

***PUBLIC NOTICE – ALL INTERESTED PARTIES***

**ENVIRONMENTAL ASSESSMENT**

**Federal Motor Carrier Safety Administration  
For**

**Pilot Program on NAFTA Long-Haul Trucking Provisions  
Docket Number FMCSA-2011-0097**

The FMCSA's environmental assessment (EA) was prepared in accordance with FMCSA's NEPA Implementing Procedures and Policy for Considering Environmental Impacts (FMCSA Order 5601.1) and complies with the National Environmental Policy Act of 1969 (P.L. 91-190) and the Council of Environmental Quality Regulations dated 28 November 1978 (40 CFR parts 1500-1508).

This environmental assessment serves as a concise public document to briefly provide sufficient evidence and analysis for determining the need to prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI).

This environmental assessment concisely describes the rulemaking action, the need for the proposal, the alternatives, and the environmental impacts of the proposal and alternatives. This environmental assessment also contains a comparative analysis of the preferred alternative, and a list of the agencies and persons consulted during the EA preparation.

7/5/2011



Date

Michael M. Johnsen, Environmental Program Analyst

7/5/2011

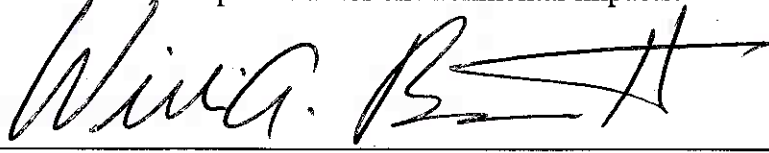


Date

Larry W. Minor, Associate Admin. Policy and Program Development

In reaching my decision/recommendation on the FMCSA's action, I have considered the information contained in this EA on the potential for environmental impacts.

7/6/2011



Date

William A. Bronrott, Deputy Administrator for FMCSA

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**Pilot Program on NAFTA Long-Haul Trucking Provisions**

**Docket Number FMCSA-2011-0097**

**DRAFT ENVIRONMENTAL ASSESSMENT**

**U.S. Department of Transportation**

**Federal Motor Carrier Safety Administration**

**Washington, DC**

**July 2011**

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**LIST OF ACRONYMS AND ABBREVAITIONS**

|                  |  |
|------------------|--|
| ABS              | antilock braking system                        |
| BLS              | Bureau of Labor Statistics                     |
| BTS              | Bureau of Transportation Statistics            |
| CAA              | Clean Air Act                                  |
| CDLIS            | Commercial Driver's License Information System |
| CEQ              | Council on Environmental Quality               |
| CFR              | Code of Federal Regulations                    |
| CMV              | commercial motor vehicle                       |
| CMVSS            | Canadian Motor Vehicle Safety Standard         |
| CO               | carbon monoxide                                |
| CO <sub>2</sub>  | carbon dioxide                                 |
| CO <sub>2e</sub> | CO <sub>2</sub> -equivalent                    |
| CVSA             | Commercial Vehicle Safety Alliance             |
| DHS              | Department of Homeland Security                |
| DOT              | U.S. Department of Transportation              |
| DPM              | diesel particulate matter                      |
| EA               | Environmental Assessment                       |
| EIS              | Environmental Impact Statement                 |
| EOBR             | electronic on-board recording device           |
| EPA              | U.S. Environmental Protection Agency           |
| FMCSA            | Federal Motor Carrier Safety Administration    |
| FMCSRs           | Federal Motor Carrier Safety Regulations       |
| FMVSSs           | Federal Motor Vehicle Safety Standards         |
| FR               | Federal Register                               |
| GDP              | gross domestic product                         |
| GHG              | greenhouse gas                                 |
| GPS              | global positioning system                      |
| HDDV             | heavy-duty diesel vehicle                      |
| IACP             | International Association of Chiefs of Police  |
| ICC              | Interstate Commerce Commission                 |
| LF               | Licencia Federal de Conductor                  |
| MCSAC            | Motor Carrier Safety Advisory Committee        |
| NAA              | nonattainment area                             |
| NAAQS            | National Ambient Air Quality Standards         |
| NAFTA            | North American Free Trade Agreement            |
| NEPA             | National Environmental Policy Act              |
| NHTSA            | National Highway Traffic Safety Administration |
| NO               | nitric oxide                                   |
| NO <sub>2</sub>  | nitrogen dioxide                               |
| OIG              | Office of Inspector General                    |
| PAH              | polycyclic aromatic hydrocarbons               |
| PASA             | Pre-Authorization Safety Audit                 |
| Pb               | lead   |
| PM               | particulate matter                             |
| POM              | polycyclic organic matter                      |

|                 |                                |
|-----------------|--------------------------------|
| SIP             | State Implementation Plan      |
| SO <sub>2</sub> | sulfur dioxide                 |
| U.S.            | United States                  |
| USC             | United States Code             |
| USDA            | U.S. Department of Agriculture |
| VMT             | vehicle miles traveled         |
| VOC             | volatile organic compounds     |

## 1. PURPOSE OF AND NEED FOR ACTION

### 1.1 INTRODUCTION

The National Environmental Policy Act of 1969 (NEPA)<sup>1</sup> and the Council on Environmental Quality's (CEQ) NEPA implementing regulations (40 CFR parts 1500-1508) establish policies and procedures that ensure environmental information is available to decision makers, regulatory agencies, and the public before Federal actions are implemented. The Federal Motor Carrier Safety Administration (FMCSA) has prepared this draft environmental assessment (EA) in accordance with NEPA, CEQ implementing regulations, FMCSA's NEPA Order 5610.1 (*NEPA Implementing Procedures and Policy for Considering Environmental Impacts*), and other applicable requirements, to analyze the potential environmental impacts of a pilot program on the implementation of the North American Free Trade Agreement (NAFTA) long-haul trucking provisions. FMCSA will, through the EA process, determine if there is a need for a more extensive analysis through an Environmental Impact Statement (EIS) or whether the potential impact to the environment and related areas from the action does not rise to that significance.

The pilot program would test and demonstrate the ability of Mexico-domiciled motor carriers to operate safely in the United States (U.S.) beyond the municipalities and commercial zones along the U.S.-Mexico border. The pilot program is part of FMCSA's phased implementation of NAFTA cross-border long-haul trucking provisions and of the 2002 Presidential order lifting the statutory moratorium on the granting of authority to Mexico-domiciled motor carriers to engage in cross-border, long-haul operations into the United States. The pilot program would allow approved Mexico-domiciled motor carriers to operate throughout the U.S. for up to three years. Participating Mexican carriers and drivers would be required to comply with all applicable U.S. laws and regulations, including those concerned with motor carrier safety, customs, immigration, drug and alcohol, vehicle registration, taxation, and fuel taxation. The safety of participating carriers would be tracked closely by FMCSA with input from a subcommittee of the Motor Carrier Safety Advisory Committee (MCSAC).<sup>2</sup>

### 1.2 BACKGROUND

The FMCSA is the administration within the U.S. Department of Transportation (DOT) responsible for ensuring the safe operation of commercial motor vehicles (i.e., trucks and buses) within the U.S. As part of its responsibilities, FMCSA registers motor carriers to operate commercial motor vehicles (CMVs) within the U.S., including motor carriers from foreign countries. FMCSA is also charged with promulgating regulations necessary to ensure the safe

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<sup>1</sup> 42 United States Code (U.S.C.) 4321 *et seq.*

<sup>2</sup> The MCSAC was established by the Secretary of Transportation (Secretary) on September 8, 2006, and is charged with providing advice and recommendations to the FMCSA's Administrator on motor carrier safety programs and motor carrier safety regulations. The MCSAC is comprised of nineteen experts from the motor carrier industry, safety advocates, and safety enforcement sectors.

operation of Mexico-domiciled motor carriers in the U.S. consistent with NAFTA and other statutory requirements.

Although FMCSA is required to grant operating authority to all domestic and foreign motor carriers willing and able to comply with its regulations, other restrictions imposed by Congress and by past Executive Branch actions have significantly limited Mexico-domiciled motor carrier long-haul operations in the U.S. Until NAFTA was negotiated in the early 1990s, a moratorium was in place for granting Mexico-domiciled motor carriers authority to transport property or passengers within the U.S. On December 18, 1992, the U.S. entered into NAFTA with Canada and Mexico, and established a free-trade zone encompassing these three countries.

