### 5-9014-01-P7

## CURRENT ISSUES RELATED TO SECURITY AND SAFETY INITIATIVES FOR MEXICAN TRUCK CARRIERS ALONG THE TEXAS-MEXICO BORDER

Authors: Michael Bomba Juan Carlos Villa William Stockton Robert Harrison

### Project 5-9014: Criteria and Design for a Model Border Crossing

#### JULY 2003; REVISED JUNE 2005

Performing Organization:	Sponsoring Organization:
Center for Transportation Research	Texas Department of Transportation
The University of Texas at Austin	Research and Technology Implementation Office
3208 Red River, Suite 200	P.O. Box 5080
Austin, Texas 78705-2650	Austin, Texas 78763-5080

Project conducted in cooperation with the U.S. Department of Transportation, Federal Highway Administration, and the Texas Department of Transportation.

<b>Abstract:</b>	of
Since the September 11, 2001 terrorist attacks, the U.S. government's view of its borders has changed and they are now viewed as serving a protective function first, while the role of encouraging trade has become secondary. However, even with the realization of the danger that the United States now faces, the country cannot simply close its borders and look inward. International trade is too vital a component of the country's economic activity and prosperity the eliminate. In the case of U.SMexico trade, it totaled \$232.1 billion in 2002 and approximatel 80 percent of the surface trade was carried by trucks. Prior to and since the September 11 attacks, federal and state governments have initiated a variety of programs for Mexica shippers and carriers to ensure domestic security, confiscate illegal drugs, stop smuggling, slow illegal immigration, and improve commercial vehicle safety. In general, most of the program operate successfully, but there are always opportunities for improvement. Specific areas for improvement identified in this paper are increasing participation in voluntary enforcement programs, improving data exchange between the U.S. federal and state governments and the Mexican federal government, and improving the Mexican Commercial Driver's License system. Given the federal government's reorganized view of the border, the current transitiona period will likely continue for two or more years and should be viewed as an opportunity to fir existing problems and improve future practices.	s:

### **Table of Contents**

Section 1.	Introduction	1
Section 2.	Recent U.SMexico Trade Patterns	1
Section 3.	The Northbound Border Crossing Process	5
Section 4.	Existing U.S. Programs for Mexican Manufacturers and Carriers	6
Section 5.	State of Texas Safety Initiatives	8
Section 6.	Opportunities for Improvement	8
Section 7.	Conclusions and Recommendations	9
Section 8.	References1	5

# List of Figures

Figure 1: U.SMexico Trade in Billions of U.S. Dollars, 1985–2002	2
Figure 2: Mode of Transport for United States' Surface Trade Exports to Mexico (Percent of Total), January 2000 to January 2003	4
Figure 3: Mode of Transport for United States' Surface Trade Imports from Mexico (Percent of Total), January 2000 to January 2003	4
Figure 4: Classification of Border Coordination Problems and Issues	11

#### **Section 1. Introduction**

A country's attitude towards the openness of its borders is not static and will be adjusted according to perceived risks. When the environment is relatively peaceful and there are opportunities for trade, countries will typically allow their borders to become more permeable. However, in regions where there is the potential for conflict or conflict already exists, functional countries are more likely to limit the flow of people and goods. Prior to the September 11, 2001 terrorist attacks in New York City and Washington, D.C., the United States government followed a border policy that reflected the first scenario. The country's emphasis at that time was on making the process of crossing the border quicker and easier, while security concerns focused primarily on illegal drug interdiction and smuggling, along with slowing the flow of illegal immigration. Since the September 11, 2001 attacks, the United States has completely changed its view of and approach towards its borders. The United States no longer believes that it is operating in a generally safe environment. On the contrary, the country now sees itself as being in a very dangerous world filled with significant and imminent threats. The U.S. government now views its borders as serving a protective function first, while the role of encouraging trade has become secondary. Consider the reorganization of the former U.S. Customs Agency in the Department of Treasury to a new agency named Customs and Border Protection (CPB) under the U.S. Department of Homeland Security.

