffic in 2003.

Benefits

Future traffic projections show that about 200,000 vehicles per day will travel the corridor between SR-905 and SR-54 once "build out" of the South Bay is complete. Motorists commuting through this rapidly growing region during the next decade would experience lengthy traffic delays without the construction of this facility.

Congestion Relief

The SR-125 corridor freeway projects are expected to significantly reduce the amount of traffic congestion and related accidents on local streets.

Cost and Schedule

Segment 1: (From SR-905 to SR-54) The SR-125 South Toll Road will cost about $400 million and will be designed and constructed under a franchise agreement between the State and the private consortium, California Transportation Ventures Inc. (CTV) and Macquarie Infrastructure Group. The toll road is financed by a combination of bank loans and a federal loan through the Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA). In May 2003, the consortium closed financing arrangements for the $400 million project. Construction began in the Summer of 2003 and is scheduled to open to traffic in the Fall of 2006. The portion from San Miguel Road to SR-54, which includes a freeway-to-freeway interchange between SR-54 and SR-125, is funded by a mix of federal funds and local funds from the TransNet program, and will cost $101 million. This portion is scheduled to open to motorists in Spring 2007.

Segment 2: (From SR-54 to SR-94) Construction is already underway on the segment between SR-54 and Jamacha Boulevard with completion planned for Summer 2006. This segment is fully funded. Other portions of this segment are open to the public and include a freeway-to-freeway interchange at SR-125/SR-94.

Segment 3: (From Fletcher Parkway to SR-52) This segment is completed and open to motorists.

Issues

Caltrans will aim to continue to provide the most up-to-date information to the public on construction schedules.

Our Partners

Caltrans has been working closely with CTV, SANDAG, the Federal government and community groups on these projects.

Community Involvement

Caltrans coordinated with several public agencies and land-use authorities regarding the preferred alignment of each segment. Citizens also provided input on specific mitigation proposals for the preferred alignments, through participation in various advisory groups.

SR-125 UNDER CONSTRUCTION
(SEGMENT NOW COMPLETE)

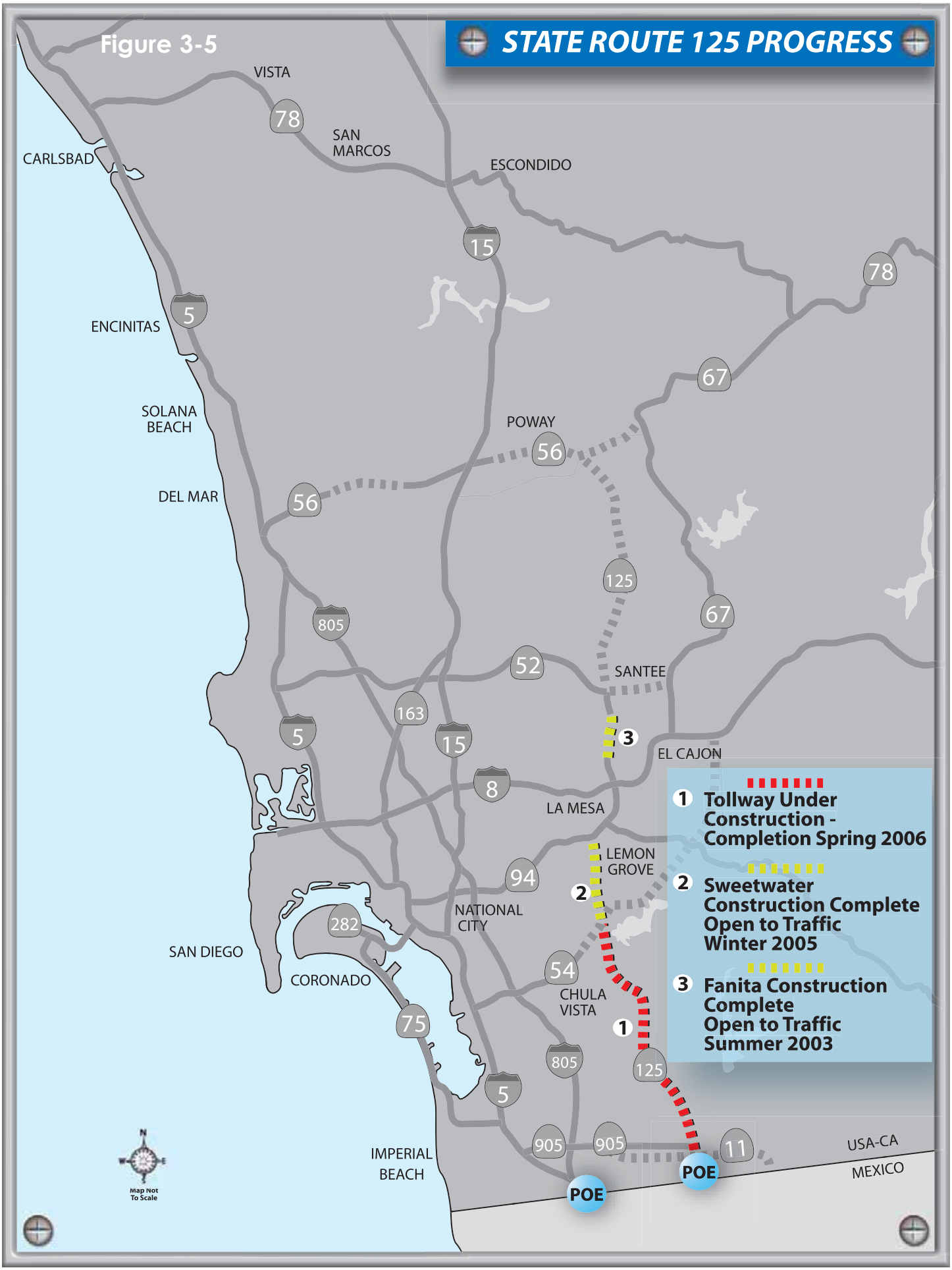


Figure 3-5
STATE ROUTE 125 PROGRESS
VISTA
78
SAN MARCOS
CARLSBAD
ESCONDIDO
15
78
5
ENCINITAS
67
SOLANA BEACH
POWAY
56
DEL MAR
56
125
805
67
52
SANTEE
163
5
15
3
EL CAJON
8
LA MESA
LEMON GROVE
94
2
NATIONAL CITY
282
SAN DIEGO
54
CORONADO
CHULA VISTA
1
75
805
125
5
905
905
11
IMPERIAL BEACH
POE
POE
USA-CA
MEXICO
Map Not To Scale
1 Tollway Under Construction - Completion Spring 2006
2 Sweetwater Construction Complete Open to Traffic Winter 2005
3 Fanita Construction Complete Open to Traffic Summer 2003

OTAY MESA TRUCK ROUTE PROJECTS

As noted in the introduction to this document, truck trips at the major commercial ports of entry have increased dramatically since 1997. The Otay Mesa POE is the largest commercial crossing on the California/Mexico border, handling the third highest volume of trucks and dollar value of trade of all US/Mexico land border crossings.

Caltrans traffic modeling projects continued growth of truck traffic at this border crossing facility. Despite its importance, the POE remains connected to the California highway system by a four-lane city street operating at three times its capacity. To meet current and future truck traffic at the Otay Mesa POE, Caltrans has identified the need for improved truck routes to and from this important port of entry.

Southbound Truck Routes

Changes in Mexican policy require the inspection of unladen trucks entering Mexico. This has caused significant southbound queuing in the Otay Mesa area, impacting local traffic and access to commercial businesses. The current one single lane route is accessed using City of San Diego streets including La Media Road and Drucker Lane. Caltrans is concerned that queuing will cause significant congestion on the new SR-905 freeway even after completion of this facility.

A short-term project would construct the following facilities: an additional truck lane on La Media Road from Siempre Viva Road to border frontage road; an additional truck lane on the border frontage road from La Media Road to the Port of Entry; and would complete operational improvements to intersections at La Media Road and Airway Road as well as at La Media Road and Siempre Viva Road.

Long term improvements include the following: constructing a new roadway and additional truck lane for the border frontage road from Britannia Boulevard to La Media Road; constructing an additional truck lane from Siempre Viva Road to the border frontage road; and constructing emergency lanes and other dedicated truck lanes (i.e. empty trucks, laden trucks) for the entire truck route.

Northbound Truck Routes

A northbound-only truck connector was completed in October 2004 and is open for traffic at the Otay Mesa POE between the Mexican export facility and the U.S. import facility. The original intent of the connector was to accommodate expansion of the "Free and Secured Trade" (FAST) program. It was determined that greater efficiency in the traffic movement and congestion relief would be achieved by accommodating empty trucks, thus allowing these trucks to bypass secondary inspection. This allows for a more efficient route through the POE for approximately one-third of all truck trips and enhances overall effectiveness of the POE facility.

Future plans call for a short-term project to construct one additional truck lane from the Mexican Export Facility to the U.S. Import Facility. Long term improvements include constructing three additional lanes connecting the two facilities.

Congestion Relief

The southbound truck route project would relieve impacts on local roads as well as assure functionality of SR-905.

A four-lane expansion of the northbound truck route would further alleviate congestion for the two-thirds of trucks, which are subject to secondary inspection at the federal facility.

OTAY MESA TRUCK ROUTE PROJECTS

Cost and Schedule

The southbound truck route project is estimated to cost $16.9 million. The City of San Diego has contributed $1.1 million and $600,000 has been provided by the State. The environmental document is in process and due to be completed by the City of San Diego in April 2006. The City of San Diego has completed designs for the Harvest Road extension and the Drucker Road expansion. Construction could begin as soon as next year. An additional $15.2 million of funding needs to be identified for completion of the overall southbound truck route plan.

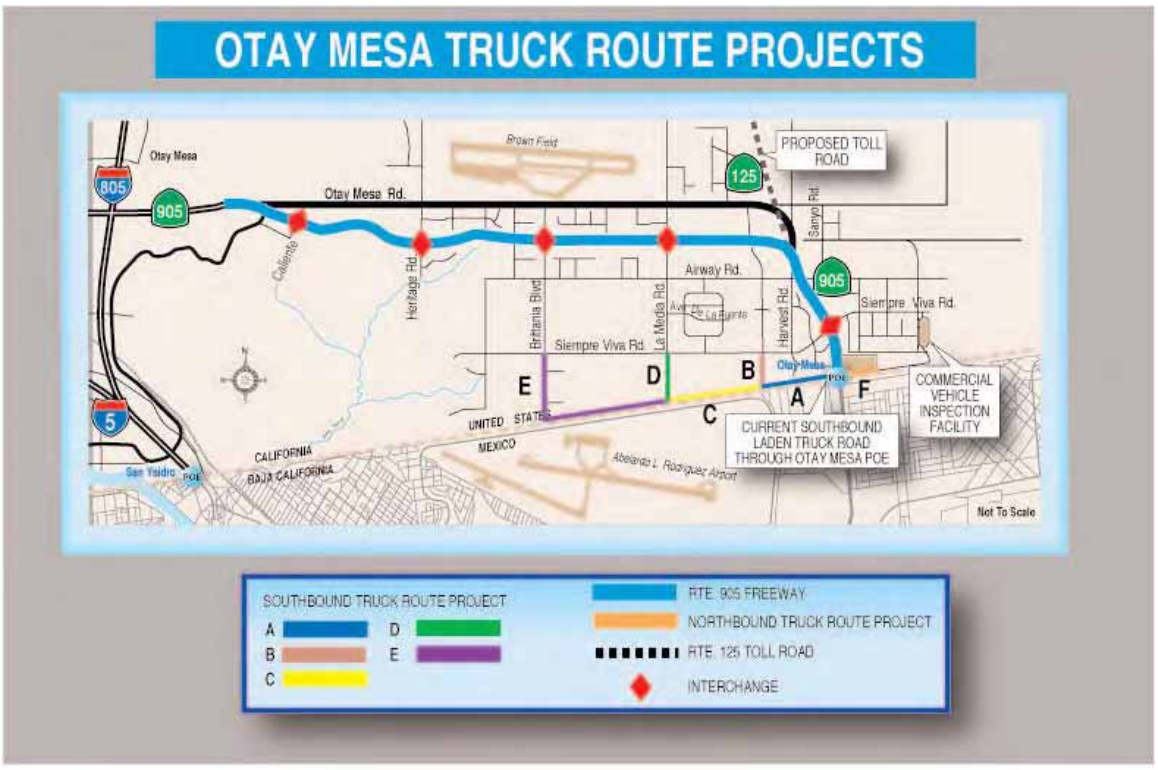
The short term improvements on the northbound truck route are projected to cost $1 million, with estimates of $5 - $8 million for phase two improvements.

Issues

Besides identifying funds for the respective project shortfalls, the project schedules are pending future fund availability.

Our Partners

Caltrans continues to work with the City of San Diego, U.S Customs and Border Protection, the U.S. General Services Administration, and local stakeholders in the planning of these projects.



STATE ROUTE 11

The Project

The State Route 11 project will consist of constructing nearly three miles of a new four-lane freeway from the proposed SR-905/SR-125 junction to the future POE at East Otay Mesa in San Diego County.

Benefits

The SR-11 project will help reduce traffic congestion at the San Ysidro and Otay Mesa POEs by providing a new means for crossing the California/Baja border. It will also provide a more efficient means of transporting goods and services from the POE north to the SR-905/SR-125 interchange. This project will connect with the Tijuana 2000 Bypass Highway in Mexico (which is currently under construction), with links to the Tijuana-Tecate and the Tijuana-Ensenada toll roads.

Congestion Relief

The SR-11 project, and the addition of a new POE, will reduce traffic at the already congested San Ysidro and Otay Mesa POEs. This will mean shorter lines and less delay to cross the border. About 25,000 vehicles a day are forecast to cross the border at the new East Otay Mesa POE by the year 2020.

Studies show that the need for this project is vital to international trade and to accommodate the projected increase from 1.3 million trucks (1999) to 2.1 million by 2010 through the Otay Mesa POE. As the existing Otay Mesa POE is the only commercial port between Tijuana, and San Diego, the SR-11 project and the new Otay Mesa East POE will not only reduce traffic congestion, but will also provide an alternate facility for commercial traffic.

Cost and Schedule

The project is currently in the environmental phase with an Environmental Impact Report/Environmental Impact Study required for project clearance. Design and right-of-way activities are estimated to take 2-3 years, with some work performed concurrent with the environmental phase and construction lasting an additional 2-3 years. The project is estimated at between $200-$260 million. The state has programmed $8.0 million to initiate the preliminary design and environmental certification process. However, because of the state's cash flow issues, the project schedule is pending the future availability of funds.

Issues

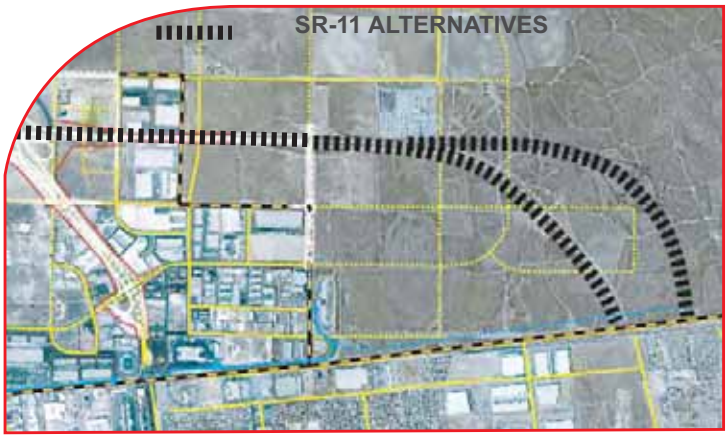
Prior to project construction, a Presidential Permit must be obtained from the federal government. Close coordination between all levels of government in both the U.S. and Mexico must continue in order to preserve right-of-way and complete the highway and POE. While STIP funding has initiated the early environmental phase and engineering studies, funding for the remaining elements of the project has yet to be identified.

Our Partners

Caltrans is working closely with the FHWA, SANDAG, the City of San Diego, GSA, the County of San Diego, the Otay Mesa Chamber of Commerce, the California Trucking Association, and the local business community.

Community Involvement

The SR-11 project has earned support from the State of Baja California, Mexico, the City of San Diego, the international business community, and trucking organizations. Caltrans will continue to work with these groups and the public as the project progresses.



STATE ROUTE 11 AND PROPOSED PORT OF ENTRY

Figure 3-6

TECATE COMMERCIAL VEHICLE ENFORCEMENT FACILITY (CVEF)

The Projects

Currently, the California Highway Patrol (CHP) must perform their commercial vehicle inspections on the shoulder portion of SR-188, with a very limited amount of space available. This project will construct a Commercial Vehicle Enforcement Facility (CVEF) near the existing Tecate POE. The CVEF will include office space for CHP staff, a truck scale, inspection bays, a truck circulation route, and parking for staff and trucks. In addition, the project will upgrade the intersection of Thing Road and SR-188.

Benefits

The CVEF will provide the CHP the ability to enforce state regulations involving size and weight violations and proper safety equipment on all commercial trucks. The facility will also allow for a better inspection of licensing and insurance requirements as NAFTA is fully implemented. Enhancement of border security is anticipated.

Congestion Relief

The intersection realignment will allow for better traffic flow and eliminate skewed road connections.

Cost and Schedule

This $18 million project is funded primarily with federal funds, including $9 million from the Border and Corridors program within TEA-21. State matching dollars are provided through SHOPP. Environmental clearance occurred in October 2005. The CVEF is scheduled to open in November 2008.

Issues

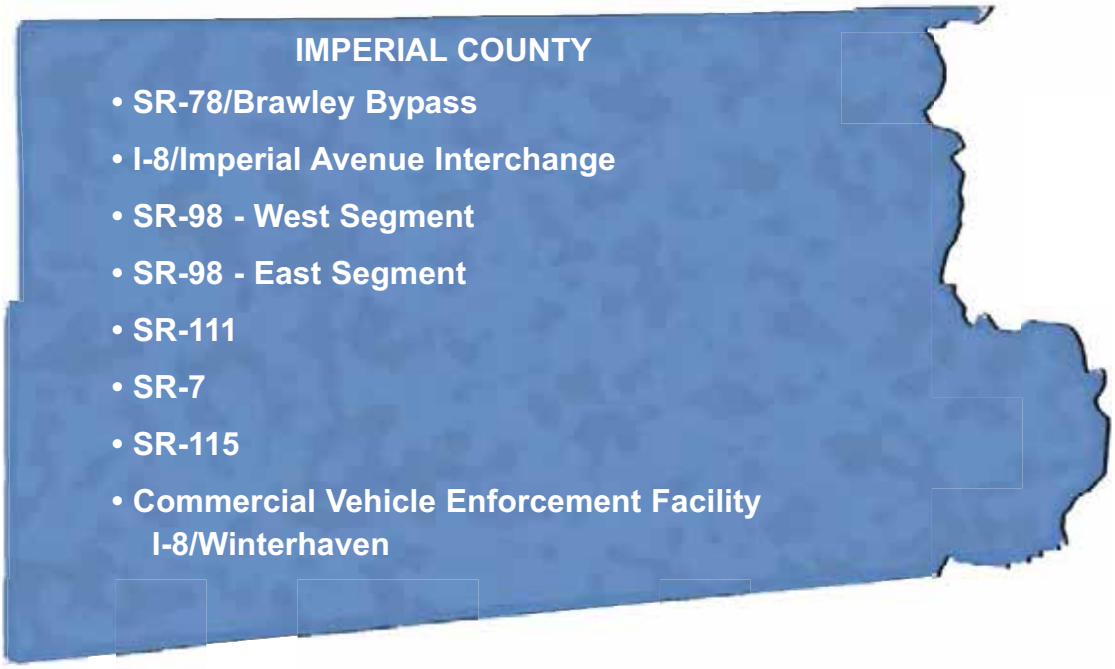
Ownership of area right-of-way needs clarification. Quick claim of some right-of-way may be necessary.

Our Partners

Caltrans is working closely with the GSA, the County of San Diego, the CHP and area planning groups.

INTERIM FACILITY

CURRENT AND NEAR TERM PROJECTS



SR-78/BRAWLEY BYPASS

The Project

The SR-78/SR-111 expressway project, more commonly known as "The Brawley Bypass," calls for the construction of a four-lane divided expressway from SR-86, north of the City of Brawley, to 1.5 miles south of the eastern junction of SR-111 and SR-78. Major features for this route include bridges at the New River and Southern Pacific Railroad crossings, a grade separated interchange at SR-111/SR-86, signalized and unsignalized intersections, and accommodations for future expansion of the Brawley Airport. The preferred route has been identified as the "Fredericks Road" alignment.

