

**ENHANCING THE CROSS-
BORDER CONNECTION:**

**RETHINKING INFRASTRUCTURE
PLANNING ALONG THE
CALIFORNIA-MEXICO FRONTIER**

**Policy Brief for the Border Master Plan
Woodrow Wilson Institute &
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Introduction

This policy brief argues that both the U.S and Mexican governments need to re-evaluate cross-border transport/ infrastructure planning and policy. Transport infrastructure in the “border zone” is the lynchpin of the cross-border economy. Despite the recent downturn, the cross-border economy has generally grown during the decade and a half since NAFTA was signed. It is well known that in the recent past, the state of California exported nearly \$20 billion annually to Mexico; the majority of those exports remained within the northern Mexican border region. Meanwhile California imported over \$45 billion per year from Mexico.¹ The region has also seen impressive levels of cross-border growth in the retail/tourism sector. For example, in San Diego county alone, before the recent recession, Mexican visitors spent an estimated \$2.8 billion dollars a year.²

For billions of dollars to continue to flow between southern California and northern Baja California – it is essential that people, vehicles and merchandise can move freely and efficiently.³ Unfortunately, much evidence points to the fact that border infrastructure – highways, rail, ports of entry-- is no longer able to handle the volume of current and future cross-border flows. That condition represents a far greater impediment to the economic potential of the bi-lateral region than the terrorism threat often cited by those who aspire to a “homeland security” view of the border.⁴ Indeed, the greatest obstacles to border trade and prosperity include: traffic congestion, inadequate port facilities, highways, and rail necessary to accommodate larger cross-border flows, delays and uncertainties in the processing of cross-border movements, exacerbated by post-9/11 federal homeland security policy, and the absence of a comprehensive regional infrastructure policy for the California-Mexico border region.

While the costs of delays, inefficient processing, overzealous Homeland Security policies or inadequately planned highway networks and Ports of Entry-- to California’s

economy-- are difficult to assess, it is certainly the case that flawed border transport facilities are weakening California's economy. The most cited study on the subject, for example, estimated losses of over some six billion dollars in revenue, and over 50,000 fewer jobs per year. The figure is expected to more than double in the next 10 years if no major changes in infrastructure are made. ⁵

Strained Cross-border Infrastructure

The essential problem of the border infrastructure crisis is one of scale. Population growth and economic development, over the last decade and a half created a boom that the existing infrastructure (roads, border gates, etc.) simply could not keep up with. An estimated six million people live along the 150 mile border California shares with the Mexican state of Baja California. ⁶ By 2030, nearly twice that many people could reside in the two California counties (San Diego, Imperial) and five Mexican municipalities (Tijuana, Rosarito, Tecate, Ensenada, Mexicali) along this border. ⁷

This demographic explosion around the California border is interwoven with the overall expansion of the cross-border California-Baja California economy. The exchange of goods across the land border is, in turn, profoundly influenced by the galvanizing role of globalizing economic processes including trade and especially the maquila (assembly plant) sector. The cumulative effect of larger populations on either side of the border, and a surge in the volume of goods in transit north and south of the California-Mexico border has left existing facilities overwhelmed. In the words of the landmark 2006 study of border wait times, California border infrastructure was "sized for a much smaller and radically less security-conscious economy."⁸

California has a mere six border crossings to absorb 34-40 million passenger vehicles, 2 million trucks, and 18 -20 million pedestrian crossings per year. Cross-border flow increases, over the last decade, have ranged from 37% growth in truck

crossings to 25% in passenger vehicles.⁹ At the same time, comparatively modest changes in border infrastructure were made in response. For example, no large-scale initiative has been made to expand rail infrastructure along the California-Mexico border. Less than one percent of all the rail-based trade between the U.S. and Mexico flows through California.¹⁰ Further, as noted below, north-south highway expansion, though badly needed, is by no means guaranteed under current budget conditions.

