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February 2, 2009

Congressional Research Service

Report RL31738

*North American Free Trade Agreement (NAFTA)
Implementation: the Future of Commercial Trucking Across
the Mexican Border*

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September 22, 2004

Abstract. With the U.S. committed to implementing NAFTA, most ongoing issues of interest to Congress, once *Public Citizen v. DOT* is resolved, are issues of oversight. The most immediate issue is oversight of implementation on the U.S. side of the border within the context of U.S. treaty obligations and the safety enforcement preconditions Congress set forth in the FY2002 DOT Appropriations Act. Mexican implementation may become a major oversight issue. The Mexican government, as of this writing, has neither accepted applications by U.S. firms to operate in Mexico, nor set forth the regulations for doing so. Other oversight issues include whether the role of Mexican customs brokers and drayage operators in cross-border trade is a barrier against U.S. trucking firms; the possible illegal operation of Mexican trucks beyond their operating authority in the United States; and the leasing of Mexican trucks and drivers by U.S. firms for use in the United States.



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North American Free Trade Agreement (NAFTA) Implementation: The Future of Commercial Trucking Across the Mexican Border

Updated September 22, 2004

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North American Free Trade Agreement (NAFTA): The Future of Commercial Trucking Across the Mexican Border

Summary

NAFTA set forth a schedule for implementation of its trucking provisions that would have opened the border states to cross-border trucking competition on December 17, 1995 and all of North America on January 1, 2000, but implementation has been stalled for nearly nine years. The U.S. Department of Transportation (DOT) announced that until safety concerns about Mexican trucks were resolved, the trucks would continue to be restricted to the commercial zone just along the border. Congress addressed these concerns in the FY2002 Department of Transportation Appropriations Act (P.L. 107-87). The act set 22 safety-related preconditions for opening the border to long-haul Mexican trucks. On November 27, 2002, the Secretary of Transportation announced that all the preconditions had been met and directed the Federal Motor Carrier Safety Administration (FMCSA) to act on the Mexican applications. However, on January 16, 2003 the Ninth Circuit Court of Appeals in *Public Citizen v. Department of Transportation*, delayed implementation pending completion of environmental impact statements and a Clean Air Act conformity determination on the FMCSA's implementing regulations. On June 7, 2004, the U.S. Supreme Court, in a unanimous decision, reversed the decision of the 9th Circuit Court.

When the regulations are ultimately implemented, the short term impact of implementation is expected to be gradual as Mexican firms deal with a number of stumbling blocks including a lack of prearranged back hauls, higher insurance and capital costs, as well as costly border processing delays. In the long run, Mexican drivers and trucks will continue to dominate the crossings at the border, but the pattern of operation will change. The use of drayage companies whose trucks shuttle loads back and forth across the border is likely to decline as they lose part of their market share to Mexican long-haul carriers. The most common trips for these carriers will probably be from the Mexican interior to warehouse facilities on the U.S. side of the border or to nearby cities in the border states. Operating beyond the border states at a profit would almost always require an arranged back-haul. In contrast, relatively few U.S. firms are expected to apply for operating authority in Mexico. Most are expected to operate through their Mexican subsidiaries or partners.

With the U.S. committed to implementing NAFTA, most ongoing issues of interest to Congress are issues of oversight. The most immediate issue is oversight of implementation on the U.S. side of the border within the context of U.S. treaty obligations and the safety enforcement preconditions Congress set forth in the FY2002 DOT Appropriations Act. Mexican implementation may become a major oversight issue. The Mexican government, as of this writing, has not established the regulations to process U.S. firms' applications to operate in Mexico. Other oversight issues include whether the role of Mexican customs brokers and drayage operators in cross-border trade is a barrier against U.S. trucking firms; the possible illegal operation of Mexican trucks in the United States; and the leasing of Mexican trucks and drivers by U.S. firms for use in the United States. This report will be updated as warranted by events.

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North American Free Trade Agreement (NAFTA): The Future of Commercial Trucking Across the Mexican Border

NAFTA's Commercial Trucking Provisions: Background and Implementation History

NAFTA set forth a schedule for implementation of its trucking provisions that would have opened the border states to cross-border trucking competition on December 17, 1995 and all of North America on January 1, 2000, but implementation has been stopped for nearly nine years. The U.S. Department of Transportation announced that until safety concerns about Mexican trucks were resolved, the trucks would continue to be restricted to the commercial zone just along the border.¹ Mexican trucks, inspected in December 1995-January 1996, were put out-of-service at nearly twice the rate of U.S. trucks. At the time, Mexican drivers operated without hours of service limits and maintained no driver log books. In addition, Mexican trucks reportedly were not required to have front brakes and were allowed a gross vehicle weight 17,000 pounds higher than allowed on U.S. roads. The wage differential between Mexican and U.S. long-haul drivers was also an issue of concern. Some labor unions and their supporters expressed concerns that the wage differential would lead to a loss of jobs for U.S. commercial truck drivers, especially in the border states and along the major highway trade corridors in the United States.

Despite ongoing bilateral consultations aimed at bringing the Mexican trucks and drivers up to U.S. safety requirements, no agreement was reached and in 1998 Mexico protested the postponement of NAFTA trucking provisions under NAFTA dispute settlement procedures. The final report of the arbitration panel concluded that the blanket refusal to process the applications of Mexican motor carriers was in breach of the NAFTA obligations of the United States and that alleged deficiencies in Mexico's regulation of commercial trucking did not relieve the United States of its treaty obligations. The panel did, however, state that the United States could

¹ U.S. General Accounting Office. *Commercial Trucking: Safety Concerns About Mexican Trucking Remain*. GAO/RECD 97-68. Washington, GAO, 1997. p. 1-4. The 1996 predecessor report *Commercial Trucking Under NAFTA*, GAO/RCED-96-91, also noted that very few U.S. trucks were allowed to operate in the Mexican border zone. The report found that, during a three week period beginning Dec. 18, 1995, 56% of the Mexican trucks inspected were placed out-of-service. This compared to an out of service rate for U.S. trucks of 28%. See also U.S. Department of Transportation. Office of the Inspector General. *Motor Carrier Safety at the U.S.-Mexico Border*. Report Number: MH-2001-096. Washington, The Office, 2001. The IG found that the Mexican out-of-service rate had improved to 37% for the FY2000.

subject Mexican carriers to different requirements than those that apply to U.S. and Canadian carriers.²

The Bush Administration originally set the end of 2001 as a goal for the U.S. Federal Motor Carrier Safety Administration (FMCSA) to begin processing Mexican applications seeking operating authority throughout the United States. Congress, however, included 22 preconditions for opening the border beyond the commercial zone to Mexican trucking in the FY2002 Department of Transportation (DOT) Appropriations Act (P.L. 107-87). Among the 22 preconditions in the act were the following requirements:³

- All Mexican motor carriers must undergo DOT safety examinations prior to being granted provisional operating authority, with at least 50% of such carrier examinations to be conducted on-site in Mexico;
- Mexican carriers applying to operate beyond the commercial zone must have a distinctive US DOT number (that distinguishes them from Mexican trucks certified to operate within the zone only) and must undergo safety monitoring initially and during an 18-month provisional period;
- Mexican motor carriers must all pass a full safety compliance review prior to receiving permanent operating authority;
- Federal and state inspectors must verify the validity of the license of every driver carrying hazardous materials or undergoing a Level I safety inspection, as well as the licenses of 50% of all other drivers;
- Mexican carriers, operating under provisional authority, and for three years after receiving permanent authority, must display a Commercial Vehicle Safety Alliance inspection decal (which are good for 90 days), verifying satisfactory completion of a safety inspection;
- Weigh-in-motion scales must be installed at the ten highest volume crossings;
- Mexican trucks may only cross at border crossings where a certified motor carrier safety inspector is on duty;
- A number of other safety reviews and studies must take place.

These requirements are in addition to requirements that predate the enactment of P.L. 107-87, including requirements that Mexican carriers meet all U.S. safety

² *North American Free Trade Agreement Arbitral Panel Established Pursuant to Chapter Twenty in the Matter of Cross-Border Trucking Services; Final Report of the Panel.* Washington, NAFTA Secretariat, 2001. p. 81-82.

Available at [http://www.nafta-sec-alena.org/app/DocRepository/1/Dispute/english/NAFTA_Chapter_20/USA/ub98010e.pdf]

³ U.S. Federal Motor Carrier Safety Administration final rules for implementation of the NAFTA trucking provisions may be found at

[http://www.fmcsa.dot.gov/rulesregs/mexican/Part_365.pdf];

[http://www.fmcsa.dot.gov/rulesregs/fmcsr/final/Safety_certification.pdf];

and [http://www.fmcsa.dot.gov/rulesregs/mexican/Parts_368_and_387.pdf].

(hours of service and log book rules, alcohol and drug tests, etc.) and insurance requirements.⁴

On November 27, 2002, Norman Y. Mineta, Secretary of Transportation, announced that all the preconditions mandated in FY2002 Appropriations Act had been met and directed the FMCSA to act on the applications of Mexican motor carriers seeking authority to transport international cargo beyond the U.S. border commercial zones.⁵ On January 16, 2003, however, the Ninth Circuit Court of Appeals in *Public Citizen v. Department of Transportation* (DOT), delayed implementation pending completion of National Environmental Policy Act (NEPA) environmental impact statements (EIS) and a Clean Air Act (CAA) conformity determination. FMCSA began the EIS process and has also filed a petition asking the Supreme Court to review the 9th Circuit Court decision in *Public Citizen v. DOT*.⁶ On June 7, 2004, the Court reversed the 9th Circuit Court's decision.⁷

As of this writing, FMCSA has processed roughly 700 requests. Approximately 200 of these have passed paper review and are waiting for the required 50% on-site reviews.⁸ Roughly 500 have been returned to the applicants for more information. The Mexican government has not yet agreed to a memorandum of understanding to allow for the 50% on site (in Mexico) safety examinations required under U.S. law. At this time, the FMCSA has not granted any of the Mexican applicants authority to operate beyond the border zone.