Under the terms of NAFTA, the U.S., Mexico, and Canada agreed to remove certain existing barriers to the cross-border operations of motor carriers, and the U.S. was permitted to adopt measures relating to safety in approving the provision of services or importation of goods coming into the country. One such measure was that Mexico-domiciled motor carriers had to comply with all DOT safety and insurance regulations in order for FMCSA to issue operating certificates. The President and Congress committed the U.S. to a timetable for modifying the moratorium to allow Mexico-domiciled carriers engaged in the transportation of international cargo to operate within the four Border States (Arizona, California, New Mexico, and Texas) beginning in December 1995 and throughout the U.S. on January 1, 2000. Due to safety concerns, in December 1995, President Clinton indefinitely delayed the modification of the moratorium for Mexico-domiciled long-haul carriers to operate throughout the U.S. In 1998, Mexico filed a claim against the U.S., claiming that the U.S.'s refusal to grant authority to Mexican trucking companies to conduct long-haul operations in the U.S. constituted a breach of the obligations established in NAFTA. In February 2001, a NAFTA arbitration panel ruled that this action was contrary to the treaty agreement which meant that Mexico could impose trade sanctions against the U.S. unless the U.S. fulfilled its NAFTA obligations. Shortly after the panel issued its ruling, President Bush announced the U.S.'s intent to comply with the terms of NAFTA by modifying the moratorium, pursuant to his statutory authority.

In anticipation of this Presidential action, FMCSA initiated a rulemaking process to revise existing motor carrier safety regulations to add additional application and oversight procedures for Mexico-domiciled long-haul carriers. While that process was ongoing, Section 350 of the Department of Transportation and Related Agencies Appropriations Act, 2002 [Pub. L. 107-87, 115 Stat. 833, 864, December 18, 2001] was enacted. Section 350 prohibited FMCSA from expending funds appropriated in the Act for processing applications by Mexico-domiciled carriers for U.S. operating authority beyond the border zones, until FMCSA adopted specific additional safety measures. Section 350 directed the DOT Inspector General to complete a border review by December 17, 2001, and verify, among other things, that: (1) there is "adequate capacity" at each border crossing for vehicle safety inspections; (2) there are an adequate number of trained inspectors available to conduct safety inspections of Mexican carriers and all other carriers working in the U.S., and (3) the information infrastructure of the Mexican government is

“sufficiently accurate, accessible, and integrated with that of the U.S. enforcement authorities,” to allow U.S. authorities to verify licenses, registration, and operating authority of Mexico-domiciled motor carriers operating in the U.S.

On March 19, 2002, FMCSA published its application and safety monitoring rules for Mexican long-haul carriers seeking U.S. operating authority, which included the regulatory provisions required by Section 350. Based on a DOT Inspector General report, on November 20, 2002, the Secretary certified that opening the border would not pose an unacceptable safety risk to the American public. President Bush subsequently lifted the moratorium on granting operating authority to Mexico-domiciled long-haul carriers on November 27, 2002.

The FMCSA conducted an EA for the application and safety monitoring rules and issued a Finding of No Significant Impact based on the EA. The EA analyzed the environmental impacts of the regulations, but did not analyze the environmental impacts, including Clean Air Act conformity, of the opening of the border to long-haul Mexican trucking, reasoning that the border opening would not be the result of the regulations, but of the anticipated Presidential order lifting the moratorium. This analysis was subsequently challenged in a lawsuit brought by a number of environmental groups, public interest organizations, and labor unions in the U.S. Court of Appeals for the Ninth Circuit. The Ninth Circuit set aside the regulations, holding that the FMCSA should have analyzed the environmental impacts of the opening of the border to long-haul Mexican trucking because that opening could not have occurred without having those regulations in place.

The United States appealed the Ninth Circuit’s decision to the Supreme Court, and the Court unanimously reversed the Ninth Circuit. In *Department of Transportation v. Public Citizen* (541 U.S. 752, 124 S. Ct. 2204 (2004)), the Supreme Court held that because FMCSA could not countermand the President’s lifting of the moratorium, the agency lacked the discretion to prevent cross-border operations of long-haul Mexican trucks, and therefore, neither NEPA nor the Clean Air Act (CAA) required FMCSA to evaluate the environmental effects of such operations. This was the case, the Court held, notwithstanding the fact that FMCSA’s Section 350 regulations were a prerequisite to its issuance of cross-border operating authority to Mexican long-haul trucks, because the causal connection between the regulations and the entry of long-haul Mexican trucks was insufficient to make FMCSA responsible for considering the environmental effects of entry.

On February 23, 2007 the U.S. announced a demonstration project to implement certain trucking provisions of NAFTA. The demonstration project was initiated on September 6, 2007, after the DOT complied with a number of conditions imposed by section 6901 of the U.S. Troop Readiness, Veterans’ Care, Katrina Recovery, and Iraq Accountability Act, 2007, [Pub. L. 110-28, 121 Stat. 112, 183, May 25, 2007] which provides that before the DOT can obligate or expend any funds to grant authority for Mexico-domiciled trucks to engage in cross-border long-haul operations, the DOT must first test granting such authority through a pilot program that

meets the standards of 49 U.S.C. 31335(c). In accordance with 49 U.S.C. 31315(c), the Secretary has general authority to establish safety measures “that are designed to achieve the level of safety that is equivalent to, or greater than, the level of safety that would otherwise be achieved....” The demonstration project was initially expected to last one year (72 FR 23883, May 1, 2007). On August 6, 2008, FMCSA announced that the demonstration project was being extended from one year to the full three years allowed by 49 U.S.C. 31315(c)(2)(A) (73 FR 45796).

On March 11, 2009, President Obama signed into law the Omnibus Appropriations Act, 2009 [Pub. L. 111-8, 123 Stat. 524, 932, March 11, 2009] that included Section 136 of the Transportation, Housing and Urban Development, and Related Agencies Appropriations Act, 2009 (Division I, Title I of the Omnibus Appropriations Act, 2009). Section 136 prohibited the DOT from expending funds made available in that Act to establish, implement, or continue a cross-border motor carrier pilot program to allow Mexico-domiciled motor carriers to operate in the U.S. beyond the border commercial zones. FMCSA subsequently terminated the cross-border demonstration project that began on September 6, 2007. The Agency ceased processing applications by prospective project participants and took other necessary steps to comply with the provision.

On March 19, 2009, Mexico announced that it was exercising its rights under the 2001 NAFTA arbitration panel decision, to impose retaliatory tariffs for failure to allow Mexico-domiciled carriers to conduct long-haul service into the U.S. These tariffs affect approximately 90 U.S. export commodities at an estimated annual cost of \$2.4 billion. Mexico agreed to suspend 50 percent of the tariffs when a final agreement for a new program is signed by the two countries and the remaining 50 percent of the tariffs when FMCSA approves the first Mexico-domiciled carrier for participation in the pilot program. Currently, most Mexico-domiciled carriers are allowed to operate only within the border commercial zones extending up to 25 miles from the Mexico border into the U.S. Every year, Mexico-domiciled CMVs cross into the U.S. about 4.5 million times. On April 13, 2011, FMCSA issued a notice and request for public comments on the proposed U.S.-Mexico cross-border long-haul trucking pilot program (76 FR 20807, Docket Number FMCSA-2011-0097). As of June 1, 2011, FMCSA received over 2,200 comments or docket submissions in response to the notice. FMCSA will publish a response to these comments in the Federal Register and a copy will appear in the Docket on or about the date this Draft EA is published. There were several comments on the notice regarding environmental impacts, and these comments are addressed in this Draft EA.

### ***1.3 PURPOSE AND NEED***

Under the terms of NAFTA, the U.S., Mexico, and Canada agreed to remove certain barriers to the cross-border operations of CMVs. Specifically, one of the NAFTA provisions required the U.S. to incrementally lift the moratorium on licensing Mexico-domiciled motor carriers to operate beyond the U.S.-Mexico border commercial zones. The purpose of the proposed pilot program is to test and demonstrate the ability of Mexico-domiciled long-haul motor carriers to

operate safely in the U.S. The program is a step in the implementation of the lifting of the moratorium. The pilot program would allow Mexico-domiciled motor carriers to conduct long-haul operations to carry international cargo across the U.S.-Mexico border to their destinations anywhere within the continental U.S. The objective of the pilot program is to collect and evaluate data on the safety performance of Mexico-domiciled carriers interested in and qualified to take advantage of the cross-border long-haul provisions of NAFTA. Based on applicable legal authorities, this pilot program is of limited scope and a prerequisite to allowing for broader cross-border long-haul operations at the U.S.-Mexico border.

#### ***1.4 INCOMPLETE AND UNAVAILABLE INFORMATION***

The CEQ's regulations at 40 CFR 1502.22 require that when there is incomplete information for completing the NEPA process, the Agency should include a statement that such information is incomplete or unavailable and a statement of the relevance of such information.

The analysis conducted in this Draft EA is based on assumptions and projections under a new FMCSA pilot program for Mexico-domiciled long-haul carrier operations in the U.S. These assumptions are described in Section 2.2. However, FMCSA is proposing to implement an extensive monitoring program with in-vehicle tracking devices to address data gaps. For example, FMCSA is proposing to collect data on the U.S. port of entry used by each participating Mexico-domiciled truck, vehicle miles travelled (VMT) in the U.S., and vehicle destination. Data collected under the pilot program would be used to inform subsequent environmental analysis of broader cross-border long-haul operations at the U.S.-Mexico border.

