Otay Mesa – Mesa de Otay
Binational Corridor
Strategic Plan

November 2010
Progress Report
INTRODUCTION

As a follow up to the Regional Comprehensive Plan (RCP) initiatives in 2005, the SANDAG Borders Committee and the Committee on Binational Regional Opportunities (COBRO) identified the Otay Mesa – Mesa de Otay binational corridor study area for a binational planning pilot project. Transportation, economic development, housing, and environmental conservation were identified as the main issue areas for the Otay Mesa – Mesa de Otay Binational Corridor Strategic Plan.

The Otay Mesa – Mesa de Otay Binational Corridor Strategic Plan created a process for collaboration and established a framework for binational collaboration and planning. This partnership continues to grow through the implementation of several initiatives identified in the Strategic Plan and serves as a guide for future binational planning efforts.

The Otay Mesa – Mesa de Otay Binational Corridor Strategic Plan was approved in 2007 by both the SANDAG Board of Directors and the City of Tijuana City Council. Since then, three annual reports were produced in 2008, 2009, and 2010 to review progress on selected actions of the strategic plan. This second interim report in 2010 provides the latest updates to highlight progress during the final months of the City of Tijuana Mayor Jorge Ramos administration which ends on November 30, 2010.

TRANSPORTATION ACTIONS

ISSUE: IMPLEMENT THE FUTURE OTAY MESA EAST-MESA DE OTAY II PORT OF ENTRY (POE) AND CONNECTING ROADS

In the past year, Caltrans, the U.S. General Services Administration (GSA), the County of San Diego, SANDAG, and the Mexican government continued to make progress to advance the implementation of the proposed Otay Mesa East – Mesa de Otay II POE and connecting roads on both sides of the border (Figure 1). Caltrans District 11 has taken the lead on several planning tasks to advance this project. In Mexico, the Secretariat of Communications and Transportation (SCT) has undertaken required studies for the Mesa de Otay II POE and connecting roads.

Caltrans, in cooperation with GSA and the Federal Highways Administration (FHWA), initiated project-level environmental clearance studies for State Route 11 (SR 11) and the Otay Mesa East POE. A Tier II Environmental Impact Report/Environmental Impact Statement (EIR/EIS) is evaluating the design and operational alternatives for SR 11, the POE, and a potential Commercial Vehicle Enforcement Facility (CVEF). The draft EIR is a key step toward environmental clearance for the implementation of the projects and is scheduled to be released during the end of November 2010 along with the circulation of the draft project report for SR 11.
In addition, the engineering studies for both SR 11 and the new POE are also expected to be completed by December 2011. The design and right-of-way acquisition are scheduled for 2012 and construction is expected to begin in late 2013, with completion in 2015.

Caltrans, in collaboration with GSA, Customs and Border Protection (CBP), and SANDAG, has engaged an architectural firm, Siegel and Associates, to undertake the Program Development Study (PDS) for the POE, which is 75 percent complete. Work on the PDS is anticipated to be complete by the end of 2010 or early 2011. Furthermore, the team recently concluded interviews and selected a legal counsel for the SR 11/Otay Mesa East POE project.

SANDAG and Caltrans are working jointly to develop a financial strategy to build the SR 11/Otay Mesa East POE project. SANDAG and Caltrans have engaged Barclay’s Capital as the Senior Investment Underwriters and Public Financial Management (PFM) to assist with bond placement and other elements of the project financing. SANDAG and Caltrans are also working with Mexico to conduct a traffic and revenue study for the project.

Finally, FHWA recently awarded SANDAG a grant to conduct an Intelligent Transportation Systems (ITS) Pre-Deployment Study for the project. This study will create a Concept of Operations or blueprint for what ITS strategies should be implemented at the new border crossing. ITS components of the project include a system that will notify travelers of border wait times so they are able to choose which POE to use to help streamline traffic by minimizing congestion.

**ISSUE: IMPLEMENT IMPROVEMENTS TO EXISTING OTAY MESA - MESA DE OTAY POE AND CONNECTING ROADS**

**State Route 905 (SR 905)**

SR 905 is a six-lane freeway being constructed in phases from Interstate 805 (I-805) to the Otay Mesa POE at the U.S.-Mexico Border to serve the POE and businesses and residents in the Otay Mesa area. It connects with other major interstate routes such as I-5 and I-805 and will include grade-separated local access interchanges and a freeway-to-freeway interchange with the South Bay Expressway (SR 125 South). Portions of this interchange will be included with the SR-11 project.

Construction of Phase 1A from Siempre Viva Road Interchange to Britannia Boulevard began in April 2008. Completion of this portion is expected by fall 2010. Phase 1B from Britannia Boulevard to just east of the I-805/SR-905 Interchange began construction in July 2010 and is expected to be completed by summer 2012. In addition, SANDAG and Caltrans received $20.2 million in federal stimulus funds for Phase 2 to complete the connection of I-805 with SR 905. The interchange for SR 905, SR 125, and SR 11 would be part of Phase 3.