Separately, the Mexican government has yet to establish procedures to process applications of U.S.-domiciled carriers to operate in Mexico. Press reports indicate that a combination of concerns about competition from better financed U.S. motor

⁴ Mexican carriers, planning only to operate in the commercial zone along the border, had to apply by October 20, 2003 for provisional Certificates of Registration. FMCSA made efforts to publicize this deadline to new and existing Mexican commercial zone certificated carriers. The provisional Certificate cannot be made permanent for at least 18 months, until the carrier has passed a safety audit.

⁵ U.S. Department of Transportation. *U.S. Transportation Department implements NAFTA Provisions for Mexican Trucks, Buses*. Available at [<http://www.fmcsa.dot.gov/contactus/press/2002/112702.htm>].

⁶ See U.S. Federal Motor Carrier Safety Administration. *NAFTA Environmental Analysis*. Available at [<http://www.fmcsa.dot.gov/naftaeis/>]; U.S. Department of Justice. Office of the Solicitor General. *United States Department of Transportation, et al., Petitioners v. Public Citizen, et al., on Petition for a Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit*. Docket no. 03-358. Washington, the Department. 27 p. Available at [<http://www.usdoj.gov/osg/briefs/2003/2pet/7pet/2003-0358.pet.aa.pdf>]; See also DOJ Supreme Court Appeal in Mexico Truck Case Puzzles Activists. *INSIDE Cal/EPA*. Sept. 12, 2003. p. 14.

⁷ The Supreme Court's decision reversing the 9th Circuit Court's decision is available at [<http://supct.law.cornell.edu/supct/pdf/03-358P.ZO>].

⁸ Following the decision of the 9th Circuit Court in *Public Citizen v. DOT*, the FMCSA stopped processing applications from Mexico-domiciled carriers to operate beyond the U.S. commercial border zones. After the Supreme Court reversal of the Circuit Court, FMCSA began processing applications.

carriers (especially the prospect of competing with U.S. trucks for the maquiladora trade) and resentment of some of the new regulations—particularly the on-site inspection and English language requirements—has motivated the Mexican trucking association (CANACAR) to pressure President Vicente Fox to ban U.S. domiciled trucking firms from operating in Mexico. In addition, Mexico's Secretary of Communication and Transportation has reportedly argued that some of the conditions set forth by the U.S. for allowing Mexican trucks to operate throughout the United States, are discriminatory and has recommended that Mexico keep open all its options under NAFTA, including the possible banning of U.S. trucks.⁹

As mentioned earlier, the Mexican government, as of this writing, has not set forth its procedures to process applications by U.S. firms to operate in Mexico.¹⁰ Mexico has also yet to agree to protocols under which FMCSA officials would complete the on-site safety reviews that are required before Mexican trucking firms can be awarded provisional authority to operate beyond the border zones in the United States.¹¹ If either of these situations continues, or if Mexico adopts a retaliatory policy of banning U.S. trucks, a U.S. response could be either to put a hold on awards of operating authority to Mexican trucking firms or to eliminate those already granted. Another possibility would be to file a complaint against Mexico under NAFTA.

Assuming, however, that both the U.S. and Mexico will implement NAFTA's trucking provisions any scenarios will be influenced by the scope of and characteristics of cross-border commercial trucking operations.

⁹ A Mexican Embassy spokesperson commented that the letter to the Ministry of the Economy asked for support for the necessary steps under Article 2018 (Nullification and Impairment) to take possible actions under NAFTA dispute settlement so that if the U.S. requirements are found to be inconsistent with the NAFTA, the process established under Article 2019 (Suspension of Benefits) could be considered. In response to the Mexican complaints of discriminatory treatment the Bush Administration ordered that the rules for U.S. and Canadian new entrant motor carriers be rewritten. As of January 1, 2003, new entrant U.S. and Canadian carriers must pass an audit similar to that required of Mexican companies during an 18 month provisional authority period. See U.S. Federal Register, v. 67, no. 92, May 13, 2002. p. 31978-31986. The main substantive difference in treatment now is the requirement that 50% of Mexican companies must pass the on-site audit prior to issuance of provisional authority.

¹⁰ A Mexican Embassy spokesperson said to the best of her knowledge no U.S. trucking firms have attempted to apply for operating authority in Mexico. An FMCSA official said (in February 2003) that the agency was getting calls nearly on a daily basis from U.S. carriers asking how to apply for authority to operate in Mexico. FMCSA refers these requesters to the Mexican Ministry of Communication and Transportation.

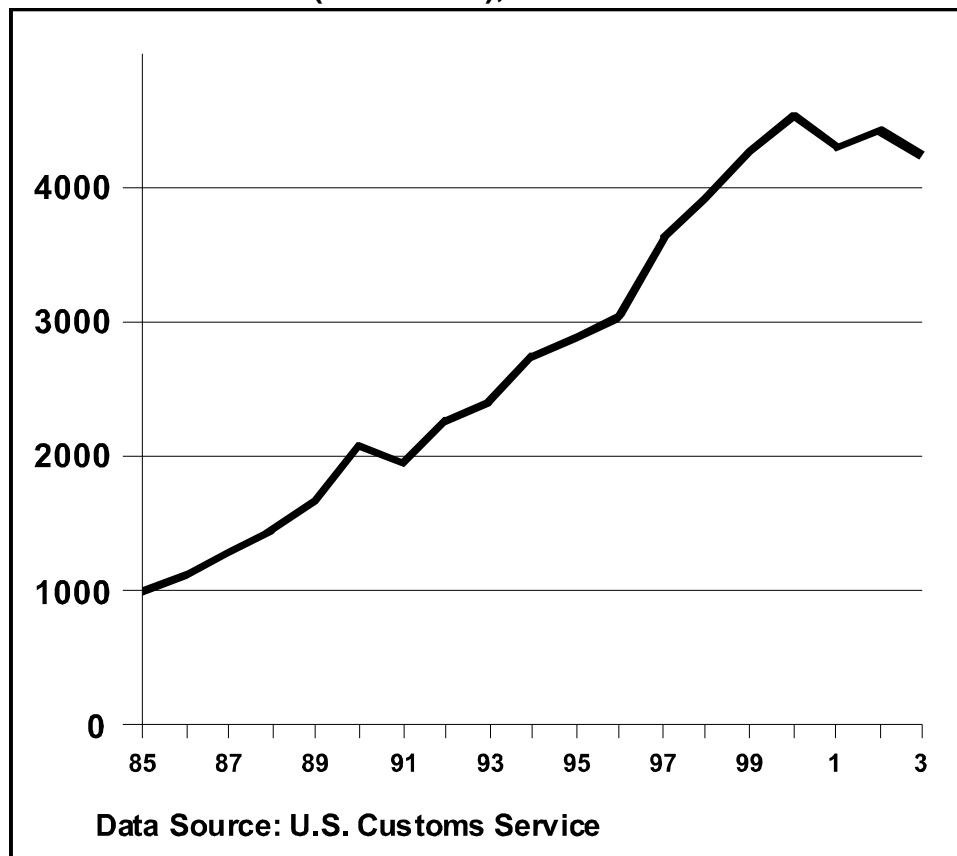
¹¹ One interesting possibility, which might or might not pass judicial review, would be for FMCSA to provide for safety examinations on the U.S. side of the border of 50% of the applicants that have passed their paper review and to suspend the remaining 50% of the applications until the protocols for on-site safety examinations in Mexico are agreed to. Such an action by FMCSA would, however, be controversial.

Cross-Border Trucking Operations: An Overview

The Scope of Cross-Border Truck Traffic

The chart in **Figure 1** shows the trend in incoming truck movements across the border with Mexico since 1985. Cross-border truck movements accelerated in the mid-1980s following Mexico's accession to the General Agreement on Tariffs and Trade and then again in the mid-1990s under NAFTA. Trucks carry roughly 80% of the cargo, by value, across the border and trends in cross-border truck movements track closely with trends in Mexico-U.S. trade. Under NAFTA the value of trade between the two nations crossing the border by truck increased from \$74 billion in 1994, to \$171 billion in 2000. In the year 2000, over 4.5 million truck crossings were made from Mexico into the United States by roughly 80,000 trucks (63,000 of Mexican registry).¹² The impact of the 2001 recession is evident in **Figure 1** as total trade with Mexico by truck fell to \$160 billion and incoming truck movements dropped to 4.3 million in that year. In 2002, truck crossings increased slightly (to 4.4 million) but then dropped to 4.2 million in 2003.

