
Office of Inspector General

Audit Report

FMCSA ADEQUATELY MONITORED ITS NAFTA CROSS-BORDER TRUCKING PILOT PROGRAM BUT LACKED A REPRESENTATIVE SAMPLE TO PROJECT OVERALL SAFETY PERFORMANCE

Federal Motor Carrier Safety Administration

Report Number: ST-2015-014

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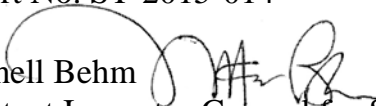
Memorandum

U.S. Department of
Transportation

Office of the Secretary
of Transportation
Office of Inspector General

Subject: **ACTION**: FMCSA Adequately Monitored Its
NAFTA Cross-Border Trucking Pilot Program but
Lacked a Representative Sample To Project
Overall Safety Performance
Federal Motor Carrier Safety Administration
Report No. ST-2015-014

Date: December 10, 2014

From: Mitchell Behm 
Assistant Inspector General for Surface
Transportation Audits

Reply to
Attn. of: JA-30

To: Acting Federal Motor Carrier Safety Administrator

Under the 1992 North American Free Trade Agreement (NAFTA), the United States and Mexico agreed to long-haul cross-border transportation of cargo and passengers between the two countries. Congress prohibited the Federal Motor Carrier Safety Administration (FMCSA) from processing Mexico-domiciled motor carrier applications to operate beyond United States commercial zones¹ until certain requirements are met and a pilot program for granting long-haul authority to Mexico-domiciled motor carriers has evaluated the potential impact on safety.

Under Section 6901 of the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act (the act),² we were required to (1) provide an initial review verifying the pilot program complies with requirements set forth in Section 350(a) of the Department of Transportation and Related Agencies Appropriation Act,³ (2) monitor the program and provide an interim report 6 months after initiation, and (3) provide a final report within 60 days after the program's conclusion. FMCSA formally initiated the pilot program on October 14, 2011, and ended the program on October 10, 2014.

¹ Commercial zones generally extend up to 25 miles north of United States border municipalities in California, New Mexico, and Texas (or 75 miles in Arizona).

² Pub. L. No. 110-28, Title VI, Ch. 9, § 6901 (2007).

³ Pub. L. No. 107-87, Title I, § 350(a) (2001).

Our audit objectives were to determine whether (1) Federal and State monitoring and enforcement activities are sufficient to ensure that participants in the pilot program are in compliance with all applicable laws and regulations, (2) the Department has established sufficient mechanisms to determine whether the pilot program is having any adverse effects on motor carrier safety, and (3) the pilot program consists of an adequate and representative sample of Mexico-domiciled carriers likely to engage in cross-border operations beyond the United States municipalities and commercial zones on the United States-Mexico border.

We conducted this audit in accordance with generally accepted Government auditing standards. In consultation with our statistician, we analyzed FMCSA's pilot program data, such as pilot program carrier business types and fleet size, crash and out-of-service⁴ rates, participant border crossings, truck and driver inspections, and other relevant information. We evaluated FMCSA's mechanisms for providing oversight of the pilot program, observed border inspections of pilot program participants, and interviewed FMCSA personnel located in its Headquarters offices and select border crossings. Exhibit A provides further details on our scope and methodology.

BACKGROUND

FMCSA initiated the pilot program to test and demonstrate Mexico-domiciled motor carriers' ability to operate safely beyond the United States-Mexico border. Passenger and hazardous materials carriers were not allowed to participate in the program. To receive pilot program provisional motor carrier certificates of registration, carriers had to pass a safety and security vetting process and undergo a Pre-Authorization Safety Audit (PASA). A PASA required the carrier to demonstrate that it had (1) a controlled substance and alcohol testing program, (2) a system for complying with hours-of-service requirements, (3) proof of insurance or ability to obtain it, (4) records of periodic inspections of vehicles used in the United States, and (5) qualified drivers for operations in the United States.

The participants were also required to progress through stages of inspections and comply with United States laws and regulations governing motor carrier safety, customs and immigration, vehicle registration and taxation, and fuel taxation. Additionally, before 18 months⁵ of pilot program operations, the carriers had to receive a satisfactory rating from a compliance review. See table 1 for a description of the different stages of operating authority for carriers that participated in the pilot program.

⁴ A driver placed out of service may not operate a commercial motor vehicle until the reason for the out-of-service order is remedied. Similarly, a commercial vehicle placed out of service may not be operated until all repairs required by the out-of-service order are satisfactorily completed.

⁵ In calculating the 18 months under the current pilot program, carriers could receive credit for time operated during FMCSA's 2007–2009 demonstration project.

Table 1. Stages of Operating Authorities for Pilot Program Participant Carriers

Pilot Program Provisional Motor Carrier Certificate of Registration	<i>Stage 1:</i> Participant carriers with pilot program provisional motor carrier certificates of registration were inspected each time they entered the United States for at least 3 months of participation or until they completed at least three inspections.
	<i>Stage 2:</i> After the first 3 months, participant carriers were monitored and inspected at a rate comparable to other Mexico-domiciled motor carriers that cross the United States-Mexico border until they reached a total of 18 months of participation. To proceed to stage 3, a carrier must have received a satisfactory safety rating during its compliance review and have no pending enforcement or safety improvement actions.
Pilot Program Permanent Motor Carrier Certificate of Registration	<i>Stage 3:</i> To obtain pilot program permanent motor carrier certificates of registration, participant carriers must comply with all Federal Motor Carrier Safety Regulations (FMCSR) and renew their Commercial Vehicle Safety Alliance (CVSA) decals every 90 days for 3 years.
Standard Motor Carrier Operating Authority Registration	<i>Post-Pilot Program:</i> Upon completion of the pilot program, pilot participants were eligible for standard motor carrier operating authority, similar to that of U.S.-domiciled motor carriers but with significant restrictions and requirements, such as limitations to international cargo and required inspection decals.
Provisional Motor Carrier Operating Authority Registration	<i>Post Pilot Program:</i> Upon completion of the pilot program, pilot participants with pilot program provisional motor carrier certificates of registration were eligible to be converted to provisional motor carrier operating authority. These motor carriers must undergo a compliance review, receive a satisfactory rating, and have no pending enforcement or safety improvement actions before being considered eligible to receive a standard motor carrier operating authority.