**Proposed Cross Border Facility (CBF)**

In 2008, in an effort to advance this concept, a private investment group, the Otay-Tijuana Venture, LLC, purchased 52 acres of undeveloped industrial land in Otay Mesa to develop the U.S. side of the crossborder terminal project. Its intent is to build a full-service crossborder passenger facility. This proposed San Diego-Tijuana CBF project includes the construction and operation of the CBF and an above-grade pedestrian bridge linking border facilities in the United States with a commercial passenger airport terminal at Tijuana International Airport (TIJ).
The CBF would enable ticketed airline passengers to travel between Mexico’s Tijuana and San Diego, California, via an enclosed, elevated pedestrian bridge. The CBF will consist of a main building on the U.S. side of the border housing U.S. CBP inspection facilities along with shops and services to accommodate travelers; an approximately 525-foot pedestrian bridge from the main building on the U.S. side connecting into Tijuana’s passenger terminal on the Mexican side; and parking facilities and areas for car rentals and potentially bus service on the U.S. side. The CBF is expected to serve 2 million passengers annually, a number that is forecasted to increase to 4.9 million by 2030.

The following summarizes the latest project developments:

- Approval of the Presidential Permit from the U.S. Department of State was granted on August 4, 2010.

- Additional approvals that need to be secured include the City of San Diego’s Planned Development Permit and Vesting Tentative Map as well as evaluation through the California Environmental Quality Act (CEQA) approval process, which is expected to begin in spring 2011.

- The anticipated adoption of the Otay Mesa Community Plan Update (OMCPU) would allow for these approvals of the CBF, so that construction could begin in late summer 2011.

- The project developer (Otay-Tijuana Venture, LLC.) anticipates that the cross-border airport terminal could start operating in late 2012 or early 2013.

**ISSUE: FACILITATE IMPROVEMENTS TO CROSS-BORDER AND REGIONAL PUBLIC TRANSPORTATION SERVICES**

SANDAG is in the process of preparing an Environmental Impact Report (EIR) for the South Bay Bus Rapid Transit (BRT) project. Figure 2 illustrates the South Bay BRT alignment. Several technical studies are being conducted including: traffic, habitat, noise, and visual. Extensive public outreach commenced in fall 2009 and continues as part of the EIR underway in compliance with CEQA. The planned South Bay BRT project is a 21-mile, reliable, high-frequency transit service between the Otay Mesa POE and downtown San Diego via eastern Chula Vista. A public workshop will be held in November 2010 to present alternative alignments and to solicit public input. Additional public workshops will be held during the EIR process. The Draft EIR is expected to be completed in the summer of 2011. The South Bay BRT project is on schedule to be implemented in 2014.

**ECONOMIC DEVELOPMENT ACTIONS**

**ISSUE: PROMOTE CREATION OR EXPANSION OF COMMON EMPLOYMENT CLUSTERS ON BOTH SIDES OF THE BORDER AND ADDRESS FUTURE INDUSTRIAL LAND USE SUPPLY AND DEMAND**

In 2007, the San Diego Dialogue produced the first briefing paper titled Borderless Biotech & Mexico’s Emerging Life Sciences Industry, which outlines progress on this collaborative effort. The report describes the San Diego border region as a portal for borderless biotech due to its strategic location along the U.S.-Mexico border and the unique opportunity to work with Mexico’s emerging life science industry. Merck & Co., and its subsidiary Merck, Sharp, & Dohme - México, sponsored a multiyear initiative to link
regions in Mexico with strengths in the life sciences with San Diego. This initiative began in 2007 and was recently completed in September 2010.

In 2008, stakeholders from the Mexican regions of Cuernavaca, Guadalajara, Guanajuato, and Monterrey were in the process of formally establishing the Mexican Life Sciences Alliance to collaboratively promote their capabilities internationally, including a showing at the San Diego BIO tradeshow in June 2008. They also agreed to co-develop a proposal to the Inter-American Development Bank (IDB). Under a three-year grant, IDB funding would be used to support Alliance activities to build commercialization infrastructure (e.g., training and policies) within participating research institutions, business support services for new life science startup companies, and international outreach for research and business development opportunities which include linkages with San Diego’s life sciences community. Under the proposal UCSD Extension (San Diego Dialogue and Global CONNECT) and Merck & Co., would serve as partners to the Alliance.

The Mexican Life Sciences Alliance became formalized as a Mexican civil association (asociación civil) in mid-2009, and submitted its proposal to the IDB shortly thereafter. Due to difficulties securing matching funds required by the IDB during the economic downturn, the Alliance’s proposal was put on hold. Member regions are continuing to pursue development strategies with state and local sources of support.

Beginning in fall 2009, San Diego Dialogue and Global CONNECT launched a process of providing advice and input to new Mexican life science start-up firms. Among the five companies accepted into the program, two have offices in Otay Mesa. These were referred to CONNECT for participation in its Springboard coaching and mentoring program, and as of October 2010, one company has completed the program and the other four are still in process. San Diego Dialogue and Global CONNECT also held additional workshops in Mexico and San Diego. An April 2010 workshop focused on the different kinds of capital available to life science companies. The final workshop, held in September 2010 in Mexico City in partnership with Angel Ventures Mexico, provided an overview of angel investing and how to organize angel investor networks in Mexico. The latter workshop included participation by the San Diego Chapter of the Tech Coast Angels.

