5-9014-01-P8

CURRENT PRACTICES AT TXDOT/DPS BORDER SAFETY INSPECTION FACILITIES AND OPPORTUNITIES FOR DATA SHARING WITH FEDERAL AGENCIES

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

JULY 2003; REVISED JUNE 2005

Performing Organization:	**Sponsoring Organization:**
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Project conducted in cooperation with the U. S. Department of Transportation, Federal Highway Administration, and the Texas Department of Transportation.

Abstract:
Concern about the safety of Mexican trucks operating in the United States began in the early 1990s, during the debate over the ratification of the North American Free Trade Agreement (NAFTA). During this debate, a number of U.S. special interest groups argued that Mexican trucks and Mexican truck drivers were unsafe and should not be allowed to operate on U.S. roads. As a result, federal and state governments have directed significant resources towards ensuring the safety of Mexican commercial vehicles and their drivers operating in the United States. This memorandum describes current practices by the Texas Department of Transportation (TxDOT) and the Texas Department of Public Safety (DPS) to inspect commercial vehicles bringing goods from Mexico into the United States. The data for the study were collected during field visits to border safety inspection facilities in El Paso, Texas and Laredo, Texas, as well as through interviews with individuals working for sates and federal agencies. The study found that the Mexican federal government has the opportunity to improve safety and the velocity of trade by improving their commercial drivers license database and by providing public truck scales near border crossings. Federal and state governments in the United States can improve the efficiency of border safety inspection stations by increasing their staffing.

Keywords:
U.S.-Mexico border, trade, truck safety, Texas, Mexico, trucks, commercial shipping industry

No. of Pages:
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Section 1. Introduction

Concern about the safety of Mexican trucks operating in the United States began in the early 1990s, during the debate over the ratification of the North American Free Trade Agreement (NAFTA). During this debate, a number of U.S. special interest groups argued that Mexican trucks and Mexican truck drivers were unsafe and should not be allowed to operate on U.S. roads. Some of this apprehension came from special interest groups, whose primary goal was to promote highway safety, but equally vocal opposition came from U.S. labor unions, such as the Teamsters, who simultaneously expressed concerns about public safety and predictions that Mexican truck drivers would displace U.S. workers. More recently and taking an opposing viewpoint, an individual interviewed for this study was disturbed by what he perceived as an intrusion by state and federal governments and their safety inspection facilities into the free flow of trade. This participant believed that state and federal safety inspections hindered the flow of goods and viewed the safety issue as a matter of local concern that could be handled using local enforcement. In reality, the arguments about the safety of commercial vehicles from Mexico are, to a certain degree, part of a much larger debate over the merits of free trade and globalization. But, regardless of the politics that envelop this issue, there is a real and legitimate need for various regulatory entities in the United States to enforce the safety of commercial vehicles from Mexico and to prevent untrained or irresponsible drivers from operating these vehicles on public roads.

The initial goal of this effort was to explore the collection and use of data at border crossings, as they relate to commercial vehicle safety, and to identify opportunities for sharing these data between state and federal agencies. However, a similar effort is already underway for Texas Department of Transportation (TxDOT) by the Southwest Research Institute in San Antonio, Texas. Therefore, to avoid duplication with this ongoing effort, a revised work plan was developed with two primary objectives. The first objective was to provide a description of current efforts by the U.S. Department of Transportation (USDOT), TxDOT, and the Texas Department of Public Safety (DPS) to ensure the roadworthiness of Mexican trucks and the legality of their drivers on U.S. roadways. To accomplish this first goal, staff from the Center for Transportation Research (CTR) at The University of Texas at Austin and the Texas Transportation Institute (TTI) visited four TxDOT and DPS commercial vehicle inspection stations along the U.S.-Mexico border. Two of the inspection stations were in El Paso (the

Zaragosa-Ysleta International Bridge and the Bridge of the Americas) and the other two inspection stations were at bridges in Laredo (the Colombia-Solidarity International Bridge and the World Trade Bridge). The second objective of the research was to understand the types of commercial vehicle safety data that are collected and used at border crossings and to identify opportunities for sharing these data between various state and federal agencies in the United States.

Section 2. Existing Federal Inspection Sites and Border Safety Inspection Facilities

At the federal level, USDOT's Federal Motor Carrier Safety Administration (FMCSA) performs inspections of commercial vehicles within federal compounds at U.S. border crossings. As U.S.-Mexico trade has grown, many existing facilities have become inadequate, so The Fiscal Year 2002 Transportation and Related Agencies Appropriations Act was enacted to provide the FMCSA with $2.3 million to procure and improve federal inspection facilities for commercial vehicles. To reach this goal, the FMCSA entered into agreements with U.S. General Services Agency (GSA) to obtain dedicated inspection and out-of-service space and to make necessary facility improvements. Many of the FMCSA facilities have already undergone rehabilitation and expansion and the USDOT inspector general reported in 2002 that all the FMCSA border crossing facilities located in Texas were consistent with their identified needs.

This act also provided the four U.S. border states with a total of $66 million to construct new state Border Safety Inspection Facilities (BSIFs) or to improve existing ones. The state of Texas received a total of $52.8 million to build these facilities and is planning to construct BSIFs at the following locations:

- Bridge of the Americas, El Paso;
- Zaragoza-Ysleta International Bridge, El Paso;
- World Trade Bridge, Laredo;
- Colombia-Solidarity International Bridges, Laredo;
- Eagle Pass International Bridge, Eagle Pass;
- Pharr-Reynosa International Bridge, Pharr;
- Free Trade International Bridge, Los Indios (Harlingen);
- Veterans International Bridge, Los Tomates (Brownsville).