Source: Office of Inspector General (OIG) summary of operating authorities, verified by FMCSA.

Our August 2011 initial report⁶ on the pilot program found that FMCSA had not (1) finalized its process for conducting 50 percent of PASAs and compliance reviews on site in Mexico; (2) issued site-specific plans for checking drivers and trucks at the border; (3) established a system to verify driver and truck eligibility for the pilot program; (4) issued an implementation plan or acquired electronic monitoring devices for use in the pilot program; and (5) conducted pilot program training for inspection personnel at the border and within the United States. After our initial audit, the Department submitted a report to Congress detailing its actions to address the issues we raised.

⁶ *FMCSA Generally Complies With Statutory Requirements, but Actions Are Needed Prior To Initiating Its NAFTA Cross-Border Trucking Pilot Program* (OIG Report Number MH-2011-161), Aug. 19, 2011. OIG reports are available on our Web site at: www.oig.dot.gov.

In August 2012, we issued an interim report⁷ on the status of FMCSA's pilot program. We found that low participation in the pilot program put FMCSA at risk of potentially not meeting its goals for providing an adequate and representative sample of Mexico-domiciled carriers and inspections necessary to assess the pilot program's impact on motor carrier safety, and would prohibit us from making reliable statistical projections. Additionally, FMCSA's oversight mechanisms did not ensure full compliance with pilot program requirements, and certain monitoring mechanisms were still in development at the time of our interim audit.

RESULTS IN BRIEF

During the course of the pilot program, FMCSA established sufficient monitoring and enforcement activities to comply with the 34 distinct requirements set forth in Section 350(a).⁸ FMCSA was not able to fully comply with one requirement for conducting 50 percent of PASAs on site in Mexico. While the Agency conducted only 38 percent of the PASAs on site, concerns for the safety and security of personnel conducting operations prevented full compliance. Therefore, we determined that FMCSA made reasonable efforts to conduct PASAs in Mexico. Additionally, FMCSA took reasonable actions to implement the nine recommendations we made in our initial and interim pilot program audits for improving its monitoring and enforcement activities to ensure that pilot program participants comply with safety laws and regulations.

FMCSA established a sufficient mechanism, through an internal analysis of carrier safety data, to determine whether the pilot program had adverse effects on motor carrier safety. FMCSA reviewed carrier safety data—such as vehicle and driver out-of-service rates, crash rates, and safety ratings—to evaluate the impact of the pilot program on safety. The Agency concluded that pilot program participant carriers, as well as Mexico-domiciled and Mexican-owned carriers with existing authority to operate in the United States, performed no worse than United States and Canadian motor carriers. Accordingly, at the end of the pilot program, FMCSA converted 9 of 13 participant carriers that had pilot program permanent motor carrier certificates of registration to standard motor carrier operating authority. FMCSA also converted the remaining four participant carriers that had pilot program provisional motor carrier certificates of registration to provisional motor carrier operating authority pending successful completion of a compliance review. We confirmed FMCSA's conclusions regarding participant carriers' safety performance.

⁷ *Increased Participation and Improved Oversight Mechanisms Would Benefit the NAFTA Pilot Program* (OIG Report Number MH-2012-169), Aug. 16, 2012.

⁸ See exhibit B for a complete list of Section 350(a) requirements.

FMCSA lacked an adequate number of Mexico-domiciled pilot program carriers to yield statistically valid findings for the pilot program. According to FMCSA officials, the termination of the previous demonstration project, the temporary status of the pilot program, increased interest in existing types of operating authorities, and lack of established business relationships in the United States resulted in less interest in the pilot program. Because the pilot program lacked an adequate number of participants, we could not determine with confidence whether the 15 carriers are representative.⁹ Without being able to determine the representativeness of the 15 carriers, one cannot project the safety performance for the population of Mexico-domiciled carriers that may qualify for long-haul operating authority in the future.

We are not making recommendations to improve FMCSA's oversight of the pilot program at this time, as FMCSA formally ended the pilot program on October 10, 2014.

FMCSA IMPLEMENTED ADEQUATE PILOT PROGRAM MONITORING AND ENFORCEMENT ACTIVITIES TO ENSURE CARRIER COMPLIANCE WITH LAWS AND REGULATIONS

FMCSA established sufficient monitoring and enforcement activities for its pilot program to ensure compliance with Section 350(a) requirements and to address recommendations from our previous audits of the pilot program. In our August 2011 initial audit and August 2012 interim audit, we reported that FMCSA's monitoring and enforcement activities did not ensure full compliance with pilot program requirements and that FMCSA was still developing some oversight mechanisms. During this current review, we determined that FMCSA took reasonable actions to implement all nine recommendations we made in our initial and interim reports for improving FMCSA's monitoring and enforcement activities (see table 2 for a list of our prior recommendations).

⁹ A total of 15 carriers enrolled in the pilot program. However, at the end of the pilot program, one carrier had withdrawn, and one carrier had its pilot program operating authority revoked, resulting in only 13 participant carriers.

Table 2. OIG Pilot Program Recommendations

Initial Report (August 2011)

Finalize plans for how FMCSA will comply with Section 350(a) requirements to conduct half of PASAs and compliance reviews in Mexico.

Issue site-specific plans, or an alternative plan, for coordinating with United States Customs and Border Protection and the States to ensure that pilot program drivers and trucks are inspected at the border.