Benefits

The Brawley Bypass project will help motorists by reducing travel time through the area and improving the movement of goods and services from the California/Baja California Border to the Los Angeles basin. The Brawley Bypass would provide continuity between SR-111 and SR-86, a key facility in the International Border Trade Corridor.

Congestion Relief

Future traffic projections and growth indicate that the demands on the existing routes through Brawley will greatly increase. This project will bypass downtown Brawley, effectively reducing traffic congestion, time delays, and accidents.

Cost and Schedule

Caltrans completed a Project Study Report in March 1993. This study was requested by the City of Brawley and the California Transportation Commission to examine alternatives for an expressway bypass around Brawley. The Project Report and Final Environmental Document were approved in February 2003. The construction will occur in three stages:

- Stage 1: Mead Road to SR-78. This segment has been completed and is open to traffic.
- SR-78 to SR-111. Construction begins in November 2006 and is expected to open in mid-2008.
- SR-111 to SR-86. Construction begins in 2007, to be completed concurrently with Stage 2.

The cost for stages two and three is estimated at $156 million with $66 million programmed through the STIP. An additional $7.6 million is provided in SAFETEA-LU earmarks.

Issues

The major issue is obtaining the remaining funds necessary for project completion in addition to the $82.4 million shortfall.

Our Partners

Caltrans has gained firm support for this project from various local, regional and federal agencies, including the City of Brawley, the Imperial Valley Association of Governments (IVAG), the County of Imperial, the SCAG, and the FHWA.

Community Involvement

Various agencies, organizations, and individuals have been involved in the development of this project since 1996. The Draft Environmental Document was circulated and a public hearing was held in 2001.

BRAWLEY BYPASS ALIGNMENT

I-8 IMPERIAL AVENUE INTERCHANGE

The Project

The project will reconstruct the interchange at I-8 and Imperial Avenue in El Centro. Currently, there is no access on I-8 to the southern sections of Imperial Avenue. The reconstruction project will install two ramps that will provide direct access to the southern sections of Imperial Avenue from I-8. The proposed interchange improvement is one of the most highly anticipated projects for Imperial County.

Benefits

The current intersection is deficient in terms of operations and traffic safety. This project would reduce traffic congestion at the Imperial Avenue and 4th Street interchanges on I-8. The circuitous route taken by motorists on city streets and county roads would be eliminated with a redesigned interchange and will provide access to future development south of I-8.

Congestion Relief

The interchange at Imperial Avenue and I-8 experiences significant congestion in the morning and the afternoon hours. Currently, 16,000 to 27,000 vehicles per day use this section on I-8. By 2025, daily usage is projected to almost double to between 31,000 and 48,000 vehicles.

Cost and Schedule

The total cost of the project is estimated at $39.2 million, inclusive of capital, support, and right-of-way costs. $1.4 million of State Transportation Improvement Program (STIP) funds have been programmed for the environmental and design phases. There is also $2.3 million of STIP and $1.2 million of Federal RSTP funds programmed for right of way acquisition. There is currently a programming shortfall of $34.3 million.

The environmental phase has been completed. The design phase has been suspended pending future programming. Right of way acquisition of critical parcels is on going to the extent that current funds permit. The construction schedule is based upon future availability of funds.

Issues

The project faces a shortfall of $34.3 million.

Our Partners

Caltrans continues to work with the City of El Centro, the County of Imperial, and IVAG on this project.

Community Involvement

A community outreach program was conducted during the Project Study Report.

CURRENT CONFIGURATION

STATE ROUTE 98 (West Project)
David Navarro Avenue to SR-111

The Project
The proposed project will widen approximately one mile of SR-98 from two-lanes to four-lanes in the City of Calexico. The widening would occur between David Navarro Avenue and SR-111. Also proposed in this project is a storm drain system from Kloke Road to Lee Road and the construction of sidewalks along both sides of SR-98. The intersection at SR-98/Lee Road will be realigned opposite from the SR-98/V.V. Williams intersection and the entire intersection will be signalized and illuminated.

Benefits
Traffic forecasts indicate that widening from two to four lanes is needed in order to accommodate the anticipated 45% increase in traffic by 2020. The project will also increase pedestrian safety as well as decrease surface street flooding.

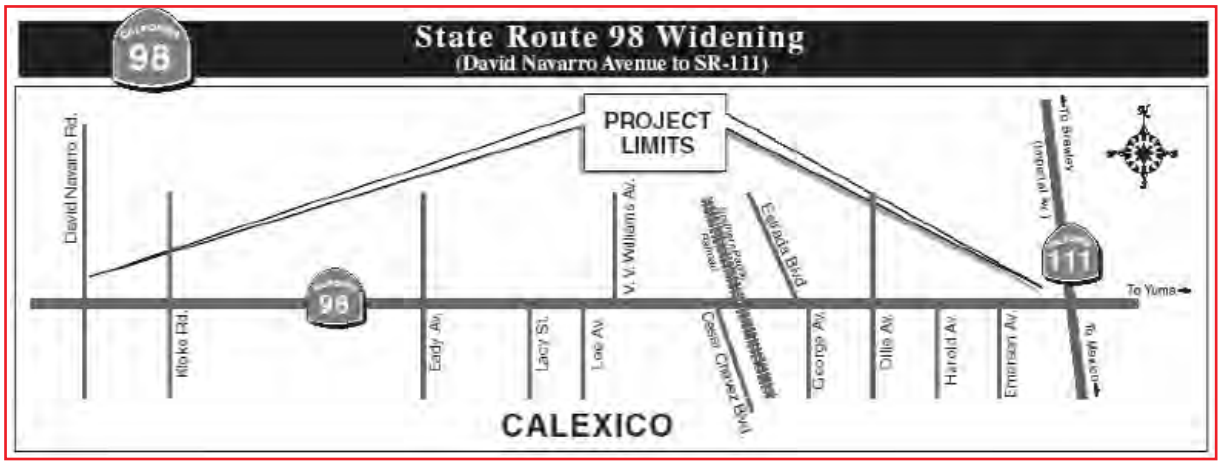
Congestion Relief
This project is expected to improve traffic and pedestrian safety, and increase highway capacity, providing relief in and around Calexico. It will accommodate the NAFTA Net by improving access to the Calexico East POE from SR-111.

Cost and Schedule
The current estimated cost of the project is $19 million. The environmental and design phases are partially funded. $2 million is provided through the State Interregional Improvement Program (STIP-IIP). The project has also received an earmark in SAFETEA-LU of $2.4 million. The environmental phase is schedule for completion in mid 2007. The schedule for completion of the project is contingent on the availability of funding. Assuming funds are available, design and right of way acquisition will start once the environmental phase is completed and will take approximately 24 months. Construction of the project would require approximately 18 months.

Issues
There is currently a $14.6 million funding shortfall. Recent traffic studies related to the environmental phase suggest an extension of the project limits some distance to the west to accommodate land use changes.

Our Partners
The SR-98 project is being developed through a cooperative effort with several local agencies, such as the City of Calexico, Imperial County, and IVAG.

Community Involvement
The community and the City of Calexico strongly support this project.



STATE ROUTE 98 (East Project)
From SR-111 to SR-7

The Project

The SR-98 corridor project will provide safety and circulation improvements as well as long-term congestion relief and benefits to interstate and intrastate travel for both people and goods. The project calls for realigning and widening the facility to four/six lanes from SR-111 to SR-7. The project will require the acquisition of additional right-of-way and the relocation of irrigation systems.

Benefits

This project is expected to improve traffic and pedestrian safety, and increase highway capacity, providing relief in and around Calexico. It will accommodate the NAFTA Net by improving access to the new Calexico East POE from SR-111.

Congestion Relief

Traffic forecasts indicate that widening SR-98 is needed to accommodate the current and future transportation demands and to help relieve traffic congestion in the City of Calexico. The population of Calexico is projected to increase from 27,109 in 2000 to 47,320 in 2020. The Calexico East POE already accommodates 9,100 automobiles ADT (3.3 million yearly) and 1000 truck ADT (269,412 yearly).

Cost and Schedule

The Project Report/Environmental Document phase had begun, but is currently suspended pending future programming actions. Once reinitiated, the environmental phase will take approximately three years to complete. The next two years will consist of design and right-of-way aquisition activities. It will take the following two years to construct the project. A Value Analysis Study was prepared to help identify alignment alternatives to be evaluated during this phase.

The total cost of the project ranges is $64 million. There is currently $11 million programmed for the preliminary engineering and design phases, and a portion of the right-of-way . This amount is a combination of STIP, TCRP and local funds. In addition, the region recently received a $4 million earmark in the SAFETEA-LU bill. An additional $49 million is needed to fund the project through the remaining right-of-way and construction phases.

Issues

Funds to complete the project need to be secured. The project timeline will be extended due to borrowing of TCRP funds to balance the state General Fund budget. Caltrans will continue to work closely with the community to determine the potential impacts to homes, business, and the natural environment.

Our Partners

The SR-98 project is being developed through a cooperative effort with several local agencies, such as the City of Calexico, Imperial County, IVAG and the Imperial Irrigation District. FHWA is also a member organization in an advisory role.

Community Involvement

As part of the Value Analysis Study, several members of the community were invited to participate and provide input. A public meeting was held in summer 2001 to share project information and gather additional information for consideration during the development of the project.

East Project Study Area (From SR-111 to SR-7)

STATE ROUTE 111
RECENTLY COMPLETED

The Project
The SR-111 project includes constructing a four-lane divided expressway on new alignment in Imperial County, from Ross Road near El Centro to Mead Road near Brawley. It also included relinquishing the existing SR-111, a two-lane conventional highway, to the County of Imperial as a frontage road.

Benefits
SR-111 is a major north-south corridor in Imperial County serving local, regional and international business, as well as recreational travel to the Salton Sea, the Imperial Sand Dunes and the Colorado River. It connects agricultural producers and packers in the Imperial Valley to distribution centers and consumers throughout the United States. This project will improve goods movement as well as international and interregional travel by serving as a crucial connection from the international border to the future Brawley Bypass and SR-86.

STATE ROUTE 111

Congestion Relief
About 8,000-12,000 vehicles per day now travel the various sections of SR-111. Traffic is projected to double along this highway during the next 20 years due to the rapid increase in residential and commercial development, in addition to an increase in international trade traffic along this NAFTA Net route through the Calexico East POE. Construction of SR-111 will accommodate this future growth.

Cost and Schedule
This project, a major facility in the NAFTA Net, was recently completed and is open to traffic.

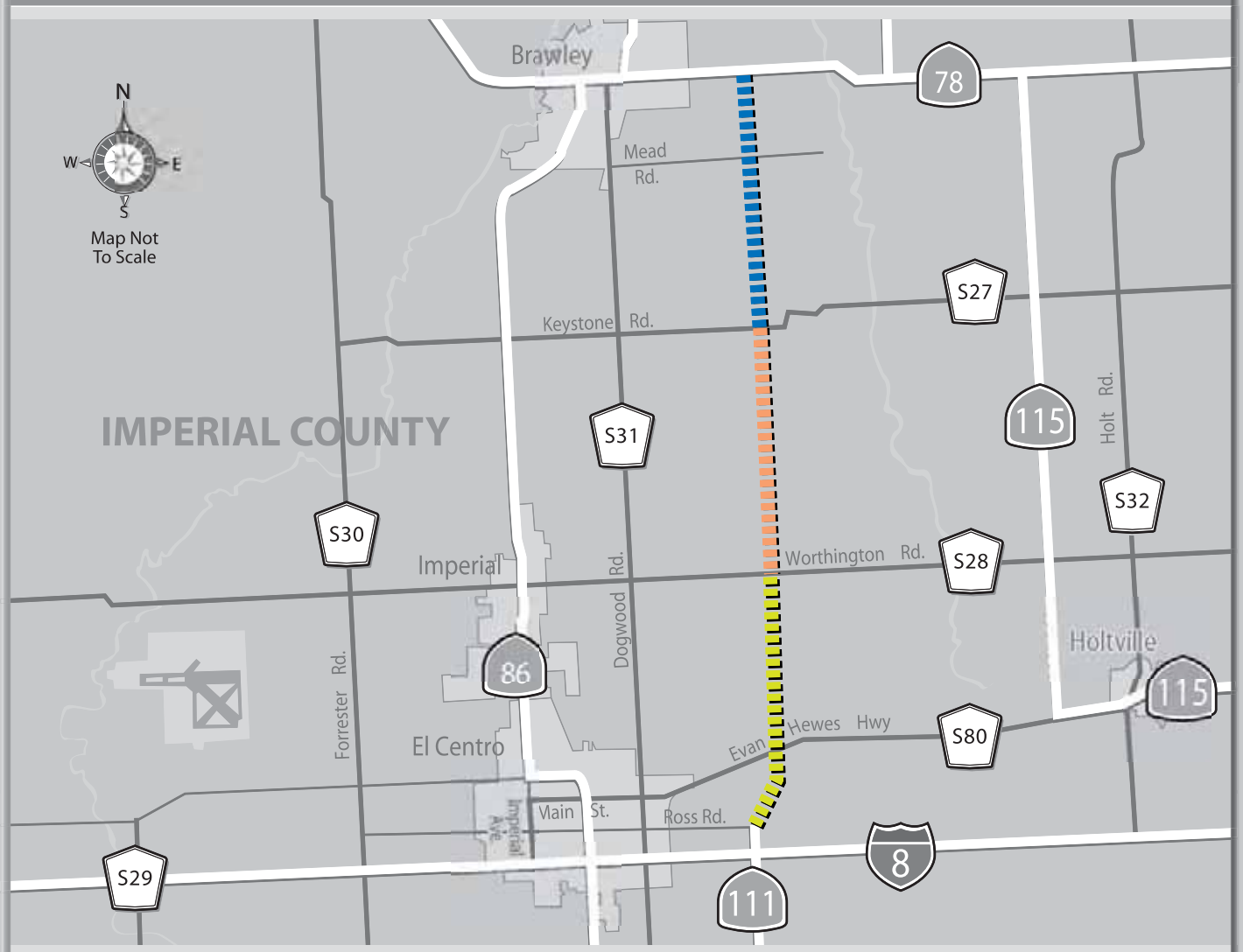
Issues
There are no outstanding issues related to this project.

Our Partners
The project is firmly supported by various local, regional and federal governmental agencies, including the County of Imperial, IVAG, SCAG and FHWA.

Community Involvement
Since the initial public meeting in 1993, various agencies, organizations and individuals have been involved in the development of this project.

Figure 3-7

STATE ROUTE 111



STAGE 1
From Ross Road to Worthington Road
Opened to Traffic 2002

STAGE 2
From Worthington Road to Keystone Road
Opened to Traffic 2003

STAGE 3
From Keystone Road to North of Mead
Opened to Traffic 2005

STATE ROUTE 7
RECENTLY COMPLETED

The Project

The State Route 7 project extended the four-lane divided highway 5.5 miles from SR-98 to I-8 in Imperial County. The preferred alignment followed Orchard Road. This was the second segment of SR-7 constructed. The first segment was completed in March 1996 and stretched a little more than a mile from the California/Baja California border to SR-98.

Benefits

The SR-7 project improves improve service to the Calexico East POE, providing more direct access to I-8. It accommodates future increases in commercial truck traffic across the border, and enhance the international and interregional movement of goods and services.

Congestion Relief

The SR-7 project reduces traffic congestion in the City of Calexico at the intersection of SR-111 and SR-98. It is anticipated that traffic crossings at the POE will increase from the current 9,500 vehicles per day to about 19,200 vehicles per day by the year 2020. The project improves the capacity and operational deficiencies of other roadways throughout the region that are expected with the increase in POE crossings, particularly within Calexico.

Cost and Schedule

This project, a major facility on the NAFTA Net, was recently completed and is open to traffic.

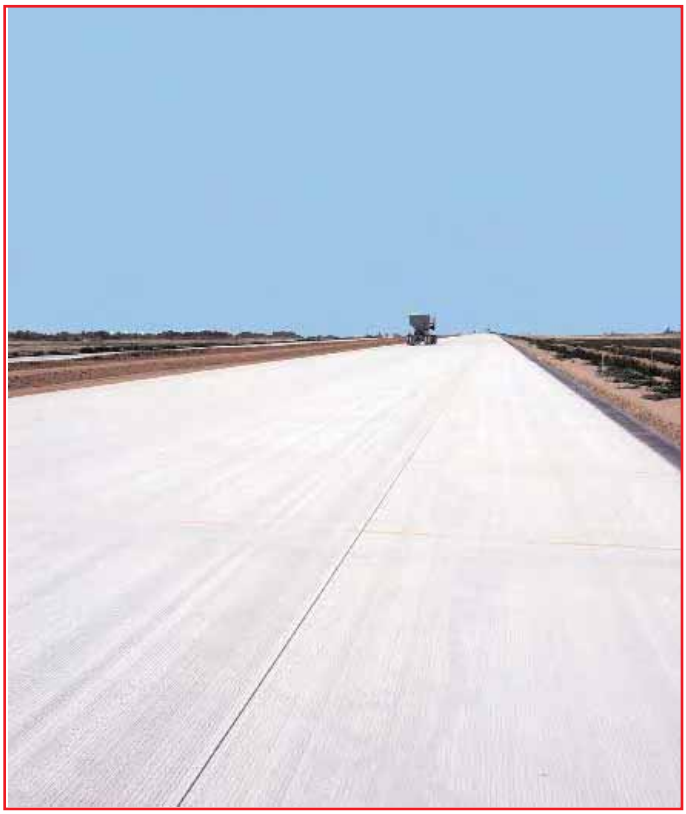
Our Partners

Caltrans worked closely with FHWA, the SCAG, IVAG, Imperial County and the City of Calexico on this project.

Community Involvement

A public scoping meeting was held in November 1996 to share general information, gather ideas and discuss issues with the public. A public hearing for the Draft Environmental Document was conducted in December 1998. Community input continues during the design of the project.

SR-7 UPON OPENING



STATE ROUTE 115

The Project

This project proposes to construct a four-lane facility from I-8 to the existing west junction of SR-115 and Evan Hewes Highway. Caltrans would relinquish to the County of Imperial the existing portion of two-lane conventional highway that this project would replace.

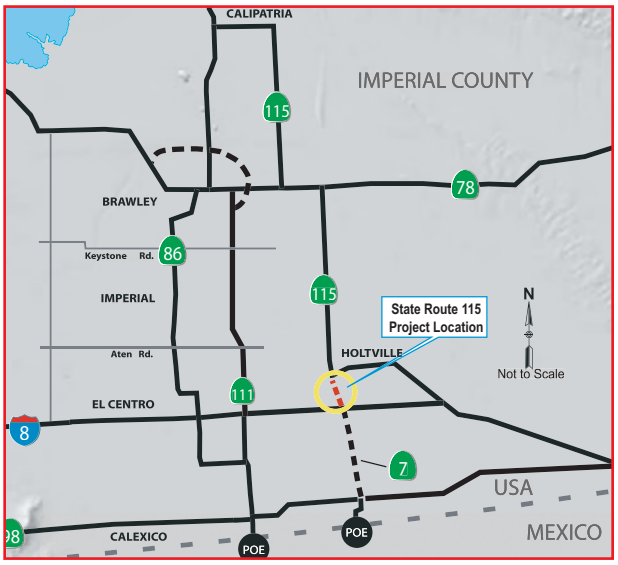
Benefits

The project is part of the NAFTA Net program and will enhance international and interregional movement of goods. Additionally, increased capacity will be necessary to accommodate the anticipated regional growth and increases in traffic in the region. This roadway would provide a more direct truck route from the SR-7 and I-8 interchange to the existing west junction of SR-115 and Evan Hewes Highway near Holtville. Trucks could continue north connecting with SR-78.

Congestion Relief

This proposed segment of SR-115 would carry as many as an estimated 25,000 vehicles ADT by the year 2020. This project is anticipated to provide the necessary capacity for increased traffic from the Calexico East POE, SR-7 and the California/Baja California border.

SR-115



Cost and Schedule

The total estimated cost of this project is between $56-76 million dollars. This estimate includes environmental clearance, engineering costs, right-of-way acquisition and construction costs. Potential funding sources include the regional share of the STIP, as well as other federal, state and local dollars.