The BSIFs in Texas are designed and maintained by TxDOT and operated by DPS. Because the funding for BSIFs is a recent event and because there are no existing facilities for the state of Texas to perform commercial vehicle safety inspections, all of the safety inspection stations presently use temporary facilities. As a result, the differences between the facilities at the various bridges can be quite large. In the case of the World Trade Bridge in Laredo, most of the inspection work is done at USDOT facilities within the federal inspection compound, where USDOT and Texas DPS inspectors perform their respective safety inspections. In addition, there is a temporary weigh station located outside of the federal compound underneath an overpass on the roadway leaving the bridge. At the Bridge of the Americas in El Paso and at the Colombia-Solidarity International Bridge in Laredo, the inspection facilities consist of a large paved area adjacent to the federal compound. These facilities have been improved with covered inspection stations and portable buildings. The most basic facility is the inspection site at the Zaragosa-Ysleta International Bridge, which is simply a segment of frontage road on the expressway leaving the bridge and has no temporary or permanent structures. TxDOT plans to build permanent structures at all eight BSIFs, but completing this task requires the purchase and development of the land, in addition to satisfying regulatory requirements such as environmental studies and clearance.

Section 3. The Northbound Border Crossing Process

Before discussing any of the current safety inspection and data collection processes for 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 requires the physical movement of goods, as well as the exchange of data 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 to the United States, from either the interior of Mexico or from a manufacturing plant along the border. The shipper also provides the carrier and customs brokers with a 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 U.S. Customs and Border Protection (CBP) agency includes data on the cargo, method of conveyance, and identifies the driver, which all appear on the U.S. *Inward Cargo Manifest*. Mexican authorities require a *Pedimento de Exportación* (export request form) a document that includes information about the cargo being exported. The freight movement during this stage consists of transferring the trailer from the Mexico border zone 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 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. When crossing over the border from Mexico, the drayage driver submits the *Pedimento de Exportación* to a Mexican officer at the Mexican federal export compound and the shipment is subject to a random selection mechanism for export inspection. Shipments that are selected to undergo revision are sent to an inspection facility. Shipments that are not selected for inspection proceed to the exit gate, cross the border, and continue on to the U.S. port of entry (POE) 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 U.S. CBP compound. Upon arrival, the driver of the truck presents the CBP agent with a 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 terminal 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, including the USDOT, CBP, the U.S. Department of Agriculture (USDA), the U.S. 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. 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. The USDOT inspection selection process is based upon the condition of the vehicle, the carrier's safety history, and the date of the tractor's last Commercial Vehicle Safety Alliance (CVSA) inspection. The driver's license and the tractor and trailer fitness may also be inspected at these facilities. Some data concerning driver credentials and vehicle and carrier safety history are now available to inspectors via online databases maintained by various U.S. and Mexican authorities. However, these data are not always accessible because the computer systems occasionally malfunction and some Mexican databases are not accessible to the USDOT.

Section 4. Current Commercial Vehicle Safety Programs

There are a number of active programs to improve shipper compliance with the U.S. laws that regulate the operation of commercial vehicles carrying imported goods. The CVSA is a nonprofit organization of federal, state, and provincial government agencies and representatives from private industry in the United States, Canada, and Mexico that is dedicated to improving commercial vehicle safety. Under a current program, a CVSA-certified officer performs inspections of commercial vehicles and affixes decals to those that pass inspections, by meeting the safety requirements of the neighboring country. The CVSA decals are valid for a period not to exceed three consecutive months and vehicles that display a valid decal are generally not subjected to re-inspection when crossing a federal inspection station, unless there is an obvious or visible problem. The intent of the stickers is to speed up the border crossing process and to avoid unnecessary inspections, although, if the condition of the trucks is not maintained, the sticker is revoked at the border (Commercial Vehicle Safety Alliance, 2003).

The CVSA has defined six levels of inspections and the certification decal is provided when a vehicle passes a Level I or Level V inspection. Passing these inspections means that the inspector finds no regulatory violations or defects of the following critical vehicle inspection items: brake system, coupling devices, head lamps, lamps on projecting loads, safe loading, steering mechanism, suspension, tires, van and open-top trailer bodies, wheels and rims, and windshield wipers (Commercial Vehicle Safety Alliance, 2003).

Level I: North American Standard Inspection

The inspection includes an examination of the driver's license; medical examine certificate and waiver; if applicable, the presence of alcohol and drugs; driver's record of duty status, as

required; hours of service; seat belt; vehicle inspection report; brake system; coupling devices; exhaust system; frame; fuel system; turn signals; brake lamps; tail lamps; head lamps; lamps on projecting loads; safe loading; steering mechanism; suspension; tires; van and open-top trailer bodies; wheels and rims; windshield wipers; emergency exits on buses; and hazardous material requirements, as applicable.