Establish a system to verify driver and truck eligibility for the pilot program.

Issue an implementation plan for using electronic monitoring devices in the pilot program.

Conduct pilot program training for inspection and enforcement personnel at the border and within the United States.

Interim Report (August 2012)

Revise FMCSA's traffic and road sign testing policy and procedures to (a) require English responses to questions about traffic and road signs, (b) require testing of all 21 traffic and road signs used for the PASA test, (c) add a height clearance sign to the traffic and road sign test, and (d) provide training and guidance on traffic and road sign testing to all enforcement officials.

Revise FMCSA's quality assurance procedures for PASAs to ensure that field supervisors and new entrant specialists validate the Agency's verification of Secretaria de Comunicaciones y Transporte (SCT)-tested drivers and ensure accuracy of drug and alcohol statistical summary reports and the accuracy of random drug and alcohol testing pools before approving PASAs.

Revise FMCSA's pilot program monitoring plan to include proactive controls such as periodic checks of electronic monitoring data quality and reporting accuracy.

When appropriate program participation warrants, complete the development of mechanisms for detecting cabotage violations as called for in the electronic monitoring contract.

Source: *FMCSA Generally Complies With Statutory Requirements, but Actions Are Needed Prior To Initiating Its NAFTA Cross-Border Trucking Pilot Program* (OIG Report Number MH-2011-161), Aug. 19, 2011; *Increased Participation and Improved Oversight Mechanisms Would Benefit the NAFTA Pilot Program* (OIG Report Number MH-2012-169), Aug. 16, 2012.

FMCSA substantially complied with the 34 distinct requirements set forth in Section 350(a)¹⁰ as a result of these improved monitoring and enforcement efforts. For example:

- In October 2011, FMCSA issued a plan to its field staff for scheduling PASAs and pilot program carrier compliance reviews, which was intended to help comply with the requirement that 50 percent of these reviews be conducted on site in Mexico. At the end of the pilot program, FMCSA had conducted 7 of

¹⁰ See exhibit B for a complete list of Section 350(a) requirements.

11 (64 percent) of compliance reviews on site in Mexico. However, only 8 of 21 (38 percent) of PASAs were conducted on site in Mexico. According to FMCSA officials, concerns about the safety and security of its personnel prevented full compliance. In some areas where motor carriers were located, the State Department warned of significant organized crime activity, kidnappings, and homicides. In light of these concerns and associated travel restrictions, FMCSA deferred the scheduling of PASAs in Mexico. Our review determined that FMCSA made reasonable efforts to conduct PASAs in Mexico.

- In its 2011 report to Congress on the pilot program, FMCSA stated that it had developed an overall plan for coordinating with United States Customs and Border Protection and the States for inspecting drivers and trucks at the border. Instead of a formal coordination plan, FMCSA implemented an internal inspection policy and used the geo-fencing function¹¹ of its electronic monitoring devices to alert inspectors of approaching vehicles that required inspection. During our site visits to the border crossings, we confirmed this mechanism was working as designed.
- FMCSA installed electronic monitoring devices on pilot program trucks to monitor truck locations, travel times, and general travel patterns to monitor compliance with hours-of-service and prohibited point-to-point transportation¹² in the United States. We verified that the electronic monitoring devices were operational, that a process was in place to mitigate technical difficulties, and that FMCSA was utilizing the electronic monitoring system to identify approaching pilot program vehicles at both ports of entry visited. Although FMCSA had planned to require pilot program carriers to return the electronic monitoring devices, FMCSA officials told us that allowing the carriers to retain the deactivated equipment would be more cost-effective.
- In June 2012, FMCSA issued an updated PASA policy, including English Language Proficiency and traffic and road sign testing guidance. FMCSA provided training on the updated policy and guidance to its staff in August 2012. Although FMCSA did not conduct PASAs during our visits to the inspection sites, we reviewed the training materials and verified training logs to confirm that FMCSA staff had received the guidance.
- In May 2013, FMCSA updated its processes and procedures for conducting PASAs, including those for ensuring carrier compliance with drug and alcohol

¹¹ FMCSA created a geo-fence, or virtual perimeter, at specific points at or near each border port of entry to electronically track pilot program vehicles approaching the ports of entry.

¹² Mexico-domiciled motor carriers are subject to Department of Homeland Security and Department of Transportation requirements and are prohibited from providing domestic point-to-point transportation while operating in the United States.

testing. We contacted eight drug and alcohol consortiums used by participant carriers and confirmed each carrier's enrollment during the pilot program.

- FMCSA established a sufficient process to monitor and identify potential cases of cabotage, or prohibited point-to-point transportation of domestic cargo wholly within the United States. During the pilot program, FMCSA staff reviewed electronic monitoring data reports to monitor and identify potential point-to-point rule violations. The Agency identified and investigated 35 potential violations by pilot program carriers but did not identify any actual violations. We reviewed FMCSA's investigation files and verified that its cabotage investigation process was working as designed.

FMCSA ESTABLISHED A SUFFICIENT MECHANISM TO DETERMINE THE PILOT PROGRAM PARTICIPANTS' IMPACT ON SAFETY

FMCSA established a sufficient mechanism, an internal analysis of carrier safety data, to determine whether the pilot program had adverse effects on motor carrier safety. Our review confirmed FMCSA's conclusion that pilot program participants performed no worse than United States and Canadian motor carriers, as well as Mexico-domiciled and Mexican-owned motor carriers with existing authority to operate within the United States. Our review identified one concern that non-pilot program driver inspections were included in FMCSA's total inspection count, but these additional data were not used in its analysis of driver out-of-service rates and do not alter our conclusion that the participant carriers operated safely during the pilot program.