An initial scoping document for the project has been completed, but additional design work has been suspended pending future programming actions. The anticipated environmental document is an EIS and will take approximately 4 years to complete. Design work and right-of-way acquisition are anticipated to take two to three years to complete. Construction will require three years to complete.

Issues

Funding for this project has not been identified. There is planned development in the proposed corridor that could proceed before the project's environmental document approval. Therefore, the ability to protect the proposed right of way from development is limited.

Our Partners

Future partners would be the County of Imperial, the Imperial Irrigation District, SCAG, IVAG and the City of Holtville.

Community Involvement

Community partners have been involved in the development process. Community outreach will proceed in accordance with the timing of the project.

COMMERCIAL VEHICLE ENFORCEMENT FACILITY I-8/WINTERHAVEN

The Project

In Imperial County, near Winterhaven, the construction of a combined CVEF and Agricultural Inspection Facility (AIF) is proposed. Completion of this project will ensure that each commercial vehicle entering California will undergo safety and regulatory inspections.

Benefits

The CVEF will facilitate the inspection of trucks entering California for compliance with various laws and regulations including weight, vehicle maintenance and license, air quality, as well as agricultural control. The safety of the motoring public will be increased through the careful inspection of all commercial vehicles and removing those vehicles from operation that are found to be faulty or not in accordance with existing laws. CVEF operations ensure that trucks do not exceed the maximum cargo load, which would otherwise damage our roads. AIF operations reduce the risk of pest infestation, that could jeopardize the Imperial County and San Diego County economies.

Cost and Schedule

The cost for construction of the CVEF is estimated at $40 million. Currently, $1.8 million has been programmed, and with the Project Study Report is in progress. Environmental documents, the design phase and construction are pending the availability of funds.

Issues

Pursue additional funds necessary for completion of project.

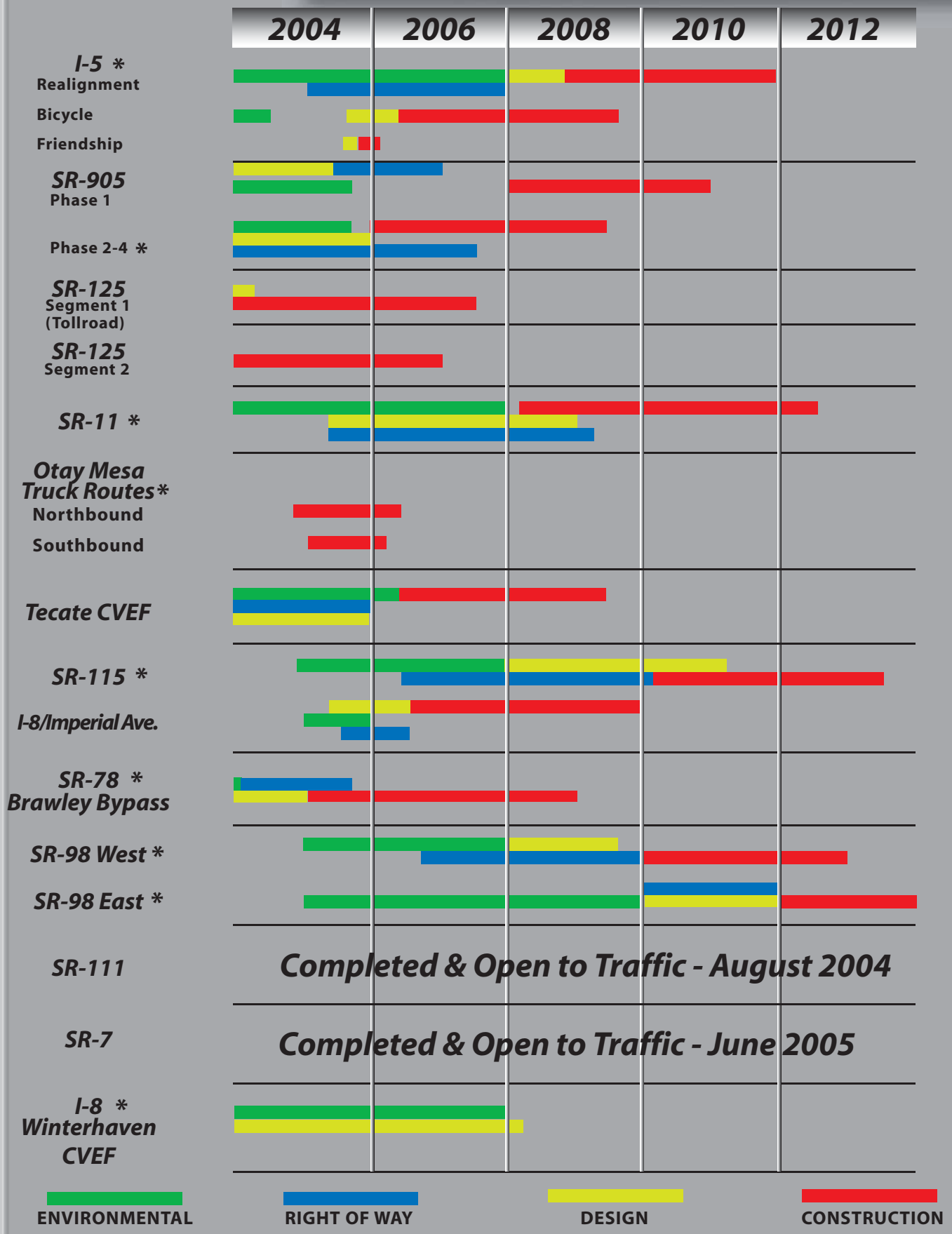
Our Partners

The CVEF project will be developed in cooperation with the California Department of Food and Agriculture, and various regulatory agencies. Main operations will be conducted by the CHP.

EXAMPLE OF CVEF DESIGN

Figure 3-8

BORDER PROJECTS MASTER SCHEDULE

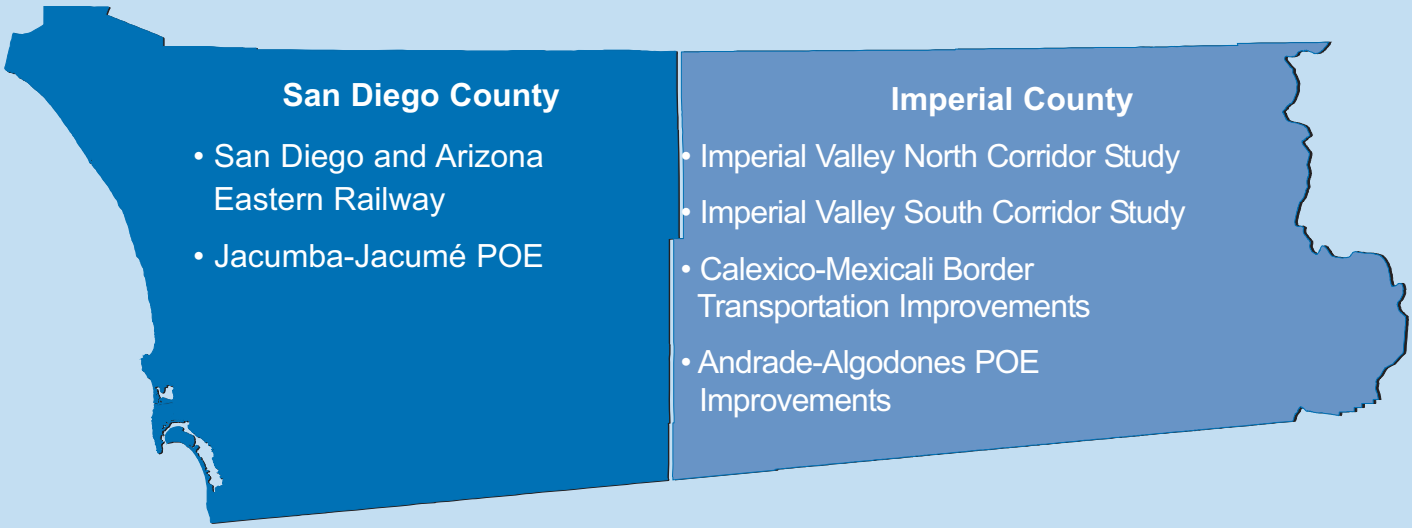


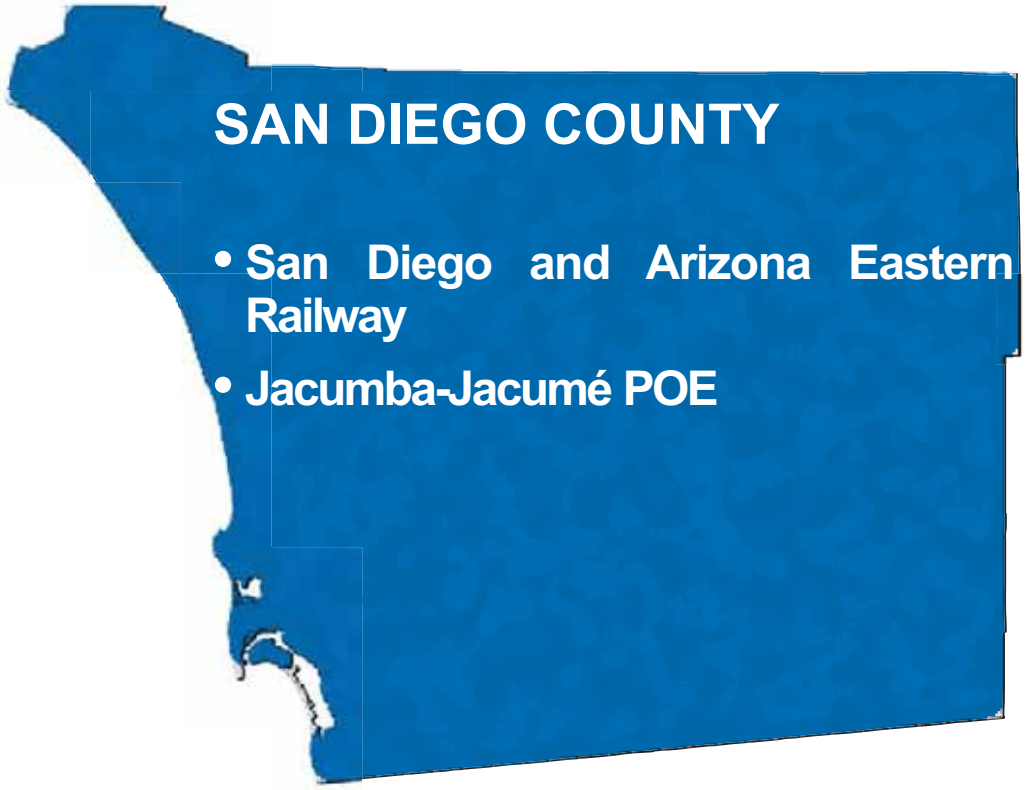
*Final completion is pending based on the future availability of funds.

ADDITIONAL PROPOSALS-INTRODUCTION

As the San Diego/Imperial border region continues to grow, it is expected to undergo an acceleration of population and border trade activity. To accommodate this, Caltrans and its partners will proceed with a proactive and cooperative approach to addressing long-term transportation border needs.

Consequently, Caltrans has been working with local and regional agencies in identifying several transportation proposals to enhance the NAFTA Net. There are two such proposed projects in San Diego County, and four in Imperial County. They represent a wide variety of improvements that support the existing transportation infrastructure, add new projects that look at providing direct relief, or constructing alternate facilities replacing the existing infrastructure. Project fact sheets are provided for the following proposed improvements:





SAN DIEGO COUNTY

- San Diego and Arizona Eastern Railway
- Jacumba-Jacumé POE

SAN DIEGO and ARIZONA EASTERN RAILWAY

The Project

The Carrizo Gorge Railway (CGR), operator of the San Diego and Arizona Eastern Railway (SD&AE), has acted aggressively to refurbish the rail line from San Diego County to Imperial County. Due to the border region's growing economy and the reauthorization of federal infrastructure funding programs, the railway is a potential important link in the development of San Diego and northern Baja California's strategic transportation needs. As the inheritor of the line original envisioned and developed by San Diego industrialist John D. Sprekels, CGR has refurbished the wooden trestle bridges, cleared tunnels and removed the sand covering the rail in both its U.S. and Mexican right-of-way. The railway meets Public Utilities Commission standards.

With the resumption of service, the railway can handle singlestack intermodal traffic and "conventional" rail cargo, such as bulk commodities.

The rail operator has a ten-year working agreement with the Metropolitan Transportation Development Board (MTDB) for operation of the rail line. CGR signed an agreement with Union Pacific Railroad to allow for the transfer of loaded and unloaded railcars at the intersection of the two railways in the Imperial Valley town of Seeley. During the final week of 2004, the renovated railway experienced its first freight run: a shipment of lumber originating in Dillard, Oregon, carried to the railhead at San Bernardino, where it moved through Imperial Valley, across the Carrizo Gorge and past Campo into Mexico to be delivered to a furniture-making maquiladora operation near Tecate.

Benefits

California's highways would benefit from reduced truck traffic as a result of the rail diversions attributable to regular shipments utilizing the SD&AE, commonly called the Desert Line. These reductions would also decrease the air pollutants associated with truck traffic.

The permanent reopening of the Desert Line could produce direct benefits for the San Diego-Imperial County region in such areas as improvements in highway safety and community mobility. Other benefits could include reduction in public costs for highway maintenance and increased employment in the local transportation and industrial sectors.

Congestion Relief

This project would reduce the number of commercial trucks travelling on the state highway system.

Cost and Schedule

The CGR invested $5 million to renovate the railway to this point. CGR states that 15-20% of gross revenues will be reinvested in railway maintenance. The operators have additional plans for upgrading the lines including the construction of passing track, reopening an additional tunnel in Carrizo Gorge and the development of six to eight railport sites in the U.S. and Mexico.

SAN DIEGO and ARIZONA EASTERN RAILWAY

Issues

In an effort to gain access to goods shipped through the Port of San Diego, CGR is pursuing a network of "rail ports", multi-modal facilities which allow the loading and off loading of goods and containers from rail cars to trucks and vise versa. Such facilities may be located in Coyote Wells, Kuhn Farms, and a location on Favre Street in Chula Vista. (Currently, Burlington Northern Sante Fe Railroad controls rail access in and around the Port of San Diego. The port has expressed an interest in having SD&AE use its facilities, but has been unable to resolve the rights-of-way issue.)

The U.S. Customs and Border Protection Agency currently has sufficient staff to supervise a light level of freight traffic generated by CGR, passing through the crossing at Campo. A significant increase in freight traffic may cause a backlog at this crossing due to homeland security concerns and procedures.

A potential new rail line and container port near Ensenada would have an undetermined impact on CGR operations. As this idea is still in the preliminary study stage, it is unknown where the rail line would connect with existing lines crossing between the U.S. and Mexico. CGR is in negotiations to provide an intermodal link with the Port of Ensenada. Short-term plans allow for shipment by truck to Tecate where goods would transfer to CGR's railway for shipments to points north and east.

Our Partners

Caltrans is working closely with SANDAG, the San Diego Unified Port District (SDUPD), the Mexican government, freight operators, and business owners.

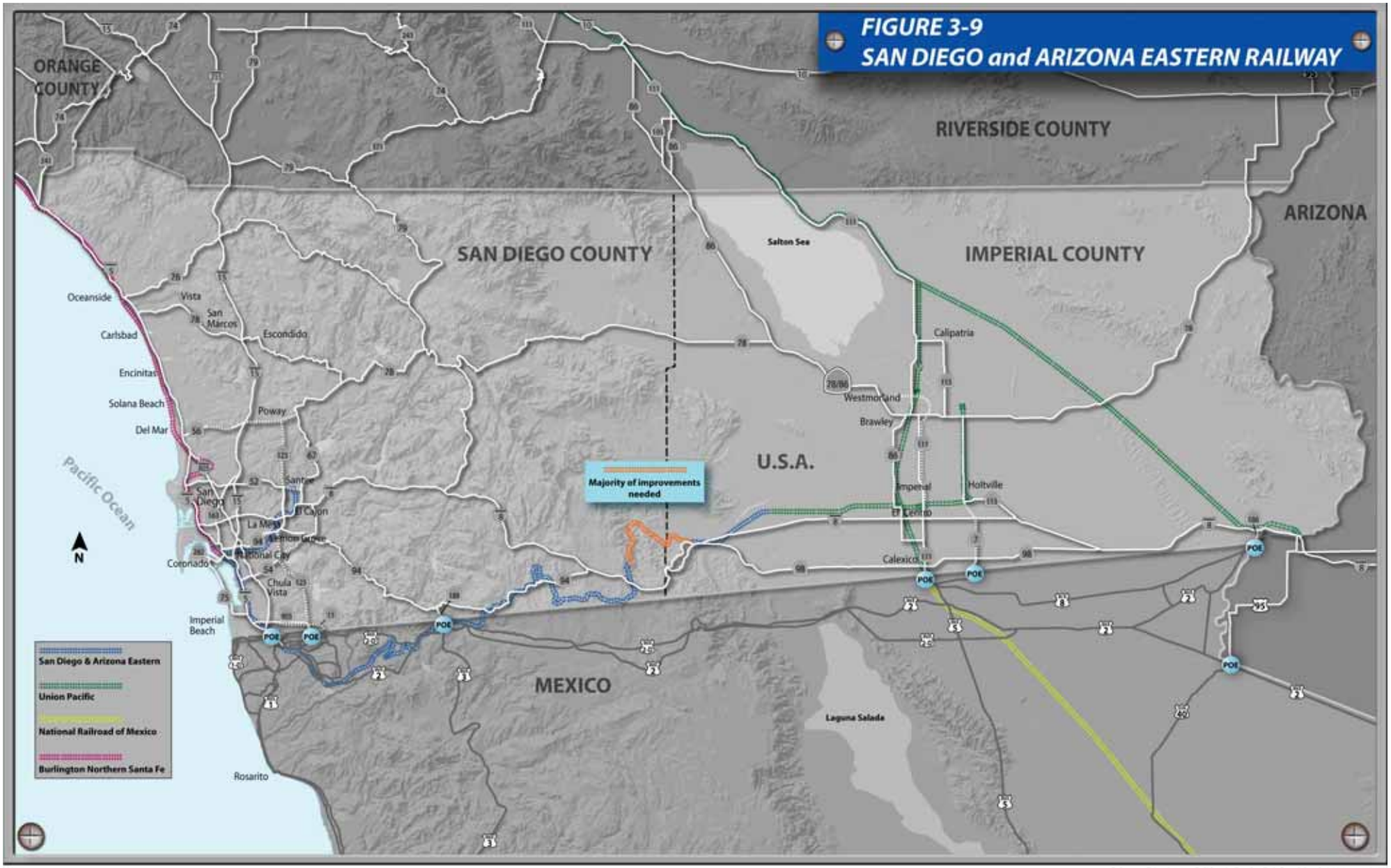


FIGURE 3-9
SAN DIEGO and ARIZONA EASTERN RAILWAY
ORANGE COUNTY
RIVERSIDE COUNTY
ARIZONA
SAN DIEGO COUNTY
IMPERIAL COUNTY
Salton Sea
U.S.A.
MEXICO
Laguna Salada
Majority of improvements needed
Oceanside
Vista
San Marcos
Escondido
Carlsbad
Encinitas
Solana Beach
Del Mar
Poway
Pacific Ocean
San Diego
Santee
El Cajon
La Mesa
Mission Gorge
National City
Coronado
Chula Vista
Imperial Beach
Rosarito
Calipatria
Westmorland
Brawley
Imperial
Holtville
El Centro
Calexico
POE
N
San Diego & Arizona Eastern
Union Pacific
National Railroad of Mexico
Burlington Northern Santa Fe

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JACUMBA - JACUMÉ

With increased passenger and commercial traffic at the region's POEs on the rise since the passage of NAFTA, Caltrans is confronted with the challenge of improving cross-border movement of both people and goods. The tremendous growth has placed pressure on transportation and planning agencies on both sides of the border to find ways of improving transportation infrastructure, access, and operations, and to minimize air quality impacts caused by increased congestion.

The Project

One way of improving cross-border movement and alleviating congestion problems is by providing additional POEs. The concept of evaluating a new POE at Jacumba was identified in Caltrans and SANDAG's SR-94 Corridor Study.

SAHOPE has also considered this location for a future POE in its long-range planning work.