#### ***1.5 SCOPE OF ANALYSIS***

This Draft EA provides an analysis of the potential environmental consequences associated with the implementation of the pilot program. FMCSA is proposing the pilot program with the purpose of gathering data in preparation for a broader opening of the U.S.-Mexico border to Mexico-domiciled long-haul carriers. Any data gathered as part of this EA process will provide the Agency with insights into the pilot program, but will also provide important baseline information necessary to conduct future studies of broader cross-border long-haul trucking operations in the United States. The scope of this document, however, is limited to the direct, indirect, and cumulative environmental effects of the current proposed pilot.

The scope of this Draft EA is informed by the Supreme Court's decision in *Department of Transportation v. Public Citizen (Public Citizen)*. As discussed above, the Court in *Public Citizen* held that because FMCSA could not countermand the President's order lifting the moratorium, the agency lacked the discretion to prevent cross-border operations of long-haul Mexican trucks, and therefore, neither NEPA nor the CAA required FMCSA to evaluate the environmental effects of such operations. The Court reached this conclusion even though Congress had imposed conditions for FMCSA to fulfill as prerequisites to granting authority to Mexican long-haul carriers to operate in the United States.

The Presidential order lifting the moratorium remains in place, and FMCSA still lacks the discretion to countermand that order by completely excluding long-haul cross-border operations of Mexican motor carriers. Thus, this Draft EA will not evaluate the environmental effects of such operations. FMCSA will, of course, implement the lifting of the moratorium in a manner consistent with statutory requirements, including Section 350 and Section 6901, pursuant to which FMCSA proposes to establish the pilot program. Accordingly, what the Agency will review in this EA are the environmental effects of the pilot program requirements on the Mexican truck operations that would take place under that program.

Chapter 1 of this Draft EA offers background information and explains the purpose of, and need for, Agency action. Chapter 2 describes FMCSA's Federal actions and the no-action alternative. Chapter 3 describes both the affected environment and the potential environmental consequences resulting from the action and the no-action alternative. This Draft EA focuses on those resource categories that could be potentially impacted, are of interest to the public, or are important to the Agency decision on: air quality, biological resources, socioeconomics and environmental justice, and public health and safety. Chapter 3 also offers a summary comparison of each alternative's environmental consequences. Chapter 4 lists those agencies and persons with whom FMCSA consulted during this NEPA compliance process. Chapter 5 lists references studied during the development of this document. Chapter 6 lists the preparers and reviewers of this Draft EA.

## **2. DESCRIPTION OF ALTERNATIVES**

### **2.1 OVERVIEW OF ALTERNATIVES**

This section provides an overview of the alternatives FMCSA is considering. Alternative 1, the Proposed Action, is the initiation of the pilot program, and Alternative 2 is the No Action Alternative. These alternatives are further described below. Potential impacts to the environment of these two alternatives are described in Chapter 3.

### **2.2 ALTERNATIVE 1: PROPOSED ACTION**

The Proposed Action is the implementation of the U.S.-Mexico cross-border long-haul trucking pilot program, as described above (76 FR 20807). The pilot program would be used to determine the ability of Mexico-based motor carriers to operate safely in the U.S. beyond the commercial border zones. The pilot program would operate for up to three years and would allow participating Mexico-domiciled motor carriers to conduct long-haul operations to carry international cargo across the U.S.-Mexico border to destinations anywhere within the continental U.S. In order to present a very conservative analysis in this Draft EA, FMCSA assumed that a maximum of 1,000 trucks would participate in the program at any given time.

All designated vehicles and drivers would be approved by FMCSA prior to the participating motor carrier using the vehicles and/or drivers for transportation beyond the commercial zones along the U.S.-Mexico border. FMCSA would submit information on the applicant motor carriers and their drivers designated for the pilot program to the U.S. Department of Homeland Security (DHS) for security screening. Motor carriers and/or drivers that fail DHS's security screening would not be eligible for participation in the pilot program. FMCSA would conduct Pre-Authorization Safety Audit (PASA) reviews of: (1) carriers' safety management programs (vehicle maintenance, drug and alcohol testing programs, driver qualifications files, etc.); (2) driving records for drivers participating in U.S.-Mexico cross-border long haul operations; (3) combined driving records of drivers who would participate in the program (U.S. driving history, Mexico Federal license history, and Mexico State license history); (4) inspection data from each vehicle to be used in the program, including verification of conformance with the Federal Motor Vehicle Safety Standards (FMVSS); (5) results from a test of English language proficiency and knowledge of U.S. traffic laws administered to each driver participating in the pilot program; and (6) a review of all convictions, crashes, and inspections in Mexico, to determine the carrier's safety record.

Participants in this pilot program would proceed through a series of stages prior to issuance of permanent operating authority. Stage 1 would begin when the Mexico-domiciled motor carrier is issued provisional operating authority. The Mexico-domiciled motor carrier's vehicles and drivers would be inspected each time they enter the U.S. for at least three months. This initial period may be extended if the motor carrier does not receive at least three vehicle inspections

during the three-month period. FMCSA would also conduct an evaluation of the Mexico-domiciled motor carrier's performance during Stage 1.

After a minimum of three months of operations in Stage 1, Mexico-domiciled carriers may be permitted to proceed to Stage 2 where the motor carrier's vehicles would be inspected at a rate comparable to other Mexico-domiciled motor carriers that cross the U.S.-Mexico border. The motor carrier's safety data would be monitored to assure the motor carrier is operating in a safe manner. FMCSA would conduct a compliance review on the Mexico-domiciled motor carrier. If the motor carrier obtains a satisfactory safety rating, has no pending enforcement or safety improvement actions, and has operated under its provisional operating authority for at least 18 months, the provisional operating authority will become permanent, moving the carrier into Stage 3. If the Mexico-domiciled motor carrier obtains a less than satisfactory safety rating, FMCSA would take action to suspend and/or revoke the motor carrier's operating authority. Mexico-domiciled motor carriers that participated in the 2007-2009 demonstration project and operated under provisional operating authority in that project would receive credit for the amount of time they operated under this authority in calculating the 18-month provisional operating authority period.

Stage 3 of the pilot program would begin for each Mexico-domiciled motor carrier upon receipt of permanent operating authority. The motor carrier must continue to operate in accordance with the Federal Motor Carrier Safety Regulations (FMCSRs) and the requirements set forth in the pilot program.

FMCSA will not grant operating authority to Mexico-domiciled motor carriers to operate beyond the commercial zones along the U.S.-Mexico border unless the Government of Mexico simultaneously permits comparable authority to be granted to U.S.-domiciled motor carriers to transport international cargo in Mexico.

The Mexico-domiciled motor carrier must maintain a valid Commercial Vehicle Safety Alliance (CVSA) safety decal on each vehicle it enrolls in this pilot program. Any vehicle with a diesel engine to be used by a motor carrier in this pilot program must have an emission control label that indicates the engine conforms to the U.S. Environmental Protection Agency (EPA) regulations applicable to 1998 or later. Alternatively, the motor carrier may present documentation from the engine manufacturer indicating the engine conforms to the EPA regulations applicable to 1998 or later (as described in 40 CFR 86.007-35). Any vehicle used by a Mexico-domiciled motor carrier in this pilot program must also display an FMVSS certification label or Canadian Motor Vehicle Safety Standard (CMVSS) certification label affixed by the original vehicle manufacturer at the time the vehicle was built. A Mexico-domiciled motor carrier may also use a vehicle manufactured for use in Mexico that does not possess an FMVSS or CMVSS label, if the vehicle is of model year 1996 or newer and it is equipped with all the safety equipment and features required by the FMVSSs in effect on the date of manufacture, such as automatic slack adjusters and antilock braking systems (ABS) if

applicable. FMCSA will equip each vehicle approved for use by Mexico-domiciled motor carriers in this pilot program with an electronic monitoring device, such as a global positioning system (GPS) and/or electronic on-board recording device (EOBR), which must be on the vehicle and operational throughout the duration of the pilot program.

Operating authority granted under the proposed pilot program excludes the transportation of placardable quantities of hazardous materials, designated as hazardous under 49 U.S.C. 5103 and required to be placarded under subpart F of 49 CFR part 172. Operating authority granted under the proposed pilot program also excludes the transportation of passengers.

Mexico-domiciled motor carriers are also subject to DHS and U.S. Customs and Border Protection cabotage requirements and are prohibited from providing domestic point-to-point transportation while operating in the U.S.

|  |
|--|
| <p><b>Cabotage</b> is the transport of domestic cargo between two points in the same country by a vehicle registered in another country.</p> |
|--|

The FMCSA would monitor the operational safety of all Mexico-domiciled motor carriers participating in the pilot program. FMCSA would work closely with State commercial motor vehicle safety agencies, the lead Motor Carrier Safety Assistance Program agencies, the International Association of Chiefs of Police, the Commercial Vehicle Safety Alliance, DHS, and others in monitoring participants' operational safety. Field monitoring would include inspections of vehicles, verification of compliance with the terms of the motor carrier's operating authority, driver's license checks, crash reporting, and initiation of enforcement actions, when appropriate.