Pilot Program Participants Performed No Worse Than Other Motor Carrier Groups

FMCSA's internal analysis of carrier data found that pilot program participant carriers, as well as an estimated 1,000 Mexico-domiciled and Mexican-owned motor carriers with existing authority to operate within the United States, performed no worse than United States and Canadian carriers.¹³ To evaluate the impact of the pilot program on safety, FMCSA reviewed carrier safety performance metrics—such as vehicle and driver out-of-service rates, inspections per truck, roadside violations, crash rates, and safety ratings—from the first 32 months of the pilot program (October 14, 2011 to June 20, 2014). During the pilot program, 15 carriers participated in the pilot program with 71 trucks and 56 drivers approved for long-haul operations. These participant carriers were inspected 5,091 times during the period of the preliminary analysis provided by

¹³ FMCSA's internal analysis combined United States and Canadian carriers into one comparison group.

FMCSA. In an effort to collect inspection rate and safety performance data that are comparable to those of non-pilot program carriers, FMCSA's analysis excluded inspections conducted while a carrier had a stage 1 pilot program provisional motor carrier certificate of registration—a period of at least 3 months during which carriers were required to be inspected each time they crossed the border. Because of this exclusion, FMCSA analyzed a total of 2,841 inspections of carriers with stage 2 pilot program provisional motor carrier certificates of registration and stage 3 pilot program permanent motor carrier certificates of registration—during which participant carriers were inspected at a frequency consistent with standard procedures at the southern border.

At the end of the pilot program, FMCSA administratively converted all participant carriers' operating authority. Specifically, FMCSA converted 9 of 13¹⁴ participant carriers that had pilot program permanent motor carrier certificates of registration to standard motor carrier operating authority. FMCSA also converted the remaining four pilot program carriers that had pilot program provisional motor carrier certificates of registration to provisional motor carrier operating authority pending completion of a compliance review.

We conducted our own assessment of participant carriers' out-of-service, inspection, and crash rates, which confirmed FMCSA's conclusions regarding pilot program carriers' safety performance. Our analysis included inspections for the entire duration of the pilot program (October 14, 2011, to October 10, 2014).¹⁵ We also compared the participant carriers' safety performance metrics to those of other motor carrier groups, such as United States, Canadian, certificate,¹⁶ and enterprise carriers.¹⁷ As table 3 shows, pilot program participant carriers had lower driver and vehicle out-of-service rates compared to United States, Canadian, certificate, and enterprise carriers.

¹⁴ A total of 15 carriers enrolled in the pilot program. However, at the end of the pilot program, 1 carrier had withdrawn, and 1 carrier had its pilot program operating authority revoked, resulting in only 13 participant carriers.

¹⁵ FMCSA indicated that it is completing an analysis for the entire pilot program period, but this analysis had not been completed at the time of our audit.

¹⁶ Certificate carriers are Mexico-domiciled companies owned or controlled by United States companies that transport exempt commodities beyond the border commercial zones. These carriers operate under Certificates of Registration obtained before the passage of the 2002 Interim Final Rules implementing NAFTA. FMCSA estimates that 271 certificate carriers currently have operating authority.

¹⁷ Enterprise carriers are Mexican-owned companies domiciled in the United States. These carriers operate in the United States and transport cross-border international cargo that originates in or is destined for a foreign country. These carriers are subject to all United States, State, and local laws pertaining to motor carrier operations and their vehicles. FMCSA estimates that 813 enterprise carriers currently have operating authority.

Table 3. OIG Analysis of Driver and Vehicle Out-of-Service Rates

Carrier Group	Driver Out-of-Service Rates (%)	Vehicle Out-of-Service Rates (%)
Pilot program participants	0.2	8.9
United States carriers	5.3	22.0
Canadian carriers	3.7	12.5
Certificate carriers	1.7	18.0
Enterprise carriers	1.6	17.6

Source: FMCSA data from the Motor Carrier Management Information System from October 14, 2011, to October 10, 2014.

Table 4 shows that pilot program participant carriers were also subject to higher rates of inspection than comparable motor carrier groups.

Table 4. OIG Analysis of Carrier Inspections and Inspection Rates

Carrier Group	Number of Inspections	Inspections Per Truck
Pilot program participants	5,269	45.1*
United States carriers	14,403,547	2.3
Canadian carriers	474,887	2.4
Certificate carriers	31,819	7.9
Enterprise carriers	128,212	5.1

Source: FMCSA data from the Motor Carrier Management Information System from October 14, 2011, to October 10, 2014.

* To confirm FMCSA's internal analysis, we calculated the pilot program participants' inspections per truck using the 2,841 stage 2 & 3 inspections.

We identified one reportable crash that occurred during the pilot program involving a participant carrier's truck. This crash occurred in San Diego, CA, on a private drive and involved a personal vehicle that veered out of its lane and hit the participant carrier's truck. We also identified nine crashes that involved participant carriers' non-pilot program trucks, all of which occurred within the commercial zones, but these crashes are outside the scope of our pilot program evaluation. We could not reasonably assess the impact of crashes on future carrier activity because FMCSA enrolled too few carriers in the program.

FMCSA's Analysis of Pilot Program Safety Included Non-Pilot Program Data but Demonstrates That Participants Operated Safely

FMCSA's total count of pilot program inspections included those of non-pilot program drivers operating pilot program trucks in the commercial zone, but these additional data do not alter our conclusion that participant carriers operated safely during the pilot program. While observing a demonstration of FMCSA's electronic monitoring interface at the Otay Mesa, CA, port of entry, we noticed that a pilot program truck was operating without a pilot program-approved driver. FMCSA stated that it allowed participant carriers to use non-pilot program drivers when operating within the commercial zones, and that its analysis of pilot program vehicle out-of-service rates included inspection data for pilot program vehicles operated by non-pilot program drivers.