Some specific infrastructure dilemmas include the following:

a) Inadequate Highway Trade infrastructure

Southern California's low density urban structure means its surface transportation is essentially highway-oriented. California's 60 billion dollar trade relationship with Mexico is currently transacted almost entirely by truck/road transport. About 98% of all trade through California's ports of entry occurs by truck. In 2004, some 1.4 million trucks crossed at the Otay Mesa crossing in southeastern San Diego county and another .6 million at Calexico East. Truck crossings are likely to increase to nearly six million trucks by 2030.¹¹

Closer to the border itself, truck crossings are causing congestion at both the Ports of Entry (POE) and along the highways that link to the POE's. Recognizing this, the U.S. Department of Transportation's 2004 Border Infrastructure Needs Assessment (BINS) report for the State of California calculated a demand for 103 new border zone highway construction projects worth \$12.9 billion needed by 2030. Of that amount, only 22 projects at a cost of \$2.6 billion were identified as fully funded. This left a deficit in border highway infrastructure of 81 projects, and a financial vacuum of \$10.3 billion in unfunded highway needs.¹²

Historically, the regional orientation of freeway infrastructure in southern California, and especially San Diego county, has been east-west, rather than north-south. For example, in the San Diego region there are 7 major east-west flow corridors (SR

905/11, SR 54, SR 94, I-8, SR 52, SR 56, SR 78), while there are only two major north south corridors (I-5/805 and I-15), and a third under construction (SR 125). Clearly, existing highway infrastructure is more oriented toward moving residents to work, shop, school, or to recreational destinations than it is in getting trade cargo from origin to destination.¹³ In the future, there will continue to be a tension in highway planning between the traditional coastal-inland connectivity, and the emerging north-south trade flow.

There are also unresolved questions about the role of commercial trucks: should transport planning agencies create “truck only lanes” or simply continue to mix truck flows with other traffic? It is also still not clear whether Mexican truckers will be able to cross the border and continue to their destinations in the U.S., or have to be off-loaded onto U.S. owned trucks at the border, or within a 25-mile buffer zone, and then have the goods taken to their final destination by U.S. trucks. There have been a number of political shifts within the U.S. over the last few years, but as of 2009, this remains an area of uncertainty.

b) Poorly developed Rail Linkages

California rail infrastructure linkages with Mexico are underdeveloped when compared with other border zones, or other world regions. The movement of goods between Mexico and California is dominated by truck transit; rail is completely overshadowed. While two million trucks enter California from Mexico, only 18,000 rail containers cross annually into the state. Texas, by contrast, receives 240,000 fully loaded rail containers per year (mainly through Laredo), and even Arizona’s port of Nogales is a more important rail facilitator than any in California. While, it might be argued that Texas and Arizona are more positioned at the epicenter of the “NAFTA corridor” for trade goods moving from central Mexico into the heartland of the U.S. market, this underestimates the importance of California’s nexus as land gateway to the major cities

and ports on the west coast (Vancouver, Seattle, San Francisco/Oakland, Los Angeles), and to the larger possibilities of linking by land through those ports to global trade corridors in the Pacific Rim.

Rail crossings are more fixed in space, and become central infrastructure hubs that attract ancillary activities, like warehousing and manufacturing. This creates more positive economic spillover effects, and can generate local catalysts for economic growth. Truck crossings, on the other hand, are more spread out and footloose, and therefore less appealing in the long term since they do not create geographically concentrated economic growth pole effects.¹⁴

The problems with California-Baja California rail infrastructure lie in the complex geography of the border zone, and in the subsequent evolution of a fragmented rail network. At present, the rail system is defined by a corridor of linkages running from Mexicali-Calexico through southern Imperial county, crossing the border at Tecate, and then travelling across the mountains south of the border, finally reentering California near San Ysidro, and then linking to the coastal rail line that runs from San Diego to Los Angeles. This rail line is divided into a series of separate railway entities (Union Pacific, San Diego and Arizona Eastern, Burlington Northern Santa Fe. The National Railroad of Mexico link begins in the State of Sonora, crosses into Baja and then into California at the Calexico-Mexicali port of entry. From there, it links to a series of different sub-systems referred to in the aggregate as the San Diego and Imperial Valley line (SDIV).