Level II: Walk-Around Driver and Vehicle Inspection

The examination includes each of the items specified under the North American Standard Inspection. As a minimum, Level II inspections must include examination of: driver's license; medical examinees certificate and waiver; if applicable, the presence of alcohol and drugs; driver's record of duty status, as required; hours of service; seat belt; vehicle inspection report; brake system; coupling devices; exhaust system; frame; fuel system; turn signals; brake lamps; tail lamps; head lamps; lamps on projecting loads; safe loading; steering mechanism; suspension; tires; van and open-top trailer bodies; wheels and rims; windshield wipers; emergency exits on buses; and hazardous material requirements, as applicable. It is contemplated that the walk-around driver and vehicle inspection will include only those items that can be inspected without physically getting under the vehicle.

Level III: Driver-Only Inspection

The roadside inspection includes the driver's license; medical certification and waiver, if applicable; driver's record of duty status, as required; hours of service; seat belt; vehicle inspection report; and hazardous material requirements, as applicable.

Level IV: Special Inspections

Inspections under this heading typically include a one-time examination of a particular item. These examinations are normally made in support of a study or to verify or refute a suspected trend.

Level V: Vehicle-Only Inspection

This inspection includes each of the vehicle inspection items specified under the North American Standard Inspection (Level I), without a driver present, that is conducted at any location.

Level VI: Enhanced NAS Inspection for Radioactive Shipments

An inspection for select radiological shipments that includes inspection procedures and enhancements (Commercial Vehicle Safety Alliance, 2003).

Section 5. Interagency Relations and Binational Data Exchange

During the interviews at the four TxDOT and DPS inspections stations, the researchers learned that the relationships between the Texas DPS and TxDOT with federal agencies like USDOT are cordial, but there is a general lack of interest on the part of the federal agencies to share responsibilities or intertwine their activities with state agencies. To a certain degree, this reluctance on the part of the federal agencies is understandable because they have different missions, bureaucratic structures and rules, and stricter federal security requirements than state agencies. At the same time, the similarity of their goals and activities makes the prospect of greater coordination and data sharing an obvious opportunity for removing redundancies at the border and increasing information flows.

At present, there exists a certain level of data exchange between Mexico and the United States, but it is limited. Mexican driver's license and vehicle information is managed at the federal level by the *Secretariat de Comunicaciones y Transportes* (SCT), which is Mexico's federal transportation and communication agency. Carrier and vehicle information is stored in the SCT's "Mexican Vehicle" database and is shared with the Federal Motor Carrier Safety Administration (FMCSA), along with the state DPS. Driver's license information is also recorded in a database developed by the SCT, which has a similar format as the U.S. driver's license database maintained by the FMCSA. Two outstanding database and information exchange issues were identified during the research. The first was the lack of complete and reliable information in the Mexican carriers and vehicles database. The database only has information on vehicles that have a federal license plate issued by the SCT. Some trucks that perform drayage services have received "border crossing" license plates, and the information on these vehicles is kept in a separate database that cannot be accessed by the current U.S. data interchange software. The other issue concerning commercial vehicle information is the database updating process. Information entered at SCT's state offices has to be transmitted to Mexico City's headquarters where the SCT transmits the information to the U.S. federal authorities. It was found that in some cases the Mexican truck information was not available in the database at the border inspection facility even though the local SCT office had processed the information. Mexican driver's license information is also kept in a database that is maintained by the SCT, and it follows the same transmission process from state SCT offices to Mexico City and then to the U.S. federal authorities. Communication links between the Mexican and U.S. authorities and

between the field BSIF and the state database were found to be inconsistent, making certain information periodically inaccessible to U.S. agents at field border stations.

Section 6. Field Visits to Texas Border Safety Inspection Facilities

Research staff from CTR and TTI made two field visits to the border region and observed the safety inspection processes at four bridges, two in El Paso and two in Laredo. The El Paso field visit included the Bridge of the Americas and the Zaragosa-Ysleta International Bridge, while the Laredo trip included visits to the Colombia-Solidarity International Bridge and the World Trade Bridge. During each trip, the CTR and the TTI researchers met with senior DPS officials responsible for the operations and oversight of the BSIFs in their respective locations, who generously participated in this study. The sections below describe the inspection activities at each of the border crossings and include a number of photographs to help the reader visualize the work. Each inspection station that was visited uses different resources and slightly different procedures, so the narrative below produces a mosaic of the different practices employed by DPS and TxDOT to ensure public safety.

6.1. Colombia-Solidarity International Bridge, Laredo, Texas

The Colombia-Solidarity International Bridge is located approximately 18 miles northwest of Laredo and, on the U.S. side of the border, is connected to the local and state roadway network by F.M. 1472 and the Camino Colombia Toll Road, a now defunct private toll facility. On the Mexican side of the border, the bridge is connected to Mexican Highway 1. The state inspection station is located several hundred yards outside of the federal inspection compound and, at present, consists of temporary facilities that include a paved lot, portable buildings, and covered inspection areas. Its hours of operation mirror the bridge's hours, which are 8:00 a.m. to 12:00 a.m. during weekdays and 12:00 p.m. to 4:00 p.m. on weekends. Generally, all trucks crossing the bridge are directed to the inspection facility by a flashing light after they leave the federal inspection compound. However, when there is congestion at the inspection station, the DPS staff will turn off the flashing lights and trucks are allowed to continue to their destination without an inspection. Commercial trucks that do not exit the roadway and enter the inspection station when the lights are flashing are chased down by a DPS patrol vehicle and risk receiving a fine for their failure to comply.