Figure 1. Incoming Truck Movements from Mexico (thousands), 1985-2003

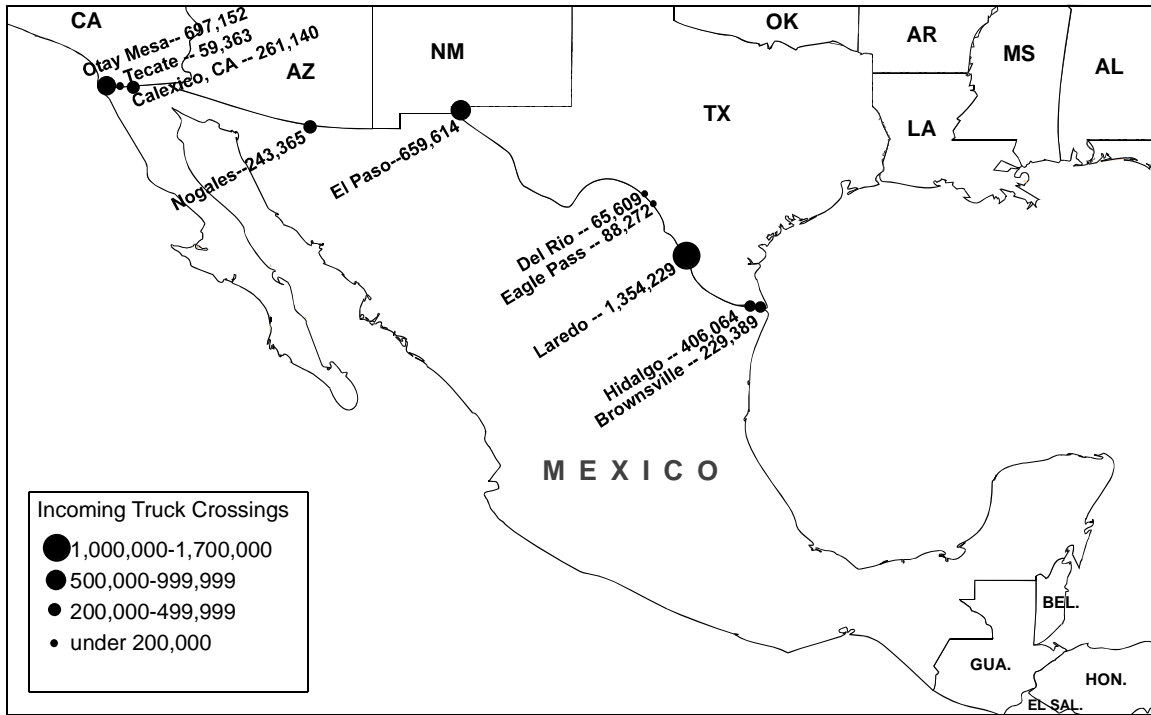


¹² The U.S. Customs service does not track outgoing truck movements as carefully as incoming crossings but it can be assumed that total truck crossings are roughly double the incoming crossings or about 9 million. The estimate of 80,000 trucks was based on 1999 data.

The link between economic growth and truck crossings is important because once the two countries' economies rebound, the growth in cross border shipping will increase the stress on the border's physical infrastructure, as well as the capacity of the U.S. federal agencies that staff the Ports of Entry (POE) (e.g. the Customs Administration, Immigration and Naturalization Service, Drug Enforcement Administration, Federal Motor Carrier Safety Administration, Department of Agriculture, etc).

The distribution of commercial traffic among the 25 POEs that handle commercial traffic is uneven. The map in **Figure 2** illustrates incoming truck crossings for the top 10 land POEs on the Mexican border in 2003. These 10 POEs handle over 95% of the total truck crossings into the United States from the south. Perhaps even more significant for border management purposes is the fact that the five busiest POEs (Laredo, Otay Mesa, El Paso, Hidalgo, and Calexico) represent an 80% share of total truck movements into the United States from the south. The busiest POEs are the ones expected to experience the most growth in traffic.

Figure 2. 2003 Incoming Truck Movements: Top Ten Ports-of-Entry from Mexico



Source: Map Resources. Adapted by CRS. Statistical data provided by the Bureau of Transportation Statistics. (K. Yancey 9/22/04)

Cross-Border Commercial Trucking: The Trade Flow Process

The speed and impact of NAFTA implementation will be greatly influenced by the institutional and procedural environment experienced and/or created by shippers and trucking firms involved in cross-border freight shipments. The roughly 8.5 to 9

million truck crossings (northbound and southbound crossings combined) occurring annually at POEs along the Mexico-U.S. border undergo documentation procedures and inspections which can vary greatly but typically include the following steps.¹³

Mexico-U.S. Crossings. Traditional cross-border shipping by truck from the interior of Mexico to the interior of the U.S. can involve over 20 separate steps. These steps are described in some detail because one of the envisioned benefits of NAFTA implementation is that it will encourage the streamlining of cross border truck movements. In simplified form, the movement of truck cargo for import into the U.S. is as follows.

- The Mexican carrier picks up the shipment, prepares the bill of lading, and hauls the shipment to the border region.
- At POEs where allowed, U.S. customs brokers may maintain small offices, where they may prepare U.S. entry documents and file them electronically. The entry must be accompanied by evidence that sufficient bond is posted with U.S. Customs to cover any potential duties, taxes, or penalties.
- A Mexican broker prepares Mexican export “pedimentos” (a paper form similar to U.S. export declarations) after inspecting the vehicle’s cargo.
- A Mexican “validator” files the pedimento electronically into the Mexican Customs Broker Association database and a validated pedimento is created to release the shipment to Mexican Customs.
- Mexican Duties are paid.
- A drayage vehicle (a short-haul truck used to shuttle truck trailers back and forth across the border) picks up the load and hauls it to the Mexican customs facility.
- At the Mexican Customs facility the export pedimentos are checked against the electronic forms and then about 2% of the trucks are pulled aside for closer inspection by Mexican Customs agents.
- The truck crosses the border, paying bridge tolls if required, and enters the U.S. customs primary inspection station.
- At the primary inspection station the U.S. Customs Inspector determines citizenship of the driver and any passengers and then questions the driver for declarations of any agricultural goods, narcotics, merchandise or currency in excess of \$10,000. Once the agent verifies the paperwork and computer information, the vehicle is either sent on to the final U.S. Customs checkpoint or is selected for secondary inspection (all hazardous materials loads are inspected and most agricultural, food product, pharmaceutical and medical equipment shipments are sent to the agricultural inspection docks, where the Department of Agriculture inspectors and the Food and

¹³ A detailed account of the steps of cross-border trade flows by truck can be found in the *Binational Border Transportation and Programming Study, Task 3.1: Description of Commercial Motor Vehicle Trade Flow Process—Final Report, May 8, 1996*. Washington, U.S. Department of Transportation and Secretaria de Comunicaciones y Transportes. 1998. [CD ROM]

Drug Administration inspectors inspect the goods). It is at the primary inspection station or in the queue that K9 units patrol around the vehicles and if the dog reacts to a truck the vehicle will be sent to secondary inspection. Agents also send vehicles to secondary inspection if they see anything suspicious about the vehicle, driver, or paperwork.

- After completing primary or secondary inspection as required, the truck proceeds to the U.S. Customs final check point where all the paperwork is submitted and the truck leaves the compound.
- Safety inspection at POEs that have permanent safety inspection facilities usually take place outside the final check point.
- A drayage company delivers the shipment to a U.S. broker, carrier or freight forwarder's facility.
- A U.S. driver picks up the load for delivery to the interior.

U.S.-Mexico Crossings. Traditional cross-border truck shipping from the interior of the United States to the interior of Mexico may also involve many separate processing steps, truck movements, and inspections. A simplified sequence of steps that are supposed to take place for the movement of cargo by truck for import into Mexico is as follows.

- U.S. exporter prepares bill of lading and certificate of origin for load.
- The U.S. carrier picks up the shipment and hauls it to the carrier's terminal, broker or freight forwarder's facility. In some cases the forwarder is by-passed and the exporter deals directly with a Mexican customs broker.
- The U.S. freight forwarder/broker fills out the Shipper's Export Declaration and verifies the load. (The U.S. broker is liable for the accuracy of the form.)
- The Mexican customs broker fills out the Mexican Import Pedimentos, facilitates the payment of duties, and verifies the load. (The Mexican broker is legally responsible and liable for the contents of shipments across the border.) The broker makes sure that the required prepayment of Mexican duties, taxes or fees has been made at the banking module. The Pedimentos are submitted electronically to Mexican Customs.
- Generally the Mexican broker then arranges for a Mexican "drayage" company to provide a truck or truck tractor to haul the shipment across the border. Maquiladoras, however, may use their own trucks.
- At U.S. Customs, export loads requiring inspection (most often firearms, computers, specialized electronic equipment and hazardous materials) are inspected and registered with U.S. Customs.
- Load is hauled across the border.
- At Mexican Customs, paperwork is checked against the electronically filed version. For trucks whose paperwork is in order, 90% of trucks go to final checkpoint and 10% are subjected to random selection for inspection.

- At the final check point, all the paperwork is collected and the truck may leave the import compound.
- The shipment is taken to either the Mexican broker's facility or to a truck corral where the drayage tractor is disconnected and the trailer is stored until a long-haul carrier's tractor arrives to transport the shipment to the Mexican interior.

The Maquiladora Exception. A Maquiladora or Maquila is a manufacturing plant, located in Mexico (usually near the U.S. border) under foreign ownership, that typically has a sister plant on the U.S. side of the border supplying parts to be assembled at the Mexican plant, that are then shipped back to the U.S. Shipments to and from maquiladora facilities benefit from systems established by both U.S. and Mexican Customs to speed the processing of maquiladora shipments. These changes eliminate both the U.S. and Mexican broker processing time. In effect, most Maquiladora cargo is pre-cleared for crossing. Some Maquiladora trucks, however, are selected for inspection. As mentioned earlier, maquiladoras may also use their own trucks and thereby eliminate any delays waiting for drayage operator pick up. Basically this means that unless they are selected for regulatory inspection or are caught in traffic congestion, most trucks operating in the maquiladora trade may cross the border with virtually no delay.¹⁴

Hazardous Materials and Agricultural Trade. The movement of hazardous materials is governed by stricter regulation. Advance notice is required by both U.S. and Mexican Customs prior to moving hazardous material over the border. The authenticity of the licenses of all drivers whose trucks carry hazardous materials must be checked. Under NAFTA, any by-products from the use of hazardous materials must be returned to the country of origin for proper disposal. This rule has increased the movement of hazardous wastes across the border.