Benefits

Forecasts completed for the SR-94 Corridor Study show the municipality of Tecate is projected to increase significantly in both population and employment by the year 2020. The Tecate population is estimated to reach 184,000, with nearly 80,000 jobs by 2020. With this projected growth and the passage of NAFTA, it is anticipated that commercial traffic through the Tecate POE will increase considerably. These circumstances will undoubtedly affect travelling conditions causing delays, congestion, and other adverse impacts on SR-94 and SR-188.

Congestion Relief

- Border access would improve at existing POEs by diverting between 1,500 and 5,900 vehicles per day to the new Jacumba-Jacume POE.
- Creating a border crossing at Jacumba-Jacumé would provide a close and alternative access to major transportation corridors located in both countries. The new POE would be strategically located to accommodate future growth expected in Baja California along the Tecate-Mexicali highway corridors.

Cost and Schedule

Initial cost estimates range from $10 million to $60 million depending on the alignments and the alternatives. There is no current schedule for project implementation.

Issues

The next steps include gaining legislative support to designate a road alignment as a future state route, identifying potential funding sources, and providing an overview of the permitting process for the construction, operation, and maintenance of a new border crossing.

Partners

The U.S. and Mexican government agencies would be partners in this potential project.

Figure 3-10

JACUMBA - JACUMÉ PORT OF ENTRY

IMPERIAL COUNTY

- Imperial Valley North Corridor Study
- Imperial Valley South Corridor Study
- Calexico-Mexicali Border Transportation Improvements
- Andrade-Algodones POE Improvements

IMPERIAL VALLEY NORTH CORRIDOR STUDY
From I-8 to SR-78 (Forrester Rd. Corridor)

The Project
The corridor study proposes to perform a comprehensive analysis to determine the feasibility of creating a new four-lane highway in the vicinity of the existing two-lane Forrester Road. This study will analyze various alternatives for impacts, benefits and constraints.

Benefits
The existing Forrester Road is a two-lane county road that runs parallel to and west of both SR-86 and SR-111. The Forrester Road corridor has been identified as part of the "NAFTA Net" since a high percentage of vehicle traffic in this corridor transports international cargo to destinations in the Los Angeles region and beyond. By providing an additional corridor for commercial goods movement, SR-86, SR-111, and regional arterials can anticipate decreased traffic delays.

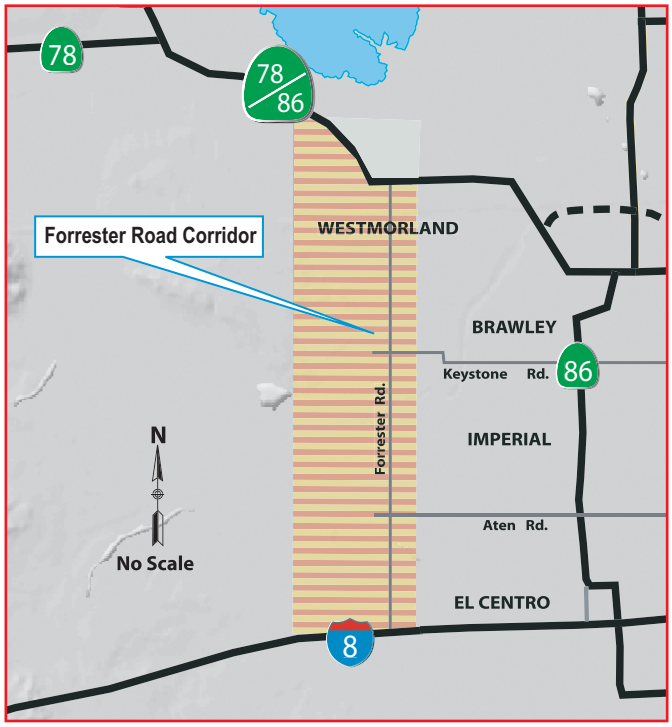
Congestion Relief
A significant portion of the commercial goods movement traffic is related to the agricultural industries of Imperial County and Mexicali, as well as the maquiladora industry. The existing two-lane Forrester Road carries an estimated 6,000 to 7,000 vehicles per day.

Cost and Schedule
The Imperial County North Corridor Study has been identified by District 11 and IVAG as one of the highest priorities for a feasibility study.

The Southern Association of Governments (SCAG) has prepared a grant application for Partnership Planning and submitted to Caltrans with an award date of June 2006 anticipated for accepted projects. The estimated cost of the study is $92,000. The study is expected to take one year to complete after award of the grant.

Community Involvement
Throughout the study process, the District proposes to perform stakeholder outreach.

FORRESTER ROAD CORRIDOR



IMPERIAL VALLEY SOUTH CORRIDOR STUDY
I-8 to SR-98, Forrester Rd. to East of SR-111

Background
Within the County of Imperial, and in particular, within the corridor study limits (I-8 to SR-98, Forrester Road to east of SR-111), a tremendous amount of development and changes in land uses are taking place. To accommodate this development and future growth, it is necessary to identify short-, mid- and long-term improvements to the transportation system.

The Project
This comprehensive corridor study will take into account recent growth and incorporate future projects that may impact travel. It will analyze and develop potential improvements to decrease delay and congestion, and will build consensus among the stakeholders and the public to develop a prioritized list of transportation improvements.

Benefits
A goal of the study will be to identify specific near-term to long-term improvements to the state highways, local arterials, and other modes of transportation to manage the expected level of growth.

Congestion Relief
The corridor from I-8 south to SR-98 has experienced a significant increase in traffic, both commercial and passenger, in part due to the new Imperial Valley Regional Mall development and other land use changes. Traffic volumes range from 4,600 to 7,300 in this area.

Cost and Schedule
Development of a request for proposal has lead to the selection of a projection consultant and the awarding of a consulting contract. The initial project "kickoff meeting" was held in January 2006.

Community Involvement
Throughout the study process, the District and IVAG propose to perform stakeholder outreach.

FIGURE 1
Study Area

CALEXICO - MEXICALI
Border Transportation Improvements

In 1996, the commercial gates west of the Calexico POE were closed and the Calexico East POE was opened, which serves all commercial truck traffic crossing between Calexico and Mexicali. By moving the POE east of the downtown Calexico area, it was anticipated that traffic congestion would be alleviated. However, this has not yet occurred, and there is a great need to identify transportation improvements that address the current congestion and future anticipated growth.

The U.S. GSA recently completed a study concerning the reuse of the former commercial Port of Entry at Calexico. The GSA study noted that la Mexican federal government is planning a new port of entry directly south of the vacated commercial POE site. The study seeks to provide more efficient processing of border crossers in conjunction with the continuing operations at the Calexico POE.

The study presents options for establishing a "tandem POE" in which the current site would process pedestrians and bus passengers, while a new facility on the old commercial site would process passenger vehicles.

In 2000, Caltrans completed the Calexico/Mexicali Border Transportation Study (CMBTS), which studied congestion within the Calexico POE on SR-111/Imperial Avenue and the Calexico/Mexicali downtown area. Underlying the results of this study are statistics which show that in 2003, approximately 34 million persons and 11 million autos crossed the border at this POE (two-way traffic). This level of traffic has impacted highways on both sides of the border causing significant delays, congestion, and other adverse impacts affecting Calexico's residents and businesses.

An arterial needs study sponsored by IVAG is currently underway. The goal of this study is to provide a document that can be referenced when agencies seek funding. In addition, it is important that the necessary costs be identified and planned for as federal action follows from the publication of the GSA's "Calexico West Border Station Expansion/Renovation Feasibility Study."

The Project

The former commercial POE site in downtown Calexico presents a unique opportunity for local and State agencies to work together with the USGSA to address congestion and improve access on both sides of the downtown Calexico/Mexicali POE.

The CMBTS identified several downtown roadway improvement alternatives with specific emphasis on re-using the former commercial POE site in a manner, which would address congestion and reduce delays. The study developed seven different alternatives, with sub-alternatives also identified. These range from the "No Build" to a "Managed Lane" concept that would provide for dual use of new gates to serve northbound or southbound traffic depending on the time of day and level of demand. Additional study will be necessary with the subsequent publication of the GSA's Calexico West study to refine infrastructure alternatives based on the facility development alternatives suggested.

The Benefits

The travelling public would realize a tremendous improvement in congestion, which would directly result in time savings. Additionally, the Calexico area would have an improvement in air quality.

CALEXICO/MEXICALI
Border Transportation Improvements

Congestion Relief

As the Calexico/Mexicali POE is the second busiest crossing along the California/Mexico border, there is substantial congestion accessing the border, and along the state highways. By providing an alternative or improvements to the existing roadways, congestion and delay will both be improved.

Cost and Schedule

The August 2000 cost estimates range from the "No Build - No Cost" option to approximately $48 million. At this time, there is no date for implementation of this project.

Issues

District 11 will continue coordination, particularly with the USGSA, activities related to the Calexico-Mexicali POE. Additional study will require searching forfunds.

Our Partners

District 11 has worked with the following partners on this project: SCAG, IVAG, the Imperial County, the City of Calexico, the Municipality of Mexicali, U.S. GSA, and Instituto de Administracion y Avaluos de Bienes Nacionales (INDAABIN).

Community Involvement

Public input was gathered at meetings and workshops held in both Calexico and Mexicali. Attendees included community representatives, consultants, and academics.

CALEXICO POE

ANDRADE - ALGODONES

The Project

The existing Andrade-Algodones POE was built in 1970 and consists of two primary and two secondary inspection lanes. Interstate 8 and SR-186 provide access with I-8 connecting to El Centro and San Diego to the west and Arizona to the east. SR-186 is a two lane conventional highway, serving the POE from I-8. In Algodones, there are connections to Mexicali on BC-8, as well as to MX-2, which connects the State of Sonora and the Mexican interior to the southeast. The POE is open to passenger vehicles, pedestrians and, on a limited basis, commercial vehicles.

During 1999, there were over 3 million pedestrians which crossed the border, and approximately 1.2 million autos crossed with an estimated 3.5 million passengers (north and southbound volumes). Future improvements to SR-186 (widening from a two-lane to a four-lane highway) are identified as a Long-Term (beyond 2020) project in the 2002 Imperial County Transportation Plan.

In the fall of 2000, the USGSA conducted an Environmental Assessment on several expansion and realignment project alternatives derived from the January 2000 Feasibility Study from improvements to the POE. These project alternatives focused on realigning access to the POE on the existing facilities, and the expansion of pedestrian and auto gates. Findings from the environmental assessment indicate that realignment to the east would traverse environmentally sensitive lands and require additional roadway structures that would be very expensive. Realignment to the west would impact existing private parking facilities, and would require access improvements to SR-186.

Benefits

The Andrade-Algodones POE is becoming an extremely important port for tourism between California and Baja California. Traffic reconfiguration at the POE and access through the Mexican town of Algodones into California are of concern to local Mexican government officials, and the resolution of these problems is critical.

Congestion Relief

During peak winter months southbound traffic may be backed up to I-8, a distance of approximately two miles. The majority of these tourists park in California and travel by foot into Algodones. CBP is pursuing the feasibility of a possible pedestrian bridge to help alleviate congestion associated with the high volume of cross-border pedestrian traffic.

Delays on SR-186 are in part caused by access back-ups leading into the parking facilities. Expansion of the Andrade POE would greatly enhance tourism and circulation on both sides of the border and would provide the public with a more efficient and safe gateway.

Cost and Schedule

If the POE is realigned, access improvements to SR-186 will be necessary at an estimated cost of $3 million. At this time, there is no date for implementation of the project.

Issues

There needs to be an ongoing coordination and information exchanges regarding USGSA and Mexican government plans for the POE expansion.

Our Partners

Caltrans has worked cooperatively with the GSA, Instituto Nacional De Estadistica Geografia E Informatica (INEGI), and the County of Imperial, and continues to build a working relationship with the Fort Yuma Indian Tribe.

Our Partners

Prior to any improvements being recommended for the state highway facility, Caltrans will undertake a comprehensive public outreach campaign.

Image Source: OMR Data Warehouse

BAJA CALIFORNIA, MEXICO TRANSPORTATION PROJECTS

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BAJA CALIFORNIA PROJECTS - INTRODUCTION

The following exhibit shows proposed transportation improvements undertaken by our Baja California partners that will substantially improve the region's border transportation network and facilities. These improvements total approximately $514 million and consist of 14 current and proposed projects.

This list represents Mexico's commitment for improving transportation adjacent to the POEs to address current and future transportation needs for both passenger and commercial travel. The projects include:

1. Puerta Mexico (two projects) - This is the companion to the realignment of the San Ysidro P.OE which is planned for the US side of the border. The project includes SENTRI lane amplification and the construction of a pedestrian bridge. They are scheduled for completion in late 2006.

2. Tijuana 2000 Corridor – This transportation project will improve travel in the Tijuana-Rosarito corridor. This project is currently under construction.

3. Otay Mesa East/Mesa de Otay – Additional construction and right-of-way acquisition are planned.

4. Popotla Blvd. Widening – Construction on this busy commercial corridor will help relieve traffic congestion. The project is scheduled to be completed by the end of 2006.

5. Commercial road improvements are planned in the municipalities of Mexicali, Tecate, Tijuana, and Ensenada (ten projects).

Construction on the Tijuana 2000 Corridor

PORT OF ENSENADA

BAJA CALIFORNIA PROJECTS

6. Port of Ensenada Modernization of Marine Infrastructure and Rail Infrastructure.

7. Ensenada Bypass (Libramiento) – This project is under construction with completion anticipated in late 2006.

8. Tecate POE Expansion (two projects) – Construction in Mexico has begun for these port expansion projects.

9. New River Blvd./Rio Nuevo Phase 3 – The project, including new signal lights, is under construction.

10. Calexico I/Mexicali – This project includes construction of the Peatonal Bridge to accommodate pedestrian traffic and a SENTRI lane. The official opening is scheduled for Spring 2006.

11. Mexicali Bypass (Libramiento) – The planning phase is complete and construction will begin later this year with a projected completion date in late 2006.

12. Mexicali Road Widening – These major widening projects focus on the corridors from Mexicali to San Luis and Mexicali to San Felipe. Construction began in 2004.

13. Andrade – Algodones POE Expansion

14. Commercial Road Corridor Improvements – Major road projects are planned to enhance travel between Mexicali & Tijuana, Tecate & Ensenada, and Mexicali & Tecate.

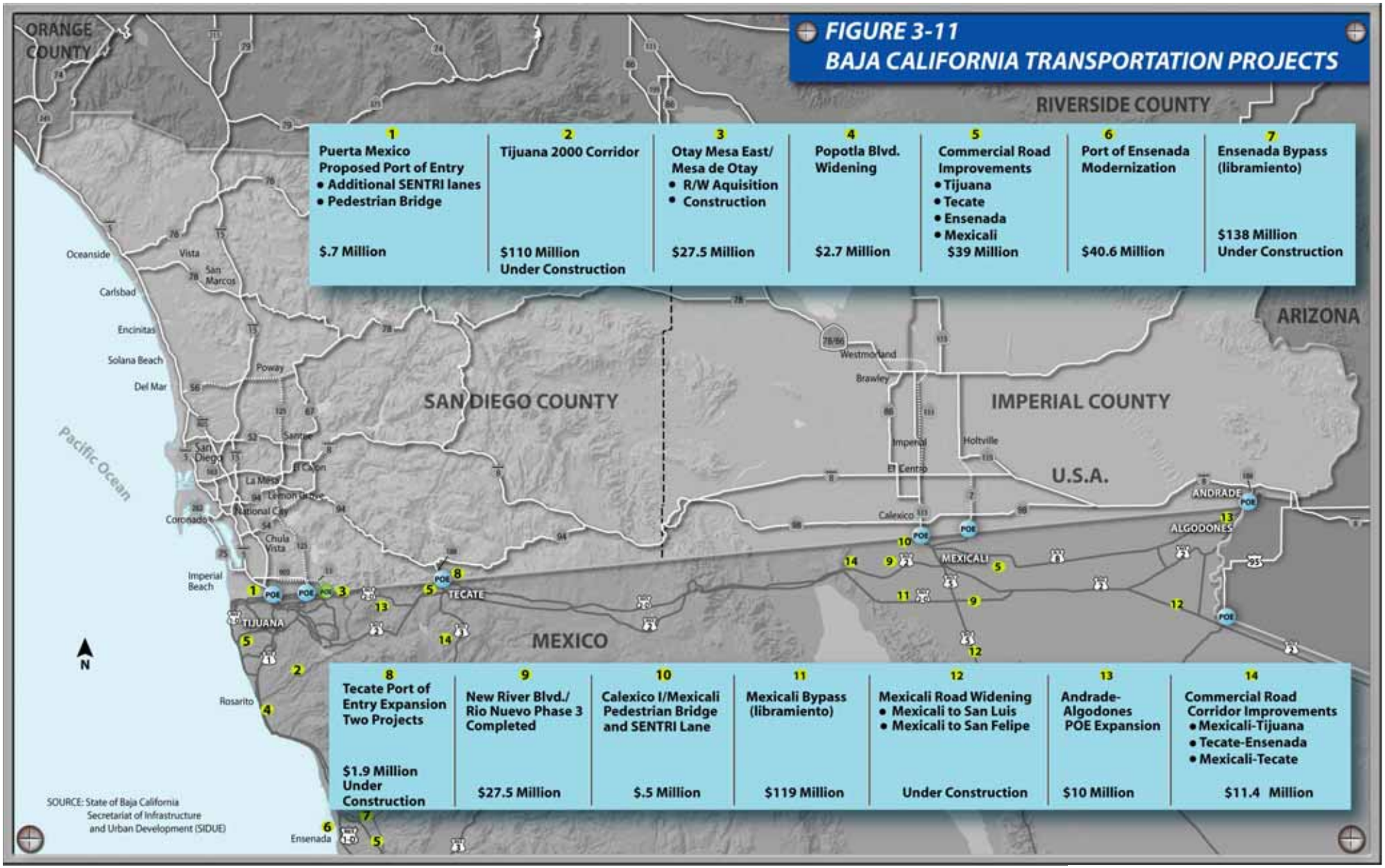
FIGURE 3-11
BAJA CALIFORNIA TRANSPORTATION PROJECTS
ORANGE COUNTY
RIVERSIDE COUNTY
SAN DIEGO COUNTY
IMPERIAL COUNTY
ARIZONA
U.S.A.
MEXICO
Pacific Ocean
Oceanside
Vista
San Marcos
Carlsbad
Encinitas
Solana Beach
Del Mar
Poway
Santee
El Cajon
La Mesa
Lemon Grove
National City
Chula Vista
Coronado
Imperial Beach
TIJUANA
Rosarito
Ensenada
TECATE
MEXICALI
Calexico
El Centro
Imperial
Holtville
Brawley
Westmorland
ANDRADE
ALGODONES
POE
N
1 Puerta Mexico Proposed Port of Entry • Additional SENTRI lanes • Pedestrian Bridge $.7 Million
2 Tijuana 2000 Corridor $110 Million Under Construction
3 Otay Mesa East/ Mesa de Otay • R/W Aquisition • Construction $27.5 Million
4 Popotla Blvd. Widening $2.7 Million
5 Commercial Road Improvements • Tijuana • Tecate • Ensenada • Mexicali $39 Million
6 Port of Ensenada Modernization $40.6 Million
7 Ensenada Bypass (libramiento) $138 Million Under Construction
8 Tecate Port of Entry Expansion Two Projects $1.9 Million Under Construction
9 New River Blvd./ Rio Nuevo Phase 3 Completed $27.5 Million
10 Calexico I/Mexicali Pedestrian Bridge and SENTRI Lane $.5 Million
11 Mexicali Bypass (libramiento) $119 Million
12 Mexicali Road Widening • Mexicali to San Luis • Mexicali to San Felipe Under Construction
13 Andrade-Algodones POE Expansion $10 Million
14 Commercial Road Corridor Improvements • Mexicali-Tijuana • Tecate-Ensenada • Mexicali-Tecate $11.4 Million
SOURCE: State of Baja California Secretariat of Infrastructure and Urban Development (SIDUE)

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ADDITIONAL BINATIONAL ACTIVITIES

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ADDITIONAL BINATIONAL ACTIVITIES

Ongoing Binational Planning Activities

The Border Technology Exchange Program (BTEP)

BTEP was created in 1994 to provide opportunities for sharing transportation information and technology between Caltrans and Baja California agencies. BTEP was created to support the efficient and safe cross-border movements of trade and people between the U.S. and Mexico, as called for by NAFTA. Thus, BTEP aims to level the playing field between the U.S. and Mexico in the binational border region. BTEP is designed to enhance and expand the binational working relationships and understanding of the transportation agencies on both sides of the border. It also serves as an opportunity for transportation officials in the border region to improve the planning, design, construction, and operation of land transportation facilities.