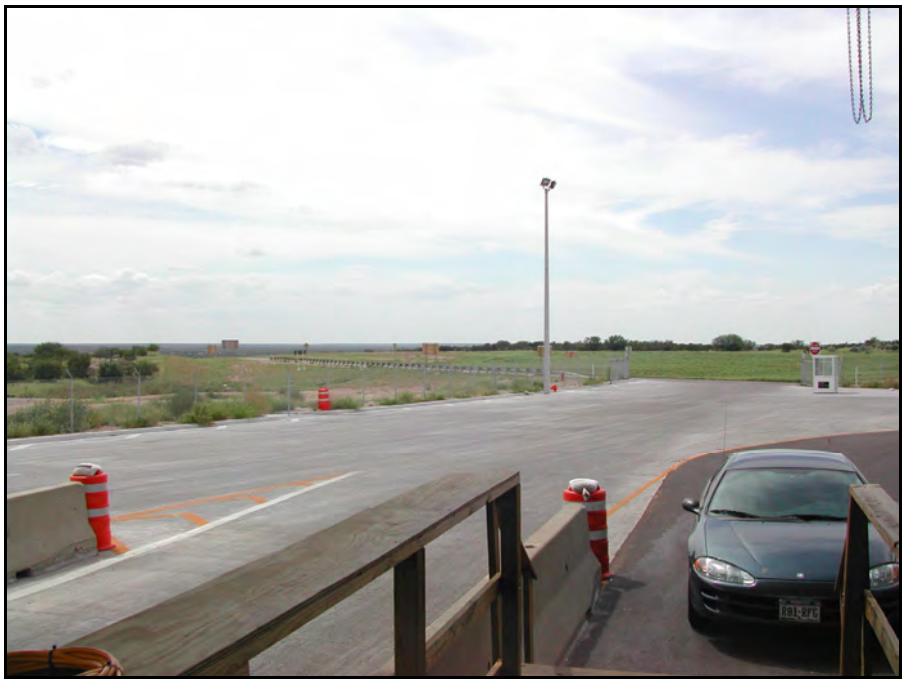


Figure 1: Entrance into the Colombia-Solidarity International Bridge DPS Safety Inspection Station

As trucks enter the inspection station, their weight is measured using a weigh-in-motion scale and the trucks come to a stop at the preliminary inspection station (Figure 1). The truck's weight is reported on a laptop computer, monitored by the inspection staff, who review the driver's cargo manifest and immigration documents (Figure 2). The inspectors also visually inspect the truck's and trailer for obvious safety violations or risks and may check the truck and trailer's turn and brake lights. If the paperwork is in order, the truck is not overweight, and it is judged to be in compliance with safety requirements during the preliminary visual inspection, the driver is typically waved through the facility and allowed to continue to the final destination within the border zone. Trucks with a CVSA sticker are typically not required to have a secondary inspection unless an inspector notices a problem during the preliminary inspection. However, if the truck is judged unsafe, is suspected of being overweight, or is randomly selected for inspection, then it will be directed to the secondary inspection facility.

Figure 2: DPS Inspectors at the Preliminary Inspection Station at the Colombia-Solidarity International Bridge

The secondary inspection facility is a covered area beyond the preliminary inspection station where inspectors perform their detailed work (Level 1 and Level 2 inspections), checking engines, brake systems, axles, etc. The DPS inspectors who work at the Colombia-Solidarity International Bridge perform about 600 secondary inspections per month (about 2 to 3 percent of all trucks) and estimate about 60 percent of those inspections result in a vehicle being taken out of service. Many of these vehicles are removed for relatively minor violations, such as brake misalignment or being overweight. Once the DPS removes a truck from service, the owner has 72 hours to repair it and remove it from the DPS lot or it is towed back to Mexico, at the owner's expense. The DPS's 72-hour grace period is considerably more generous than the USDOT rules, which immediately tow out-of-service trucks back to Mexico from its inspection station, at the owner's expense. If the driver is unable to repair the truck, the trucking companies will either send a mechanic to make repairs or, if the truck is immobile or not allowed to be driven, will send a wrecker to tow it back to Mexico. If the driver is the problem, then a new driver must be sent to the inspection facility before the truck is allowed to leave. Although it is a relatively rare occurrence, some of the reasons a driver may be taken out of service include: the lack of a valid driver's license; a missing logbook or logbook violation; or, in the rarest cases, intoxication.

Drivers who are taken out of service cannot operate a commercial vehicle for 8 hours and intoxicated drivers have their driver's license and U.S. visa suspended for one year. The possession of alcohol in the cab of the vehicle also results in a 24-hour suspension of the driver, even if the container has not been opened and the driver has not been drinking. The Colombia-Solidarity International Bridge's secondary inspection facilities are shown below in Figure 3. Figures 4 and 5 show DPS inspectors conducting these secondary inspections.