#### Section 2. Recent U.S.-Mexico Trade Patterns

However, even with the realization of the dangers that the United States now faces, its government cannot simply close the country's borders and look inward. International trade is too vital a component of the country's economic activity and prosperity. Many medium- and large-sized U.S. corporations could not remain profitable if they were unable to export their goods. Similarly, many would not remain in business if they were unable to gain access to materials or products from other countries for their own manufacturing processes. U.S. consumers have also come to expect access to affordable imported goods to maintain their consumption patterns. The dollar amount of yearly U.S. foreign trade is staggering when the total figures are revealed. In 2002, the United States exported \$681.9 billion worth of goods and imported \$1.16 trillion worth (U.S. Census Bureau, 2003). A significant portion of this trade occurred with Canada and Mexico, which together, exported and imported approximately 37.9 percent and 29.5 percent of

the United States' total exports and imports, respectively. Total U.S.-Mexico trade has grown significantly over the last two decades, from approximately \$32.8 billion dollars in 1985 to \$232.1 billion in 2002 (See Figure 1) (U.S. Census Bureau, 2003a).



Figure 1: U.S.-Mexico Trade in Billions of U.S. Dollars, 1985–2002 Source: U.S. Census Bureau-Foreign Trade Division, 2003a.

The primary challenge the United States now faces is to maintain the flow of goods across its borders without allowing dangerous persons or cargoes to pass. The United States now considers terrorists and weapons of mass destruction to be the greatest threat to the nation, but continues its enforcement of drug interdiction, the prevention of smuggling, and stopping illegal immigration. The CBP has been charged with leading the new anti-terrorist efforts at the U.S. border. There has also been a parallel effort undertaken to eliminate unsafe commercial vehicles from Mexico, by federal and state officials, as a result of the intense lobbying efforts by certain special interest groups. Considerable resources have been allocated towards improving the enforcement of safety rules for Mexican trucks so that they meet or exceed U.S. standards and are driven by qualified individuals.

Trucks carry the majority of the surface trade that crosses the U.S.-Mexico border. At the end of 2002, trucks hauled approximately 80 percent of the United States' surface exports and

imports to and from Mexico (See Figures 2 and 3) (U.S. Bureau of Transportation Statistics, 2003). This accounts for a large volume of trucks, which share U.S. roadways with commuters and other domestic cargo movers. Historically and at present, outside of a 20-mile border zone, U.S. drivers and trucks operate and haul all commercial vehicles carrying Mexican cargo. However, the North American Free Trade Agreement (NAFTA) required that Mexican operators be allowed to operate in the United States by 2000. The passage of Mexican trucks beyond the border zone was initially halted through an executive order issued by former President Bill Clinton in 1995, who at the time was under intense pressure from labor unions. The matter was referred to the NAFTA arbitration panel, which ruled that the U.S. government had violated the NAFTA agreement and authorized the Mexican government to levy sanctions of \$1 billion. However, the Mexican government agreed to suspend those sanctions, if the Bush administration could develop and implement a plan that would permit Mexican trucks into the United States (Hendricks, 2001). In 2002, the Ninth Circuit Court of Appeals ordered the preparation of an environmental impact statement (EIS) on the air-quality effects of an open border before Mexican trucks would be allowed to enter the United States. Since then, the permission to prepare the EIS has been granted and the work will commence in the very near future. There is also a strong likelihood that the Bush administration will also bring the case up on appeal to the U.S. Supreme Court this year. But, until this issue is resolved, Mexican trucks are still limited to the 20-mile border zone on the United States side of the border.



Figure 2: Mode of Transport for United States' Surface Trade Exports to Mexico (Percent of Total), January 2000 to January 2003 Source: U.S. Bureau of Transportation Statistics, 2003.



Figure 3: Mode of Transport for United States' Surface Trade Imports from Mexico (Percent of Total), January 2000 to January 2003 Source: U.S. Bureau of Transportation Statistics, 2003.