Based on data collected in the 2007 demonstration project, FMCSA estimates that up to 316 Mexico-domiciled carriers would be both capable of and interested in participating in the pilot project. FMCSA anticipates that each carrier would have, on average, two trucks participating in the program and that each truck would perform, on average, one long-haul border crossing per week. However, to be conservative in the analyses conducted in this Draft EA (especially for the air quality analysis), FMCSA estimates that up to 1,000 trucks could participate in the pilot program at any given time. The air quality analysis uses the very conservative assumption that each truck would cross the border once per day and operate within the U.S. This conservative assumption is used to demonstrate the potential impacts of an absolute maximum number of trucks that could operate under the pilot program. In reality, operations are likely to be much lower than this assumption. The air quality analysis conservatively assumes that all pilot program Mexico-domiciled truck operations represent new trips and do not displace existing cross-border operations of Mexico-domiciled drayage trucks and U.S.-domiciled long-haul trucks.

Four U.S. States border Mexico: California, Arizona, New Mexico, and Texas. There are 23 ports of entry for CMVs entering from Mexico into the U.S. The majority (90 percent) of northbound truck crossings occur in seven ports of entry: Brownsville, Hidalgo, Laredo and El

Paso – Texas; Nogales –Arizona; and Calexico and Otay Mesa – California. Existing operations at the U.S-Mexico border commercial zones are described in more detail in Section 3.1 of this Draft EA.

### ***2.3 ALTERNATIVE 2: NO ACTION ALTERNATIVE***

Under the No Action Alternative, FMCSA would not implement the U.S.-Mexico cross-border long-haul trucking pilot program. Mexico-domiciled carriers would continue to operate in the U.S.-Mexico border commercial zones under existing regulations.

Currently, most goods shipped by truck from Mexico into the U.S. are delivered to locations within the border commercial zones for delivery by U.S.-domiciled motor carriers throughout the U.S. These U.S.-Mexico border commercial zones generally encompass areas extending between 3-20 miles north of U.S. border cities. Most Mexico-domiciled trucks may enter the U.S. to deliver or collect property within these commercial zones, but are not allowed to travel in the U.S. past these zones. Commercial zones exist in the U.S.-Mexico border States of California, Arizona, New Mexico, and Texas. Existing operations at the U.S.-Mexico border commercial zones are described in more detail in Section 3.1 of this Draft EA.

The No Action Alternative serves as the baseline scenario against which environmental impacts associated with the Proposed Action Alternative are compared.

### **3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

This chapter describes the current conditions at the U.S.-Mexico border and then presents the affected environment and the potential environmental impacts that could result from the Proposed Action and the No Action Alternatives. Because FMCSA's analysis addresses non-border-crossing impacts, FMCSA focuses on safety issues, and the environmental issues related to such safety concerns.

#### **3.1 UNITED STATES-MEXICO BORDER ZONE**

##### *3.1.1 Commercial Zones*

Mexico-domiciled motor carriers have been permitted to operate in the U.S.-Mexico commercial zones, known as the "border zone," of municipalities along the U.S.-Mexico border since 1982. These border zones are established geographical areas, as set forth in FMCSA regulations at 49 CFR parts 368 and 387, where interstate commerce is partially exempt from economic regulation. Although commercial zone Mexico-domiciled motor carriers are partially exempt from economic regulation, they are still required to meet the same Federal and State safety standards that apply to other motor carriers. The commercial zones exist throughout the U.S. and vary in size according to the population of the base municipality. Most of the commercial zones extend for 20 miles or less, but the Rio Grande Valley zone, including four Texas counties, and the San Diego zones extend 70 miles. Mexico-domiciled CMVs operating within the U.S. commercial zone must obtain a certificate of registration from the FMCSA. The majority of Mexican trucks entering the U.S.-Mexico border zones are used solely for short-haul cross-border services (often termed "drayage"), i.e., a Mexico-based and owned tractor pulls a trailer from the Mexico side of the border into the U.S. border zone. The trailer, or its cargo, is then transferred to a U.S.-based and owned tractor or tractor-trailer, which then proceeds to its final U.S. destination. Similar commercial zones exist on the Mexico side of the border.

Twenty-three ports of entry handle U.S.-Mexico CMV traffic. Every year, Mexico-domiciled CMVs cross into the U.S. about 4.5 million times. The vast majority of CMVs pass through a small number of the 23 ports of entry. The majority of northbound truck crossings at the U.S.-Mexico border occurred in seven ports of entry: Brownsville, Hidalgo, Laredo and El Paso – Texas; Nogales – Arizona; and Calexico and Otay Mesa – California. Table 3-1 shows annual Mexico to U.S. (northbound) truck volumes by Port of Entry.

**Table 3-1 Annual Mexico to U.S. (Northbound) Truck Volumes by Port of Entry (Fiscal Years 2006-2010)**

| Port Name                  | 2006      | 2007      | 2008      | 2009      | 2010      |
|----------------------------|-----------|-----------|-----------|-----------|-----------|
| Arizona                    |           |           |           |           |           |
| Douglas, AZ                | 27,845    | 27,585    | 24,667    | 25,246    | 25,142    |
| Lukeville, AZ              | 832       | 533       | 448       | 326       | 137       |
| Naco, AZ                   | 3,997     | 4,711     | 2,825     | 1,722     | 2,171     |
| Nogales, AZ                | 288,144   | 291,429   | 308,917   | 273,716   | 312,509   |
| Sasabe, AZ                 | 408       | 309       | 369       | 223       | 6         |
| San Luis, AZ               | 46,184    | 43,869    | 43,967    | 39,952    | 38,639    |
| California                 |           |           |           |           |           |
| Andrade, CA                | 1,777     | 561       | 394       | 329       | -         |
| Calexico East, CA          | 311,008   | 317,588   | 334,672   | 277,938   | 298,647   |
| Otay Mesa/San Ysidro, CA   | 745,974   | 733,163   | 790,175   | 684,307   | 729,178   |
| Tecate, CA                 | 72,617    | 80,247    | 74,014    | 67,609    | 58,273    |
| New Mexico                 |           |           |           |           |           |
| Columbus, NM               | 5,250     | 5,778     | 6,145     | 6,797     | 8,563     |
| Santa Teresa, NM           | 36,950    | 37,681    | 46,587    | 51,500    | 76,798    |
| Texas                      |           |           |           |           |           |
| Brownsville, TX            | 246,124   | 236,494   | 232,495   | 190,440   | 205,619   |
| Del Rio, TX                | 67,064    | 63,389    | 58,732    | 49,439    | 54,822    |
| Eagle Pass, TX             | 96,819    | 99,177    | 103,968   | 84,620    | 92,050    |
| El Paso, TX                | 773,265   | 789,454   | 775,387   | 643,158   | 705,340   |
| Fabens, TX                 | 43        | -         | -         | -         | -         |
| Hidalgo, TX                | 471,224   | 474,646   | 488,588   | 420,537   | 457,457   |
| Laredo, TX                 | 1,526,623 | 1,554,296 | 1,584,331 | 1,372,230 | 1,550,177 |
| Presidio, TX               | 6,616     | 7,414     | 6,316     | 5,999     | 9,248     |
| Progreso, TX               | 30,390    | 38,521    | 45,311    | 45,375    | 43,858    |
| Rio Grande City, TX        | 45,812    | 35,555    | 31,401    | 27,729    | 21,623    |
| Roma, TX                   | 8,506     | 8,071     | 7,775     | 6,946     | 6,480     |
| U.S. - Mexico Border Total | 4,813,472 | 4,850,496 | 4,967,522 | 4,276,138 | 4,696,737 |

Source: U.S. Customs &amp; Border Protection national and field offices.

### *3.1.2 U.S.-Mexico Border Crossing Operations*

All U.S.-Mexico Ports of Entry exhibit some common operational characteristics related to the movement of freight shipments across the border. The current regulations, institutional relationships, and business practices have led to logistics patterns that are unique to the U.S.-Mexico border.

Several entities are typically involved in moving freight across the U.S.-Mexico border. These can include Mexico customs brokers, U.S. customs brokers, drayage truck companies, and Mexico-domiciled long-haul carriers (U.S. long-haul carriers typically do not move loads across the border from the U.S. into Mexico).

Mexican customs brokers prepare the documentation and make the filings required to move goods through Mexican customs in both directions (i.e., U.S. to Mexico and vice versa). Mexico brokers may also prepare the shipper's export declaration (SED) required by the U.S. Bureau of the Census for southbound shipments from the U.S.-Mexico border into Mexico. U.S. customs brokers prepare the documentation and make the filings required to move northbound goods from the U.S.-Mexico border through U.S. customs.