Figure 3: DPS Secondary Inspection Facility at the Colombia-Solidarity International Bridge

Figure 4: Inspectors Examining Truck Axle and Tires during a Secondary Inspection at the Colombia-Solidarity International Bridge

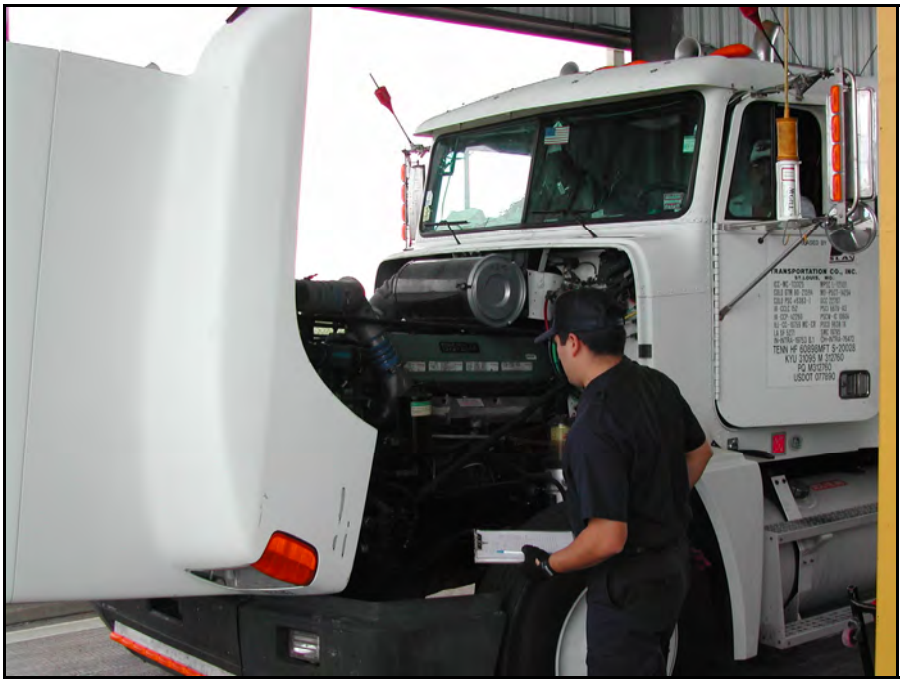


Figure 5: DPS Inspector Examining a Truck Engine during a Secondary Inspection at the Colombia-Solidarity International Bridge

Despite the rigorous enforcement of weight restrictions, Mexican trucking companies continue to challenge Texas state law and many are caught by the DPS and handed expensive fines. The average number of overweight violations at the Colombia-Solidarity International Bridge is about 300 to 350 citations per month. The primary problem for the drayage firms is that trailers are loaded in the interior of the country and sent to the border overweight. Because Mexican law allows for heavier loads, shippers will often load their trailers to comply with Mexican weight restrictions instead of the U.S. limits, despite being aware that the trailer's ultimate destination is in the United States. Some drayage drivers are unaware of the trailer's weight when crossing the bridge, while others may know their trailer is overweight but still attempt to cross. Those carriers who are caught are responsible for paying the fine for an overweight trailer, even though the responsibility for loading the trailer often falls with the shipper. The extremely competitive environment of the drayage industry means that it is unlikely that the carriers will be reimbursed by the shipper for the fine. Many carriers fear asking the shippers to do so, believing it will simply cause them to find another drayage firm. In Nuevo Laredo alone, there are literally hundreds of drayage firms looking for business and the environment is extremely competitive.

6.2. World Trade Bridge, Laredo, Texas

As mentioned earlier, most of the DPS safety inspections at the World Trade Bridge take place within the federal compound, alongside the USDOT inspections. Although these two inspections may seem redundant, the difference between the two is that the USDOT cannot issue fines; it can only file civil lawsuits against carriers or send trucks back to Mexico. The DPS, on the other hand, is permitted to issues fines to carriers and impound their trucks, so it bears most of the responsibility for safety enforcement at the border. The CTR and the TTI researchers were not allowed to enter into the federal inspection compound to observe the DPS's operations due to elevated security restrictions. Therefore, the visit to the World Trade Bridge was limited to the DPS's weigh station, which is located outside of the federal compound. The current weigh station at the World Trade Bridge is a temporary facility that is located underneath an overpass on Loop 20. This facility provides a covered area for the weighing but there are no temporary buildings or permanent improvements. The DPS uses a modified recreational vehicle (RV) for a rest and work area and portable toilets are available for DPS staff and truck drivers.

Truck weights at the World Trade Bridge are initially measured using a weigh-in-motion scale that is mounted into an overpass leaving the bridge. The truck weights are reported to a computer station below. If a truck is believed to be overweight or if one of its axles has exceeded a weight limit, then flashing lights on the overpass notify the truck to exit the roadway and go to the weigh station for a more accurate weighing. Thus, after leaving the federal compound of the World Trade Bridge, the only commercial vehicles that are typically stopped by the DPS are those trucks that have been identified as having a potential weight problem by the weigh-in-motion scale.[1] The DPS has also mounted a camera on the overpass that captures an image of the overweight trucks and these images can be viewed on a laptop screen below (Figure 6). The DPS uses these images to ensure that suspected overweight trucks exit for inspection and the images can also help the DPS troopers identify trucks whose drivers have disregarded the signal to exit.

Figure 6: Temporary Computer Work Station at the World Trade Bridge Temporary Weighing Facility

The trucks are weighed at a turnaround lane beneath the overpass where DPS inspectors are stationed with axle scales (Figure 7). These moveable axle scales are placed in front of the truck tires by the inspector, typically two axles at a time, and the truck driver is instructed to

[1] The City of Laredo also enforces weight restrictions and may stop commercial vehicles for suspected truck weight violations.

move the truck forward onto the scales. The axle weights are measured for each tire to determine whether any of the truck's axles are overweight or if the cargo has been stowed unevenly.