#### Section 3. The Northbound Border Crossing Process

Before discussing any of the current initiatives to improve the flow of northbound commercial trucks, it may be useful to familiarize the reader with the complicated border crossing process. The northbound border crossing process for commercial vehicles, i.e., trucks, requires the physical movement of goods, as well as data exchanges between Mexican private and public entities and federal and state officials in the United States. The crossing of northbound trade begins with a Mexican shipper arranging transportation from either the interior of Mexico or from a manufacturing plant along the border into the United States. The shipper provides the carrier and customs brokers with the commercial invoice and other relevant information. Shipments arriving from the interior of Mexico are typically transported using long-haul carriers, who leave the trailer at the Mexican side of the border, usually at a custom broker's or freight forwarder's trailer yard.

During the next step, two processes occur simultaneously. As the goods are transported to the border crossing point, import and export paper documents are prepared and then electronically filed with U.S. and Mexican customs authorities by the respective customs brokers. The information sent to the CBP agency includes data about the cargo and method of conveyance, identifies the driver, and appears on the U.S. *Inward Cargo Manifest*. Mexican authorities require an *Exportación Pedimento*, which includes information about the cargo being exported. The freight movement during this stage consists of transferring the trailer from Mexico to the United States using short-haul carriers, who are also called "drayage" carriers. Drayage carriers typically collect the trailer of cargo from the custom broker's or freight forwarder's trailer yard, where the long-haul transportation company that brought it from the interior of Mexico had left it, and take the cargo across the border. If the cargo originates from a manufacturing facility in the border area, then the drayage carrier picks up the trailer from that facility and carries it across. With the cargo's Mexican export and its U.S. import documents, the driver hauls the trailer to the Mexican export facility, then across the border and into the U.S. federal inspection compound.

The first stop for a truck after it enters the United States is the primary inspection booth at the CBP compound. Upon arrival, the driver of the truck presents to the CBP agent personal identification (proof of citizenship, a valid visa, or laser card), a copy of the Inward Cargo Manifest, and a commercial invoice. Basic information about the driver, the vehicle, and its load are cross-checked via a computer with information previously sent by the brokers. The agent then makes a decision whether to assign the truck to a secondary inspection or to release it to the exit gate. Secondary inspections could include any inspection of the driver, the freight, or the truck and trailer between the primary inspection and the exit gate of the port of entry. Inspections are carried out by various federal agencies, which include: the U.S. Department of Transportation (USDOT), the CBP, the U.S. Department of Agriculture (USDA), the Food and Drug Administration (FDA), and others. The inspection process seeks to ensure that the driver, the vehicle, and the cargo comply with all U.S. laws. As pointed out earlier, the inspectors are most concerned with protecting against terrorists and their weapons, then illegal drugs, smuggling, illegal immigration, etc. Historically, most USDOT inspections have been conducted in designated areas within the U.S. federal compound, where USDOT agents interview drivers and inspect conveyances to determine whether they are in compliance with U.S. safety standards and regulations. More recently, however, the work of USDOT personnel has been supplemented and even replaced by state DPS personnel, who work at dedicated vehicle inspection facilities located adjacent to or near the U.S. government's federal facilities

#### Section 4. Existing U.S. Programs for Mexican Manufacturers and Carriers

Prior to the September 11, 2001 attacks, the CBP had implemented and supported a variety of initiatives to improve and speed up the border crossing process for Mexican manufacturers and carriers. Among these initiatives were the Carrier Initiative Program (CIP), the Border Anti-Smuggling Coalition (BASC), the Americas Counter Smuggling Initiative (ACSI), and the Land Border Carrier Initiative Program (LBCIP). The CIP is the oldest of the programs and was started in 1984 to prevent drug smugglers and terrorists from using commercial transporters to carry their shipments. The carriers commit to working with CBP to raise security levels at their facilities and on their vehicles, as well as to report suspicious activities or individuals. For its part, CBP provides training and site surveys to improve carrier security. The BASC initiative is led by the business community and supported by CBP, thus it is an alliance rather than a U.S. government program. BASC is a completely voluntary effort that seeks to eliminate opportunities for criminal elements to use commercial trade for smuggling activities. While the CIP program strictly addresses carrier activities, the BASC initiative focuses on reducing illegal activities from the manufacturing process through product shipment. The ACSI program was established in 1988 and was designed to build on the successes of the CIP and BASC. It

developed a team of inspectors and agents from CBP to provide training and site surveys to BASC members four times a year. The LBCIP program applies only to the U.S.-Mexico border and is available to commercial shippers using land-based modes of transport with the objective of increasing security against smuggling illegal drugs. Importers who want to use line release at border crossings must become a member of the LBCIP (CBP, 2003c).