California is working in partnership with Mexico's transportation agencies at the federal, state, and local levels, as well as with universities from both California and Baja California, to continue the BTEP program. The program includes:

- A personnel exchange component in which Baja California transportation planners/engineers receive training at Caltrans for a period ranging between six months and two years. Over 100 professionals from Baja California have participated in the exchange program.
- A traditional classroom setting seminar where professionals from Baja California receive the same training provided to Caltrans employees.
- Library and computer sharing, where Caltrans loans computers and software, as well as library related materials, to our Baja partner agencies.
- Field trips visits, in which Baja California professionals visit job sites to gain exposure to Caltrans construction and maintenance methods.

Caltrans - District 11 Binational Groups

Caltrans is an active participant in the following binational transportation and planning groups:

- The U.S.-Mexico Joint Working Committee for Binational Planning and Programming (JWC).
- U.S.-Mexico Binational Group on Bridges and Border Crossings.

ADDITIONAL BINATIONAL ACTIVITIES

- Border Governors Conference (Port of Entry Work Table)
- Bi-State Transportation Technical Advisory Committee (BTTAC)
- Committee on Binational Regional Opportunities (COBRO)
- U.S.-Mexico Border Technology Exchange Program (BTEP)
- USGSA and INDAABIN Technical Committee

Binational Infrastructure Needs Assessment Study (BINS I & BINS II)

The recently completed BINS I study (2004) follows the U.S./Mexico JWC vision of developing and coordinating border transportation plans. (Members of the JWC include representatives of transportation officials of the four U.S. and six Mexican states as well as representatives from selected Federal agencies from both the U.S. and Mexican governments.) The purposes of BINS I were to identify major transportation corridors in the border region, and to develop a quantitative procedure to evaluate the needs of the corridors. With input from the JWC, BINS I identified transportation projects to meet the needs of the corridors and identified possible funding sources. The report findings have been ratified by the JWC and the study was published in November 2004.

For California, 110 transportation projects were identified. Only 22 of the 103 projects are considered to be "fully funded". This leaves an unfunded need of 81 highway projects that are identified as essential to providing a transportation system to handle future cross-border travel demand. These 81 projects indicate a need above and beyond the "Current and Near-Term" and "Additional Proposals" projects identified in other sections of this document. The total cost of California's transportation needs within the 100 kilometer border zone is estimate at $10.3 billion.

The JWC approved funding for a follow-up study (BINS II) at its meeting in November 2004. The proposed BINS II study builds upon BINS I by providing improved corridor and project identification, filling in data gaps from the previous study, developing an update mechanism, redefining transportation corridors through the consideration of continuity, enhancing the corridor evaluation process and re-evaluating accordingly, and enhancing compatibility of data with the Binational Geographic Information System (BGIS).

Please refer to Appendix A for a more thorough description of the BINS project, background, study purpose and objectives, as well as the California list of projects.

Planning Studies

Transportation Infrastructure and Traffic Management Analysis of Cross-Border Bottlenecks - "The Bottlenecks Study"

The U.S./Mexico Smart Border Agreement, signed in April 2003, by Secretary of State Colin Powell and his Mexican counterpart, Lic. Santiago Creel, identified the need for a study of bottlenecks at the land ports of entry. In December 2003, the U.S./Mexico JWC provided funding to Caltrans to develop a methodology and to conduct a multimodal pilot study of traffic management and transportation infrastructure bottlenecks at the San Diego/Tijuana Gateway.

The central goal of the study was to develop a methodology for analyzing border related bottlenecks at the POEs. The Caltrans approach focused on a step-by-step means to quantify the bottlenecks or congested points within the transportation systems, which serve the federal study area POEs. The JWC approved the final report in November 2004 and is evaluating how to apply this methodology in studying bottlenecks at additional POEs along the U.S.-Mexico border.

Caltrans is proceeding with some of the "low cost/high results" operational improvements envisioned in the study. At the Otay Mesa POE, the "empty lane" was rerouted to improve efficiency by removing empty trucks from secondary processing, additional lanes have been added to increase capacity, and concrete barriers have been installed to enhance safety and channelize truck movements. At the San Ysidro POE, access to the SENTRI lanes has been improved, the number of SENTRI lanes has been increased to allow for more capacity in the prescreening program, the pedestrian bridge has been expanded, and "no parking zones" have been enforced to enhance traffic flow exiting the POE.

ADDITIONAL BINATIONAL ACTIVITIES

Estimating Economic Impacts Of Border Wait Times At The San Diego-Baja California Border Region

Caltrans' California Trade and Goods Movement Study (1996) documents the fact that successful economic competitiveness requires coordinated and efficient transportation systems for the movement of goods. Post-September 11th security measures at the international border crossings have led to longer and sometimes unpredictable delays at the POEs. This Caltrans funded study, undertaken by SANDAG, estimates the impacts of border wait times on the regional economy. The survey was completed in June 2005.

An economic model was developed as an analysis tool to assess impacts due to border wait times on tourist, shopping, and work trips, and their effects on regional productivity. The analysis includes assessing the feasibility and cost of automating data collection at the three San Diego POEs, as well as evaluating current methodologies to provide standardized, systematic estimates of border delays. This study allows for development of a database of border crossing and wait times at the California-Baja California ports of entry.

The impacts from current wait times affect both sides of the border with $2.4 billion in lost output and 32,800 jobs lost. If the wait times were to increase by 15 minutes, the model predicts an additional $1 billion loss in output and an additional loss of 13,400 jobs.

Underlying facts show that San Diego experienced losses of 8 million trips, $1.28 billion in potential revenue, 3 million potential working hours and $42 million in wages. For Baja California, the losses are more than 2 million trips, a potential $120 million in revenue, a potential 500,000 working hours, and $10 million in wages.

The study also showed that almost 75% of respondents would be willing to pay a $3 toll to cross at a new POE east of Otay Mesa.

The Survey and Analysis of Trade and Goods Movement Between California and Baja California, Mexico - "The Maquiladora Study"

This Caltrans funded study was designed to assess cross-border shipping patterns and collect information previously not available from the key private sector stakeholders in binational commerce, such as maquiladora (assembly only), maquiladora (manufacturers), customs brokers, non-agricultural shippers (definitive importers), agricultural shippers (produce importers/exporters), and transportation companies.

The study surveyed these key sectors to determine their concerns regarding border crossing delays at Otay Mesa-Mesa de Otay, Calexico-Mexicali, and Tecate-Tecate, to collect experience and information on shipping practices, and to develop a reliable source of data to be used in supporting recommendations for improvements to border transportation infrastructure or federal inspection facilities, as well as proposing incentives or measures that would encourage shippers to alter the shipping times. The Maquiladora Study was completed in June 2003.

Current Cross-Border Issues

Arguably, the two greatest impacts on the efficient movement of people and goods between California and Baja California are the creation of the U.S. Department of Homeland Security (DHS) and the ability to fully fund border related transportation facilities and infrastructure. DHS has been quite successful in guaranteeing the security of area border crossings, while improving the efficiency of the cross-border operations. The following are impacted by security operations as well as general transportation concerns. Therefore, Caltrans continues to monitor these programs and participate in joint planning activities as appropriate.

Pedestrian Crossings and Bicycle Activity

Initial observations of trans-border activities after the events of September 11, 2001 showed great changes in pedestrian and bicycle usage. As security increased at all POEs, longer, unpredictable delays for both automobiles and pedestrians inspired innovation. But as the new security measures were streamlined, vehicle wait times decreased. Though bicycle and pedestrian crossings have decreased since their peak, these modes of travel are viewed as viable alternatives for border crossing and could help alleviate wait times. As discussed in the project description, I-5/San Ysidro Bicycle Facilities, Caltrans continues to work for improvements to alternative modes of transportation, including bicycles. The majority of bicyclists currently travel southbound into Mexico by accessing the southbound I-5 freeway lanes, which are sharing the lanes with vehicles. Caltrans constructed a new, temporary bicycle lane on southbound I-5 serving the San Ysidro POE.

San Ysidro

ADDITIONAL BINATIONAL ACTIVITIES

Las Americas International Pedestrian Bridge, San Ysidro

JER partners and the City of San Diego have proposed a "public-private partnership" for construction and operations of a pedestrian bridge connecting San Ysidro community in San Diego and Tijuana. The bridge entrances will be by Plaza Las Americas (San Ysidro) and the Tijuana commercial center on Avenida Revolucion.

Since the bridge will be operated by a private owner, tolls will be charged. While this would be the only tolled crossing in California, many international bridges along the U.S.- Mexico border charge tolls.

The proponents suggest that newly developed technologies and DHS programs developed since 9/11 may be incorporated into the crossing design during the planning stage. In particular, the conceptual plan calls for development of a "Pedestrian SENTRI" lane to increase usage of this pre-clearance program.

The preliminary project plan identifies the development of transportation links at a transportation hub planned for the bridge entrance near Las Americas Mall.

Programs For Frequent Border Crossers

With the aim to ensure and expedite the legitimate flow of goods and people across our international borders, two programs are in various stages of implementation. One program, the Free and Secure Trade (FAST) program, focuses on goods movement, and the second, Secure Electronic Network for Travelers Rapid Inspection (SENTRI), is dedicated to people crossings at the POEs.

Free and Secure Trade (FAST) program

The FAST targets industrial, trade and commerce entities. Participants qualify by enhancing the security of their manufacturing plants, warehouses and shipping systems under the auspices of the U.S. Customs-Trade Partnership Against Terrorism (C-TPAT). FAST processing on the U.S.-Mexico border also requires the foreign manufacturer to use "high-security seals properly placed in the approved manner when crossing the border." The FAST program was implemented in June 2004 at the Otay Mesa POE.

Otay Mesa POE Lane Addition: Caltrans, in partnership with the U.S. Department of Homeland Security - Customs and Border Protection (DHS-CBP), Federal Highways Administration (FHWA), and U.S. General Services Administration (GSA), completed an additional northbound-only truck lane in October 2004. This project was completed with aid of a federal ITS technology grant. The connector between the U.S. and Mexican inspection facilities was originally intended to accommodate expansion of the FAST Program.

[1] *Free and Secure Trade (FAST) Implementation on U.S.-Mexico Border,* **United States Department of State, December 4, 2003.**

An analysis the recent traffic studies determined that greater efficiency in traffic movement would be achieved by accommodating empty trucks. This reduces the number of trucks required to pass through federal secondary border inspection facility by one-third, contributing to a more efficient use of the federal facility. Each of the seven U.S. inspection booths at Otay Mesa has the technology to process the 900 drivers and their trucks that are enrolled in the FAST program.

Future plans call for a short-term project to construct one additional truck lane from the Mexican export facility to the U.S. import facility. Long term improvements include constructing three additional lanes connecting the two facilities.

Secure Electronic Network for Travelers Rapid Inspection (SENTRI)

As noted in the section on "Current and Near Term Projects", many POEs have implemented the SENTRI program. SENTRI is the world's first automated dedicated commuter lane, using advanced Automatic Vehicle Identification (AVI) technology. The SENTRI program was first implemented for northbound passenger vehicles in November 1995 at the Otay Mesa POE. This program identifies travelers who pose little risk to border security, verifies their low risk status through extensive record checks, and screens approved participants, and their vehicles, each and every time they enter the United States. Participant wait times do not exceed three minutes, even at the busiest time of the day.

SENTRI Lane Expansion at San Ysidro POE: In partnership with DHS-CBP and the City of Tijuana, a two lane expansion of SENTRI lanes for autos at the San Ysidro POE was completed and opened to traffic in June 2005. This increases the total number of SENTRI lanes for autos thus expanded to four.

SENTRI Exit Lane Improvements at the San Ysidro POE: Caltrans, as the lead agency for design and construction, is working with DHS-CBP to complete additional capacity and operational improvements for northbound exit (U.S. bound) traffic lanes serving the four SENTRI lanes and other lanes serving buses and general auto traffic. The project is expected to be completed in late 2005. The total cost of the project is $500,000, with Caltrans contributing $300,000 and DHS-CBP contributing $200,000.

SENTRI Lane at the Calexico POE: A SENTRI enrollment center was opened at the Calexico POE in September 2005 and the new SENTRI lane became operational in December 2005. While the DHS-CBP is the lead agency for the U.S. side, a close working relationship was established amongst FHWA, GSA Caltrans and Baja California counterparts. Caltrans provided technical assistance for this project.

2 *US VISIT Program Overview*, **United State Department of Homeland Security, www.dhs.gov.**

ADDITIONAL BINATIONAL ACTIVITIES

United States Visitor and Immigrant Status Indicator Technology (US-VISIT)

In response to several Congressional mandates, the US Department of Homeland Security established the US-VISIT program a comprehensive entry-exit registration program for visitors to the United States. This program was implemented at the 50 highest land border POEs in December 2004. In this process, the usual immigration & customs procedures are complemented with fingerprinting and taking digital photographs of all visitors. The added information will be instantaneously compared with government security databases & watch lists. The stated goal of the program is "to enhance the security of the United States without slowing the system for legitimate visitors."

Additional Southbound Programs

It is expected that, eventually, southbound traffic will be subject to inspections similar to those currently in use for northbound vehicles. To help alleviate southbound delay associated with this new level of inspection for commuters travelling into Mexico, one proposal would be to implement southbound pre-clearance lanes similar to the Secure Electronic Network for Travelers Rapid Inspection (SENTRI).

Coordinate Traffic Signage to and from International POEs

Within California and Baja California, traffic sign standards vary. In the busy and congested border region, these signs can often lead to confusion for the motoring public in accessing roads that serve the POEs. Interest has been expressed by Baja California Municipalities in working with Caltrans to develop appropriate binational signage using Caltrans expertise and State highway standards. By making a minimal investment of time and funds, the potential for providing travelers with easy to understand, coordinated signage serving the main routes leading to the POEs can be realized in both the U.S. and Mexico.

Border Traffic Information

Caltrans District 11 has developed an internet website with links for commuters that cross the border from Mexico into California. (http://www.dot.ca.gov/sdtraffic and http://www.dot.ca.gov/dist11/d11tmc/sdmap/border.html).

A private company website in Mexico has four various views of the San Ysidro POE and one view of the Otay Mesa POE. In addition, the site also contains estimated wait times for both crossings.

Security and Emergency Situations

To further increase the California-Baja California relationship, we will develop a process to coordinate our preparedness for emergency response, and we will be exchanging binational communication information with Baja California.

SUMMARY

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SUMMARY

The 150-mile California-Baja California border area can be characterized as a vibrant and rich mix of urban, suburban, and rural communities. Despite the many similarities with other California regions, this binational area holds a unique position throughout California and the U.S. Having a boundary between the U.S. and the Republic of Mexico, the region is a major gateway to points within and beyond the State of California. This unique characteristic emphasizes the value of the transportation system along the California-Baja California border.

The transportation system is a critical economic pipeline that links the movement of goods and services with the border region, California, other States in the U.S., and international markets. Key highlights related to trade activity within the California-Baja California region include:

- In 1999, Mexico surpassed Japan to become California's top export trade market.
- Exports to Mexico have grown from $6.5 billion to $19 billion, an increase of 192% since 1993.
- The value of goods carried through California POEs has grown from $12.6 billion to $32.9 billion*, an increase of 160% since 1995.
- Trucks transport approximately 98% of this trade.
- In 2004, approximately two million trucks crossed the California/Mexico border and this number is expected to increase to approximately 5.6 million trucks by 2030.
- The busiest POE for commercial traffic is Otay Mesa with approximately 1.4 million truck crossings annually. This is followed by the Calexico East POE with approximately 600,000 annual truck crossings.
- At least 21% of the truck trips using California POEs have origins or destinations outside California.
- The majority of trade transactions are associated with the maquiladora industry, whose sites are located within the municipalities of Tijuana, Tecate, Mexicali, as well as other locations in Baja California.
- The number of maquiladora plants has grown from 178 to over 900, representing a 400% increase since 1978.

Despite the many contributions and economic success that the movement of goods and services has brought to the California-Baja California region, it has also resulted in several challenges to the transportation system and the six POEs. Traffic congestion in the regions' key corridors, and increased border wait times for both passenger and commercial vehicles, are the primary by-products of the cross-border activity.

*** U.S. Customs and Border Protection Agency**

SUMMARY

As the region continues to grow, and trade activity most likely to increase, Caltrans and its partners have recognized that maintaining and improving the operations, efficiency, and safety of the transportation system along the California-Baja California border will be a challenge. To date, the State of California has committed over $900 million for 15 projects in the San Diego and Imperial County regions. Despite these investments, there remain several issues that need to be addressed. One of the issues will be to identify potential funding resources to complete the short-term projects and long-term proposals. Below are two additional issues (see map on page 5-3).

- Research options to fund current shortfalls for Near and Current Term Improvement Projects - total between $612.0 and $753.0 million.
- Identify new and/or innovative funding resources for Additional Proposals - totaling approximately $111 million.

The State of California strongly believes that every attempt should be made to sustain the existing commitment and cooperation among local, regional, state, and federal transportation agencies in the U.S. and Mexico for improving the transportation system along the California and Baja California border. Consequently, Caltrans will continue to work with its partners in the U.S. and Mexico to identify and prioritize transportation improvements to serve the NAFTA Net.

With federal and state assistance, Caltrans' priorities will be to ensure that current border transportation commitments are met. Additionally, ongoing efforts for documenting transportation deficiencies, identifying funding resources and implementing transportation improvements along the California and Baja California border are continued. This document was intended to provide the reader with a comprehensive overview of current and future projects in the California-Baja California border region. As circumstances change, this report will be updated in an effort to keep interested parties apprised of the most current information related to project programming, funding, and delivery. For additional copies, or to inquire as to forthcoming updates, please contact the Public Information Office at (619) 688-6670.