Drayage firms are short-haul truckers, typically moving loads at one end of a trip where the line-haul move is handled by another carrier. At the U.S.-Mexico border, Mexico-domiciled drayage drivers pull trailers across the U.S.-Mexico border in both directions. On northbound moves, loaded trailers are pulled across the border by Mexico-domiciled drayage carriers or Mexico-domiciled long-haul carriers. Agricultural products are typically hauled from Mexico's interior by Mexico-domiciled long-haul carriers who take them across the border to a produce-distribution center in a U.S. commercial zone. Otherwise, trailers are hauled north across the border by Mexico-domiciled drayage trucks, which drop them in a terminal or yard in the commercial zone from which U.S.-domiciled carriers move the loads to their U.S. destinations.

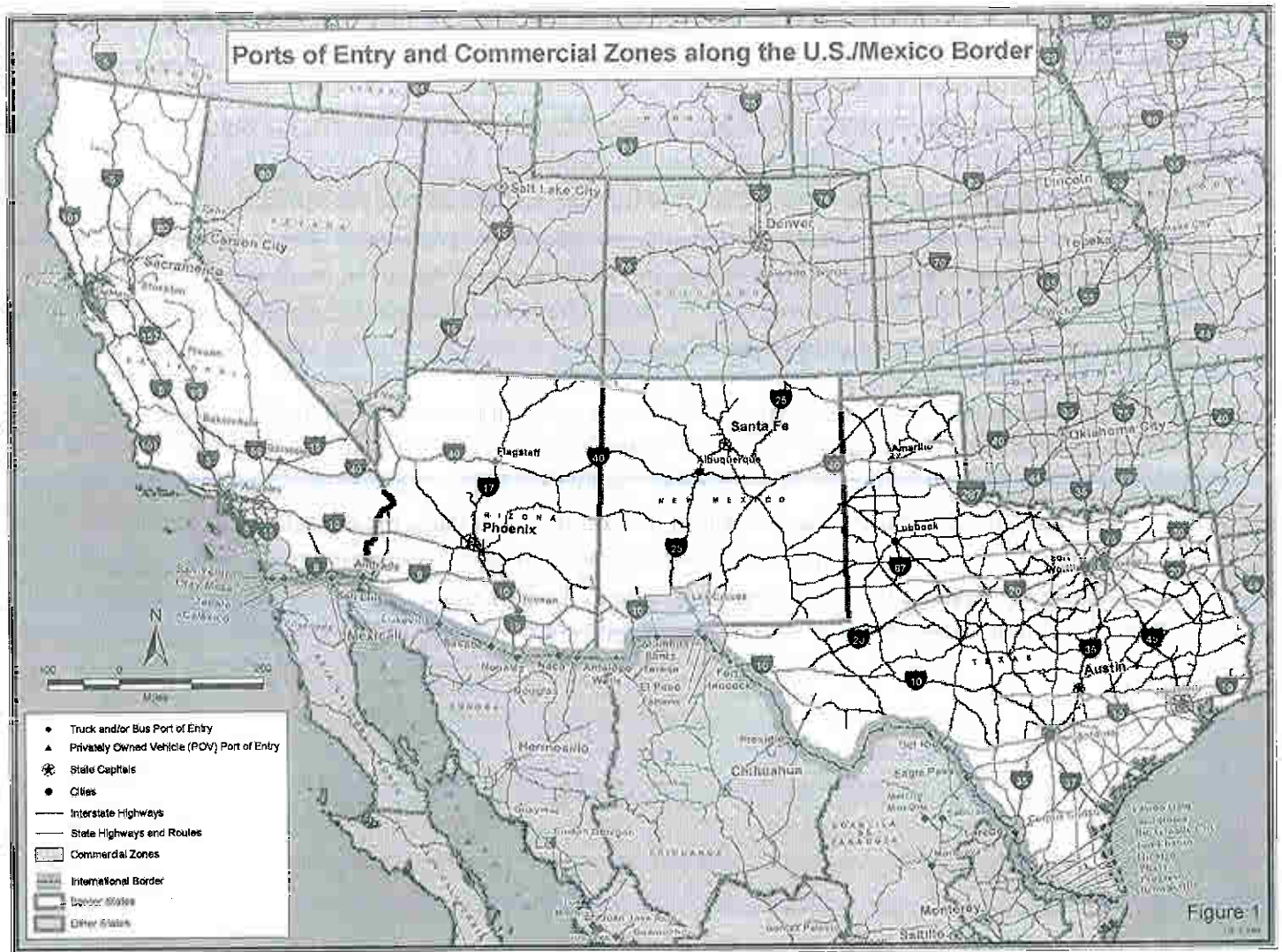
Goods other than farm products moving from Mexico's interior are brought up to the border by Mexico-domiciled long-haul carriers, which drop their trailers at yards near the U.S.-Mexico border where drayage carriers pick them up. The Mexico-domiciled long-haul fleets serving the border area include some of the largest Mexico-based carriers, which typically operate trucks similar in age to their U.S. counterparts. Most of these Mexico-based carriers have interline agreements with one or more U.S. carriers. For U.S.-based carriers, these interline agreements help ensure that reliable service is available to complete the Mexico leg of a shipment to the U.S. U.S.-based carriers will often entrust their trailers to their Mexico-based interline partners.

For the southbound move to Mexico, U.S.-domiciled long-haul carriers typically drop trailers at the yards of forwarders in commercial zones. Trailers are picked up at these yards and pulled across the border by Mexico-domiciled or U.S.-domiciled drayage carriers. The drayage trucks usually take the trailers, after clearing Mexico customs, to a terminal where Mexico-domiciled long-haul carriers will pick them up and take them to their final destinations. If the final

destination of the cargo is near the U.S.-Mexico border, the drayage truck will complete the move.

Typically, there are close business affiliations among Mexico customs brokers, drayage carriers, and forwarders. Mexico drayage firms are frequently owned by Mexican brokers. The yards south of the U.S.-Mexico border where loads are transferred between drayage trucks and Mexico-domiciled long-haul carriers are typically owned either by a Mexico broker or a Mexico drayage carrier closely affiliated with a broker. Forwarders operating on the north side of the border may be owned by Mexico brokers or by large international freight forwarding and logistics companies or may be independent firms.

Currently, Mexico-domiciled carriers can only receive authority to operate in the U.S. in the designated commercial zones along the U.S.-Mexico border. For this reason, the yards and terminals where loads are transferred between cross-border Mexico drayage trucks and U.S.-domiciled long-haul carriers are located within the commercial zones. Figure 3-1 shows the commercial zones as well as the major U.S.-Mexico ports of entry. Approximately 8,000 Mexico-domiciled carriers hold authority to operate in the U.S. commercial zones (called OP-2 authority), although some of these carriers may be currently inactive.



**Figure 3-1 Commercial Zones and the Major U.S.-Mexico Ports of Entry**

**3.2 UNAFFECTED RESOURCES**

The resource areas dismissed from further analysis include topography, geology, and soils; hazardous materials; solid wastes; water resources; cultural resources; Section 4(f) resources<sup>3</sup>; farmland resources; visual resources; and wetlands. These areas of potential concern were dismissed because the implementation of the pilot program and its safety monitoring and enforcement procedures would not create a demand for new construction. Border crossings and inspections would occur at existing facilities. In addition, the operating profile of the Mexico-domiciled carriers would be similar to that of the U.S.-domiciled carriers that currently transport goods beyond the border commercial zones. FMCSA has concluded that there would be no more

<sup>3</sup> Section 4(f) of the U.S. Department of Transportation Act of 1966 was enacted as a means of protecting publicly-owned public parks, recreation areas, wildlife and waterfowl refuges, and historic sites from impacts due to transportation projects. It was subsequently recodified at 49 U.S.C. section 303.

than nominal impacts and minimum changes in resource consumption and waste disposal associated with the Proposed Action. There would be no change from existing conditions under the No Action Alternative.

### ***3.3 AIR QUALITY AND CLIMATE***

The principal Federal legislation that addresses air quality is the Clean Air Act of 1970, as amended in 1977 and 1990 (CAA). The purpose of the CAA is to preserve air quality and to protect public health, welfare, and the environment from the effects of air pollution.

#### *3.3.1 Affected Environment*

##### *National Ambient Air Quality Standards*

Under the authority of the CAA and amendments, the EPA established a set of National Ambient Air Quality Standards (NAAQS) for “criteria” pollutants, as follows: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone, particulate matter (PM) less than 10 micrometers in diameter (PM<sub>10</sub>), PM less than 2.5 micrometers in diameter (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (Pb). The NAAQS include “primary” standards and “secondary” standards. Primary standards are intended to protect public health with an ample margin of safety. Secondary standards are set at levels designed to protect public welfare by accounting for the effects of air pollution on vegetation, soil, materials, visibility, and other aspects of the general welfare. Table 3-2 provides information about the NAAQS.