Agricultural trade has some characteristics of traditional trade, but may be pre-cleared as in the Maquiladora trade.¹⁵ It is also subject to special inspection requirements. For example, inspection for pest infestation varies depending on whether the agricultural product is considered high or low risk. Low risk products are often pre-cleared and only one load in twenty may be randomly inspected. High pest-risk loads may all be inspected and receive pest control treatment.

The Border's Distinctive Institutions: Drayage and Mexican Customs Brokers

The predominant use of drayage for cross border hauling of freight and the role of the Mexican customs broker are distinctive institutional characteristics of the Mexico-U.S. border.

¹⁴ Ibid., p. 4-6.

¹⁵ Traditional trade is defined in the *Binational Study* as non-maquiladora, non-agricultural, or non-hazardous materials trade.

Drayage: Deadheads and Bobtails. With the major exception of trucks serving the Maquiladora trade, truck cargo crosses the Mexican border under a “drayage” system. Under this system truck cargo is delivered to the border where a drayage company provides a truck that picks up the load on one side of the border, crosses the border, and drops it off to be picked up by a long haul domestic carrier in the destination country. The predominance of this characteristic of the Mexico-U.S. border of commercial cross border traffic leads to an unusually large percentage of “deadhead and bobtail” crossings. A deadhead crossing is any truck crossing with an empty trailer and a bobtail crossing is a truck tractor crossing without a trailer. In 2002, 43% of the truck trailers that entered the U.S. from Mexico were empty compared to 15% from Canada.¹⁶ This peculiarity of the Mexican border traffic has two important results that are significant to any discussion of post-NAFTA implementation scenarios: first, drayage is a big business for the Mexican trucking firms in the border region; and second, deadheader and bobtail crossings are a major component of the traffic congestion that impedes the cross border flow of freight.

Despite the arguments that fully implementing NAFTA and thereby allowing Mexican and U.S. trucks to pick up and drop off international loads anywhere in each other’s territory will lead to a major reduction in the use of drayage services across the Mexico-U.S. border, there are reasons to expect that the drayage system will not contract quickly or as much as some have argued. Although, on its face, drayage would seem to be inefficient and costly, given extensive processing, inspection, and traffic delays, drayage actually makes more economic sense to some motor carriers than having their equipment held up for a day or more awaiting crossing. Reportedly, drayage adds roughly \$100 to each cross border shipment.¹⁷ Although the overall aggregate cost that the drayage system adds to cross border trade is staggering, for many carriers \$100 is much less than a carrier would lose if it has a truck and driver idle for a day or more awaiting clearance (even efficient traditional shippers can expect paperwork delays of 4 to 5 hours). Second, not only is drayage big business for Mexican carriers based in the border region, but it is also a major formative factor in the border region economy of warehouses, truck corrals, and related service industries. Local interests may support the status quo for fear that the demise of drayage would lead to job losses in the Mexican border towns and, in some U.S. border towns, from fear of being by-passed.¹⁸ Third, drayage companies often have operating agreements with Mexican customs brokers (who often have a financial interest). Some argue that this provides a strong incentive for the brokers to keep the processing times long enough to keep drayed freight competitive with single vehicle cross border trucking. Although, most observers expect NAFTA implementation would probably reduce the number of deadhead and bobtail crossings over time, few expect that they will fall to the level experienced on the Canadian border.

¹⁶ Based on U.S. Bureau of Transportation Statistics data. Some believe the U.S. Customs Administration data that the BTS statistics are based on undercounts the number of Canadian border empty crossings. However, even using other sources, the Mexican rate is twice the Canadian rate.

¹⁷ Giermanski, James R. A Fresh Look at NAFTA: What’s Really Happened? *Logistics Management and Distribution Report*, vol. 9, Sept. 1, 2002, 43pp.

¹⁸ Yardley, Jim. Truck-Choked Border City Fears Being Bypassed. *New York Times*, Mar. 15, 2001, pp. A1, A20.

Descriptions of the drayage system are often oversimplified. A truck dedicated to drayage can cross the border roughly two to four times each day or up to 1,000 times a year. However, the 80,000 trucks involved in cross-border trucking averaged only 50 crossings per year. This indicates that trucks used for drayage may also be used for domestic carriage. Following NAFTA implementation, these trucks may continue to provide drayage services. It is also likely that more of these trucks will operate more deeply, either legally or illegally, in the border states. Some believe, however, that in the post-implementation environment, the risk of getting caught will be much higher than before.

Mexican Customs Brokers. The degree of control that the Mexican customs broker has on the cross border movement of cargo could have major implications for the scope and speed of impact of the implementation of NAFTA's trucking provisions. Customs brokers are businesses or individuals that assist in preparing the required documentation for the cross border movement of goods. Mexican customs brokers are active on both sides of the border, processing the paperwork and verifying the shipped goods for both U.S. exports to Mexico and Mexican exports to the U.S. Whereas in the United States a broker or freight forwarder is only liable for the accuracy of the form, in Mexico the broker is liable for the accuracy of the paperwork and the content of the shipment. Because of this, Mexican brokers generally actually take a look at the cargo. This, along with the paperwork process, adds a significant amount of processing time to cross border shipments. The *Binational Border Planning and Programming Study* found that for frequent south bound shippers the preparation of paperwork by the Mexican broker took 4 to 5 hours and for infrequent shippers up to three days. Northbound into the U.S., the Mexican broker processing time was 4 to 5 hours. If anything is wrong with the paperwork used to compile the Mexican pedimentos, it takes longer. The study found that the minimum total crossing time southbound was just over 8 hours and northbound was just over six hours.¹⁹ Thus, under the best of conditions (i.e. minimum Mexican broker processing time, no traffic delays, no narcotics inspection or customs secondary inspections, etc.), the Mexican broker's role was responsible for nearly half the crossing time southbound and nearly two-thirds northbound. Mexican broker processing time could therefore be sufficient to deter some carriers from engaging in cross border carriage of cargo.

As mentioned earlier, Mexican brokers are often affiliated with drayage companies and most observers believe that they will resist changes that could reduce the attractiveness of cross border drayage. Some believe that the confluence of interest between these two institutions is so powerful that drayage will dominate the movement of cargo across the border for the next 15 to 20 years.²⁰ This is a powerful alliance for the status quo. Many feel that potential U.S. entrants into cross border trucking will not be able to bypass the customs brokers, which in effect will make them opt for an alternative to direct competition with Mexican carriers. Many of the brokerage firms are family-run firms that have been in the business for generations.

¹⁹ Binational Study. Task 3.1. p. 3-6.

²⁰ Whitten, Daniel L. Mexican Freight Handlers Warily Eye U.S. Competition: Carriers, Brokers Seek to Protect Paperwork-Preparation fee, Long-Time Ties to Shippers. *Transport Topics*, June 3, 2002: 13.

Both the brokers and the Mexican carriers have significant clout through their professional organizations and have heavily lobbied the Mexican government against opening up the border to U.S. trucks.

Traffic Congestion

Traffic congestion is not uncommon at commercial border crossings and can be caused by a wide variety of processing and inspection activities that occur in POEs as well as traditional causes of traffic congestion such as infrastructure limitations, excess traffic volume, and vehicle breakdowns. Different POEs have differing levels of congestion and differing reasons for its occurrence. Most POE congestion occurs during certain peak periods, usually mid afternoon. With the decline in cross border volume in 2001, traffic congestion has been less of an issue. Post-September 11 security concerns, on the other hand, have at times increased delays for northbound traffic.²¹ Once economic growth picks up and traffic volumes increase the cost of traffic, delays to long-haul trucking firms could make them less willing to commit their equipment to crossing the border and make it likely that drayage will retain a significant share of cross border haulage. A case can be made, however, that for some operators, the location of the next available load will have more influence on the use of drayage than border delays or avoiding the fee.

Mexican Trucks Illegally Operating Beyond the Border Zone

Some Mexican carriers are operating illegally beyond the commercial zone. The DOT Office of the Inspector General (IG) reported that, based on FMCSA safety inspection data, Mexican trucks in significant numbers were already operating beyond the border zone. The IG expressed that he was not concerned about

the trucks, the long-haul trucks that tell the truth that they're going to be long-haul, and have a sticker displayed on their windshield. I'm more concerned about the trucks that come across, that are, by law, confined to the commercial zones, who just drive on. And I think it's important that the state police ... have the authority to say, 'you're stopping in your tracks' and that's going to cause economic pain and that will be a hindrance to that type of behavior.²²

The IG also expressed concern that in all but two states the police and state inspectors do not have the authority to implement federal law and put these illegal

²¹ Karaim, Reed. On Both Sides Now, the Costly Consequences of Vigilance. *Washington Post*, March 10, 2002: B3. See also GAO, *NAFTA: Coordinated Operational Plan Needed to Ensure Mexican Trucks' Compliance With U.S. Standards*. GAO-02-238, Dec. 2001. p. 8.