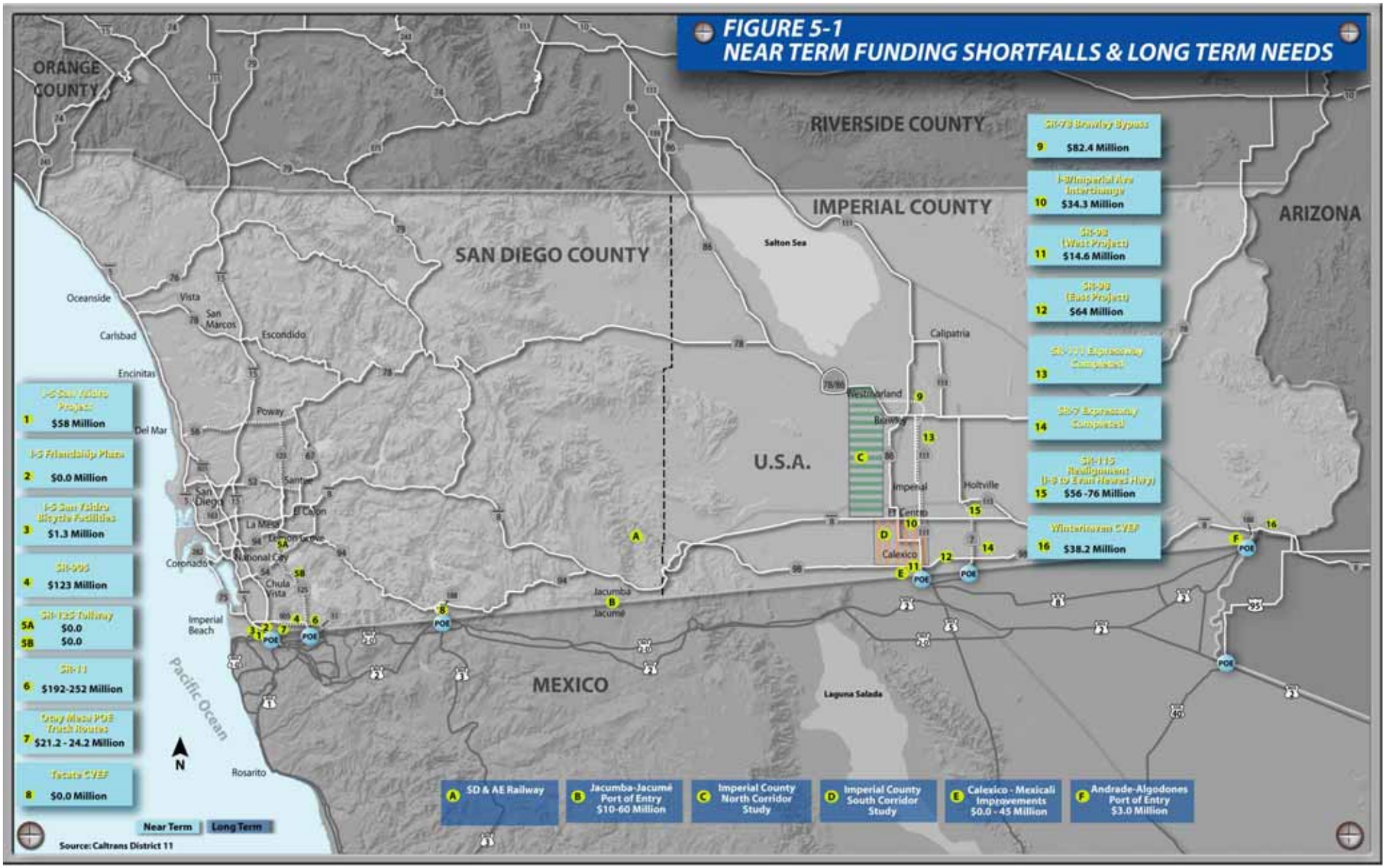
FIGURE 5-1
NEAR TERM FUNDING SHORTFALLS & LONG TERM NEEDS
ORANGE COUNTY
RIVERSIDE COUNTY
IMPERIAL COUNTY
SAN DIEGO COUNTY
ARIZONA
U.S.A.
MEXICO
Salton Sea
Laguna Salada
Pacific Ocean
Oceanside
Vista
San Marcos
Escondido
Carlsbad
Encinitas
Del Mar
Poway
Santee
San Diego
El Cajon
La Mesa
Lemon Grove
National City
Coronado
Chula Vista
Imperial Beach
Rosarito
Jacumba
Jacumé
Calipatria
Westmorland
Brawley
Imperial
Holtville
El Centro
Calexico
1 I-5 San Ysidro Project $58 Million
2 I-5 Friendship Phase $0.0 Million
3 I-5 San Ysidro Bicycle Facilities $1.3 Million
4 SR-905 $123 Million
5A SR-125 Tollway $0.0
5B $0.0
6 SR-11 $192-252 Million
7 Otay Mesa POE Truck Routes $21.2 - 24.2 Million
8 Tecate CVEF $0.0 Million
9 SR-78 Brawley Bypass $82.4 Million
10 I-8/Imperial Ave Interchange $34.3 Million
11 SR-98 (West Project) $14.6 Million
12 SR-98 (East Project) $64 Million
13 SR-111 Expressway Completed
14 SR-7 Expressway Completed
15 SR-115 Realignment (I-5 to Evan Hewes Hwy) $56 -76 Million
16 Winterhaven CVEF $38.2 Million
A SD & AE Railway
B Jacumba-Jacumé Port of Entry $10-60 Million
C Imperial County North Corridor Study
D Imperial County South Corridor Study
E Calexico - Mexicali Improvements $0.0 - 45 Million
F Andrade-Algodones Port of Entry $3.0 Million
Near Term
Long Term
Source: Caltrans District 11

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ACRONYMS

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ACRONYMS

ADT	Average Daily Traffic
ASA	Aeropuertos y Servicios Auxiliares (Federal Agency responsible for the operations and maintenance of Mexican public airports)
AVI	Automatic Vehicle Identification
BGIS	Binational Geographic Information System
BINS	Binational Border Transportation Needs Assessment Study
BTEP	Border Technology Exchange Program
BTS	Bureau of Transportation Statistics
CALTRANS	California Department of Transportation
CABIN	Commission de Avaluos de Bienes Nacionales (Mexican Counterpart of GSA)
CGR	Center for Governmental Research
CHP	California Highway Patrol
COBRO	Committee on Binational Regional Opportunities
C-TPAT	Customs Trade Partners against Terrorism
CTV	California Transportation Ventures (Private company responsible for the construction of SR-125 toll road)
CVEF	Commercial Vehicle Enforcement Facility
DHS	Department of Homeland Security
DOT	Department of Transportation
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FAST	Free and Secure Trade
FHWA	Federal Highway Administration
FNM	Ferrocarriles Nacionales de Mexico (Federal Agency responsible for all railroad facilities and services in Mexico)
GARVEE	Grant Application Revenue Vehicle
GATT	General Agreement of Tariffs and Trade
GSA	General Services Administration
HOV	High Occupancy Vehicles
IBTC	International Border Trade Corridor
I I D	Imperial Irrigation District
ICTP	Imperial County Transportation Plan
INDAABIN	Instituto de Administracion y Avaluos de Bienes Nacionales (Mexican Counterpart of GSA)

ACRONYMS

INEGI	Instituto Nacional De Estadistica Geografia E Informatica (Mexican Agency responsible for integrating Mexico's system of statistical and geographic information)
INS	Immigration and Naturalization Service
ISTEA	Intermodal Surface Transportation Efficiency Act
IVAG	Imperial Valley Association of Governments
JWC	Joint Working Committee
LOS	Level of Service
MPO	Metropolitan Planning Organization
MTDB	Metropolitan Transit Development Board
NAFTA	North American Free Trade Agreement
NHS	National Highway Systems
POE	Port of Entry
PS&E	Plans Specifications and Estimates
PSR	Project Study Report
RSTP	Regional Surface Transportation Program
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
R / W	Right of Way
SAHOPE	Secretaria de Asentamientos Humanos y Obras Publicas del Estado de Baja California (Agency responsible for regional land use and transportation planning in the state of Baja California,Mexico)
SANDAG	San Diego Association of Governments
SAT	Servicio de Administracion Tributaria (Mexican Agency equivalent to Customs Inspection Agency)
SCAG	Southern California Association of Governments
SCT	Secretaria de Communicaciones y Transportes (Mexican Counterpart of FHWA)
SD&AE	San Diego and Arizona Eastern Railway
SD&IV	San Diego and Imperial Valley Railroad
SDUPD	San Diego Unified Port District
SENTRI	Secure Electronic Network For Travelers Rapid Inspection
SIDUE	Secretariat of Infrastructure and Urban Development
SP	Southern Pacific Railroad (merged with Union Pacific)
SR	State Route
STIP	State Transportation Improvement Program
TCRP	Transportation Congestion Relieve Program
TEA 21	Transportation Equity Act for the 21st Century
TransNet	San Diego County's voter approved sales tax program for transportation projects
USGAO	United States General Accounting Office
US VISIT	United States Visitor and Immigrant Status Indicator Technology

APPENDIX A

AN EXCERPT FROM THE

"Executive Summary
Binational Border Transportation Infrastructure
Needs Assessment Study"

JANUARY 2004

Sourcepoint
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APPENDIX A
AN EXCERPT FROM THE
Executive Summary - Binational Border Transportation Infrastructure Needs Assessment Study

INTRODUCTION

Trade between the United States (U.S.) and Mexico has soared over the past decade. With the signing of the North American Free Trade Agreement (NAFTA) in 1994, the value of trade from 1995-2000 has increased by 17 percent per year. Currently, Mexico is the second largest trading partner of the U.S., behind only Canada. In 2002, trade between the U.S. and Mexico totaled $232 billion dollars[1].

This explosion of trade between the U.S. and Mexico predominantly moves across the border on trucks, with a smaller portion of goods exchanged by rail, water and air. Two-way truck trade alone more than doubled from about $77 billion dollars in 1994 to about $170 billion dollars in 2000. In 2002, nearly 70 percent of merchandise trade between the U.S. and Mexico was transported by trucks[2].

While NAFTA has brought economic benefit to the border region as well as to each country, it has also provided infrastructure-related challenges. For both countries to continue to benefit in future years from the shared border, the transportation infrastructure that links the two countries needs to be maintained and expanded to handle future cross-border travel demand. Current transportation infrastructure was not designed to handle the large NAFTA traffic volumes[3]. As a result, the local transportation system is increasingly used by international trade related traffic destined for the interior of the United States or Mexico, compounding existing demands for additional transportation infrastructure from the rise in local traffic.

In the U.S., State Departments of Transportation (DOTs) have been mainly responsible for improving the local transportation infrastructure, which provided benefits to the national economy as it serves international goods movement. The U.S. and Mexico share a 1,278-mile (2,056 kilometers – km) border that extends from the Pacific Ocean on the west coast to the Gulf of Mexico on the southeast coast. A border region of 100 km on either side of the border is shown in Map 1 on the following page. The 100 km, ten-state "Border Region" is the focus of this study. The four U.S. border states are California, Arizona, New Mexico and Texas. The six Mexican border states are Baja California, Sonora, Chihuahua, Coahuila, Nuevo León, and Tamaulipas.

[1] U.S. Bureau of the Census, Foreign Trade Division, 2003.
[2] U.S. Department of Transportation, Bureau of Transportation Statistics, Transborder Surface Freight Data, 2003
[3] Transportation infrastructure in the U.S. and Mexico was not historically built around binational trade and as such is not adequate for the reorientation of traffic around the border. For example, in the U.S., the main transportation arteries run east-west, following the pattern of national development. In Mexico, the principal federal highways run north-south and show a radial pattern around main population centers (Federal District, Guadalajara and Monterrey).

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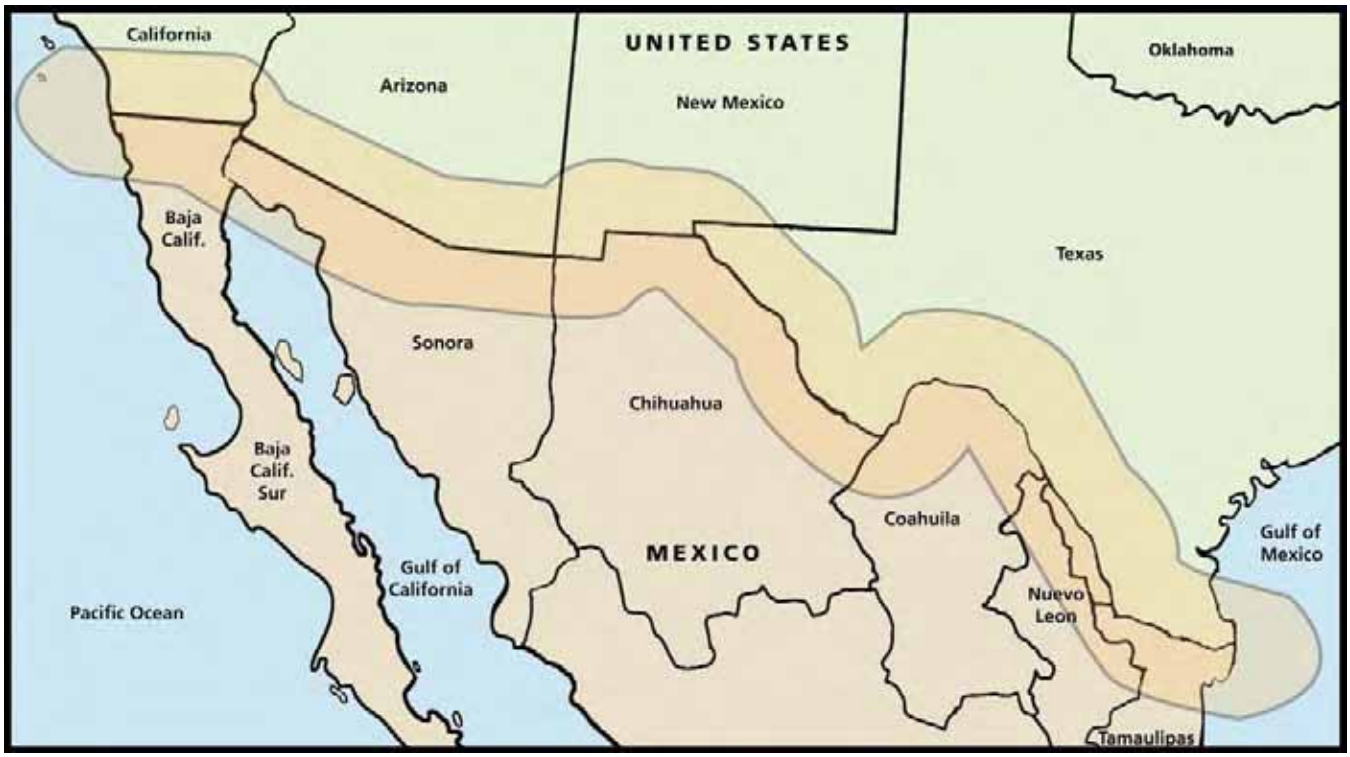
100 KM BORDER REGION



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BACKGROUND

In April 1994, the U.S. Department of Transportation (DOT) and Mexico's Secretariat of Communications and Transportation (Secretaría de Comunicaciones y Transportes (SCT)) signed a Memorandum of Understanding (MOU) outlining the creation of the Joint Working Committee (JWC). Through the MOU, the JWC was charged with "analyzing, developing, and coordinating border transportation plans and programs reflecting the needs of both countries." The MOU also envisioned enhanced communications, coordination, advice, and consensus building among government entities on both sides of the border.

The JWC consists of transportation and planning agency representatives from the four U.S. states and the six Mexican states along the international border and representatives from selected federal agencies from both the U.S. and Mexican governments, including the U.S. Department of State (DOS) and Mexico's Secretariat of Foreign Relations (Secretaría de Relaciones Exteriores (SRE)). In Mexico, the 1995-2000 National Development Plan (Plan Nacional de Desarrollo (PND)) called for the modernization of the federal highways of national importance, which provide a link among state capitals and main maritime and border ports.

The 2001-2006 PND continues these efforts with the objective of achieving a transportation infrastructure network that will facilitate Mexico's participation in the globalization process. In addition to investments in highway improvements, railroads, airports and seaports have benefited from both public and private investments. [4]

In the U.S., the Transportation Equity Act for the 21st Century (TEA-21), which became law in 1998,provided some dedicated resources to address additional transportation facilities identified in the[4] Secretaría de Comunicaciones y Transportes, *Plan Nacional de Desarrollo 1995-2000 and Plan Nacional de Desarrollo 2001-2006*.

National Corridor Planning and Development (NCPD) Program and the Corridor Border Infrastructure (CBI) Program. However, these programs have not provided sufficient funding to cover border area transportation needs, and the sections authorizing these programs end with the scheduled termination of TEA-21 at the end of the 2003 federal fiscal year.

In 1998, the JWC authorized the Binational Border Transportation Planning & Programming Study[5] or P&P Study. The P&P Study produced an inventory of transportation infrastructure along the U.S.- Mexico border and specified some of the "disconnects" that existed in 1998. However, the P&P Study stopped short of identifying major transportation corridors and assessing their needs. The JWC recognized that the TEA-21 programs did not provide sufficient funding to satisfy the rapidly expanding border area transportation needs and, with the reauthorization of TEA-21 close at hand, that additional information was required to carry out a transportation corridor analysis and needs assessment for the U.S.-Mexico border region. The JWC anticipated that the findings from this study would be used during the TEA-21 reauthorization process as input to help ensure adequate future funding for international border transportation investment needs. With these objectives in mind the JWC authorized the Binational Border Transportation Infrastructure Needs Assessment Study (BINS).

[5] Barton-Aschman Associates Inc. & La Empresa S. de R.L., "Binational Border Transportation Planning and Programming Study," April 10, 1998.

APPENDIX A
AN EXCERPT FROM THE
Executive Summary - Binational Border Transportation Infrastructure Needs Assessment Study

STUDY PURPOSE AND OBJECTIVES

The BINS project follows the JWC's vision of developing and coordinating border transportation plans, and continues the work initiated in the P&P study. The purpose of BINS is to identify major transportation corridors on the border region, to develop a quantitative procedure to evaluate the needs of these corridors, and then, with input from the JWC, to identify transportation projects to meet the needs of the corridors as well as to identify possible funding sources.

Specifically, the BINS project has five key objectives:

1. To develop a set of minimum criteria to be used by the JWC to identify major multi-modal transportation corridors.

2. To develop an evaluation process, accepted by the JWC, to analyze major transportation corridors identified in Objective No. 1.

3. To create a border-wide database and evaluation tool to prioritize each state's transportation corridors based on the methodology and process identified in Objective No. 2, which can be used for future assessments.

4. To compile a list of significant transportation projects on the corridors, including each project's description, estimated cost, and anticipated completion date, and to summarize each state funding needs, as well as those for the U.S.-Mexico border, to implement these transportation projects.

5. To investigate traditional and innovative methods to fund border transportation infrastructure needs.

ORGANIZATION OF THE REPORT

The BINS project is documented in three reports that provide increasing levels of detail. First, the Executive Summary highlights the major findings related to border transportation infrastructure needs, strategic transportation corridors and planned projects as well as potential financing options.

Second, the BINS report describes the process, methodology and tools developed to evaluate transportation infrastructure needs along the border region and it also presents the results of the analyses in more detail. Finally, the Appendices include the raw data used as input for the various analyses as well as documentation of the study process.

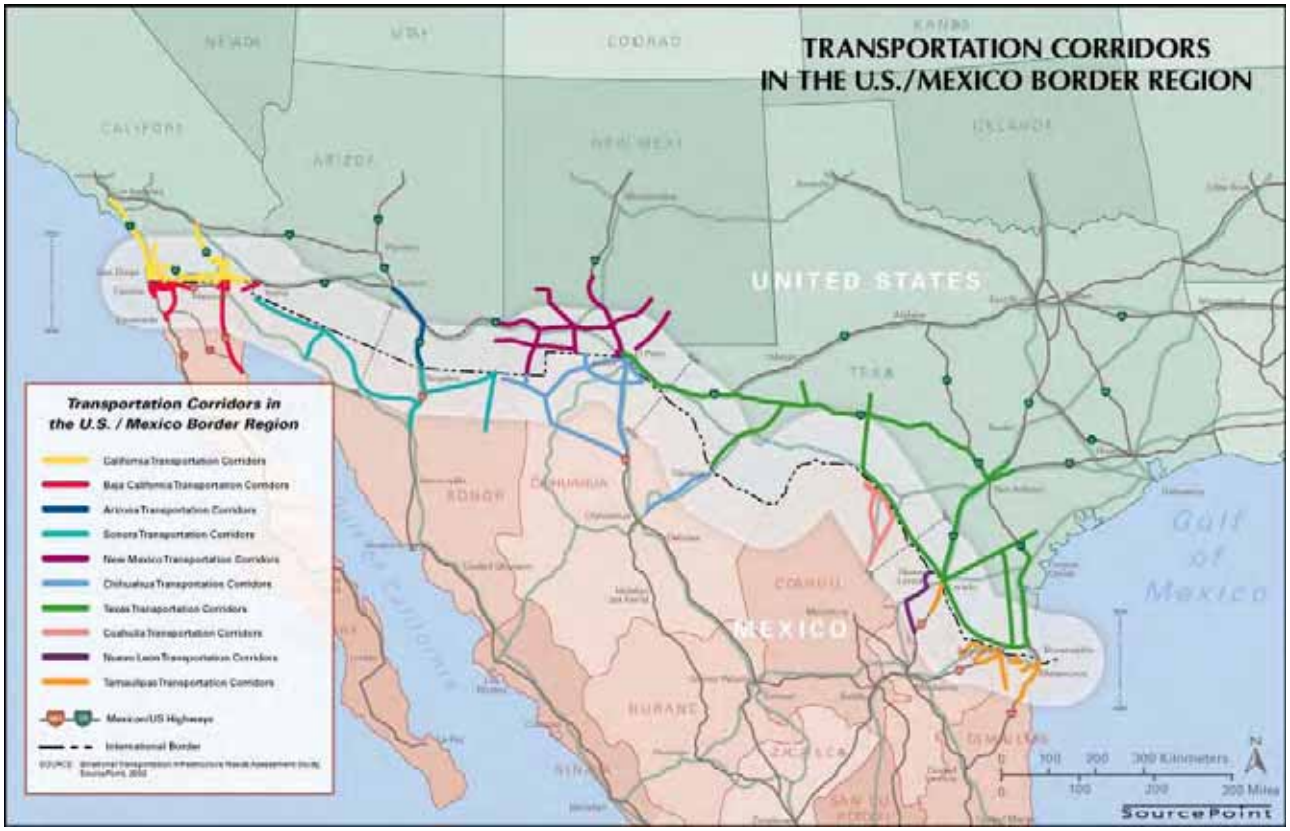
GENERAL CONCLUSIONS

The BINS project completed five main objectives which followed the overall purpose of assessing the transportation infrastructure needs of the U.S.-Mexico border region. It was conducted with the participation of representatives from the ten border states as well as SCT and Federal Highway Administration (FHWA), under the guidance of the JWC.