The health effects of the six Federal criteria pollutants are briefly summarized below. (This section is adapted from the information at <http://www.epa.gov/oar/oaqps/greenbk/index.html>.) CO is a colorless, odorless, and poisonous gas produced by incomplete burning of carbon in fuels. Motor vehicles (primarily automobiles) are the largest source of CO emissions nationally. When it enters the bloodstream, CO reduces the delivery of oxygen to the body’s organs and tissues. Health threats are most serious for those who suffer from cardiovascular disease, particularly those with angina or peripheral vascular disease.

Lead exposure can occur through multiple pathways, including inhalation of air and ingestion of lead in food, water, soil, or dust. Excessive lead exposure can cause seizures, mental retardation, and behavioral disorders, and even low doses of lead can lead to central nervous system damage. Because of the prohibition of lead as an additive in motor vehicle fuels, highway transportation sources are no longer a major source of lead pollution.

Table 3-2 NAAQS for Criteria Pollutants

| Pollutant                               | Type of Standard      | Standard Value                         | Averaging Period            |
|---|-----------------------|--|-----------------------------|
| Carbon monoxide                         | Primary               | 35 ppm (40 mg/m <sup>3</sup> )         | 1-hour average <sup>a</sup> |
|   | Primary               | 9 ppm (10 mg/m <sup>3</sup> )          | 8-hour average <sup>a</sup> |
| Lead <sup>b</sup>                       | Primary and Secondary | 1.5 µg/m <sup>3</sup> (1978 standard)  | Calendar quarterly average  |
|   | Primary and Secondary | 0.15 µg/m <sup>3</sup> (2008 standard) | Rolling 3-month average     |
| Nitrogen dioxide                        | Primary               | 100 ppb (188 µg/m <sup>3</sup> )       | 1-hour average <sup>c</sup> |
|   | Primary and Secondary | 53 ppb (100 µg/m <sup>3</sup> )        | Annual average              |
| Ozone <sup>d</sup>                      | Primary and Secondary | 0.08 ppm (1997 standard)               | 8-hour average              |
|   | Primary and Secondary | 0.075 ppm (2008 standard)              | 8-hour average              |
| Particulate matter (PM <sub>10</sub> )  | Primary and Secondary | 150 µg/m <sup>3</sup>                  | 24-hour average             |
| Particulate matter (PM <sub>2.5</sub> ) | Primary and Secondary | 35 µg/m <sup>3</sup>                   | 24-hour average             |
|   | Primary and Secondary | 15 µg/m <sup>3</sup>                   | Annual average              |
| Sulfur dioxide <sup>e</sup>             | Primary               | 75 ppb (200 µg/m <sup>3</sup> )        | 1-hour average <sup>f</sup> |
|   | Secondary             | 0.5 ppm (1300 µg/m <sup>3</sup> )      | 3-hour average              |

<sup>a</sup> Not to be exceeded more than once per year.

<sup>b</sup> EPA is retaining the 1978 lead standard of 1.5 µg/m<sup>3</sup> until 1 year after EPA has designated nonattainment areas for the 2008 standard. EPA expects to designate nonattainment areas for the 2008 standard by January 2012.

<sup>c</sup> Standard effective January 22, 2010.

<sup>d</sup> The 1-hour standard has been revoked, but some areas have continuing obligations in which the standard may not be exceeded more than once per year. The 1997 ozone 8-hour standard of 0.08 ppm will remain in place for implementation purposes as EPA undertakes rulemaking to address the transition to the 2008 standard of 0.075 ppm. On January 19, 2010 EPA proposed to reduce the 8-hour ozone standard to a level between 0.060 and 0.070 ppm. EPA plans to issue the final standard by July 31, 2011.

<sup>e</sup> On June 2, 2010, EPA revoked the 24-hour primary standard of 0.14 ppm and the annual primary standard of 0.03 ppm.

<sup>f</sup> Standard effective June 2, 2010.

Notes: ppm = parts per million; ppb = parts per billion; mg/m<sup>3</sup> = milligrams per cubic meter; µg/m<sup>3</sup> = micrograms per cubic meter.

NO<sub>2</sub> is a brownish, highly reactive gas, caused largely by oxidation of the primary air pollutant nitric oxide (NO). NO<sub>2</sub> can irritate the lungs, cause bronchitis and pneumonia, and lower

resistance to respiratory infections. Nitrogen oxides (NO<sub>2</sub> and NO) are an important precursor both to ozone and acid rain, and can affect both terrestrial and aquatic ecosystems.

*Ozone* is a photochemical oxidant and the major component of smog. Ozone is not emitted directly into the air, but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) in the presence of sunlight. Heavy-duty diesel vehicles (HDDVs), including large trucks and buses, are a major source of NO<sub>x</sub> emissions. Ground-level ozone causes health problems by damaging lung tissue, reducing lung function, and sensitizing the lungs to other irritants. Exposure to ozone for several hours at relatively low concentrations has been shown to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise.

*PM* includes dust, dirt, soot, smoke, and liquid droplets directly emitted into the air, and particles formed in the atmosphere by condensation or transformation of emitted gases such as SO<sub>2</sub> and VOCs. HDDVs are a major source of PM emissions. Exposure to high concentrations of PM can affect breathing and respiratory symptoms, aggravate existing respiratory and cardiovascular disease, alter the body's defense systems against foreign materials, damage lung tissue, and cause cancer and premature death.

SO<sub>2</sub> results largely from stationary sources. High concentrations of SO<sub>2</sub> affect breathing and can aggravate existing respiratory and cardiovascular disease. SO<sub>2</sub> also is a primary contributor to acidic deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings, and statues.

Approximately 86 percent of all commercial truck volume that enters the U.S. through the Mexico border passes through six ports of entry: Laredo, Hidalgo, and El Paso – Texas; Otay Mesa and Calexico – California; and Nogales – Arizona. Four of these six ports of entry are in nonattainment status for at least one pollutant. Areas that are designated by the EPA as nonattainment for a criteria pollutant do not meet the NAAQS for that pollutant(s), and the CAA establishes levels and timetables for each region to achieve attainment of the NAAQS for each pollutant in nonattainment. The State must prepare a State Implementation Plan (SIP), which documents how the region will reach its attainment levels by the required date established by EPA. A SIP includes inventories of emissions within the area and establishes emissions budgets that are designed to bring the area into compliance with the NAAQS. In maintenance areas, SIPs document how the State intends to maintain compliance with NAAQS. Table 3-3 lists the attainment status for the six busiest U.S.-Mexico ports of entry.

**Table 3-3 Attainment Status for the Top Six U.S.-Mexico Ports of Entry**

| Border Crossing | State | County     | Ozone         | PM <sub>10</sub>        | PM <sub>2.5</sub> | CO          |
|-----------------|-------|------------|---------------|-------------------------|-------------------|-------------|
| Laredo          | TX    | Webb       | Attainment    | Attainment              | Attainment        | Attainment  |
| Otay Mesa       | CA    | San Diego  | Nonattainment | Attainment              | Attainment        | Maintenance |
| El Paso         | TX    | El Paso    | Attainment    | Nonattainment           | Attainment        | Attainment  |
| Hidalgo         | TX    | Hidalgo    | Attainment    | Attainment              | Attainment        | Attainment  |
| Nogales         | AZ    | Santa Cruz | Attainment    | Nonattainment           | Nonattainment     | Attainment  |
| Calexico        | CA    | Imperial   | Nonattainment | Nonattainment (serious) | Nonattainment     | Attainment  |

Section 176(c) of the CAA prohibits Federal entities from taking actions in nonattainment or maintenance areas that do not “conform” to the SIP. The purpose of this conformity requirement is to ensure that Federal activities: (1) do not interfere with the State budgets in the SIPs; (2) do not cause or contribute to new violations of the NAAQS; and (3) do not impede the State’s ability to attain or maintain the NAAQS. To implement CAA Section 176(c), EPA issued the General Conformity Rule (75 FR 17254) (codified at 40 CFR part 93, Subpart B), which applies to all Federal actions not funded under title 23 of the United States Code, (Federal-aid highways) or chapter 53 of title 49, United States Code (Federal assistance for public transportation) . (FMCSA actions are not funded under title 23 or chapter 53 of title 49, United States Code.) The General Conformity Rule established emissions thresholds, or *de minimis* levels, for use in evaluating the conformity of a project. Table 3-4 lists the *de minimis* thresholds for nonattainment areas. Table 3-5 lists the *de minimis* thresholds for maintenance areas. If the net emissions increases due to the project are less than these thresholds, the project is presumed to conform and no further conformity evaluation is required. If the emissions increases exceed any of these thresholds, a conformity determination is required.

Analysis of this action under the CAA’s general conformity requirement shows that it would not result in any potential increase in emissions that are above the general conformity rule’s *de minimis* emission threshold levels (40 CFR 93.153(c)(2)). Moreover, subject to our legal obligations stemming from *Public Citizen* as discussed above, our analysis need not address cross border non-safety impacts, including the potential for increase total CMV mileage, routing of CMVs, how CMVs operate, or the CMV fleet mix of motor carriers. Therefore, no further action under the CAA’s general conformity regulations is required.