Figure 7: Suspected Overweight Truck Being Weighed at the World Trade Bridge

Figure 8 is a close-up of the scales used by the DPS inspectors to measure the weights of commercial trucks.

Figure 8: Close-up of a Truck Axle Being Weighed at the World Trade Bridge

If a truck is overweight, the DPS trooper at the inspection facility will issue a citation to the driver of the truck. The amount of an overweight fine is set by local judges, and it increases with subsequent overweight infractions. In Figure 9, a DPS Trooper is filling out a computerized form that describes the truck's infraction. He is also preparing a written citation to issue to the truck driver, using a laptop computer mounted in his vehicle (in this case, a pickup) and, behind the seat, a small printer to print a paper copy of the ticket for the truck driver. The data from the infraction is not immediately sent to a central computer, but is downloaded at a later time to DPS's main computer system.

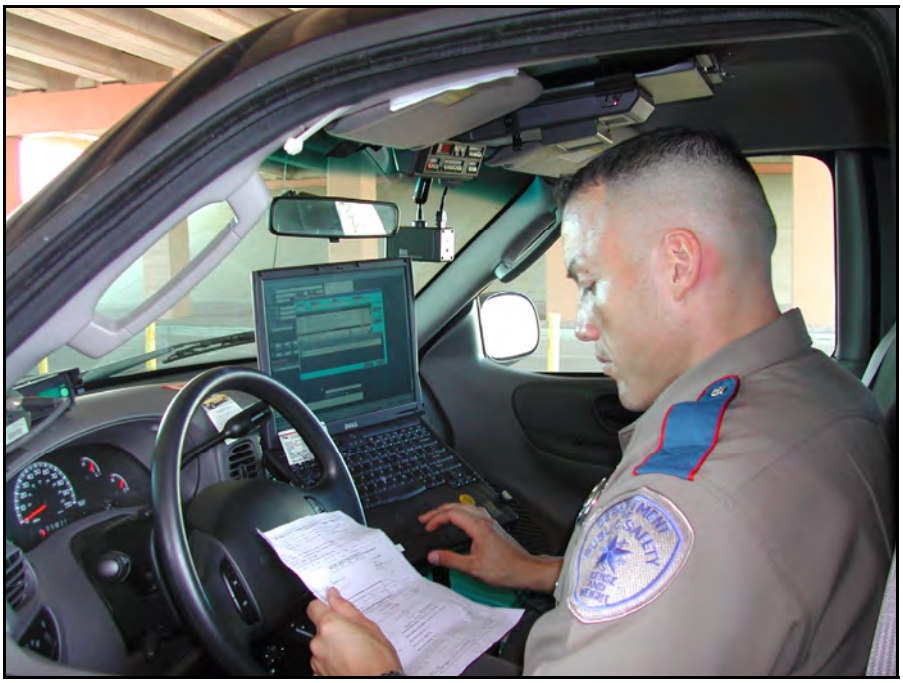


Figure 9: DPS Trooper Preparing a Citation for a Commercial Vehicle Safety Violation at the World Trade Bridge

Trucks that are placed out of service at the World Trade Bridge are parked nearby until they are off-loaded and become compliant. Figure 10 shows a small, three-axle commercial truck carrying palettes of bricks that was overloaded by several thousands pounds. DPS troopers at the station identified this driver and his company as a habitual overweight offender and, in this instance, the driver was issued a citation. Soon after this photograph was taken, another truck arrived to take part of his load so that the overweight truck would be in compliance with the law. The driver was then allowed to continue to his final destination within the border zone.

Figure 10: Overweight Truck Removed from Service and Waiting to Be Off-Loaded at the World Trade Bridge Weight Inspection Station

6.3. Bridge of the Americas (BOTA), El Paso, Texas

The Bridge of the Americas crossing in El Paso (referred to as the BOTA by local users) has facilities similar to the Colombia-Solidarity International Bridge in Laredo. The DPS safety inspection facility is located immediately adjacent to the federal compound, so that all trucks enter the facility immediately after leaving the federal inspection compound. As the trucks leave the compound, their weight is measured using a weigh-in-motion system that is located on the roadway underneath the overpass (Figures 11 and 12).

Figure 11: Truck Entering the DPS Commercial Vehicle Safety Inspection Facility at the Bridge of the Americas

Trucks pull into the covered preliminary inspection facility where the driver's paperwork is reviewed and the truck is given a visual inspection. The truck's weight from the weigh-in-motion scale is reported on a laptop computer mounted on the deck railing and is monitored by the inspectors.

Figure 12: DPS Trooper and Inspector at the Preliminary Inspection Facility at the Bridge of the Americas

Like the other bridge crossings, if the inspectors at the preliminary inspection notice a problem with the truck, if it is suspected of being overweight, or if the truck is randomly selected for inspection, then it is sent to the secondary inspection facility (Figure 13).

Figure 13: Truck Awaiting Inspection at the Secondary Inspection Facility at the Bridge of the Americas

Trucks that are taken out of service are sent to a parking lot within the inspection facility to await repairs (Figure 14). Depending on the nature of the repairs, the truck may stay in the out-of-service parking area for a few hours to a few days. Trucks are most frequently removed from service because their brakes need realignment, which is a relatively easy task that can usually be performed by a trained driver. Thus, if a driver is able to make the repair to the satisfaction of the DPS inspectors, then the driver is allowed to continue. In other cases, however, trucks may need tires changed or mechanical work done in which case the carrier must send a mechanic to make the repairs. If the truck is not removed within the allocated period of time, it is towed back across the border at considerable expense to the trucking company, whose trucks are not allowed to cross again until the towing fees have been paid.