Since the September 11, 2001 attacks, the CBP has created a new program called the Customs-Trade Partnership Against Terrorism (C-TPAT). The C-TPAT is a voluntary joint program between the CBP and interested businesses involved in the supply chain (importers, carriers, brokers, warehouse operators, and manufacturers). The purpose of the program is to encourage businesses in the supply chain to undertake procedures and practices that will increase security at their facilities and prevent them from becoming a conduit for terrorists and their weapons. The primary benefit of firm participation is potentially fewer inspections of their shipments at the border. While there is some overlap with the CIP, the C-TPAT program is intended to work in conjunction with CIP, not to replace it (CBP, 2003). Another recent CBP initiative undertaken along the U.S.-Canada border is the Free and Secure Trade (FAST) Program, which is offered to Canadian importers, highway carriers, and commercial drivers. Under the FAST initiative, cargo shipments are eligible for a more rapid electronic release, if the importer is C-TPAT approved, the carrier is FAST and C-TPAT approved, and the driver is FAST approved (CPB, 2003b). The CBP is also currently working on a similar program along the U.S.-Mexico border called FAST-STEP (STEP stands for Secure Trade-Expedited Processing), which takes into account the unique issues at the United States' southern border. The program seeks to expedite the border crossing process, while searching for weapons of mass destruction and creating a harmonized port of entry operating process. The program is currently in a testing stage and, so far, the results have been impressive. FAST-STEP has created better electronic data sharing and decreased cargo processing times from 4 minutes to about 25 seconds. Another important benefit is that the program does not require additional spending on infrastructure. The FAST-STEP system will be targeted to the top thirty companies crossing the U.S.-Mexico border that, combined, account for a large share of total border crossings (CBP, 2003a).

#### Section 5. State of Texas Safety Initiatives

The state agencies along the U.S.-Mexico border are mostly concerned with the enforcement of commercial vehicle safety. The Texas Department of Public Safety (DPS) is making a decisive investment (with federal assistance) to ensure that Mexican trucks entering the U.S. meet or exceed the state and federal safety regulations. Safety inspections facilities, located at the eight busiest Texas ports of entry, will ensure that all Mexican truck traffic gets a 100 percent visual inspection—a rate that certainly exceeds the level of effort on the northern border. In fact, one could question whether the resources that the state of Texas has directed towards Mexican truck safety are proportional to the true safety risk posed by incoming Mexican trucks.

#### **Section 6. Opportunities for Improvement**

Although a variety of programs is available to manufacturers and carriers who want to expedite the border crossing process, they only offer advantages if the complete chain makes use of the system. A trucking company interviewed in Ciudad Juárez, Mexico, pointed out that while all of its drivers are CIP certified, one of their primary shippers is not a member of the BASC, which means they cannot use the STEP program. Therefore, there is virtually no time-savings realized by their membership in the CIP. This situation presents a problem to the CBP, because it creates a disincentive for trucking companies to retain their membership in the CIP and fewer reasons to bother implementing the security features that could reduce smuggling into the United States.

Truck equipment safety is another problem for Mexican truck drivers, carriers, and shippers. The Texas DPS has tried to improve conditions for commercial carriers in Mexico by allowing them to obtain a 90-day safety permit for each of their trucks (provided each passes an inspection). This permit can expedite their passage through the DPS border safety inspection. However, not infrequently, these truck safety permits are not beneficial to carriers because they sometimes haul unsafe trailers provided to them by the shippers. While trucking companies do share some responsibility for this problem, because they are supposed to inspect the trailers before carrying them, the reality is that most carriers will probably try to carry the trailer over, hoping they will not be stopped, than refuse the trailer and lose the trip or potentially anger the shipper. Similarly, when the carrier is punished for a safety violation that is primarily the responsibility of the shipper, there is a diminishing incentive for the carrier to participate in programs to improve tractor and driver safety.