The U.S. Department of Transportation has already allocated \$43 million through the Transportation and Efficiency Act (TEA) for upgrading the Desert Line of the Carrizo Gorge Railway system. TEA monies are specifically earmarked for, among other things, improvements along the international border that enhance international trade. The total cost of upgrades, however, will probably be over \$100 million, and that money has yet to be allocated.¹⁵

c) Limited Ports of Entry

California currently has six ports of entry into Mexico . They include: San Ysidro (24 northbound vehicle gates, 6 southbound gates), Otay Mesa (12 northbound, 2 southbound gates), Tecate (2 northbound, 2 southbound gates), Calexico (4 northbound, 2 southbound gates), Calexico East (8 northbound, 2 southbound gates), Andrade (1 northbound, 1 southbound gate).

Most infrastructure reports on this region have emphasized that these facilities can handle neither the current volume nor future forecasts of flows of people, vehicles and goods across the California-Mexico border.¹⁶ There are not enough gates or inspectors for handling commercial trucks, passenger vehicles, bicycles, and pedestrians. Increasing wait times and congestion have led to loss of income, jobs and a climate of uncertainty about California-Mexico trade in the future.

d) The Friction of Homeland Security

The cross border economic synergy of the free trade decade of the 1990's was considerable weakened by the events of September 11, 2001. The plans for cross-border growth-- new highways and border gate -- were abandoned in favor of a "wall" of heightened security along California- Mexico boundary. The formation of the Department of Homeland Security (DHS) as a cabinet level agency, consolidating the efforts of immigration, customs, border inspection, transportation security, the border patrol, and maritime security, marked a watershed moment in 2001-2002. It signaled the emergence of "security" as the primary objective in the management and organization of the border zone, and the myriad facilities within its jurisdiction.¹⁷

"National security" as the operating federal policy "paradigm" for the U.S.-Mexico border stands in marked contrast to the previous decade of the 1990's, where "economic development" had become the overarching theme in U.S.-Mexico relations

and the border. From a policy-making perspective, then, DHS must be viewed as an indirect, but potentially formidable drain on California's future economic growth.

Planning for California-Mexico Border Infrastructure

The process of planning, funding and managing border infrastructure in this region is a complex web of planning and policy-making venues, that cut across Federal, state, and regional/local agencies on both sides of the border. Briefly, the key existing planning approaches along the border include the following:

1. Federal level

a) cross-border cooperation.

The Mexican and U.S. national governments signed a Memorandum of Understanding in 1994 to create a U.S.-Mexico Joint Working Committee (JWC) through the U.S. Department of Transportation and Mexico's Secretary of Transport and Communications. The idea was to bring together both nations and their supporting transport and border crossing agencies (the U.S. Department of State, General Services Administration, California Department of Transportation, etc.) to plan and organize future highway and port of entry strategies. This effort led to the U.S.-Mexico Border Partnership Action Plan, which, in turn, evolved toward the creation of a Smart Border Action Plan in 2002, which has 22 points of agreement about making border crossings more efficient.¹⁸

b) funding and planning of highways.

In the early 2000's, The U.S. Department of Transportation (DOT) created a planning process for funding U.S.-Mexico border roads. A key mechanism was the Bi-national Border Transportation Infrastructure Needs Assessment Study or BINS,

completed in 2004. This study created a mechanism for projecting travel patterns and thus for crafting funding strategies. In 2005, the U.S. Congress passed the Safe, Affordable, Flexible, Efficient Transportation Equity Act (SAFETEA), which authorizes monies for transport infrastructure in various regions, including the border region. An initiative called the CBI or Cross Border Initiative also allows for some funds to specifically support projects in Mexico.

c) International border security/operations.