Figure 14: Trucks Removed from Service at the Bridge of the Americas

6.4. Zaragoza-Ysleta Internacional Bridge, El Paso, Texas

The layout of the Zaragosa-Ysleta International Bridge safety inspection station in El Paso is somewhat similar to the temporary weigh station facility at the World Trade Bridge in Laredo (unfortunately, photographs are not available for this facility). The inspection station operates along a frontage road of Loop 375 and, after trucks cross the bridge and leave the federal compound, a flashing light signals them to exit the roadway and to enter the TxDOT and DPS inspection facility. As trucks enter the facility, their weight is reported on a laptop computer from a weigh-in-motion sensor and overweight trucks are identified for further measurement. The DPS troopers and inspectors operate on a modified segment of frontage road that has been widened to accommodate the inspectors and the parked trucks. There are no permanent facilities at the station, but the DPS does use an RV for work and rest space and there are some small tent-like structures to protect the inspectors from the sun when they are not inspecting trucks. The area available for inspections and parking the trucks is limited and the volume of trucks at the time of the field visit was fairly high, so it appeared that most of the effort was placed on stopping overweight trucks and trucks with visible safety problems.

Section 7. What Is Being Done Correctly at the Border?

USDOT, TxDOT, and the DPS are making decisive investments to ensure that Mexican trucks operating in the United States exceed state and federal safety regulations. The safety inspections facilities, located at the eight busiest Texas ports of entry, will ensure that most Mexican truck traffic gets a 100 percent visual inspection-a rate that certainly exceeds the level of effort along the United State's border with Canada or domestically. 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.

To assist the trucking companies' understanding of the safety requirements at the border inspection stations, the DPS officers in Laredo (and also Brownsville) provide short courses to the Mexican trucking companies that explain what the inspectors are looking for. According to the DPS, these classes have become very popular and have produced a number of positive impacts. First, the classes give the DPS an opportunity to explain why it is conducting inspections at the border and how it handles the penalties it applies to violators. Second, the classes provide the trucking companies and their employees with a detailed description of what the inspectors are looking for when they conduct inspections. The class attendees are given the same check sheets and manuals that the inspectors use, which they can use to maintain their fleet and avoid violations. Third, each class gives the trucking companies an opportunity to comment on the inspection process and to ask questions about procedures they do not understand or believe are unfair. All classes are taught in Spanish by a bilingual DPS trooper in Mexico and are provided free of charge to all attendees.

Section 8. Opportunities for Improvement

Perhaps the most important resource needed by the inspection stations along the border is adequate manpower. Several of the inspection facilities stated that they were inadequately staffed, which extends the amount of time needed for inspections. Inadequate manpower also requires the stations to temporarily close, which potentially permits dangerous trucks to bypass the inspection facilities as the inspectors work down their backlog. Increasing the number of inspectors would also allay some of the concerns of the private sector, which believes, that understaffed inspection facilities are slowing the speed of trade and diminishing the reliability and predictability of the border crossing process. Representatives of the private sector worry that

these uncertainties could make the border region a less attractive area for manufacturing and the delays could have serious consequences to manufacturing activities in the United States.

It is possible that many of the relatively minor offences that cause trucks to be taken out of service at the border inspection stations could be avoided by providing information or reminders to the drivers of the vehicles. One option would be to place signs on the Mexican side of the border reminding truckers to adjust their brakes before crossing. The brakes on Mexican trucks are often out of alignment because drivers adjust them for the steeper terrain in Mexico. Providing reminders to drivers would give them an opportunity to make these adjustments so they could avoid delay at the border crossing. A second possible improvement would be to mount public scales near the border so that drivers could know if their trucks were overweight. The SCT is beginning to weigh trucks as they cross the 20 kilometer border checkpoint, but the trucks at this point are not being driven by the drayage drivers. Therefore, unless the long-haul driver tells the drayage firm that the trailer is overweight, the drayage driver may not be aware there is a problem.

Ensuring that commercial vehicles from Mexico comply with U.S. laws and regulations is a significant problem for Mexican truck drivers, carriers, and shippers. USDOT and Texas DPS have tried to improve the situation for Mexican carriers by honoring a 90-day CVSA safety permit for each tractor (provided it passes the CVSA inspection). Unfortunately, while this permit can expedite the tractor's passage through the DPS border safety inspection, many times it is the trailer that has a safety problem. Thus, not infrequently, the tractor 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 conveying them, the reality is that most will probably try to carry the trailer over, hoping they will not be stopped. The belief of many Mexican carriers is that it is better to carry an unsafe trailer than to refuse the trailer and lose the trip or potentially anger the shipper. Similarly, when the carrier alone 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 Drivers License (CDL) system. The Mexican government maintains the CDL system as two separate databases: one for trucks registered in the interior of Mexico and the other 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 the SCT's telecommunication equipment and the system is occasionally off-line (as was the Texas DPS's OASIS 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 U.S. and Texas 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 all 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 a secondary inspection. These data also could 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 safety and weight inspections in the interior of the United States that have already been performed at the border.