First, multimodal border transportation corridors were identified. Then, an evaluation process and tool, as well as a borderwide database, were developed to analyze and prioritize those corridors within each border state. Next, transportation projects were identified on each of the selected corridors. Finally, traditional and innovative financing methods for transportation projects were investigated.

The BINS project provides a systematic approach for assessing transportation infrastructure needs in the U.S.-Mexico border region. Findings from this project will assist transportation officials on both sides of the border to establish planning and programming strategies to achieve common goals for key multi-modal transportation corridors. The framework developed by the BINS project also will be useful for future transportation infrastructure assessments and can be enhanced or adapted to reflect the JWC's evolving areas of emphasis. A summary of findings for each border state is provided in the following section.

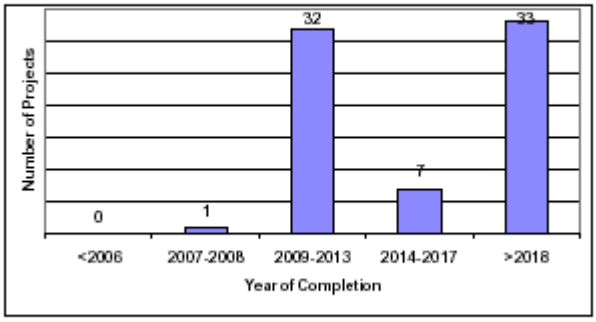
In brief, the BINS project identified 42 multimodal transportation corridors within the ten border states. A border-wide database and evaluation tool was created to prioritize each state's transportation corridors based on multimodal quantifiable criteria for highways, land ports of entry, airports, maritime ports, and railroads.



Also, the BINS project compiled a list of significant transportation projects on the corridors. The purpose of compiling transportation project-level information was both to summarize planned infrastructure improvements for the border region and the unfunded needs identified by the states. Texas' long-term projects were not included. Arizona submitted projects beyond 2003; however, the expected implementation timeline was not provided. In the U.S., a shortfall of approximately $10.6 billion dollars

Of the 103 highway projects, 73 of the projects contain dates when the project is scheduled to be completed. For completion dates, one is schedule for completion between 2007 and 2008, 32 between 2009 and 2013, seven between 2014 and 2017, and 33 in 2018 and beyond (see Figure 23).

Figure 23
California Highway Projects by Year of Completion



Source: BINS Technical Committee

Of the seven railroad projects, which total approximately $923 million dollars (constant 2003 dollars), four projects are considered fully funded at an estimated cost of approximately $811 million dollars while three projects are considered not fully funded and are anticipated to cost $112 million dollars. The fully funded highway projects will help accommodate the projected growth in travel demand in the two California corridors over the next two decades. However, California has identified a need of $10.3 billion dollars to fully fund identified highway projects and $112 million dollars to implement rail projects in the state's border transportation system.

(in 2003 constant dollars) for transportation projects was identified and it is mostly related to highway projects ($10.5 billion dollars). Anticipated costs for long-term projects were not submitted by Texas and Arizona. New Mexico submitted cost estimates for long-term highway projects only.

In Mexico, the identified funding need for transportation projects amounts to $9,030 million pesos (in constant 2003 pesos) and it also corresponds mainly to highway projects ($8,878 million pesos). The section titled Summary of Findings by State illustrates the corridors (organized by priority), provides an example of transportation projects, and identifies funding needs, for each of the ten border states.

As noted earlier, the BINS methodology followed a multimodal approach for gathering quantitative data for highway, rail, maritime, airport, port of entry, and intermodal facilities. The evaluation tool relies on this database to prioritize transportation corridors within each border state. The limitations of the evaluation tool derive from the lack of availability of current or projected traffic and trade data for the corridors identified. Several border states were unable to provide complete datasets. Another data limitation encountered was related to information on planned transportation projects. The data provided by the states varied widely in terms of the planning horizon, project description, cost estimates, and project funding availability. For example, some states provided no data on planned long-term projects, anticipated project cost or funding levels. Project descriptions were many times incomplete.

The future enhancement of the transportation infrastructure network along the border region will greatly depend on continuous cooperation and coordination efforts in binational planning. The BINS project has continued to strengthen the foundation of a binational perspective for the improvement of transportation infrastructure, which was started through the P&P study. However, BINS stopped short of looking at the connection between the transportation corridors identified in the U.S. and Mexico or between adjoining states in either country. The remainder of this section identifies recommended enhancements for a potential second phase of the BINS project.

A second phase of BINS could accomplish improvements in the process of corridor and project identification of binational and multistate transportation corridors. The concept of establishing binational corridors would capture the synergy of crossborder trade and travel more fully. It would allow the prioritization of corridors and projects under a new light by providing a better understanding of the mutual economic benefits for both countries. Also, it would point to the positive results of coordinated binational planning and, at the same time, would provide a signal when that coordination is not present. For example, establishing binational corridors and identifying key transportation projects would show whether both countries are planning to implement improvements on transportation facilities or POEs on a similar schedule. In addition, a second phase of BINS could enhance the corridor evaluation process by incorporating a broader set of criteria. Issues such as security, environment, and safety should be considered as additional elements.

Current criteria could be reviewed to determine whether thresholds should be established, such as minimum levels of daily traffic on a facility, among others. Although a binational geographical information system (GIS) database was not available during the development of the BINS project, a second phase of BINS could incorporate its capabilities. Such a system could facilitate the process of corridor data administration and, most importantly, it could assist in locating and analyzing transportation projects on the identified corridors. A binational GIS database could also assist in the production of maps, which are important visual tools for transportation studies and decision making.

Finally, it is recommended that the evaluation of U.S.-Mexico border transportation corridors be updated regularly, building upon the BINS project.

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California

The BINS Technical Committee representative identified two corridors in California, the San Diego-Tijuana-Tecate and the Imperial-Mexicali Corridors. A map of the California border region and its corridors, which are organized by priority, is presented below.

The BINS Technical Committee representative identified 110 transportation projects in California's two corridors through 2030. They include the construction of State Route (SR) 905, improvements to I-5 and I-805, construction of Brawley Bypass expressway, and upgrades to SR 111. Of the 110 projects, 103 are highway projects and seven are railroad projects. Twenty-six projects are considered fully funded and 84 projects are not fully funded. Of the 103 highway projects, which total approximately $12.9 billion dollars (constant 2003 dollars), 22 projects are considered fully funded and have an estimated cost of approximately $2.6 billion dollars.

The remaining 81 highway projects are considered not fully funded and are estimated to cost $10.3 billion dollars. Of the seven railroad projects, which total approximately $923 million dollars (constant 2003 dollars), four projects are considered fully funded at an estimated cost of approximately $811 million dollars while three projects are considered not fully funded and are anticipated to cost $112 million dollars.

Therefore, California has identified a need of $10.3 billion dollars to fully fund identified highway projects and $112 million dollars to implement rail projects in the state's border transportation system.

APPENDIX A
AN EXCERPT FROM THE
Binational Border Transportation Infrastructure Needs Assessment Study

California

The BINS Technical Committee representative identified two corridors in California, the San Diego-Tijuana-Tecate and the Imperial-Mexicali Corridors. T hese corridors were selected because they are the two main routes trucks use as they cross into California from Mexico. In short, they are the truck trade routes for NAFTA trade. A map of the California border region and the corridors in the 100 km limit is presented on the following page.

California Transportation Infrastructure within 100 km of the U.S. Mexico Border

Highways

The San Diego-Tijuana-Tecate Corridor is composed of various segments from nine highways: Interstate 5 (I-5), I-8, I-15, I-805, State Route 11 (SR 11), SR 94, SR 125, SR 188 and SR 905. The Imperial-Mexicali Corridor is composed of segments from eight highways: I-8, I-10, SR 7, SR 78, SR 86, SR 98, SR 111, SR 115 and SR 186.

Land Ports of Entry

There are six land POEs in California: San Ysidro, Otay Mesa, Tecate, Calexico, Calexico East, and Andrade. A new POE is proposed at East Otay Mesa, approximately two miles east of the existing Otay Mesa POE.

Airports

There are six airports located within 100 km of the U.S.-Mexico border, but only Lindbergh Field is included in the evaluation because it is the only airport designated as an international POE. The runway length of the longest runway is 9,400 feet (about 2,860 meters).

Railroads

There are three railroads within 100 km of the U.S.-Mexico border and they are the Burlington Northern Santa Fe (BNSF), the San Diego & Arizona Eastern (SD&AE) Railway, and the Union Pacific (UP). The SD&AE Railway crosses the U.S.-Mexico border at the San Ysidro POE and east of the Tecate POE while the UP crosses the U.S.-Mexico border at the Calexico POE.

Maritime Ports

California has one maritime port located within 100 km of the U.S.-Mexico border that is designated as an international POE. That port is the Port of San Diego with a main channel depth of 42 feet (about 13 meters).

Analysis of the Corridor Evaluation Results for California

Of the two corridors evaluated in California, the San Diego-Tijuana-Tecate Corridor is listed first overall with the Imperial-Mexicali Corridor listed second. The San Diego-Tijuana-Tecate Corridor obtains its overall first place listing with respect to the current conditions and the projected changes.

Current Conditions

This discussion reviews highway, land POE, airport, maritime port and rail data and results. With regard to highways, the San Diego-Tijuana-Tecate Corridor is listed first. This comes about because the San Diego-Tijuana-Tecate Corridor is listed first in three categories (AADT, LOS and capacity) and the Imperial-Mexicali Corridor is listed first in only one category (highway length). The San Diego-Tijuana-Tecate Corridor had almost eight times as much AADT as the Imperial-Mexicali Corridor (719,972 vehicles compared to 92,755 vehicles), 77 percent more highway capacity (42,177 versus 23,871) and its LOS is lower (LOS C versus LOS A). By contrast, the Imperial-Mexicali Corridor has 29 percent more mileage than the San Diego Corridor (377.8 miles versus 292.4 miles).

For truck and trade volumes, passenger vehicles, airports, and maritime ports, the San Diego-Tijuana-Tecate Corridor is listed first primarily because of its AADT counts. For railroad data, the Imperial-Mexicali Corridor is listed first because the number of rail cars and the amount of goods transported in the Imperial-Mexicali Corridor by the UP is larger than the number of rail cars and goods transported by the San Diego Imperial Valley (SDIV) railroad in the San Diego-Tijuana-Tecate Corridor. The SDIV operates freight service on the SD&AE Railway.

Projected Change

This discussion reviews highway, land POE, airport, maritime port and rail data for both absolute changes and percent changes. With regard to highway data, the San Diego-Tijuana-Tecate Corridor is listed first in three of the four categories (AADT, highway length and capacity), indicating that the changes are forecast to be greater in the San Diego-Tijuana-Tecate Corridor. The San Diego-Tijuana-Tecate Corridor is listed first with a higher percent increase in highway length (4.8%) and capacity (42.0%). AADT is projected to grow faster in the Imperial-Mexicali Corridor (101%). ForLOS, congestion in the Imperial-Mexicali Corridor is anticipated to increase more than in the San Diego-Tijuana-Tecate Corridor. For trucks, passenger vehicles, airports, and maritime ports data, the San Diego-Tijuana-Tecate Corridor is listed first because the growth rates for both corridors are the same, and the San Diego-Tijuana-Tecate Corridor had larger volumes in the year 2000. For railroad data, the Imperial-Mexicali Corridor is listed first for the same reason. The growth rates are the same for both railroads, but the UP in the Imperial - Mexicali Corridor had larger volumes in calendar year 2000 than the SDIV railroad in the San Diego-Tijuana-Tecate Corridor had in the year 2000.

Table 4 summarizes key indicators of California's transportation corridors. Corridors are listed by priority based on the results of the evaluation.

Table 4
California's Corridor Summary

1. San Diego-Tijuana-Tecate Corridor				**2. Imperial-Mexicali Corridor**			
	2000	2020	% Change		2000	2020	% Change
AADT	719,972	1,008,392	40	AADT	92,755	186,422	101
POE Crossings (Annual)				POE Crossings (Annual)			
Trucks	910,694	1,478,428	170	Trucks	117,326	273,318	170
Passenger	26,566,907	43,633,792	72	Passenger	3,422,661	8,066,624	72
Trade by Truck[10]	$14,121	$41,543	309	Trade by Truck[10]	$1,819	$7,680	309

[10]Values of trucks, by truck, in millions of dollars.

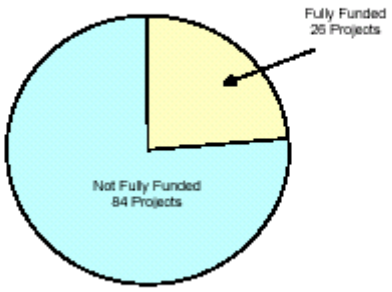
California

The BINS Technical Committee representative identified 110 transportation projects in California's two corridors through 2030. Of the 110 projects, 103 (85%) are highway projects and seven (15%) are railroad projects. They include the construction of State Route (SR) 905, improvements to I-5 and I-805, construction of Brawley Bypass expressway, and upgrades to SR 111.

The sources of the list of projects provided by the California Technical Representative are the 2030 San Diego Regional Transportation Plan (RTP), the 2002 San Diego Regional Transportation Improvement Plan (RTIP), the Imperial Valley Association of Governments (IVAG)-Near Term Projects, and the IVAG-Long Term Projects.

Twenty-six of the 110 projects are considered fully funded and 84 projects are not fully funded (see Figure 22). All 110 projects have cost estimates.

Figure 22
California: Projects by Funding Availability



Source: BINS Technical Committee

Of the 103 highway projects, which total approximately $12.9 billion dollars (constant 2003 dollars), 22 highway projects (21%) are considered fully funded and have an estimated cost of about $2.6 billion dollars.[1] For these 22 projects, the costs range from about $448 million dollars (largest)[2] to about $300,000 dollars (smallest). The median project cost is about $47 million dollars. The remaining 81 highway projects (79%) are not fully funded and are estimated to cost $10.3 billion dollars. These projects range in cost from about $900 million dollars (largest) to about $393,000 dollars (smallest). The median project cost is about $72 million dollars[1]

[1] Costs were provided in 2001 constant dollars and are inflated to 2003 constant dollars using an inflation factor of 3.5% per year. This inflation factor was obtained from the BINS Technical Committee representative.
[2] This project is a toll road and all the funding comes from the private sector.

California Transportation Projects

Bi-National Border Transportation Infrastructure Needs Assessment Study [BINS]

Projects must be Within 100 km of the US-Mexico Border

# 1	#2	#3	#4	#5	#6	#7	======= Highway Projects Data #8 =======					#9	#10				
							8a	8b	8c	8d	8e	<=== Dollar Data ===>					
Project Number or ID	State ID	CO	Project Mode 1=Hwy 2=Air 3=Rail 4=Water	Description of Project	Year the Project Begins	Year the Project Becomes Operational	Highway ID	Specify the mile marker where the segment begins	Specify the mile marker where the segment ends	LOS before	LOS after	Cost of Project in Thousands of Dollars - Base Year Set by Agency	Fully Funded?	Comments	Cost of Project in Thousands of 2003 Dollars	Partial Funding in 2003 Dollars from Allocations	2003 Dollars Needed [cost - allocations]
From the San Diego Regional Transportation Plan [RTP] - Projects Whose Funding is "Reasonably Expected" 2003$																	
1R	CA	SD	1	Construct 2 new HOV lanes from SR-905 to SR-54	By 2020	2020	I-5	3.100	9.400			$130,000	N	Projects 1R through 6R	$130,000	$1,000	$129,000
2R	CA	SD	1	Construct 2 new HOV lanes from SR-54 to I-8	By 2020	2020	I-5	9.400	R20.1			$900,000	N	obtain	$900,000	$2,000	$898,000
3R	CA	SD	1	Add 2 freeway lanes and 2 HOV lanes from I-8 to I-805	By 2020	2020	I-5	R20.1	R30.7			$440,000	N	the first	$440,000	$1,000	$439,000
4R	CA	SD	1	Construct 4 new managed lanes from I-805 to SR-56	By 2014	2014	I-5	R30.7	R32.9			$30,000	N	$7,337 from	$30,000	$1,000	$29,000
5R	CA	SD	1	Add 2 freeway lanes and 4 managed lanes from SR-56 to Leucadia Blvd.	By 2014	2014	I-5	R32.9	R42.7			$530,000	N	RTIP	$530,000	$1,337	$528,663
6R	CA	SD	1	Construct 4 new managed lanes from Leucadia Blvd. To Vandegrift Blvd.	By 2030	2030	I-5	R42.7	R56.4			$370,000	N	Project # 2	$370,000	$1,000	$369,000
7R	CA	SD	1	Construct 2 new HOV lanes from SR-125 to SR-67	By 2030	2030	I-8	9.600	15.800			$130,000	N		$130,000		$130,000
8R	CA	SD	1	Construct 2 new HOV lanes from SR-67 to 2nd Street	By 2030	2030	I-8	15.800	R18.7			$40,000	N		$40,000		$40,000
9R	CA	SD	1	from SR-94 to SR-163 / Two new HOV lanes	By 2030	2030	I-15	R2.2	M12.1			$200,000	N	Projects 9R	$200,000	$60,000	$140,000
10R	CA	SD	1	Add 2 managed lanes/movable barrier from SR-163 to SR-56	By 2010	2010	I-15	M12.1	M19.4			$200,000	N	through 12R obtain	$200,000	$60,000	$140,000
11R	CA	SD	1	Construct 4 new managed lanes/movable barrier from SR-163 SR 56 to Centre City Pkwy.	By 2010	2010	I-15	M12.1	M27.6			$340,000	Y	$243,954 from RTP	$340,000	$100,000	$240,000
12R	CA	SD	1	Construct 4 new managed lanes from Centre City Pkwy to SR-78	By 2010	2010	I-15	M27.6	R31.5			$120,000	N	projects # 3, #4 & #5	$120,000	$23,954	$96,046
13R	CA	SD	1	Construct 2 new HOV lanes from I-805 to I-15	By 2030	2030	SR-52					$70,000	N		$70,000		$70,000
14R	CA	SD	1	Construct 2 new freeway lanes and 2 managed lanes from I-15 to SR-125	By 2030	2030	SR-52					$170,000	N		$170,000		$170,000
15R	CA	SD	1	from I-5 to SR-94 / Two new HOV lanes	By 2010	2010	SR-54/ SR-125	L1.50	R14.6			$120,000	N	From RTIP #20	$120,000	$5,502	$114,498
16R	CA	SD	1	Construct 2 new freeways lanes and 2 HOV lanes fro I-5 to I-15	By 2014	2014	SR-56					$180,000	N		$180,000		$180,000
17R	CA	SD	1	Construct 2 new HOV lanes from I-5 to I-15	By 2030	2030	SR-78					$500,000	N		$500,000		$500,000
18R	CA	SD	1	Construct 2 new HOV lanes from I-5 to I-8	By 2030	2030	SR-94/ SR-125	1.400	T10.1			$500,000	N	RC: SR 94 from I-5 to I-15 only	$500,000		$500,000
19R	CA	SD	1	Construct new 4 lane toll road and 2 HOV lanes from Orange County to I-5	By 2030	2030	SR-241					$420,000	N		$420,000		$420,000
20R	CA	SD	1	Construct new 4 lane managed lanes from SR-905 to SR-54	By 2020	2020	I-805	1.800	8.900			$300,000	N	RC: add 2 HOV only	$300,000		$300,000
21R	CA	SD	1	Construct new 4 lane managed lanes from SR-54 to I-8	By 2020	2020	I-805	8.900	17.600			$450,000	N		$450,000		$450,000
22R	CA	SD	1	Construct new 4 lane managed lanes on Mission Valley Viaduct	By 2020	2020	I-805	17.000	18.900			$250,000	N		$250,000		$250,000
23R	CA	SD	1	Construct 4 new managed lanes from I-8 to I-5	By 2020	2020	I-805	17.600	0.500			$380,000	N		$380,000		$380,000
24R	CA	SD	1	I-5 and I-805 HOV Connector	By 2014	2014	I-5	30.400	32.700			$180,000	N		$180,000		$180,000
25R	CA	SD	1	I-15 and SR-78 HOV Connector	By 2030	2030	I-15	31.500	32.900			$200,000	N		$200,000		$200,000
26R	CA	SD	1	I-15 and SR-94 HOV Connector	By 2030	2030	I-15	1.850	3.370			$150,000	N		$150,000		$150,000
27R	CA	SD	1	I-805 and SR-52 HOV Connector	By 2030	2030	I-805	22.600	24.400			$150,000	N		$150,000		$150,000
28R	CA	SD	1	Port of Entry - Mexico	By 2010	2010	I-5/I-805	R0.0	1.190			$20,000	N		$20,000		$20,000
29R	CA	SD	1	Construct a 4 lane freeway from SR-125 to SR-67	By 2010	2010	SR-52					$290,000	Y		$290,000		
30R	CA	SD	1	Construct a 4 lane freeway from Camino Ruiz to Carmel County	By 2010	2010	SR-56					$130,000	Y		$130,000		
31R	CA	SD	1	Construct new 4 lane toll road from SR-905 to San Miguel Rd.	By 2010	2010	SR-125	L1.50	R14.6			$400,000	Y	Obtain some funds from	$400,000	$350,000	$50,000
32R	CA	SD	1	Construct new 4 lane freeway from San Miguel Rd. to SR-54	By 2010	2010	SR-125	11.200	R14.6			$140,000	Y	RTIP Project # 14	$140,000	$97,503	$42,497
37R	CA	SD	1	Construct new 6 lane freeway from I-805 to Mexico	By 2010	2010	SR-905	2.800	12.000			$290,000	N	From RTIP # 15 & #16	$290,000	$224,929	$65,071
38R	CA	SD	1	Construct new 4 lane freeway from SR-905 to Mexico	By 2010	2010	SR-11	0.000	2.700			$190,000	N	From RTIP Project # 23	$190,000	$6,736	$183,264
39R	CA	SD	1	Southbound Truck Route	STIP candidate 05/06			9.700	12.000			$16,600	N		$16,600		$16,600
40R	CA	SD	1	Northbound Truck Route	Application submitted			12.000	10.600			$1,000	N		$1,000		$1,000
41R	CA	SD	1	Otay Mesa ITS				12.000	12.000			$6,000	N		$6,000		$6,000
42R	CA	SD	1	I-5/Virginia Avenue Realignment	PA&ED phase		I-5	R0.0	R0.9			$130,000	N	RTIP # 18	$130,000	$11,200	$118,800
43R	CA	SD	1	Friendship Plaza	Construction			R0.0	R0.9			$300	Y		$300		
45R	CA	SD	1	Tecate CVEF	PA&ED phase			0.600	1.900			$12,500	N		$12,500		$12,128
46R	CA	SD	1	Tecate CA - Tecate B.C. Commercial Road Connection			Tecate POE					$2,000	N		$2,000		$2,000
47R	CA	SD	1	Add 4 lane freeway from I-805 to SR-56	By 2010	2010	I-5	R0.9	R32.9			$190,000	Y		$190,000		
48R	CA	SD	1	Add 2 lane freeway from 2nd Street to Los Coches	By 2030	2030	I-8	15.800	R25.7			$30,000	N		$30,000		$30,000
49R	CA	SD	1	Add 2 lane freeway from I-5 to I-805	By 2030	2030	SR-52					$80,000	N		$80,000		$80,000
50R	CA	SD	1	Add 2 lane freeway form SR-125 to Avocado Rd.	By 2030	2030	SR-94	T10.1	R13.3			$70,000	N		$70,000		$70,000
51R	CA	SD	1	Add 2 lane conventional highway from Avocado Rd. to Steele Canyon Rd.	By 2030	2030	SR-94	R13.3	19.800			$20,000	N		$20,000		$20,000