Another issue facing Mexican trucking companies and drivers is the inadequate development of Mexico's Commercial Driver's License (CDL) system. The Mexican government maintains the CDL system as two separate databases: one for trucks registered in the interior of Mexico and another for trucks registered in the border zone. Although it is accessible to the CBP, U.S. authorities are only able to view one of the databases, due to the incompatible format of the second database. As a result, if the information for the driver crossing the border is assigned to the database that the CBP personnel does not have access to, then the driver is sent back to Mexico. To further complicate matters, there have also been a number of problems with the operation of Mexican telecommunication equipment and the system is occasionally off-line (as was the Texas DPS's computer system during a field visit) and drivers are not allowed to cross the border using their CDL. Without verification from the database, it is not possible to confirm the legitimacy of the Mexican drivers, so they are sent back, although they have fully complied with the law.

There could be benefits gained by transportation planners in the United States through the sharing of border data collected by federal and state agencies on both sides of the border. If the various entities could decide on the appropriate methods, data from customs, immigration, food and agriculture, and motor carrier safety agencies could be linked so that the efficiency and effectiveness of all entities could be improved. As an example, a customs query that is linked to a safety database might show that an incoming truck company has a high number of out-of-service rates, which might change the perceived risk associated with that vehicle and route it to secondary inspection. These data could also be used to improve current highway corridor planning. The Bureau for Transportation Statistics (BTS) would be the appropriate provider of this information and could publish it—suitably amended—for use by state highway planners and consultants. Finally, by linking border crossing data systems, trucks entering the United States from Mexico could avoid repeat inspections, for example, weigh-in-motion and safety checks, which they have already performed at the border.

#### Section 7. Conclusions and Recommendations

The CBP has undertaken some significant and important steps to expedite the border crossing process for Mexican shippers and carriers. However, there are a number of Mexican shippers and carriers who have chosen not to participate in these programs. Unfortunately, if both the shippers and carriers are not participants in these programs, then neither can benefit. This is further

complicated by the fact that carriers have little or no influence over their shipper's participation. Given the competitive nature of the industry, it is highly unlikely that a Mexican carrier would attempt to push their clients to participate in one of the U.S. government programs, even though there are benefits to the CBP for greater participation. Mexican shippers, on the other hand, probably have much greater influence over carrier participation in such programs. Regardless, it is to the benefit of the CBP to have as many participants in its security programs as possible. Therefore, the CBP should consider providing financial disincentives to trucking firms and large manufacturers along the border who are not members of programs that permit expedited border crossings. More than saving time, participation in these programs allows the CBP to have some influence over manufacturers and shippers to ensure that they follow policies that minimize opportunities for illegal activities. But, before implementing these financial disincentives, the CBP, in conjunction with the General Services Administration (GSA), needs to expand the physical layout of federal facilities so that expedited lanes are always available to carriers during normal bridge operating hours.

Federal and state agencies need to continue initiating new efforts, as well as maintaining existing ones, for data sharing and improved coordination between agencies. In particular, federal and state agencies should look for new ways to share safety data on commercial vehicles. A recent study conducted for the binational Joint Working Committee, which was coordinated and funded by the Texas Department of Transportation (TxDOT), focused on the impact of limited coordination among the key public and private stakeholders in the transborder movement of freight. That study concluded that there were twenty documented shortcomings in coordination that had substantial impacts on trade flow, security, or operational efficiencies of either the public or private sector. Those shortcomings are illustrated in the diagram shown in Figure 4, which illustrates the seven major categories of issues identified by the authors. The authors found that some of the issues have been known since the early 1990s, but have not been resolved due to the absence of overarching coordination mechanisms (Ojah et al, 2003).





Source: Ojah et al, 2003.

Ojah et al. (2003) concluded that some of these problems could be addressed by individual agencies, but that a sustainable resolution of the vast majority of these issues could only be achieved through a coordination mechanism that does not exist. The authors stopped short of calling for unified port management, though changes in the Department of Homeland Security, since the study was concluded, have largely achieved unified port management. However, those changes only assure coordination among federal entities. Other state and local public entities and private sector stakeholders must be included in the planning and operations processes to achieve meaningful results (Ojah et al. 2003).