San Diego Dialogue and Global CONNECT continue to have ongoing relationships with regions in Mexico. Beginning in September 2010 and running through early 2011, both organizations have partnered with Mexico’s Technology Business Accelerator (TechBA) office in Phoenix, Arizona, to provide coaching and mentoring services to high technology companies that wish to further develop their business networks in the San Diego region. Successful completion of this pilot program may result in the expansion of the program to companies incubated in other TechBA offices, such as those in Silicon Valley and Austin, with the hope that these companies will eventually establish offices in San Diego.
ENVIRONMENTAL ACTIONS


Comprehensive Road Rehabilitation Project in the City of Tijuana (Programa Integral de Repavimentación)

According to the Border Environment Cooperation Commission (BECC), Tijuana’s air pollution problems are primarily caused by vehicular emissions and suspended dust particles. As part of the Border 2012 Program, EPA and SEMARNAT performed an emissions study of the border region, which ranked the Tijuana-San Diego metropolitan area air basin as first in the U.S. - Mexico border region in terms of pollutant emissions derived from mobile and area sources, including: nitrogen oxides (NO), sulphur dioxide (SO), carbon monoxide (CO), and fugitive dust (PM10 and PM2.5).

Based on this information the City of Tijuana recognized the need to tackle these air pollution problems through improving its infrastructure. Its primary roadway system shows deterioration from potholes, erosion, shifting asphalt, and leveling and runoff problems caused by the uneven terrain of the city. A majority of roadways are over 30 years of age and have exceeded the average 8-14 year life cycle for asphalt pavements. Historically, the City has allocated a significant portion of its public works budget (US $750,000 on average) for the rehabilitation and maintenance of its principal roadways, particularly for the repair of potholes. However, despite this maintenance, the roadways continue to show substandard travel conditions, due to aging, weather, and high traffic volumes.

After analyzing various options for implementing a comprehensive solution to this problem, the City determined that the most viable long-term solution was the rehabilitation of the primary roadway system with a concrete overlay known as “whitetopping.” Cement concrete has a longer useful life and lower maintenance requirement compared to asphalt. Consequently, asphalt could be several times more expensive than whitetopping over the Project’s life cycle.

In 2009, the City of Tijuana applied for a North American Development Bank (NADB) loan of US$109.8 million certified by BECC to complete construction of the Comprehensive Road Rehabilitation Project in Tijuana, Baja California. This represents 85 percent of the financing and of the total project cost of US$125.46 million.

The loan financing is being provided under an innovative public-private financing structure designed to finance the project with debt for a term of 20 years. Under this arrangement the private contractor, Cementos Mexicanos (Cemex), entered a construction and financing agreement with the City of Tijuana, which is converted into a long-term debt obligation between the City and NADB.

The project consists of the rehabilitation of primary roadways with a total length of 160 km (100 mi) and an area of 4.3 million square meters (m²) (46.3 million ft²), and also includes the rehabilitation of storm drains, construction or reconstruction of curbs and sidewalks, and the restoration of landscaping adjacent to the roadways.

The rehabilitation is anticipated to improve air quality in the region by facilitating traffic flows through improved road conditions and fewer street closures for repairs, eliminating the asphalt debris, and reducing the need for constant pothole repair using hot asphalt mix. The use of whitetopping instead of asphalt
will also mitigate the heat island effect, as well as increase the efficiency of street lighting. Moreover, the project will extend the useful life of the streets by 30 years, which will reduce maintenance costs, thus increasing the City’s ability to fund other infrastructure needs. It is anticipated to be completed in November 2010.

Greenhouse Gas (GHG) Emissions

The study titled GHG Emissions due to Vehicle Delays at the San Diego – Baja California Border Crossings addresses the public health concerns related to GHGs in the context of global climate change. It includes a study of estimated GHG emissions due to northbound vehicle delays at the three San Diego County – Baja California border crossings (located in San Ysidro, Otay Mesa, and Tecate) in fiscal year (FY) 2009.

Estimations were based on emission rates derived from EPA’s latest mobile vehicle emission simulator model, MOVES2010. FY 2009 emissions were approximately 80,000 metric tons (MT) of CO₂Eq for all three border crossings combined, comprising 0.5 percent of total on-road transportation emissions in San Diego County based on the latest 2006 inventory. The study showed that Otay Mesa contributed 30 percent of total emissions and heavy-duty diesel trucks at the Otay Mesa commercial crossing contributed the most on a per vehicle basis (15.3 kg CO₂Eq/crossing). The paper includes recommendations to reduce GHG emissions for the border region including increasing SENTRI participation, decreasing border delay times, and creating a border crossing process that allows drivers to turn off their engines while waiting in line.

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1 GHG Emissions Due to Vehicle Delays at the San Diego-Tijuana Border Crossings; Suzanne Louise Barzee, July 2010
Figure 1
State Route 11 / Otay Mesa East Port of Entry
Figure 2
South Bay Bus Rapid Transit (BRT)