Section 9. Recommendations

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 TxDOT, focused on the impact of limited coordination among the key public and private stakeholders in the transborder movement of freight. The 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 15, which provides 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.

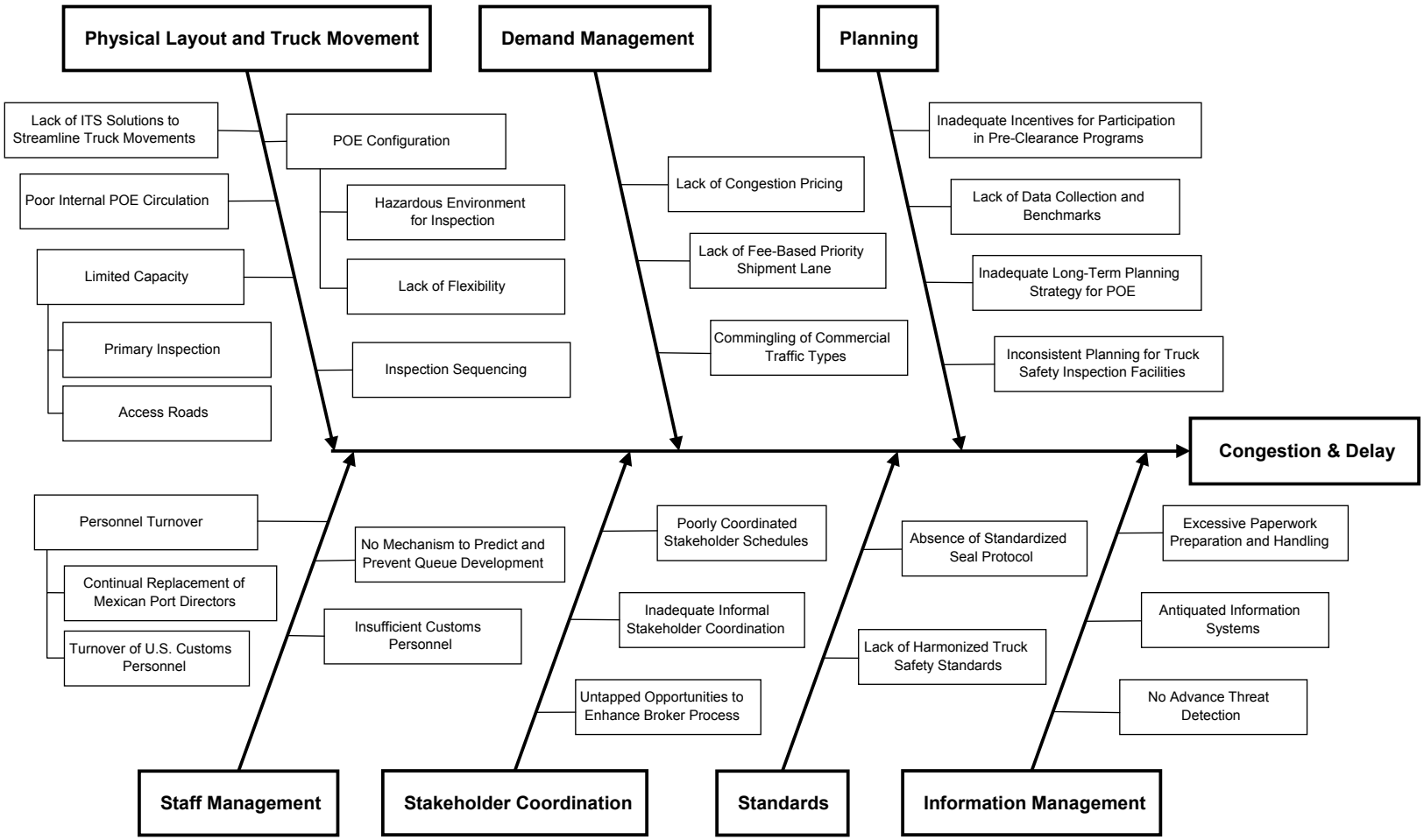
Ojah et al, concluded that some of these problems could be addressed by individual agencies, but that a sustainable resolution of the vast majority of these issues could only be achieved through a coordination mechanism that does not yet exist. The authors stopped short of calling for unified port management,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

On the Mexican side, there could be some relatively simple solutions to the problems identified with the Mexican CDL system, but there is reluctance by the SCT to confront the issue. The quickest solution would be for the Mexican government 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 an interview with a local SCT official, the 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’ viewpoint, the cost of incompatible systems is quite high. Additionally, inefficiencies like these add uncertainty and cost into the system and waste state and federal agency resources that have been committed to the border.

There is a similar reluctance by the SCT to alleviate the problems associated with overweight trucks. There have been proposals to mount public scales closer to the bridges, but the SCT has expressed opposition to this proposal, without giving any reason as to why it is opposed. Although one could rightfully argue that it is the trucking companies’ responsibility to assure that they are not transporting overweight trucks, the reality of the situation is that the information is not perfect and many drayage drivers unknowingly transport overweight trailers. Additionally, the frequent stopping of overweight trucks adds to Mexico’s increasing manufacturing disadvantage and when compared to the cost of public scales, the resources required from Mexico for this solution are minimal.

In closing, 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 to improve future practices.

Figure 15: Classification of Border Coordination Problems and Issues



Source: Ojah, et al. 2003.

Section 10. Sources

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