Finally, there could be some relatively simple solutions to these problems with the Mexican CDL system, but there is reluctance by the *Secretaria Comunicaciones y Transportes* (SCT—Secretariat of Communication and Transportation) to confront the issue. The quickest solution would be to spend the necessary funds to make the Mexican database compatible with the CBP system, but there are no immediate plans to do so. During a recent interview with a local SCT official, a question was raised about the cost of not having compatible systems. His matter-of-fact response was, "There is no cost." From an agency perspective, this official was correct, but from a broader perspective, particularly the commercial carriers' viewpoints, the cost of the incompatible system is quite high. Additionally, inefficiencies like this add uncertainty and cost into the system and diminish Mexico's competitiveness as an offshore manufacturing location at a time when it is already losing a substantial number of its jobs in the maquiladora sector.

The southern border is still in a transitional stage, moving from its previous reliance on primary inspection and paper forms to various forms of electronic processing and pre-filing. Change is, of course, difficult for the many business entities at the ports of entry that are accustomed to a set of procedures that have generally served them and their communities well over the past two decades. It should be remembered that the experimental nature of many of the pilot schemes gives rise to unforeseen problems and potentially higher costs for shipping goods across the border. Given the razor thin profit margins by which many of these businesses operate, they tend to prefer a consistent and constant regiment of regulations, rather than to experiment with new ideas that may cost them money. State governments have experienced problems working with federal entities, which have tended to remain somewhat introspective and tightly focused within their specific realm of operations. Federal agencies have often been relatively non communicative (almost secretive) with state agencies like TxDOT and Texas DPS, which bear the impact of their decisions. Given the federal government's reorganized view of the country's borders, the current transitional period will likely continue for two or more years, but this should be viewed as an opportunity to fix existing problems and improve future practices.

#### Section 8. References

- Customs and Border Protection-U.S. Department of Homeland Security. C-TPAT Fact Sheet and Frequently Asked Questions. <u>http://www.cbp.gov/xp/cgov/import/commercial\_enforcement/ctpat/fact\_sheet.xml</u>. Accessed 24 July 2003.
- Customs and Border Protection-U.S. Department of Homeland Security. "FAST-STEP: Secure Trade – Expedited Process." Presented on 12 June 2003a at the U.S. Customs & Border Protection Office in El Paso, Texas.
- Customs and Border Protection-U.S. Department of Homeland Security. Free and Secure Trade (FAST). http://www.cbp.gov/xp/cgov/import/commercial\_enforcement/ctpat/fact\_sheet.xml.

Accessed 24 July 2003b.

- Customs and Border Protection U.S. Department of Homeland Security. Industry Partnership Programs. <u>http://www.cbp.gov/xp/cgov/import/commercial\_enforcement/ctpat/fact\_sheet.xml</u>. Accessed 16 July 2003c.
- Hendricks, David. "U.S. may delay Mexican trucks; Transportation Secretary indicates the January 1 deadline could be pushed back," *San Antonio Express-News*, 23 August 2001, 1(A).
- Ojah, M., J. Villa, W. Stockton, D. Luskin, R. Harrison. *Truck Transportation through Border Ports-of-Entry: Analysis of Coordination Systems*. Texas Transportation Institute Research Report 50-1XXA3038. 2003. Texas Department of Transportation.
- U.S. Bureau of Transportation Statistics. Transborder Surface Freight Data. January 2000 to December 2002 monthly data. Accessed 16 July 2003.
- U.S. Census Bureau-Foreign Trade Division. Exports and Imports of Goods by Principal End-Use Category. <u>http://www.census.gov/foreign-trade/Press-</u> <u>Release/current\_press\_release/exh13.pdf</u>. Accessed 16 July 2003.
- U.S. Census Bureau Foreign Trade Division. "U.S. Trade Balance with Canada" and "U.S. Trade Balance with Mexico". 11 July 2003a. <u>http://www.census.gov/foreign-trade/balance/c1220.html</u> and <u>http://www.census.gov/foreign-trade/balance/c2010.html</u>. Accessed 16 July 2003.