Before the pilot program started, FMCSA had projected that it would need at least 4,100 roadside inspections to obtain statistically valid results when detecting differences in violation rates between United States- and Mexico-domiciled carriers.¹⁸ FMCSA reported a total of 5,545 inspections for the pilot program. Our review of FMCSA inspection data for the entire pilot program found that over 27 percent (1,525) of the 5,545 inspections involved pilot program trucks driven by non-pilot program drivers operating within the commercial zones. Out of these 1,525 inspections, 1,236 (81 percent) were Level III driver-only inspections,¹⁹ which evaluated the non-pilot program drivers' safety fitness. If the 1,236 inspections of non-pilot program drivers are removed from the total number of inspections, then the pilot program yielded 4,309 inspections of pilot program trucks, which is still above FMCSA's target of 4,100 inspections. Still, because the pilot program was intended to test the safety of pilot program participant carriers conducting long-haul operations, the most useful inspection data for supporting the carriers' safety performance are data involving pilot program-approved drivers conducting long-haul operations with pilot program-approved trucks.

While FMCSA excluded the non-pilot program drivers from calculations of pilot program driver out-of-service rates, FMCSA officials explained that they wanted to include more data on the operational condition of pilot program trucks, including those operated by non-pilot program drivers. These additional inspections do not alter our conclusion that the 15 participants carriers operated safely during the pilot program.

¹⁸ According to FMCSA, a statistically valid result would be a difference in violation rate of 2 percentage points or greater, with 90-percent confidence.

¹⁹ A Level III inspection is a driver/credential inspection, including an examination of the driver's license, medical examiner's certificate, record of duty status, and hours of service.

THE PILOT PROGRAM LACKED AN ADEQUATE SAMPLE TO PROJECT SAFETY PERFORMANCE OF LONG-HAUL OPERATIONS BY MEXICO-DOMICILED MOTOR CARRIERS

FMCSA's pilot program lacked an adequate number of Mexico-domiciled participant carriers to yield statistically valid findings for the pilot program. Because FMCSA lacked an adequate number of participants, we could not determine with confidence whether the 15 carriers are representative. Without being able to determine the representativeness of the 15 carriers, one cannot project the safety performance for the population of Mexico-domiciled carriers that may qualify for long-haul operating authority in the future.

The Pilot Program Lacked an Adequate Number of Participant Carriers To Determine Whether the Sample Was Representative

Although FMCSA made an effort to promote the 3-year pilot program, the number of participant carriers was not sufficient to yield statistically valid findings for the pilot program. During the program, 37 carriers applied for authority to participate. However, only 15 total carriers were granted permission to participate, and 2 of these 15 carriers either withdrew or had their pilot program operating authority revoked, resulting in only 13 participant carriers at the end of the pilot program. The act requires pilot program plans to have enough participants to yield statistically valid findings,²⁰ but the pilot program's sample of 15 carriers was considerably smaller than the 46 carriers that FMCSA originally estimated it would need.

FMCSA's April 13, 2011, pilot program proposal calculated that 46 participant carriers would be needed to achieve the target of 4,100 inspections within 3 years. FMCSA based this calculation on the assumption that pilot program participants would perform, on average, one long-haul border crossing per week per truck and would have, on average, two trucks participating in the pilot program. FMCSA also stated that if participating carriers performed more crossings per week or enrolled more vehicles, then fewer carriers would be needed for the program.

FMCSA officials stated that termination of the previous demonstration project, the temporary status of the pilot program, and increased interest in the Agency's enterprise operating authority resulted in lower levels of interest in the pilot program. FMCSA officials also pointed out that Mexican long-haul authority only

²⁰ Section 6901 of the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act requires FMCSA to conduct the pilot program in compliance with Title 49 United States Code Section 31315(c). Under this statute, pilot program plans must include certain elements, including a reasonable number of participants to yield statistically valid findings. In addition, Title 49 Code of Federal Regulations Section 381.400(d) states that the number of participants in a pilot program must be large enough to ensure statistically valid findings.

allows transportation of international cargo, and Mexican motor carriers generally do not have established business relationships in the United States to transport freight back to Mexico that would make long-haul operations profitable.

While the 15 pilot program participants did not raise concerns regarding safety, the sample was too small for us to produce statistically reliable estimates. Because FMCSA lacked an adequate number of participants, we could not determine with confidence whether the 15 carriers are representative.²¹ Without an adequate and representative sample, one cannot project the safety performance for an unknown population of Mexico-domiciled carriers that may be granted long-haul operating authority in the future.

During our review, we performed other analyses to determine whether the 15 pilot program participant carriers were a representative sample. For example, we compared the participant carriers' business characteristics (such as form of business, type of registration, and United States operating status) to those of the applicants not chosen for the pilot program—in order to identify any statistically significant differences between the groups. However, to yield reliable results, the statistical test needs to have a minimum expected number of five carriers in each business characteristic group—a condition that was not met for three carrier business characteristics (form of business, type of registration and United States operating status).

Most Pilot Program Activity Was Attributed to Two Carriers and Occurred in the Commercial Zone, Making Any Projection of Safety Unreliable

During the pilot program, 90 percent (25,630 out of 28,225) of the border crossings and 80 percent (4,473 out of 5,545) of the inspections conducted were attributed to only 2 carriers. This skewed distribution of activity makes a statistical projection about the ability of Mexico-domiciled carriers to operate safely beyond the commercial zones along the United States-Mexico border unreliable.

For example, according to an FMCSA official, the most active carrier in the pilot program primarily made deliveries of Toyota parts to a location in the commercial zone within 2 miles of the border. According to preliminary FMCSA data as of June 15, 2014, Mexico-domiciled motor carrier Servicio de Transporte Internacional y Local (STIL) made 13,598 trips into the United States, but only 99 trips involved operations outside of the commercial zone, and only 18 inspections were conducted during these 99 long-haul trips.