²² U.S. Senate. *Joint Hearing of the Surface Transportation and Merchant Marine Subcommittee of the Senate Commerce, Science, and Transportation Committee and the Transportation Subcommittee of the Senate Appropriations Committee*. Hearing held June 27, 2002. As reported by the Federal News Service, Inc. The distance of the limit of the border zone varies depending on the size of the municipality involved and can extend substantially farther into the United States than the often quoted 3 to 20 miles. See 49 U.S.C. Sec. 372.241. This variability of border zone limits could be an enforcement issue after implementation.

trucks out of service. The FMCSA has proposed that all states, within three years, pass legislation to empower their police and safety inspector personnel to enforce foreign violations of federal registration requirements on foreign carriers (P.L. 106-159, Sections 205 and 219). In the interim FMCSA has asked states that do not have state authority to contact their FMCSA state office when they stop a truck operating beyond its operating authority. FMCSA will then either take the truck out-of-service or, if this is not possible, take enforcement action against the carrier, who will also be subject to a fine. Either of these actions are seen as being very expensive for the carrier and a strong incentive against Mexican trucks operating beyond their authority.²³

The Outlook for Commercial Trucking Under NAFTA

Most observers agree that the full impact of NAFTA implementation will take time to manifest itself. There is considerable agreement on the probable short-term impact as well as a general expectation that the resulting changes in cross-border commercial trucking will be gradual. In the longer term, stake holders interested in the opening of the Mexican-U.S. border to long haul trucking are less willing to make predictions about the impact of implementation and are more tentative, many preferring to take a wait and see attitude before committing to a change in business practices. The decision of the Ninth Circuit Court of Appeals in *Public Citizen v. DOT* has put NAFTA implementation on hold for nearly two years.

Public Citizen v. Department of Transportation

On December 2, 2002, a coalition of public interest, labor, environmental, and industry groups requested that the U.S. Court of Appeals for the Ninth Circuit stop DOT from granting federal operating authority beyond the U.S. border zones to Mexican trucking firms.²⁴ This was in response to President Bush's November 27, 2002 modification of the U.S. moratorium that had prevented Mexican trucks from operating in the United States beyond the border zones. The coalition, which includes Public Citizen, the California Trucking Association, the International Brotherhood of Teamsters, and the Environmental Law Foundation, had filed suit against DOT in May, challenging the implementing regulations on the grounds that they violated the conformity provision of the Clean Air Act (CAA)²⁵ and the environmental impact statement requirement of the National Environmental Policy Act (NEPA).²⁶ The group contended that the government failed to consider the local air quality impact of implementing the trucking provisions of NAFTA. The plaintiffs also argued that there is no system for emissions inspection of Mexican trucks at the

²³ Ibid., Testimony of FMCSA Administrator Joseph M. Clapp.

²⁴ *Public Citizen v. U.S. Department of Transportation* (No. 02-70986 9th Cir.); *International Brotherhood of Teamsters v. U.S. Department of Transportation* (No. 02-71249 9th Cir.).

²⁵ 42 U.S.C. Section 7506 (c) (1).

²⁶ 42 U.S.C. Section 4332 (2) (C).

border and that Mexican trucks may not be covered by the prohibition on the use of “defeat devices” that allow trucks to run cleaner while being inspected than when in normal use. The Court agreed to hear the request for a stay.²⁷

On January 16, 2003, a panel of the Ninth Circuit found that,

the Department of Transportation acted arbitrarily and capriciously in failing to prepare a full Environmental Impact Statement under the National Environmental Protection Act, as well as a conformity determination under the Clean Air Act. Therefore, we grant the petitions, and remand this matter to the Department of Transportation so that it may prepare a full Environmental Impact Statement and Clean Air Act conformity determination for all three regulations.²⁸

This ruling granted the petitioners’ request for a stay on the granting of operating authority beyond the commercial zones to Mexican-domiciled carriers. DOT petitioned for a panel rehearing by the full Ninth Circuit Court (*en banc* review); the petition, however, was denied in April 2003. DOT has taken steps to comply with the panel’s finding and is preparing environmental impact statement (EIS) on the three regulations in question as well as a CAA conformity determination, taking into consideration the regulations’ environmental impact on a local and regional basis.²⁹ On September 8, 2003, FMCSA also filed a petition asking the Supreme Court to review the decision of the 9th Circuit Court. On December 15, 2003 the request for review was granted. Oral arguments took place on April 21, 2004. On June 7, 2004, in a unanimous decision, the Supreme Court reversed the judgment of the 9th Circuit Court of Appeals. The Supreme Court found that,

the emissions from the Mexican trucks are neither “direct” nor “indirect emissions caused by the issuance of FMCSA’s proposed regulations. Thus, FMCSA did not violate the CAA or the applicable regulations by failing to consider them when it evaluated whether it needed to perform a full “conformity determination”... FMCSA did not violate NEPA or the relevant CEQ [Council of Environmental Quality] regulations when it did not consider the environmental effect of the increase in cross-border operations of Mexican carriers in its EA [environmental assessment].³⁰

Following the decision, FMCSA again began processing Mexican applications. However, as mentioned earlier, the agency has not, as of this writing, granted authority to operate beyond the border zones to any of the Mexican applicants.

²⁷ Whetzel, Carolyn. Ninth Circuit Will Consider Injunction to Bar Mexican Trucks From United States. *BNA, Inc., Daily Report For Executives*, December 10, 2002. See also December 3, 2002 issue.

²⁸ *Public Citizen v. DOT*, Slip opinion. p. 752.

²⁹ NEPA does not require that a regulation be changed as a result of an EIS; a CAA conformity determination could force a change in the regulations.

³⁰ U.S. Supreme Court. *Department of Transportation, et al. v. Public Citizen et al.* No. 03-358. June 7, 2004. Internet site [<http://supct.law.cornell.edu/supct/pdf/03-358P.ZO>].

The Short Term: Expectations and Limitations

Once it happens, nearly all observers expect that the opening of the Mexico-U.S. border will begin with a whimper rather than a bang.³¹ Few expect a major surge of either Mexican long-haul trucking into the United States or U.S. long-haul trucks into Mexico during the first couple of years of implementation. Because of the safety concerns about Mexican trucks, most of the discussions have focused on the likelihood that Mexican trucks would begin operating deep into the United States. Much less has been written or said about the likelihood of U.S. domiciled trucking firms operating in Mexico, however.

The Short Term Prospects for Mexican Long-Haul Trucking in the United States. There are a number of reasons that few Mexican carriers are expected to operate beyond the commercial zone in the short term. The most immediate reason is the delay resulting from the Ninth Circuit Court ruling. Implementation, however, was already at a standstill because of the state of the certification process for Mexican operators. As of this writing, FMCSA has processed roughly 700 applications for operating authority beyond the U.S. commercial zones, of which roughly 200 have passed their paper review and are ready for on-site review. As mentioned earlier, the Mexican government has not, however, responded to a proposed memorandum of understanding to set up the framework for the required on-site reviews in Mexico. Once the on-site review issue is resolved, the Mexican firms that complete the resulting certification process will still face a number of competitive disadvantages when carrying international cargo into the U.S. interior.³² These disadvantages include:

- Beyond the commercial zone, few Mexican-domiciled carriers have developed business relationships that could provide them with the return loads needed to make operating deep in the U.S. profitable;
- Border delays push up costs and discourage Mexican long-haul carriers from committing their vehicles to international trade with the United States. Reportedly northbound delays at the border have increased significantly since the September 11 attacks;³³
- Mexican carriers, like U.S. domestic carriers, must pay registration fees in each state in which they operate; however, because Mexico has not joined the International Registration Plan, Inc., Mexican

³¹ Delgado, Claudia Patricia. Prozzi, Jolanda. Harrison, Robert. *Opening the Southern Border to Mexican Trucks Will Have a Negative Impact on the US Transportation System—Where Is the Evidence?* Austin, TX, University of Texas at Austin. 18 p. See also Whitten, *Mexican Freight Haulers Warily Eye U.S. Competition*, p. 13.

³² For the best description of difficulties faced by Mexican carriers see, General Accounting Office. *North American Free Trade Agreement: Coordinated Operational Plan Needed to Ensure Mexican trucks' Compliance With U.S. Standards*. Report no. GAO-02-238, December 2001. pp. 2-3, 7-12.

³³ Ibid. GAO reported that “Mexican and private sector officials stated that delays in crossing the border have increased since the terrorist attacks of September 11, 2001.”

carriers must pay for individual trip permits to each state traversed and will therefore pay more than U.S. carriers,³⁴

- Initially, the cost of insurance for Mexican carriers operating to the U.S. interior will be set at the highest U.S. insurance risk level until the Mexican firms have a track record for operating safely beyond the commercial zone. As time passes the rates would likely be adjusted to reflect experience;
- In 2000 only 20% of federally registered Mexican commercial trucks had been manufactured after 1994—older trucks would have more difficulty meeting U.S. safety standards and were not built to U.S. emissions standards.
- The English language requirement will limit the number of federally licenced Mexican truck drivers that can operate legally in the U.S.;
- Mexican carriers have less access to financial resources and pay much higher interest rates than U.S. based companies. In addition, new trucks cost more in Mexico than in the U.S.;³⁵
- One unusual possibility is that some Mexican carriers are concerned that some of their drivers may be tempted to abandon their trucks deep inside the U.S. and seek work in the U.S.
- The presence of a more active safety and regulatory enforcement effort in the post-implementation environment will discourage some long-haul Mexican motor carriers from entering the United States.