The Department of Homeland Security (DHS), and U.S. Department of State bring together members of the U.S.-Mexico Bridge and Border Crossing Group to “create a border region that is modern, safe and efficient.” The Bridge and Border Crossing Group also includes corresponding Mexican agencies, including the Secretary of Foreign Relations, and works to streamline border crossing security at the Ports of Entry. Other programs that seek to combine security with border crossing efficiency include: i) Fast and Secure Trade (FAST), which screens and tracks goods entering and leaving the U.S., thus speeding up the flow of commercial vehicles across the border; ii) Secure Electronic Network for Travelers Rapid Inspection (SENTRI) – an automated dedicated computer lane using an Automated Vehicle Identification technology, which allows security checks but with a high level of efficiency, thus reducing congestion.

d) Planning Ports of Entry.

The General Services Administration (GSA) is charged with funding and managing port of entry facilities. The U.S.-Mexico Bi-national Bridges and Border Crossing Group works with GSA on border crossing projects from a security and flow management perspective (see section on Cross-border operations below). . These projects are coordinated with CALTRANS and with Mexican companion agencies – the Secretaria de Comunicaciones y Transportes (SCT) and the INDAABIN (Institute for Administration and Management of National Goods).

Some of the ports of entry will be privatized, and thus funding and management will fall to the hands of private managers – for example, the Calexico-Mexicali crossing at the Silicon Border project would be managed by a consortium of companies manufacturing and marketing computer chips.

2. State level

a) Border Governors' Declarations: Each year, the Governors from the border states in the U.S. and Mexico meet to discuss key issues facing their administrations. One role of this process is to challenge decision-making coming out of the national capitals. For example, in 2007, the XXV Border Governor's Conference produced a Joint Declaration which called for a Border Master Plan, and made commitments to promoting economic development and regional competitiveness along the border, while challenging the U.S. Department of Homeland Security's policy of building more border fences, which is seen as contributing to bottlenecks and more delays along the border.¹⁹

b) analysis, funding and construction of highways: California Transportation Commission/CALTRANS .

Drawing from the BINS study generated by the U.S. Department of Transportation, the Federal SAFETEA transport funding mechanism, and other statewide priorities, the California Transportation Commission created the "Trade Corridors Improvement Fund" program, which allocates monies for highways and rail projects.

3. Joint regional infrastructure planning.

The California Department of Transportation (CALTRANS), working closely with the San Diego Association of Governments (SANDAG), has produced most of the "state of the art" plans and studies that either guide or directly influence decision-making for

highways and rail construction along the California-Mexico border. These include the *California-Baja California Border Master Plan*, a work in progress.

Cross-border infrastructure planning is fragmented across Federal, state and local levels. Obviously, the need to work across levels of government is paramount. In the past, the creation of “working groups” partly solved this problem. But the lack of integration between the different border agencies and processes is a major obstacle to an improved cross-border infrastructure system.

Putting It All Together: Policy Challenges

In an era of globalization, state and regional government must take the lead in crafting cross-border infrastructure policy. Regions must reinvent themselves as conduits facilitating the movement of people, goods, information and finance within nations and across international boundaries. Urbanizing regions that build world-class transportation infrastructure strengthen their competitive advantage in the global economy and fortify themselves against competing regions.²⁰ The California-Baja California border region fits this category of emerging entrepreneurial regions. But it must plan and manage infrastructure in a way that fully embraces the trans-boundary geographic and global economic conditions of the border zone.

Globalization – the integration of the state economy with trans-national markets – will increasingly define California’s future. But globalization is a multi-level challenge. While global manufacturing (maquilas) and NAFTA/trade should be the two galvanizing forces that drive the border economy, global security and competition from other globalizing regions (Central America, the U.S. northwest, Texas, etc.) represent potential threats to California-Baja California’s future .

To enhance the California-Mexican export sector, the state needs stable and efficient border region infrastructure – land ports, roads, rail. Current infrastructure

deficits along the border need to be addressed. Long waiting times interrupt business and production cycles, impose financial losses and contribute to an atmosphere of uncertainty that is disturbing the cross-border economy, and could cause investors to relocate to other regions. Meanwhile, Department of Homeland Security policies along the border are, at times, generating overzealous interventions that result in even greater delays and more uncertainty.