²¹ A sample size of 15 motor carriers would be enough to estimate an unknown prevalence of an attribute with 90-percent confidence and 10-percent precision if the universe size of Mexico-domiciled carriers likely to exist in future long-haul operations were only 18 carriers. This is less than half the size of the applicant pool of 37 carriers who were interested in participating in the pilot program.

FMCSA also tracked mileage accrued by the pilot program carriers using data collected from the electronic monitoring devices installed on each truck. According to FMCSA, pilot program carriers traveled 1.5 million miles during the pilot program. However, only 255,392 of these miles (17 percent) were accrued while traveling outside of the four border States.²² For the four border States, FMCSA did not differentiate between mileage totals within the commercial zones and those beyond the commercial zones. As a result, we were unable to determine what percentage of the total mileage accrued could be attributed to long-haul operations.

CONCLUSION

FMCSA initiated the pilot program to test and demonstrate the ability of Mexico-domiciled motor carriers to operate safely beyond the commercial zones along the United States-Mexico border. In response to our initial and interim report recommendations, FMCSA improved its monitoring and enforcement activities for the pilot program to ensure compliance with Section 350(a) requirements. FMCSA concluded that pilot program participant carriers, as well as Mexico-domiciled and Mexican-owned carriers with existing authority to operate in the United States, performed no worse than United States and Canadian motor carriers. However, the pilot program lacked an adequate and representative sample of participant carriers to project these results across the universe of Mexico-domiciled carriers likely to engage in cross-border operations. FMCSA indicated that it will decide what actions to take in regards to cross-border trucking long-haul operations once we issue this report.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided a draft of this report to FMCSA on December 5, 2014. FMCSA provided a formal response to our draft report on December 9, 2014, which is included in the appendix to this report. In its response, FMCSA stated that it believes the pilot program provided sufficient and representative information on future participation. According to FMCSA, it analyzed the safety records of not only the 15 pilot program participant carriers but also more than 1,000 Mexico-domiciled certificate carriers and Mexican-owned enterprise carriers. As a result, FMCSA states that it was able to achieve statistically valid findings that support the pilot program analysis and conclusions. While we verified the calculations used by FMCSA to assess the performance data for enterprise and certificate carriers, we did not test the hypothesis that these groups were similar in safety performance, as Section 6901 of the U.S. Troop Readiness, Veterans' Care,

²² The four southern border States are Texas, New Mexico, Arizona, and California.

Katrina Recovery, and Iraq Accountability Appropriations Act limited our audit scope to pilot program applicants and participants. Further, FMCSA contends that the pilot program participants are representative of Mexican carriers likely to engage in long-haul trucking in terms of carrier size and safety performance. As support, FMCSA presented a chart that shows the number of trucks for participants and Mexico-wide carriers. However, we maintain that a test for a statistically significant difference between these two groups would be unreliable because of the small number of participants. Finally, FMCSA stated that it will submit its full analysis of the pilot program to Congress in early 2015.

We appreciate the courtesies and cooperation of Department of Transportation and Federal Motor Carrier Safety Administration representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-5630 or Kerry R. Barras, Program Director, at (817) 978-3318.

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cc: DOT Audit Liaison, M-1
FMCSA Audit Liaison, MCPRS

EXHIBIT A. OBJECTIVES, SCOPE, AND METHODOLOGY

We conducted our work from July 2014 through December 2014 in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our audit objectives were to determine whether (1) Federal and State monitoring and enforcement activities are sufficient to ensure that participants in the pilot program are in compliance with all applicable laws and regulations, (2) the Department has established sufficient mechanisms to determine whether the pilot program is having any adverse effects on motor carrier safety, and (3) the pilot program consists of an adequate and representative sample of Mexico-domiciled carriers likely to engage in cross-border operations beyond the United States municipalities and commercial zones on the United States-Mexico border.

To determine whether monitoring and enforcement activities were sufficient to ensure that pilot program participants complied with applicable laws and regulations, we relied on our prior work and followed up on our prior audit recommendations. For each recommendation, we evaluated FMCSA's progress in implementing its planned actions. We observed FMCSA inspections of motor carriers operating at the border in Otay Mesa, CA, and, El Paso, TX, the two most active ports in the pilot program. We interviewed FMCSA personnel to gauge their understanding of vehicle and driver inspection procedures, and to resolve any differences we observed between planned and actual inspection procedures.

To assess whether the Department established sufficient mechanisms to determine whether the pilot program adversely affected motor carrier safety, we conducted an independent analysis of the performance data FMCSA used to evaluate pilot program safety, and identified key business characteristics of the participant and applicant groups (business type, fleet size, etc.). We verified the calculations used by FMCSA to assess the performance data for enterprise and certificate carriers, but we did not assess whether these groups were comparable to other Mexico-domiciled and Mexican-owned carriers. We interviewed FMCSA officials to discuss their plans for future cross-border operations.

To determine whether the pilot program consists of a representative and adequate sample of Mexico-domiciled carriers, we evaluated the participant carriers and potential applicants to determine if the participants provided a representative sample of Mexican carriers that were interested in operating in long-haul operations. Our statistician evaluated the sample for statistical adequacy.