**Table 3-4 De Minimis Thresholds for Nonattainment Areas**

|   |
|---|
| De Minimis Thresholds – Nonattainment Areas (NAA's) - (tons/year)   |
| Ozone (VOC's or NOx):   |
| <ul style="list-style-type: none"> <li>– Serious NAA's 50</li> <li>– Severe NAA's 25</li> <li>– Extreme NAA's 10</li> <li>– Other zone NAA's outside an ozone transport region 100</li> </ul> |
| Marginal and moderate NAA's inside an ozone transport region:   |
| <ul style="list-style-type: none"> <li>– VOC 50</li> <li>– NOx 100</li> </ul>   |
| Carbon monoxide:  |
| – All NAA's 100   |
| SO2 or NO2:   |
| – All NAA's 100   |
| PM10:   |
| <ul style="list-style-type: none"> <li>– Moderate NAA's 100</li> <li>– Serious NAA's 70</li> </ul>  |
| PM2.5   |
| <ul style="list-style-type: none"> <li>-Direct Emissions 100</li> <li>-SO2 100</li> <li>-NOx 100</li> <li>-VOC 100</li> </ul>   |
| Pb:   |
| – All NAA's 25  |

**Table 3-5 De Minimis Thresholds for Maintenance Areas**

|  |
|--|
| De Minimis Thresholds – Maintenance Areas - (tons/year)  |
| Ozone (NOx), SO2 or NO2:   |
| – All Maintenance Areas 100  |
| Ozone (VOC's):   |
| <ul style="list-style-type: none"> <li>– Maintenance areas inside an ozone transport region 50</li> <li>– Maintenance areas outside an ozone transport region 100</li> </ul> |
| Carbon monoxide:   |
| – All Maintenance Areas 100  |
| PM10:  |
| – All Maintenance Areas 100  |
| PM2.5  |
| <ul style="list-style-type: none"> <li>-Direct Emissions 100</li> <li>-SO2 100</li> <li>-NOx 100</li> <li>-VOC 100</li> </ul>  |
| Pb:  |
| – All Maintenance Areas 25   |

### *Air Toxics*

Motor vehicle emissions contribute to ambient levels of air toxics known or suspected to be human or animal carcinogens or which have non-cancer health effects. The population experiences an elevated risk of cancer and other non-cancer health effects from exposure to air toxics (EPA, 1999). In 2001, EPA identified six mobile source-oriented air toxics as being “likely to present the highest health risks to public health and welfare” (66 FR 17230). These air toxics are: acetaldehyde, acrolein, benzene, 1,3-butadiene, diesel particulate matter (DPM), and formaldehyde. EPA also identified these compounds (except acetaldehyde) plus polycyclic organic matter (POM) and naphthalene as national or regional risk drivers in its 2002 National-scale Air Toxics Assessment that have significant inventory contributions from mobile sources (EPA, 2009). This Draft EA does not analyze POM separately, but it can occur as a component of DPM and is addressed under DPM below. Naphthalene is not analyzed separately in this Draft EA; naphthalene is a POM compound and is discussed under DPM.

*Acetaldehyde* is classified in EPA’s Integrated Risk Information System database as a probable human carcinogen, based on nasal tumors in rats, and is considered toxic by the inhalation, oral, and intravenous routes. The primary non-cancer effects of exposure to acetaldehyde vapors include eye, skin, and respiratory-tract irritation (EPA, 1991). EPA is reassessing the cancer and non-cancer risks from inhalation exposure to acetaldehyde.

*Acrolein* is extremely acid and is irritating to humans when inhaled, with acute exposure resulting in upper respiratory tract irritation, mucus hypersecretion, and congestion. EPA determined in 2003 that the human carcinogenic potential of acrolein could not be determined because the available data are inadequate (EPA, 2003).

The EPA Integrated Risk Information System database lists *benzene* as a known human carcinogen (causing leukemia) by all routes of exposure, and concludes that exposure is associated with additional health effects, including genetic changes in both humans and animals and increased proliferation of bone marrow cells in mice (EPA, 2000). Several adverse non-cancer health effects also have been associated with long-term exposure to benzene, with the most sensitive being depression of the absolute lymphocyte counts in blood (EPA, 2002a).

EPA has characterized *1,3-butadiene* as carcinogenic to humans by inhalation (EPA, 2002b, 2002c).

*DPM*, along with diesel exhaust organic gases, is a component of diesel exhaust. DPM particles are very fine, with most of them smaller than 1 micrometer, and their small size enables inhaled DPM to reach the lungs. Particles typically have a carbon core coated by condensed organic compounds such as POM, which include mutagens and carcinogens. DPM also includes elemental carbon (carbon black or black carbon) particles emitted from diesel engines. An EPA study (EPA, 2002d) documented both acute and chronic health effects from exposure to DPM. Acute effects include: (1) irritation to the eyes, throat, and bronchus, (2) neurophysiological

symptoms, including lightheadedness and nausea, and (3) respiratory symptoms (cough and phlegm). Also, there is evidence for an immunologic effect – the exacerbation of allergenic responses to known allergens and asthma-like symptoms. Studies of chronic effects are inadequate for a definitive evaluation, but chronic exposure has been shown to pose a respiratory hazard. EPA concluded that DPM is likely to be carcinogenic to humans by inhalation, although it has not been classified as a carcinogen (EPA, 2002d). EPA found sufficient evidence of non-carcinogenic effects from acute and long-term inhalation exposure of DPM to establish an inhalation reference concentration level<sup>4</sup> of 5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ).

DPM can contain *POM*, which is generally defined as a large class of organic compounds that have multiple benzene rings and a boiling point greater than 100 degrees Celsius ( $^{\circ}\text{C}$ ). EPA classifies many of the compounds included in the POM class as probable human carcinogens based on animal data. Polycyclic aromatic hydrocarbons (PAHs) are a subset of POM containing only hydrogen and carbon atoms. Several PAHs are known or suspected carcinogens.

Since 1987, EPA has classified *formaldehyde* as a probable human carcinogen based on evidence in humans and in rats, mice, hamsters, and monkeys (EPA, 1987). Formaldehyde exposure also causes a range of non-cancer health effects, including irritation of the eyes (burning and watering), nose, and throat. Effects in humans from repeated exposure include respiratory-tract irritation, chronic bronchitis, and nasal epithelial lesions. Animal studies suggest that formaldehyde might also cause airway inflammation. Several studies suggest that formaldehyde might increase the risk of asthma, particularly in the young (ATSDR, 1999; WHO, 2002).

EPA has not established NAAQS for air toxics and no regulatory thresholds apply to the total emissions of air toxics associated with the proposed action and its alternatives.

#### *Greenhouse Gas Emissions/Climate Change*

Climate change refers to long-term fluctuations in temperature, precipitation, wind, and other elements of Earth's climate system. Atmospheric gases affect Earth's surface temperature by absorbing solar radiation that would otherwise be reflected back into space. The concentration of greenhouse gases (GHGs) is increasing as a result of human activities according to EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2008* (EPA, 2010). U.S. GHG emissions have been increasing over time, but total emissions have been nearly level since 2005 (EPA, 2010). Transportation sources account for approximately 32 percent of the total U.S. CO<sub>2</sub> emissions from fossil fuel combustion (EPA, 2010; Table ES-2). Freight trucks were responsible for 21 percent of total transportation GHG emissions in 2008 (EPA, 2010).

### 3.3.2 Environmental Consequences

The FMCSA analyzed the potential air quality impacts associated with the Proposed Action. The analysis focused on additional inspections that would be performed as part of the pilot program. The Mexico-domiciled motor carrier's vehicles and drivers would be inspected each time they enter the U.S. for at least three months. This initial period may be extended if the motor carrier does not receive at least three vehicle inspections during the three-month period. This is a more frequent inspection cycle than what is currently performed on Mexican-domiciled trucks which enter the U.S. to go to the commercial zones.

The number of inspections performed in the 2007 pilot project provide an estimate for the potential additional number of inspections. Each Level 3 inspection, which is the type of inspection that would be performed on the trucks entering the U.S. takes about 20 – 25 minutes. In determining the additional potential impacts of the border crossing inspections, the number of inspections performed in the 2007 pilot project (of 27 participating carriers) was 12,512 from September 7, 2007 to September 6, 2008<sup>5</sup>. Under this program, every truck was inspected every time it entered the U.S. Compared to the 219,869 inspections performed on Mexican-domiciled carriers in 2007<sup>6</sup>, this is roughly 5.7 percent of Mexican-domiciled inspections or 0.37 percent of all roadside inspections performed in 2007<sup>7</sup>. Under the pilot program analyzed in this EA, not all trucks will be inspected every time they enter the U.S. so the actual percentage, when compared to the 2007 pilot program, will be smaller (perhaps by about 2/3rds). However, even the number of inspections in the 2007 pilot program were a small percentage of total inspections. Thus, it can be assumed that the additional emissions, including GHGs, from inspection of trucks in the pilot program will be very small. The inspections could be performed at any of the border crossings. Consequently, the impact to air quality in these various non-attainment zones is expected to be in the *de minimis* range for applicable NAAQS.