California Transportation Projects

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							8a	8b	8c	8d	8e	<=== Dollar Data ===>					
Project Number or ID	State ID	CO	Project Mode 1=Hwy 2=Air 3=Rail 4=Water	Description of Project	Year the Project Begins	Year the Project Becomes Operational	Highway ID	Specify the mile marker where the segment begins	Specify the mile marker where the segment ends	LOS before	LOS after	Cost of Project in Thousands of Dollars - Base Year Set by Agency	Fully Funded?	Comments	Cost of Project in Thousands of 2003 Dollars	Partial Funding in 2003 Dollars from Allocations	2003 Dollars Needed [cost - allocations]
52R	CA	SD	1	Add 4 lane toll road from SR-905 to San Miguel Rd.	By 2030	2030	SR-125	L1.50	11.700			$110,000	Y	RC: From Telegraph Cyn to San Miguel Rd. add 2 lanes	$110,000		$110,000
53R	CA	SD	1	Add 4 lane freeway from San Miguel Rd. to SR-54	By 2030	2030	SR-125	11.700	R14.6			$60,000	Y	RC: add 2 lanes	$60,000		
54R	CA	SD	1	I-5 and I-8 freeway connector	By 2030	2030	I-5	19.030	20.880			$200,000	N		$200,000		$200,000
55R	CA	SD	1	I-5 and SR-56 freeway connector	By 2010	2010	I-5	30.700	34.130			$140,000	N	RTIP # 43	$140,000	$3,750	$136,250
56R	CA	SD	1	I-5 and SR-78 freeway connector	By 2020	2020	I-5	50.700	53.210			$150,000	N	RTIP # 26	$150,000	$393	$149,607
57R	CA	SD	1	SR-94 and SR-125 freeway connector	By 2014	2014	SR-94	7.800	11.100			$110,000	N	RTIP # 25	$110,000	$4,393	$105,607

Note: In the "Reasonably Expected" scenario, the project cost is equal to the amount of revenue reasonably expected.

From the Imperial Valley Association of Governments - Near Term Transportation Projects in 2002 $

AA	CA	IMP	1	I-8 Winterhaven CVEF	2002	2012	I-8	95.000	97.000			$35,000	N		$36,225		$34,155
A	CA	IMP	1	Construct 4 lane expressway from SR-98 to I-8	2002	2012	SR-7	1.200	6.700		C	$64,300	Y		$66,551		
B	CA	IMP	1	Construct 4 lane expressway "Brawley Bypass"	2002	2012	SR-78 /SR-111	17.590	23.670	F	C	$108,000	N		$111,780		$18,630
C	CA	IMP	1	Imperial Avenue Interchange Improvements	2002	2012	I-8	R37.0	R37.0	E	C	$23,000	N		$23,805		$16,043
D	CA	IMP	1	SR-98 Corridor Improvements - Widening and/or Realignment	2002	2012	SR-98	32.300	39.600	F	E	$90,000	N		$93,150		$80,213
E	CA	IMP	1	Construct 4 lane extension - I-8 to Evans Hewes	2002	2012	SR-115	R3.2	L9.8	D	C	$55,000	N		$56,925		$56,925
1-A	CA	IMP	1	Access Improvements - Proposed SDSU Campus in Brawley	2002	2012	SR-78	15.000	18.700	D	C	$55,000	N		$56,925		$56,925
1	CA	IMP	1	Widening and/or realignment from SR-111 to Dogwood Road	2002	2012	SR-98	30.300	32.300	F	E	$30,000	N		$31,050		$31,050
2	CA	IMP	1	SR-111 Improvements - south of SR-98 to POE	2002	2012	SR-111	R0.0	R1.2	F	D	$50,000	N		$51,750		$51,750
3	CA	IMP	1	Upgrade to 4 lane freeway from SR-98 to I-8 with interchange's) at several locations	2002	2012	SR-111	R1.2	R7.7	F	D	$90,000	N		$93,150		$93,150
4	CA	IMP	1	Upgrade to 4 lane conventional highway from SR-78 to SR-115	2002	2012	SR-111	22.600	32.500	D	C	$50,000	N		$51,750		$51,750
5	CA	IMP	1	Construct new east-west facility Corridor from Atten Road to Keystone Road	2002	2012				D	C	$120,000	N		$124,200		$120,000
6	CA	IMP	1	Construct new north-south facility SR-78 to I-8 Corridor from Forrester Road Corridor	2002	2012				C	B	$120,000	N		$124,200		$120,000

Note: Values are converted to 2003 dollars using a 3.5% inflation rate - the rate used by the California Department of Finance.

From the Imperial Valley Association of Governments - Long Term Transportation Projects in 2002 $

7	CA	IMP	1	Construct bridge structure at railroad crossing	2012	2022	SR-98	30.300	32.300	F	C	$1,500	N		$1,553		$1,553
8	CA	IMP	1	Construct new north-south facility West of SR-111 from I 8 to SR-98	2012	2022	SR-86	6.010	approx. 0.0	F	D	$90,000	N		$93,150		$93,150
9	CA	IMP	1	Construct Westmorland Bypass Construct 4 lane expressway	2012	2022	SR-78/SR-86	24.200	28.000	C	B	$80,000	N		$82,800		$82,800
10	CA	IMP	1	Improvements from SR-115 to Riverside County Line	2012	2022	SR-78	21.200	80.740	B	B	$50,000	N		$51,750		$51,750
11	CA	IMP	1	Widen to 8 lanes from new north-south route to SR-111	2012	2022	I-8	23.480	40.940	D	C	$90,000	N		$93,150		$93,150
12	CA	IMP	1	Interchange improvements from I-8 to SR-78	2012	2022	SR-111	R1.2	R7.7	E	D	$60,000	N		$62,100		$62,100
13	CA	IMP	1	Construct interchange at Austin Road	2022	Beyond 2022	I-8	34.000	37.000	E	C	$24,000	N		$24,840		$24,840
14	CA	IMP	1	Construct new 4 lane expressway form SR-78 to Brawley Bypass	2022	Beyond 2022	SR-115	21.200	approx 25.0	D	B	$36,000	N		$37,260		$37,260
15	CA	IMP	1	Widen to 4 lane expressway from SR-78 to SR-111	2022	Beyond 2022	SR-115	21.200	31.600	C	B	$70,000	N		$72,450		$72,450
16	CA	IMP	1	Widen to 4 lane expressway from Evan Hewes Highway to SR-78	2022	Beyond 2022	SR-115	R9.3	21.200	C	B	$70,000	N		$72,450		$72,450
17	CA	IMP	1	Widen to 4 lane conventional or construct interchange improvements	2022	Beyond 2022	SR-186	0.000	2.100	D	C	$10,000	N		$10,350		$10,350

Note: Values are converted to 2003 dollars using a 3.5% inflation rate - the rate used by the California Department of Finance.

From the San Diego Regional Transportation Improvement Plan [RTIP] in Dollars of Year Project is Completed

1		SD	1	From Del Mar Heights Road To Via De La Valle - Construct Northbound Auxiliary Lane	2004	e SANDAG R	I-5					$6,100	Y	Stand alone project	$5,894		
2		SD	1	From San Diego To Oceanside. Construct HOV/managed Lanes	2012	2015	I-5					$10,000	N	Part of 1R through 6R	$7,337	See SANDAG RTIP	

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3		SD	1	Construct Managed Lanes (freeway Elements)	2004	e SANDAG R	I-15					$238,000	Y	Part of 9R through 12R	$229,952		
4		SD	1	Near Escondido - From Clarence Lane To SR 78 - Construct Managed Lanes North Segment	2007	2012	I-15					$5,000	N	Part of 9R through 12R	$4,668	See SANDAG RTIP	
5		SD	1	From SR 163 To Route 15/56 Separation - Construct Managed Lanes South Segment (freeway Component)	2007	2012	I-15					$10,000	N	Part of 9R through 12R	$9,335	See SANDAG RTIP	
6		SD	1	Mercy Road To Just South Of SR 56/i-15 Separation - Construct Northbound And Southbound Added And Auxiliary Lanes	2004	e SANDAG R	I-15					$19,474	Y	Stand alone project	$18,815		
7		SD	1	San Diego - .5 Mile South Of Mira Mar Way To .5 Mile North Of Mira Mesa Blvd. - Auxiliary Lanes (northbound And Southbound) Various Locations	2003	e SANDAG R	I-15					$34,515	Y	Stand alone project	$34,515		
13		SD	1	In San Diego - Poway Road To Camino Del Norte; Also On Route 56 From Rancho Penasquitos Blvd. To East Of Route 15 - Construct Auxiliary Lanes And Ramp Improvements	2003	e SANDAG R	I-15					$9,940	Y	Stand alone project	$9,940		
14		SD	1	From SR 905 To SR 54 Construct 6-lane Fwy With Interchange With HOV Provisions	2004	e SANDAG R	SR 125					$463,166	Y	Part of 31R and 32R	$447,503		
15		SD	1	I-805 To Otay Mesa Border Station - Construct 6-lane Freeway (stages 2-4)	2004	e SANDAG R	SR 905					$203,097	N	Part of 37R	$196,229	See SANDAG RTIP	
16		SD	1	From Airway Road To The Otay Mesa Port Of Entry - Construct Siempra Viva Road Interchange (stage 1)	2003	e SANDAG R	SR 905					$28,700	Y	Part of 37R	$28,700		
17		SD	1	In El Cajon - Second Street To Greenfield Drive - Construct Auxiliary Lane Eastbound And Replace Pedestrian Over crossing Bridge	2006	e SANDAG R	I-8					$11,494	Y	Stand alone project	$10,367		
18		SD	1	Realignment Of I-5 & I-805. New Virginia Ave. Lane Improvements, Increase Number Of Inspection Gates @ San Ysidro Poe (gen. Svs Agency Project)	2005	e SANDAG R	I-5/805					$11,998	N	Part of 42R	$11,200	See SANDAG RTIP	
19		SD	3	Construct 1.2 Miles Of Double Track North Of Oceanside Blvd & Buena Vista Lagoon	2003	e SANDAG RTIP						$6,000	N		$6,000	See SANDAG RTIP	
20		SD	1	In And Near Lemon Grove On SR 125 From South Of Jamacha Blvd To SR 94, On SR 54 From I-805 To South Of Jamacha Blvd- Engineering For HOV Lanes.	2009	2010	SR-125					$7,000	N	Part of 15R	$5,502	See SANDAG RTIP	
21		SD	1	Near San Diego - Pine Valley Creek River Bridge #57-692, Sweetwater River Bridge #57-688 & La Posta Creek Bridge #57-756 - Rehabilitate Bridges	2004	e SANDAG R	I-8					$30,233	Y	Maintenance & Rehab of Bridges. No new capacity	$29,211		
23		SD	1	Border Of Mexico - East Of Route 905/otay Mesa Border Crossing To Future Route 125/905 Junction - Construct 4-lane Freeway And Truck Bypass Road	2008	2010	SR 11					$8,000	N	Part of 38R	$6,736	See SANDAG RTIP	
24		SD	1	From I-5 To SR 125.	2013	2016	SR 94					$10,000	N	Not in MOBILITY 2030 RTP. Included only in Revenue Unconstrained scenario.	$7,089	See SANDAG RTIP	
25		SD	1	Freeway To Freeway Connector	2009	2011	SR 94/125					$5,400	N	Part of 57R	$4,393	See SANDAG RTIP	
26		SD	1	In The Cities Of Oceanside & Carlsbad - Modify Interchange, Construct Auxiliary Lanes, Construct Direct Connectors	2010	e SANDAG R	I-5/SR 78					$500	N	Part of 56R	$393	See SANDAG RTIP	
27		SD	1	Chula Vista - Orange Avenue To Palomar Street - Construct Sound walls; Widen Bridge Deck, Ramp And Add Auxiliary Lanes, Utility Relocation.	2003	e SANDAG R	I-805					$21,831	Y	Fully Funded and soon to be under construction	$21,831		
28		SD	1	Interchange Modifications And Improvements At I-805 And East H Street, Including Street And Ramp Widening, Restriping, Signal Improvements And Landscaping.	2005	e SANDAG R	I-805					$3,114	Y	Fully Funded and soon to be under construction	$2,907		
30		SD	1	On I-5, at Manchester, 4 Lanes Plus One Auxiliary Lane Northbound And Southbound - Interchange Improvements	2011	2012	I-5					$2,425	N	Stand Alone	$1,842	See SANDAG RTIP	
32		SD	3	Oceanside To Escondido - Design 22 Mile Extension Including 15 Stations And Maintenance Facility	2004	e SANDAG R	Parallels SR 78					$351,520	Y		$339,633		
34		SD	1	Widen From 4 To 6 Lanes With Intersection Improvements, Raised Median And Left Turn Pockets. Phase 2: On Sr94 Extend Jamacha Blvd. Phase 3: On Sr54 Extend From Cuyamaca College East To Brabham St	2004	e SANDAG R	SR 54/94					$8,297	Y	Stand Alone	$8,016		
36		SD	3	San Diego - Four Light Rail Transit Stations In East Village Area Of Downtown - Platform Improvements, Passenger Amenities, Track Realignment, Lighting, Landscape	2002	e SANDAG RTIP						$24,641	Y		$25,503		
37		SD	1	United States/Mexico International Border - Rebuild Station To Create A Trolley Plaza With 3 Platforms, New Shelters, Paving And Landscaping. Also Re-routes Traffic To Eliminate Pedestrian Conflicts.	2003	e SANDAG RTIP						$16,408	N	Stand alone project. Total Cost $22.1 M	$16,408	See SANDAG RTIP	
38		SD	3	Design/construct Light Rail Line From Old Town Transit Center To Balboa Ave; Conduct Alternative Alignment Study; Begin Per From Balboa Ave To University City; Mid-coast Corridor Planning/environmental	2005	2008						$100,090	N		$93,435	See SANDAG RTIP	

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Bi-National Border Transportation Infrastructure Needs Assessment Study [BINS]

Projects must be Within 100 km of the US-Mexico Border

# 1	#2	#3	#4	#5	#6	#7	======= Highway Projects Data #8 =======					#9	#10				
							8a	8b	8c	8d	8e	<=== Dollar Data ===>					
Project Number or ID	State ID	CO	Project Mode 1=Hwy 2=Air 3=Rail 4=Water	Description of Project	Year the Project Begins	Year the Project Becomes Operational	Highway ID	Specify the mile marker where the segment begins	Specify the mile marker where the segment ends	LOS before	LOS after	Cost of Project in Thousands of Dollars - Base Year Set by Agency	Fully Funded?	Comments	Cost of Project in Thousands of 2003 Dollars	Partial Funding in 2003 Dollars from Allocations	2003 Dollars Needed [cost - allocations]
39		SD	3	Construct Commuter Rail Station At Nobel Drive	2004	e SANDAG RTIP						$13,525	N		$13,068	See SANDAG RTIP	
40		SD	3	5.8 Mile Extension Of San Diego Blue Line With 4 Stations, Including Tunnel At San Diego State University Campus	2003	e SANDAG RTIP						$444,000	Y		$444,000		
41		SD	3	From Old Town To Mission San Diego Station - Enhancements To Blue Line Light Rail Trolley	2002	e SANDAG RTIP						$221,809	Y		$2,072		
43		SD	1	Freeway To Freeway Interchange	2007	2008	I-5/SR 56					$4,303	N	Part of 55R	$3,750	See SANDAG RTIP	
45		SD	1	I-5 To I-15 - Widen And Install Traffic Signals, Per Only (cip 52-274)	See SANDAG RTIP	e SANDAG R	I-5/15					$2,558	N	Stand alone project.		See SANDAG RTIP	
47		SD	1	Construct New Interchange At Smilax Road. (cip-108)	See SANDAG RTIP	e SANDAG R	SR 78					$600	N			See SANDAG RTIP	
Note:	Values are converted to 2003 dollars using a 3.5% inflation rate - the rate used by the California Department of Finance.																
														Total	**13,807,957**		**9,944,474**
				Total Projects:	110												
				Number of Highway Projects:	103	93.6%											
				Number of Railroad Projects:	7	6.4%											
				Number of Fully Funded:	26	23.6%											
				Number of Projects Not Fully Funded:	84	76.4%											
				Number of Projects with Cost Data:	108												
				Number of Projects with **NO** Cost Data:	2												
				All Cost Data in 2003 Constant Dollars													
				Total Cost:		$13,807,957											
				Funds Allocated to Projects:		$9,944,474	72.0%										
				Funds Needed to Complete Projects:		$3,863,483	28.0%										