The ever rising cross-border movement of vehicles, people, and goods will very likely remain a land-based phenomenon along the California-Mexico frontier. As such, the region will need innovative cross-border planning strategies that determine how highways, rail systems, and port of entry will be integrated to support and match up with Mexico's border transport systems and future regional development mega-projects since the latter could dramatically shift cross-border flow patterns.²¹ Most critical of all, an upgraded "cross-border infrastructure" strategy will help overcome the perception among businesses and potential investors of long delays and uncertainty. That strategy will need to challenge the post-9/11 "homeland security" view of the border.

Notes

¹ These numbers fluctuate with the state of the international economy, but see generally: Shatz, Howard J. and Luis Felipe Lopez-Calva, 2004. *The Emerging Integration of the California-Mexico Economies*. Research Report. San Francisco: Public Policy Institute of California.

² San Diego Association of Governments (SANDAG), 2006. *Economic Impacts of Wait Times at the San Diego-Baja California Border*. Final Report. San Diego: SANDAG.

³ Some 35 million vehicles cross the California border from Mexico each year; they carry between 65 and 70 million passengers. Meanwhile two million trucks carry nearly 30 billion dollars of merchandise. These flows are forecast to double by the year 2020. See California Department of Transportation (CALTRANS), 2006. *California-Baja California Border Report*. CALTRANS. District 11. This zone also houses a steady stream of legal cross border flows of labor into the state.

⁴ By "homeland security" view, I refer to the Bush administration's post-9/11 homeland security approach to the U.S.-Mexican border, elected officials, writers, anti-Mexican interest groups and others who

believe the United States needs to build bigger fences and walls to protect itself from the threat of terrorists and other perceived “menaces” from the south.

⁵ SANDAG, 2006

⁶ Growth projections are based on past rates of growth on both sides of the border, as well as demographic trends plotted by planning organizations in the U.S. and Mexico. See San Diego Association of Governments, , 2006, and State of Baja California, 2005. *Regional Plan for State of Baja California*. Mexicali: Office of the Governor. Baja statistics are drawn from the national census carried out by the national Institute for Statistics and Geographical Information (INEGI).

⁷ Population figures in Mexican census for border cities have sometimes been underestimated in the past.

⁸ SANDAG, 2006

⁹ U.S. Department of Transportation, Bureau of Transportation Statistics, *United States Mexico Border Crossing Data*, 2006. Obviously, during the recent recession, flows have decreased, but the overall trend remains.

¹⁰ Haveman, Jon D. and David Hummels, 2004. *California's Global Gateways: Trends and Issues*. San Francisco: Public Policy Institute of California.

¹¹ CALTRANS, 2006.

¹² Sourcepoint, 2004. *Binational Border Transportation Infrastructure: Needs Assessment Study (BINS)*.

¹³ This pattern may be slowly changing, however. For example, The San Diego Association of Governments has discussed amending its regional transportation plan to create cargo trucking lanes on major north-south freeways.

¹⁴ Haveman and Hummel, 2004.

¹⁵ SANDAG, 2004. *Comprehensive Plan for the San Diego Region*. San Diego: SANDAG

¹⁶ CALTRANS, 2006; Sourcepoint, 2004.

¹⁷ DHS oversees some 22 different agencies divided among four areas of concern: border and transport security, science and technology, information analysis and infrastructure protection, and emergency preparedness. Its objectives are to manage the nation's borders and ports of entry, prevent the unlawful entry of illegal persons or goods, and work overseas to detect and block illegal smuggling operations.

¹⁸ U.S. Department of State, 2002. *“Smart Border: 22 Point Agreement”* Washington, D.C.: U.S. Department of State and Office of the Press Secretary, White House.

¹⁹ Border Governors XXV Conference, 2007. Joint Declaration. Puerto Penasco, Mexico. September 27.

²⁰ Herzog, Lawrence A. and Steven P. Erie, 2002. "Globalization, Politics and the Future of the San Ysidro Community" San Diego: UCSD Civic Collaborative.

²¹ Two important regional projects in Baja California—the new port at Punta Colonet, and the high tech platform at Silicon Border in Mexicali— are examples of projects that would have a huge impact on the cross-border transport/trade infrastructure system in California/Baja California.