EXHIBIT B. REQUIREMENTS OF PUBLIC LAW 107-87, SECTION 350(a)

No.	Reference	Requirement
	§350(a)	(a) No funds limited or appropriated in this Act may be obligated or expended for the review or processing of an application by a Mexican motor carrier for authority to operate beyond United States municipalities and commercial zones on the United States-Mexico border until the Federal Motor Carrier Safety Administration—
1	§350(a)(1)(A)	requires a safety examination of such motor carrier to be performed before the carrier is granted conditional operating authority to operate beyond United States municipalities and commercial zones on the United States-Mexico border;
	§350(a)(1)(B)	requires the safety examination to include—
2	§350(a)(1)(B)(i)	verification of available performance data and safety management programs;
3	§350(a)(1)(B)(ii)	verification of a drug and alcohol testing program consistent with part 40 of title 49, Code of Federal Regulations;
4	§350(a)(1)(B)(iii)	verification of that motor carrier's system of compliance with hours-of-service rules, including hours-of-service records;
5	§350(a)(1)(B)(iv)	verification of proof of insurance;
6	§350(a)(1)(B)(v)	a review of available data concerning that motor carrier's safety history, and other information necessary to determine the carrier's preparedness to comply with Federal Motor Carrier Safety rules and regulations and Hazardous Materials rules and regulations;
7	§350(a)(1)(B)(vi)	an inspection of that Mexican motor carrier's commercial vehicles to be used under such operating authority, if any such commercial vehicles have not received a decal from the inspection required in subsection (a)(5);
8	§350(a)(1)(B)(vii)	an evaluation of that motor carrier's safety inspection, maintenance, and repair facilities or management systems, including verification of records of periodic vehicle inspections;
9	§350(a)(1)(B)(viii)	verification of drivers' qualifications, including a confirmation of the validity of the Licencia de Federal de Conductor of each driver of that motor carrier who will be operating under such authority; and
10	§350(a)(1)(B)(ix)	an interview with officials of that motor carrier to review safety management controls and evaluate any written safety oversight policies and practices.
	§350(a)(1)(C)	requires that—
11	§350(a)(1)(C)(i)	Mexican motor carriers with three or fewer commercial vehicles need not undergo on-site safety examination; however 50 percent of all safety examinations of all Mexican motor carriers shall be conducted onsite; and
12	§350(a)(1)(C)(ii)	such on-site inspections shall cover at least 50 percent of estimated truck traffic in any year.
13	§350(a)(2)	requires a full safety compliance review of the carrier consistent with the safety fitness evaluation procedures set forth in part 385 of title 49, Code of Federal Regulations, and gives the motor carrier a satisfactory rating, before the carrier is granted permanent operating authority to operate beyond United States municipalities and commercial zones on the United States-Mexico border, and requires that any such safety compliance review take place within 18 months of that motor carrier being granted conditional operating authority, provided that—

No.	Reference	Requirement
14	§350(a)(2)(A)	Mexican motor carriers with three or fewer commercial vehicles need not undergo onsite compliance review; however 50 percent of all compliance reviews of all Mexican motor carriers shall be conducted on-site; and
15	§350(a)(2)(B)	any Mexican motor carrier with 4 or more commercial vehicles that did not undergo an on-site safety exam under (a)(1)(C), shall undergo an on-site safety compliance review under this section.
16	§350(a)(3)	requires Federal and State inspectors to verify electronically the status and validity of the license of each driver of a Mexican motor carrier commercial vehicle crossing the border;
17	§350(a)(3)(A)	for every such vehicle carrying a placardable quantity of hazardous materials;
18	§350(a)(3)(B)	whenever the inspection required in subsection (a)(5) is performed; and
19	§350(a)(3)(C)	randomly for other Mexican motor carrier commercial vehicles, but in no case less than 50 percent of all other such commercial vehicles.
20	§350(a)(4)	gives a distinctive Department of Transportation number to each Mexican motor carrier operating beyond the commercial zone to assist inspectors in enforcing motor carrier safety regulations including hours-of-service rules under part 395 of title 49, Code of Federal Regulations;
21	§350(a)(5)	requires, with the exception of Mexican motor carriers that have been granted permanent operating authority for three consecutive years—
22	§350(a)(5)(A)	inspections of all commercial vehicles of Mexican motor carriers authorized, or seeking authority to operate beyond United States municipalities and commercial zones on the United States-Mexico border that do not display a valid Commercial Vehicle Safety Alliance inspection decal, by certified inspectors in accordance with the requirements for a Level I Inspection under the criteria of the North American Standard Inspection (as defined in section 350.105 of title 49, Code of Federal Regulations), including examination of the driver, vehicle exterior and vehicle under-carriage;
23	§350(a)(5)(B)	a Commercial Vehicle Safety Alliance decal to be affixed to each such commercial vehicle upon completion of the inspection required by clause (A) or a re-inspection if the vehicle has met the criteria for the Level I inspection; and
24	§350(a)(5)(C)	that any such decal, when affixed, expire at the end of a period of not more than 90 days, but nothing in this paragraph shall be construed to preclude the Administration from requiring reinspection of a vehicle bearing a valid inspection decal or from requiring that such a decal be removed when a certified Federal or State inspector determines that such a vehicle has a safety violation subsequent to the inspection for which the decal was granted.
25	§350(a)(6)	requires State inspectors who detect violations of Federal motor carrier safety laws or regulations to enforce them or notify Federal authorities of such violations;
26	§350(a)(7)(A)	equips all United States-Mexico commercial border crossings with scales suitable for enforcement action; equips 5 of the 10 such crossings that have the highest volume of commercial vehicle traffic with weigh-in-motion (WIM) systems; ensures that the remaining 5 such border crossings are equipped within 12 months; requires inspectors to verify the weight of each Mexican motor carrier commercial vehicle entering the United States at said WIM equipped high volume border crossings; and
27	§350(a)(7)(B)	initiates a study to determine which other crossings should also be equipped with weigh-in-motion systems;