Mexican carriers, on the other hand, do have some advantages that could eventually give them a competitive edge in certain U.S. markets. These advantages include:

- lower labor costs—although there is disagreement on the size of the wage advantage, it is probable that federally licensed Mexican drivers' wages are less than half that of U.S. drivers and may be as low as one-third of U.S. drivers' wages;³⁶
- Mexican carriers, and in particular Mexican drivers, currently dominate cross border trade within the border zone. Some trucking

³⁴ The International Registration Plan, Inc. is a reciprocal agreement that authorizes the proportional registration of commercial motor vehicles among the states under the auspices of the American Association of Motor Vehicle Administrators.

³⁵ Whitten, p. 13

³⁶ See U.S. Bureau of Labor Statistics. *2000 National Occupational Employment and Wage Estimates: 53-3032 Truck Drivers, Heavy and Tractor-Trailer*. At [<http://stats.bls.gov/oes/2000/oes533032.htm>]. The median wage is estimated at \$15.25 per hour for a tractor trailer driver in the U.S. Benton, James C. "Transportation Bill Set to Clear as Bush Wins Key Provision Opening U.S. to Mexican Trucks," *CQ Weekly*, Dec. 1, 2001, p. 2846. Quotes Michael Belzer of Wayne State University's estimate that Mexican drivers earn two thirds less than U.S. drivers. An Associated Press Article, *New Policy Troubles U.S., Mexican Truckers*, Nov. 29, 2002, estimates that U.S. truckers on average earn 32cents per mile and their Mexican counterparts earn about half that amount. Delgado, Perozzi, Harrison's survey of Mexican trucking firms found that long-haul drivers incomes varied greatly—from \$800 to \$1600 per month.

companies in Mexico that provide drayage service also handle domestic carriage. These firms could test the market by hauling cargo to border cities close enough to the border for a day trip;

- Mexican carriers, in press reports, have complained that in Mexico excess trucking capacity has forced down rates for domestic carriage, this could make haulage beyond the commercial zone attractive to some Mexican firms. A decline in drayage could, for example, have the effect of freeing up even more Mexican capacity.
- Mexican drivers know the border region well and some have knowledge of the U.S. road system beyond the commercial zones;³⁷
- Some of the disadvantages faced by Mexican trucking firms (i.e., insurance, state registration fees, lack of back-hauls) will become less constraining as these firms establish an operating history or possibly lease their services to U.S. firms and/or establish interline partnerships.

The Short Term Prospects for U.S. Long-Haul Trucking in Mexico.

The likelihood of significant numbers of U.S. trucking firms directly providing long-haul international trucking services deep into Mexico is very low. As of this writing, the Mexican government has not begun accepting applications from U.S. trucking companies for operating authority in Mexico. Once the Mexican government accepts and processes applications for operating authority, some U.S. firms will apply, but the number is expected to be small. The 10 U.S. trucking firms contacted by CRS all stated that they had no plans to use their U.S.-based trucks or U.S.-based drivers to haul international cargo into the Mexican interior soon. U.S. firms have, however, been investing in Mexican trucking firms that specialize in international cargo and many observers expect U.S. firms to expand their business in the Mexican market through Mexican subsidiaries or partners.

U.S. firms cite a variety of reasons for not being interested in using their own drivers and equipment to provide long-haul trucking services to the Mexican interior. Once a U.S. truck and driver cross the border they are at a labor cost disadvantage relative to Mexican firms. U.S. equipment is built for U.S. road conditions and could probably only operate on the best Mexican roads (many of which have significant tolls) without risking damage. Most U.S. drivers, especially those not based beyond the border region, do not speak Spanish. U.S. firms do not want to risk having their equipment and drivers delayed by paperwork and inspection activities or by the congestion that occurs as part of the cross border flow of goods. U.S. carriers also believe that Mexico is a dangerous place to operate and hesitate to place their drivers, equipment, and cargo at risk.³⁸ In addition, even if the Mexican government begins

³⁷ U.S. Department of Transportation. Office of the Inspector General. *Audit Report: Mexico-Domiciled Motor Carriers*. Report no. TR-2000-013. Washington, DOT, 1999. 25p.

³⁸ Cargo theft and especially fear of hijacking and the related endangerment of their drivers and potential loss of equipment were mentioned by U.S. trucking firms as a major reason for not operating in Mexico. A 1999 U.S. Department of State report, *Trucking Services:[Mexico]*, by Javier Flores at

(continued...)

accepting applications from U.S. carriers for operating authority in Mexico, there is a great deal of uncertainty as to how soon NAFTA implementation will take place in a meaningful way on the Mexican side of the border.

The Short Term Outlook. Gradualism will probably be the predominant characteristic for at least the first couple of years of NAFTA implementation. It could be 2005 before Mexico agrees to terms for the on-site inspections of Mexican carriers required under U.S. law. Once this occurs, Mexican firms that are certified to operate beyond the commercial zone will likely begin testing the waters for deliveries to destinations close enough to the border that allow them to have at least a prospect of breaking even without having a prearranged back-haul. Where back-hauls can be arranged, Mexican carriers will operate farther into the U.S., but most observers expect the vast majority of truck loads will be to destinations in the border states. As long as there are significant delays at the border, however, the majority of truck freight crossing the border into the U.S. will continue to be brought in by drayage operators. Despite this short term gradualism, the limited activity is important because it will be a time of testing of different business patterns. One feature of this period may be the evolution of cooperative agreements between Mexican and U.S. haulers, which could have a major impact in the long-term outlook for international trucking in the U.S. and Mexico.³⁹

The Long Term: Business Structure and Competition

In the long run, the outlook for international trucking across the border is less a function of regulation than of business practices and the economics of international trucking. Within this context there are a number of factors that will influence the shape and scope of NAFTA implementation. Most discussions of the likelihood or extent of Mexican or U.S. trucks entering the long-haul trucking market within each other's borders focus on the difficulties that would be faced by a Mexican trucking firm going it alone in the U.S. market or a U.S. firm going it alone in the Mexican market. Only a few brave companies on either side of the border are expected to provide direct trucking services deep into the other country, but many are expected to operate cross-border through a subsidiary or parent corporation or in cooperation with an affiliate business on the other side of the border. Virtually all observers agree that Mexican drivers will continue to dominate the cross-border carriage of cargo by truck for some time.⁴⁰ The one area, however, where Mexican trucking companies

³⁸ (...continued)

[<http://www.tradeport.org/ts/countries/mexico/isa/isar0029.html>], stated that the "lack of security on Mexican highways is, by far, the largest problem affecting this industry. The soaring cost of insurance is the result ... as a result, transportation companies and their customers lose business opportunities." The report also discusses other difficulties faced by U.S. trucking service providers who are interested in operating in Mexico.

³⁹ See Delgado, et al.

⁴⁰ Some U.S. firms, headquartered in the border region, with their lower than the U.S. average driver wages and Spanish speaking workforce, may try to send their drivers and trucks into Mexico, but are not expected to gain much of a market share. It is likely that, once the Mexican government begins accepting applications, some U.S. firms will apply for operating authority simply for the flexibility of being able to send some of their drivers and

(continued...)

fear direct competition with U.S.-based companies is for the trucking serving the maquiladora trade concentrated near the border. There continues to be disagreement on how common it will be for Mexican drivers to operate deep within the United States in the long term. It is important to remember that the main factor in the growth of truck crossings has been the growth in trade, which determines the amount of freight that must be moved across the border.⁴¹ Consequently, it is doubtful that eventual implementation of the trucking provisions of NAFTA, by itself, will lead to a major increase of the amount of freight shipped. It will, however, have an impact on how and by whom the freight is moved across the border.

The Cross-Border Business Paradigm. Despite having been banned for many years from delivering cargo in each other's countries beyond the border zones, U.S. and Mexican trucking firms have offered "seamless delivery" throughout each other's territory to their customers through working arrangements with counterparts across the border.⁴² These arrangements are commonly referred to as partnerships, but are generally interlining or interchange agreements. Interline agreements provide for joint line transborder shipments by transloading freight at the border between U.S. and Mexican trucking firms. Interchange agreement generally has the U.S. firm also providing the loaded trailer for delivery to the final destination.

Prior to NAFTA, U.S. firms could not invest in Mexican trucking firms and Mexican firms were not allowed to hold a controlling interest in U.S. trucking firms. NAFTA phased in the allowable ownership for U.S. investors in Mexican trucking companies: 49% ownership after December 17, 1995, 51% ownership on January 1, 2001, and 100% ownership on January 1, 2004.⁴³ Major U.S. trucking firms doing business in Mexico began investing in Mexican trucking firms beginning in the mid-1990s, often in effect creating subsidiary firms in Mexico. The investment link is significant in that the profits of the U.S. parent firm are affected by the profits of its Mexican subsidiary. U.S. investment in Mexican motor carriers is limited to firms that carry international loads only. This significantly limits the number of existing Mexican carriers that are subject to controlling interest investment by U.S. investors. With 100% ownership now allowed it should be even easier for U.S. firms to set up new Mexican subsidiaries dedicated to cross-border trucking. Mexican investors were to be allowed to invest up to 100% in U.S. trucking firms providing international freight services beginning December 18, 1995; however, it wasn't until June 2001 that U.S.-domiciled Mexican-owned firms were allowed to obtain

⁴⁰ (...continued)
trucks into Mexico if required.

⁴¹ See Appendix I in, General Accounting Office. *U.S.-Mexico Border: Better Planning, Coordination Needed to Handle Growing Commercial Traffic*. Report no. GAO/NSIAD. Washington, GAO, 2000, pp. 42-43.

⁴² Office of International Affairs, American Trucking Association. *South of the Border: U.S. Trucking in Mexico*. Washington, the Association, 1992. pp. 17-19.

⁴³ North American Free Trade Agreement. Annex I, Schedule of Mexico. In U.S. Congress. *North American Free Trade Agreement, Texts of Agreement, Implementing Bill, Statement of Administrative Action, and Required Supporting Statements*. U.S. House of Representatives Document 103-159, vol. 1, p. 1590.

operating authority to provide truck services for the transport of international cargo between points in the U.S.⁴⁴

Within the context of NAFTA implementation, cross-border investment is expected to alter the cross-border trucking business paradigm for some companies and allow U.S. firms to take advantage of their Mexican subsidiary or affiliate partner's labor cost advantage and knowledge of the Mexican market. At the same time the new paradigm will help their Mexican subsidiaries or partners navigate the complexity of operating beyond the border zones in the U.S. In short, the strengthened business paradigm will reduce some of the non-labor disadvantages faced by Mexican firms operating in the U.S. Mexican firms that are subsidiaries of large U.S. trucking firms may be able to benefit from their parent firm's ability to assist them with navigating U.S. state registration fee requirements, acquiring insurance at reasonable rates, getting loans at reasonable rates, and arranging for back-haul loads for return trips. The U.S. firm benefits from the potential cost savings that the subsidiary provides for its international trucking business. Over time, however, the wages of Mexican drivers would be expected to rise relative to U.S. truck drivers.

Celadon Group, Inc., which claims to be the leading truckload carrier to and from Mexico, has briefly outlined its post-implementation plans.

The opening of the border... will for the first time, permit Mexican drivers to move loads without restrictions between Mexico and points in the United States. We have extensive experience with the management of drivers in Mexico, through our ownership of Jaguar, our Mexico City-based subsidiary. We expect to take advantage of the border opening by utilizing lower cost drivers on shipments to and from Mexico.⁴⁵

If Celadon's business model succeeds in giving it a cost advantage, its competitors will have to adjust. Such an adjustment, however, might put a downward pressure on the wages of U.S. drivers vis-à-vis their Mexican counterparts.

As mentioned earlier, an area where Mexican companies have expressed concern over possible direct competition with U.S. carriers is in the provision of trucking services to the maquiladoras. The location of their factories near the border and the expedited processing of maquiladora freight at the border might attract U.S. competition, especially from companies headquartered near the border.

An alternate business plan, reportedly raised by some Mexican carriers as a possibility, would be to lease their equipment and drivers to U.S. firms, who it is hoped could then deal with insurance and regulatory requirements, and provide knowledge of the market on the U.S. side of the border. Another business plan being considered by some Mexican firms that would require less dependence on a U.S.

⁴⁴ Bush, George W. *Memorandum for the Secretary of Transportation: Determination Under the Interstate Commerce Commission Termination Act of 1995*. Washington, White House. June 2001.

⁴⁵ Celadon Group, Inc. *Form 10-K, Annual Report Pursuant to Section 13 or 15 (d) of Securities Exchange Act of 1934*. Washington, U.S. Security and Exchange Commission. (September 2002) p. 3.

partner would focus on long haul delivery direct to the warehouse districts in or near the border zones on the U.S. side and to direct long-haul delivery back into Mexico, thus eliminating the drayage hauler. Over time, these carriers might gradually expand service to border state inland ports such as San Antonio, Texas.

Truckload (TL) and Less Than Truckload (LTL). Trucking firms in the U.S. are generally either truckload (TL) or less than truckload (LTL) carriers. TL carriers generally specialize in shipments that qualify for full truckload rates, usually over 10,000 pounds. LTL carriers specialize in shipments of a quantity of freight too small (i.e., less than 10,000 pounds) to get the TL rate and generally involve the use of terminals to break and/or consolidate shipments.⁴⁶ Nearly all carriers of cross border freight by truck, as well as nearly all major Mexican long-haul carriers, are TL carriers. This differs from the U.S. market where many trucking firms are LTL carriers. Some see LTL as a market niche that U.S. carriers could develop in Mexico.

The Low Cost Producer: Time and Distance Is Money. Two of the basic precepts of making money in trucking are minimizing the time that trucks and drivers are idle and reducing the miles that empty trailers are hauled or tractors are driven without a load. For an independent Mexican carrier operating in the U.S., its significant cost advantage is limited to its lower driver costs. Its main disadvantages are the aforementioned probable lack of a back-haul, higher insurance rates, increased inspection costs, higher state registration fees, and more expensive financing of its equipment. Over the long run, the effect of these disadvantages will probably mitigate but will not go away entirely. Mexican firms that are closely affiliated with, or are subsidiaries of, major U.S. firms will probably get help from their U.S. partner or parent firm to assist them in reducing their non-labor costs. In either case, the key to profitability may be that the labor cost differential is enough to overcome the cost of being delayed at the border and/or returning without a back-haul.

The Wage Differential. Estimates of the wage differential vary substantially for a federally licenced Mexican truck driver engaged in international carriage of cargo to the U.S. versus the cost of a U.S. driver, but they generally range from one third to one half the cost of the U.S. driver.⁴⁷ Using the 2000 Bureau of Labor Statistics figure for the median hourly truck driver wage of \$15.25, roughly three times the U.S. minimum wage, and the estimates that Mexican drivers would cost

⁴⁶ U.S. Department of Transportation. Bureau of Transportation Statistics. *Transportation Expressions*. Washington, The Bureau. 1996. p. 110, 196.

⁴⁷ See U.S. Bureau of Labor Statistics. *2000 National Occupational Employment and Wage Estimates: 53-3032 Truck Drivers, Heavy and Tractor-Trailer*. Internet address [<http://stats.bls.gov/oes/2000/oes533032.htm>]. The median wage is estimated at \$15.25 per hour for a tractor trailer driver in the U.S. Schulz, John. *A Race to the Bottom*. Traffic World, Mar. 4, 2002, p. 22. Quotes Owner-Operator Independent Drivers Association (OOIDA) estimates that Mexican drivers earn 13 cents per mile versus U.S. truckload drivers earning 31 cents to 40 cents. Benton, James C. *Transportation Bill Set to Clear as Bush Wins Key Provision Opening U.S. to Mexican Trucks*. CQ Weekly, Dec. 1, 2001, p. 2846. Quotes Michael Belzer of Wayne State University estimate that Mexican drivers earn two thirds less than U.S. drivers. An Associated Press Article, *New Policy Troubles U.S., Mexican Truckers*, Nov. 29, 2002, estimates that U.S. truckers on average earn 32cents per mile and their Mexican counterparts earn about half that amount.

one third to one half of a U.S. driver, the cost savings for using a Mexican driver for long-haul carriage into the U.S. would range from \$7.63 to \$10.17 per hour.⁴⁸ Estimates that looked at the differential on an earnings-per-mile basis pegged Mexican driver earnings in one case at 13 cents per mile versus 31 to 40 cents for a U.S. driver and in another case 16 cents per mile versus 32 cents per mile. With overall truck operating expenses reportedly ranging from \$1.10 to \$1.70 per mile, the majority of the labor cost advantage is quickly lost on any job without a revenue earning back-haul.⁴⁹ The labor cost benefit would probably be lost within the first third of a return run to the border without a back-haul load.⁵⁰ Most observers believe that the border states will be the main zone of competition, with only the Mexican companies with connections for back-haul loads operating beyond the border states with any regularity.

Cabotage: Legal and Illegal. One way Mexican trucking firms could avoid hauling an empty trailer all the way back to Mexico would be to use the tractor to pick up and make a domestic U.S. delivery on the way back to Mexico. In the language of the trucking industry, such domestic movements are referred to as cabotage. NAFTA does not allow Mexican trucks to engage in domestic trucking in the U.S. or vice versa. The U.S. Customs Administration has made an exception for Canadian vehicles which may also be allowed for Mexican carriers.⁵¹ The exception is for a domestic movement of merchandise that is “incidental” (defined as in the “general direction of an export move or as part of the return movement [of trucks] to their base country”).

Cabotage is a contentious side issue in NAFTA implementation regarding Mexico. Opponents of implementation see the “incidental” exception as an enormous loophole on the prohibition against foreign carriers competing against U.S. truckers in the domestic market. The “incidental” exception is part of a much larger concern. Trucking unions and truck owner-operators are concerned that once Mexican trucks are commonly operating deep within the U.S., Mexican carriers will be tempted to routinely engage in illegal cabotage in general and, in doing so, will take jobs away from U.S. drivers and businesses.⁵² Another concern is that Mexican

⁴⁸ Some believe Mexican trucking firms would be under pressure to pay their drivers well for fear that some of their drivers might abandon their equipment deep in the U.S. and seek work with a U.S. firm that would pay more.

⁴⁹ Case, Brendan M. “Mexican Rigs Get Go-Ahead; Bush Gives OK to Open Up U.S. Roads.” *Dallas Morning News*, Nov. 28, 2002, p. 1D.

⁵⁰ Getting information on costs can be difficult due to the proprietary nature of business information, however, using the cost-per-mile estimate of \$1.10 to \$1.70, and the estimate that federally licenced Mexican drivers earn one third to one half what U.S. truckload drivers earn can provide a rough estimate that the labor cost savings are lost in the first third of a deadhead return. Near the border this does not mean a great deal, but the farther into the U.S., a Mexican truck travels the more important a back-haul or cabotage load becomes to the profitability of the operation.