No.	Reference	Requirement
28	§350(a)(8)	the Federal Motor Carrier Safety Administration has implemented a policy to ensure that no Mexican motor carrier will be granted authority to operate beyond United States municipalities and commercial zones on the United States-Mexico border unless that carrier provides proof of valid insurance with an insurance company licensed in the United States;
29	§350(a)(9)	requires commercial vehicles operated by a Mexican motor carrier to enter the United States only at commercial border crossings where and when a certified motor carrier safety inspector is on duty and where adequate capacity exists to conduct a sufficient number of meaningful vehicle safety inspections and to accommodate vehicles placed out-of-service as a result of said inspections.
	§350(a)(10)	publishes—
30	§350(a)(10)(A)	interim final regulations under section 210(b) of the Motor Carrier Safety Improvement Act of 1999 (49 U.S.C. 31144 note) that establish minimum requirements for motor carriers, including foreign motor carriers, to ensure they are knowledgeable about Federal safety standards, that may include the administration of a proficiency examination;
31	§350(a)(10)(B)	interim final regulations under section 31148 of title 49, United States Code, that implement measures to improve training and provide for the certification of motor carrier safety auditors;
32	§350(a)(10)(C)	a policy under sections 218(a) and (b) of that Act (49 U.S.C. 31133 note) establishing standards for the determination of the appropriate number of Federal and State motor carrier inspectors for the United States-Mexico border;
33	§350(a)(10)(D)	a policy under section 219(d) of that Act (49 U.S.C. 14901 note) that prohibits foreign motor carriers from leasing vehicles to another carrier to transport products to the United States while the lessor is subject to a suspension, restriction, or limitation on its right to operate in the United States; and
34	§350(a)(10)(E)	a policy under section 219(a) of that Act (49 U.S.C. 14901 note) that prohibits foreign motor carriers from operating in the United States that is found to have operated illegally in the United States.

EXHIBIT C. MAJOR CONTRIBUTORS TO THIS REPORT

Name	Title
Kerry R. Barras	Program Director
Anette Soto	Project Manager
Pat Conley	Auditor
Kevin Lynch	Analyst
Petra Swartzlander	Senior Statistician
Marvin Tuxhorn	Senior Auditor
Seth Kaufman	Senior Counsel
Christina Lee	Writer-Editor

APPENDIX. AGENCY COMMENTS



U.S. Department of Transportation

1200 New Jersey Ave., S.E.
Washington, D.C. 20590

**Federal Motor Carrier
Safety Administration**

December 9, 2014

ACTION: Draft Report: FMCSA Adequately Monitored
Its NAFTA Cross-Border Trucking Pilot Program but Lacked a
Representative Sample to Project Overall Safety Performance

FROM: T.F. Scott Darling, III
Acting Administrator

TO: Mitchell Behm
Assistant Inspector General
for Surface Transportation

The Federal Motor Carrier Safety Administration (FMCSA) appreciates the work of the Office of the Inspector General (OIG) to conduct a final audit of the U.S.-Mexico Cross-Border Long-Haul Trucking Pilot Program. We are pleased that the OIG's report acknowledges that the Agency established monitoring and enforcement activities for its Pilot Program to ensure compliance with all requirements and to address recommendations from your previous audits of the Pilot Program. The OIG's audit additionally recognizes that FMCSA established sufficient mechanisms and analysis of carrier safety data to determine whether the Pilot Program had adverse effects on motor carrier safety. Furthermore, it is noted that the OIG's review confirms FMCSA's conclusion that Pilot Program participants demonstrated better safety performance than U.S. and Canadian motor carriers.

FMCSA recognizes that Section 6901 of the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act limited the OIG's analysis to data compiled on the Pilot Program carriers. The OIG's report concludes that FMCSA's Pilot Program lacked an adequate number of Mexico-domiciled participant carriers because the OIG could not determine with confidence whether the 15 Pilot Program carriers are representative of the population of Mexican domiciled motor carriers that may be granted long-haul authority. However, FMCSA believes that the Pilot Program data is, as the chart below indicates, representative of the Mexican motor carriers likely to engage in long-haul trucking in terms of both carrier size and safety performance. The chart below compares the distribution of Pilot Program carriers by size to that of distribution of companies in Mexico.

Number of Trucks	Mexico-wide	Pilot Program Participants*
1-5	82.7%	80.0% (12 out of 15)
6-30	15.1%	6.7% (1 out of 15)
31-100	1.7%	0.0% (0 out of 15)
100+	0.5%	13.3% (2 out of 15)

With respect to the representativeness of the pilot carrier safety performance data, there are a limited number of companies that would profit from transporting goods beyond the commercial zones, and fewer that would have established business relationships that would support transportation beyond the border States. As these motor carriers may not transport domestic freight from point to point in the United States, they must have a product to haul back to Mexico or travel beyond the commercial zones is not profitable. As a result, we believe that the pilot program did, in fact, provide sufficient and representative information on future participation, especially in the short-term.

As noted in the Agency's April and July 2011 Federal Register notices, FMCSA included a review of the safety records of other types of Mexican-controlled operations (Enterprise and Certificate carriers') safety records for this same 3-year period. These operations allow for Mexican-controlled vehicles to operate long-haul into the U.S. As a result, FMCSA examined safety data from a population of more than 1,000 Mexico-domiciled (Certificate) or Mexican-owned (Enterprise) motor carriers that conducted long-haul transportation beyond the commercial zones during the Pilot Program period. This included 351 Enterprise carriers that received authority during this same 3-year period.

FMCSA believes this robust set of data to be representative of carriers likely to operate in long-haul operations, FMCSA was able to achieve statistically valid findings regarding the performance of Mexico-domiciled and Mexican-owned long-haul motor carriers, which support the Pilot Program analysis and conclusions. Based on this data, FMCSA finds that the records of these carriers indicate that they are as safe, and, in most metrics safer, than U.S. and Canadian motor carriers. This full analysis will be conveyed in FMCSA's Report to Congress which will be submitted in early 2015.

Again, we thank the OIG for its timely report and its advice throughout the Pilot Program. Should you have any questions, or need additional information regarding our response, please contact William A. Quade, Associate Administrator for Enforcement, at (202) 366-8163.

Appendix. Agency Comments