⁵¹ See *Cabotage Rules for Canadian-Based Drivers*. Washington, U.S. Customs Administration. [<http://www.fmcsa.dot.gov/safetyprogs/nafta.htm>]

⁵² The Department of Transportation Inspector General reported in 1999 that some Mexican
(continued...)

trucking firms will lease their trucks and drivers to U.S. partners or parent companies who might arrange for a work visa for the leased driver and then provide both international trucking services as well as cabotage within the U.S.⁵³

The Distinctive Institutions. As mentioned earlier, there is a common view that the Mexican customs brokers and drayage companies will do what they can to maintain the status quo. There are reasons to believe, however, that resistance is overstated. To begin with, it is not only the drayage operators that have developed working relationships with the Mexican customs brokers over the years but also the long-haul companies that will be providing single truck service to the U.S. side of the border. A second reason is that in the long run, Mexican brokers' profits are determined by the amount of freight they process. This will eventually provide them with an incentive to work with the long haul carriers and also to streamline and automate their procedures. Although it is likely that the share of cargo hauled by the drayage operators will decline over the next ten years, it is unlikely that drayage will decline to the 15% share drayed across the Canadian border. The quality of trucks used for drayage reportedly is improving, in part, because of the increased safety and environmental scrutiny they will face at the border.⁵⁴ As the drayage share declines, some of these operators may change their business strategy and seek more business in local haulage in Mexico and some will also probably try operating beyond the border zones in the United States.

This is not to say that these institutions will not resist change but just that estimates that nothing will change for ten to fifteen years can probably be viewed as overly conservative. Should the two countries' economies grow more rapidly, the resulting increase in trade will probably provide plenty of business for both long haul and for drayage operators. The irony for the drayage companies is that the threat to their dominance of cross-border trucking is going to come from Mexican long-haul carriers, not from U.S. trucks.⁵⁵ Also, regular shippers have a model for expedited cross border trucking in the processing of the trucks used in the maquiladora trade. Mexican trucking companies that begin to regularly serve the warehouse districts and nearby cities in the border states will be especially attracted to the maquiladora model.

⁵² (...continued)

trucks were operating beyond the border zones and to a lesser extent beyond the border states, see *Mexico-Domiciled Motor Carriers [Operating Beyond the Border Zone]* Washington, Office of the Inspector General. Nov. 4, 1999. Report no. TR2000-013.

⁵³ The Motor Carrier Safety Improvement Act of 1999 (P.L. 106-159) prohibited the use of leases as a means of having Mexican trucks operate beyond the border zones, until implementation of NAFTA's land transportation provisions.

⁵⁴ U.S. Department of Transportation. Office of the Inspector General. *Interim Report on Status of Implementing the North American Free Trade Agreement's Cross-Border Trucking Provisions*. Report no. MH-2001-059. Found that out-of-service rates for Mexican trucks has been declining and that the condition of Mexican trucks correlate with the level of inspection at the border.

⁵⁵ The point where these companies interline or interchange with their Mexican partners may move deeper into the U.S. border states.

Caveat

Cross-border carriage of goods is a complicated activity with many elements that could change the outlook discussed above. Anything that significantly adds time to the paperwork process on either side of the border or to the duration and frequency of inspection of cargo could significantly delay the impact of NAFTA implementation. Heightened concerns about security, drug smuggling, safety, pollution, illegal immigration and terrorism, could lead to more intensive inspection of goods and driver documentation. This could increase border crossing delays and perhaps reduce the Mexican labor cost advantage and limit the impact of implementation.

Congressional Issues

With the U.S. committed to implementation, the main issues likely to be of interest to Congress are ones of oversight. The most immediate issue is oversight of implementation on the U.S. side of the border within the context of U.S. treaty obligations and the preconditions enacted in the FY2002 DOT Appropriations Act (P.L. 107-87). The act requires the DOT IG to conduct annual reviews of whether the act's requirements are being met. Of particular interest may be an examination of FMCSA's 50% on-site safety compliance reviews of Mexican carriers and the results of the licence validation requirement for Mexican truck drivers, as well as the post-implementation out-of-service rates for Mexican trucks and drivers.

The Mexican government, as of this writing, has not responded to the FMCSA's suggestion for a memorandum of understanding concerning the protocols under which FMCSA officials would complete the on-site reviews of 50% of Mexican trucking firm applicants that are required before the firms can be certified to operate beyond the border zones in the United States.⁵⁶ This situation, should it continue, is notable because the on-site reviews are required by law and also because, should it delay Mexico's reciprocal opening of the border, it could eventually be grounds for a U.S. complaint, under NAFTA, against Mexico.

The Mexican government has only recently begun to accept applications by U.S. trucking firms for authority to operate international trucking in and out of Mexico. As of this writing, it has not issued the rules under which U.S. firms can apply. Observers have mentioned several reasons for this situation. The reason most often discussed in press accounts, is Mexican indignation over the U.S. preconditions required under P.L. 107-87. The Mexican Government may be considering seeking compensation or the suspension of U.S. trade benefits under NAFTA on grounds that the U.S. preconditions discriminate against Mexican trucking firms relative to U.S. and Canadian firms.⁵⁷ Mexico's Secretary of Communication and Transportation reportedly has argued that some conditions set forth by the U.S. for allowing Mexican trucks to operate throughout the United States are discriminatory and has

⁵⁶ FMCSA official.

⁵⁷ The NAFTA dispute resolution panel allowed for differing treatment but did not define the degree of difference allowable.

recommended that Mexico should keep all of its NAFTA options open, including a possible retaliatory ban on U.S. trucks. Some have suggested that Mexico should simply use the FMCSA's regulations for Mexican carriers applying to operate in the United States and apply them reciprocally for U.S. carriers applying to operate in Mexico.⁵⁸ The problem with this approach is that the Mexican government does not have the well developed safety regulatory and compliance system for motor carriers that exists in the United States. Also, given that the number of U.S. trucking firms dwarfs the number of Mexican firms, it is doubtful that Mexico has the resources to regulate compliance. A potential question for Congress is that, if a significant period of time goes by and U.S. applications for operating authority are still not being accepted, or if Mexico implements a retaliatory ban on U.S. trucking, should the U.S. put a hold on awards of operating authority for Mexican trucking companies and/or eliminate those already granted? Another possibility, as mentioned above, would be to make a complaint against Mexico under NAFTA. On the other hand, should delays from the U.S. side continue, Mexico also could have grounds for retaliating against the United States under NAFTA dispute resolution rules.⁵⁹

The FMCSA's new entrant rule, effective January 1, 2003, which sets forth new requirements for U.S. and Canadian motor carriers that apply for operating authority in the U.S., raises two issues that may receive congressional attention. The Bush Administration ordered the rule be written to raise the requirements faced by U.S. and Canadian new entrant motor carriers to a level similar to the requirements being imposed on Mexican motor carriers. This may have been done to counter Mexican charges that the certification rules discriminate against Mexican carriers. U.S. and Canadian new entrant carriers must now also undergo a safety audit within an 18 month period of provisional operating authority, including on-site reviews. The difference in treatment is narrowed to the requirement that at least 50% of Mexican companies undergo on-site reviews before being given provisional authority to operate beyond the border zone. One issue is how significant these regulatory changes imposed on U.S. and Canadian carriers should be in considering a policy response to any Mexican move to seek compensation or a suspension of benefits under NAFTA. A second issue is how Congress will respond to the funding and staffing needed to carry out the audits of U.S. and Canadian new entrant carriers. An FMCSA official estimated that as many as 25,000 new entrants will have to be processed and audited.⁶⁰

If the role of Mexican customs brokers and drayage operators becomes an impediment to the efficient flow of freight across the border, it would raise the issue of whether these particular institutions have a role in preventing U.S. firms from operating directly in Mexico. If after implementation these institutions continue to have a degree of control over cross border trucking that is deemed detrimental to U.S.

⁵⁸ FMCSA official in conversation of January 17, 2003.

⁵⁹ Authers, John and Sara Silver. Mexico "Could Retaliate" Over Ban on Trucks. *Financial Times*, Jan. 18, 2003, p. 9. The article quotes former trade minister, Louis de la Calle, "Mexico has retaliation rights under NAFTA...If Mexican trucks were prohibited, then we should retaliate on products going beyond trucking. But the pressure would be to retaliate in the trucking sector."

⁶⁰ FMCSA official in conversation of January 17, 2003.

trucking firms, some may view them as a non-tariff trade barrier to U.S. trucking services.⁶¹

Another issue is the number of trucks that have operating authority restricted to the border zones and that operate illegally beyond those zones. This includes concerns about the fate of Mexican drayage trucks after implementation. If implementation reduces the demand for drayage services, some operators may try to use their drayage equipment to haul loads to destinations beyond the border zone. The drayage trucks would not simply disappear and some would undoubtedly risk going beyond the commercial zones. The case can be made, however, that the combination of increased enforcement (the FMCSA alone has 252 personnel assigned to the Mexican border and state police and safety inspectors will also be on the look-out for Mexican trucks operating beyond their authority) and penalties (placing a Mexican truck, far from the border, out-of-service is a very expensive proposition for a Mexican carrier; in addition, fines can be imposed) should reduce this kind of cheating.⁶² However, it is worth watching the numbers of Mexican-domiciled trucks that are caught operating beyond their authority.

The leasing of Mexican trucks and drivers by U.S. firms may become a major implementation issue. The ban on using leases to circumvent the prohibition on Mexican trucks from operating beyond the border zones ends with NAFTA implementation. Leasing may become an important element in the post-implementation business environment. If a U.S. firm also arranges for work visas for leased Mexican drivers, it could make them available for more cabotage loads and could have Mexican drivers competing more often against U.S. drivers in the United States. Should this happen, Congress may want to revisit the leasing issue.

⁶¹ Whitten, p. 13.

⁶² FMCSA officials.