## 3.4 SAFETY

The FMCSA establishes standards for commercial motor carrier operations, vehicles, and drivers to ensure the safety of the public on U.S. roadways. The Agency enforces both safety and hazardous material standards and monitors commercial motor vehicle and carrier operations that may affect the safety of workers. FMCSA programs ensure safety in commercial motor vehicle and carrier operations by targeting high-risk carriers and CMV drivers, improving safety information systems and vehicle technologies, strengthening vehicle equipment and operating standards, and increasing safety awareness.

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<sup>5</sup> From Independent Evaluation Panel Report to the U.S. Secretary of Transportation U.S.-MEXICO CROSS-BORDER TRUCKING DEMONSTRATION PROJECT Hon. Mortimer L. Downey III, Hon. James T. Kolbe, and Hon. Kenneth M. Mead, October 31, 2008

<sup>6</sup> From FMCSA Motor Carrier Management Information System (MCMIS) September 24, 2010 snapshot.

<sup>7</sup> From FMCSA Motor Carrier Management Information System (MCMIS) September 24, 2010 snapshot – there were 3,417,496 roadside inspections performed on CMVs in 2007.

### *3.4.1 Affected Environment*

Although highway crash fatality rates have declined, new strategies are continually being developed to provide further reductions. While crashes involving CMVs are frequently found not to be the fault of the operator of the truck, advanced technological systems installed in CMVs, together with carefully targeted investments, will continue to reduce commercial motor vehicle-related fatalities.

For over a decade, the governments of Mexico and the U.S. have actively worked to improve the consistency and enforcement of motor carrier safety regulations. The U.S. has provided training to Mexico's officials to conduct roadside and hazardous materials inspections; conducted an education and media campaign to increase Mexico firms' awareness of U.S. safety regulations; assisted in developing nationwide electronic information systems for driver's licenses, vehicle and carrier registration and safety performance, such as accidents and inspection; and increased Federal funding to U.S. border States in order to enhance border inspection facilities. The result of these and other initiatives is increased consistency in many of the programs that support motor carrier safety in each country, such as driver logs, equipment inspection standards, commercial vehicle safety standards, automated information systems for motor carriers, commercial drivers and vehicles, medical requirements, and drug and alcohol testing.

### *3.4.2 Environmental Consequences*

Under the Proposed Action, Mexico-domiciled long-haul motor carriers participating in the pilot program are required to comply with all applicable U.S. Federal and State laws and regulations including, but not limited to, vehicle size and weight, environmental, tax, fuel tax, and vehicle registration requirements. FMCSA has developed an extensive oversight system to protect the health and safety of the public and the Agency will apply it to Mexico-domiciled motor carriers conducting long-haul operations in the U.S. These measures are outlined in 49 CFR parts 350-396 and include providing grants to States for CMV enforcement activities, regulations outlining the application procedures, regulations explaining how FMCSA will assess safety ratings and civil penalties as well as amounts of possible civil penalties, insurance requirements, drug and alcohol testing requirements, commercial driver's license (CDL) requirements, general operating requirements, driver qualification requirements, vehicle parts and maintenance requirements, and hours-of-service requirements. These requirements apply to Mexico-domiciled carriers operating in this pilot program, just as they do to any commercial motor vehicle, driver, or carrier operating in the U.S.

The FMCSA developed special rules that govern Mexico-domiciled long-haul motor carriers during the application process and for several years after receiving operating authority. They are codified in 49 CFR 365.501 through 365.511. These rules impose requirements on Mexico-domiciled motor carriers in addition to those imposed on U.S.-domiciled motor carriers seeking operating authority.

Under the Proposed Action, Mexico-domiciled carriers operating beyond the commercial zones would be subject to a more stringent inspection regime than they are currently. The process for applying for participation in the pilot program begins with a 28-page application that gathers specific information about the carrier, its affiliations, its insurance, its safety programs, and its compliance with U.S. laws. In addition to providing general information, the carrier must complete up to 35 safety and compliance certifications and provide information regarding its systems for monitoring hours-of-service and crashes and complying with DOT drug and alcohol testing requirements.

A Mexico-domiciled long-haul carrier must satisfactorily complete the FMCSA-administered Pre-Authorization Safety Audit (PASA) required under FMCSA regulations before it is granted provisional authority to operate in the U.S. beyond the border commercial zones. The PASA is a review of the carrier's safety management systems including written procedures and records to validate the accuracy of the information and certifications provided in the application. The PASA will determine whether the carrier has established and exercises the basic safety management controls necessary to ensure safe operations. The carrier would not be granted provisional operating authority if FMCSA determines that its safety management controls are inadequate. Vehicles of the program participants designated for cross-border long-haul operations within the U.S. would be inspected; if the vehicle passes the inspection, a CVSA decal would be affixed by the inspector.

Each PASA would be conducted in accordance with 49 CFR part 365 and the carrier would be denied provisional operating authority if FMCSA cannot:

1. Verify available performance data and safety management programs;
2. Verify the existence of a controlled substances and alcohol testing program consistent with 49 CFR part 40 (FMCSA would ensure that the carrier has information on drug and alcohol collection sites and laboratories it intends to use);
3. Verify a system of compliance with hours-of-service rules in 49 CFR part 395, including recordkeeping and retention;
4. Verify the carrier has the ability to obtain the minimum levels of financial responsibility as required by 49 CFR part 387, including the ability to obtain insurance in the U.S.;
5. Verify records of periodic vehicle inspections, as required by 49 CFR part 396;
6. Verify that each driver the carrier intends to assign to operate under the pilot program meets the requirements of 49 CFR parts 383 and 391. This would include confirmation of the validity of each driver's Licencia Federal de Conductor (LF) through Mexico's driver's license information system and a check of the Mexico State licensing records and

the Commercial Driver's License Information System (CDLIS) for violations, suspensions, etc;

7. Review of available data concerning safety history and other information necessary to determine familiarity with, and preparedness to comply with, the FMCSRs and Federal Hazardous Materials Regulations that apply to the transportation of non-placardable hazardous materials;
8. Evaluate safety inspection, maintenance, and repair facilities or management systems, including verification of records of periodic vehicle inspections;
9. Inspect each vehicle the carrier intends to operate under the pilot program unless the vehicle has received and displays a current CVSA decal;
10. Interview carrier officials to review safety management controls and evaluate any written safety oversight policies and practices; and
11. Obtain any other information required by the FMCSA to complete the PASA.

Applicant carriers would designate and identify drivers and vehicles that would perform cross-border long-haul operations in the pilot program.<sup>8</sup> FMCSA would verify driver qualifications, including confirming the validity of the driver's LF and review any Federal and State driver's license history for traffic violations that would disqualify the driver for operations in the U.S. FMCSA would also conduct an English Language Proficiency assessment of each participating driver to ensure compliance with 49 CFR 391.11(b)(2). The assessment would be conducted orally, in English, and would include a test on knowledge of U.S. traffic signs.

At the time of the PASA, FMCSA would inspect participating vehicles to determine whether they:

1. Comply with the FMVSSs; and
2. Display an EPA emission control label indicating that the engine conforms to the EPA regulations applicable to 1998 or later (40 CFR 86.007-35). Alternatively, the Mexico-domiciled motor carrier can present documents from the engine manufacturer indicating the engine conforms to the EPA regulations applicable to 1998 or later.

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<sup>8</sup> Carriers' selection of specific vehicles to participate is limited to the new program only. Once the new program ends, carriers will not have the option of selecting specific vehicles. Instead, all vehicles that may enter the U.S. for carriers with OP-1 authority (authority to operate beyond the commercial zone) will be required to comply with all FMCSRs.

The PASA inspections, due to the anticipated small number of participating carriers, are not expected to impact emissions either from FMCSA's inspection and reviews nor from any actions needed on the part of the carriers to comply with the inspections and reviews.

If a Mexico-domiciled long-haul carrier successfully completes the PASA and FMCSA approves its application, the Agency will publish comprehensive data and information on the PASAs conducted of carriers that are granted authority to operate beyond the U.S.-Mexico border commercial zones. Additional security screening procedures, including immigration and the existence and status of law enforcement investigations, are detailed in the *Federal Register* notice for the pilot program (76 FR 20807).

#### *Monitoring of Operational Safety*

FMCSA would monitor the operational safety of all Mexico-domiciled long-haul motor carriers participating in the pilot program. To accomplish this, FMCSA would work closely with State commercial vehicle safety agencies, the lead Motor Carrier Safety Assistance Program agencies, International Association of Chiefs of Police (IACP), CVSA, DHS, and others. Field monitoring would include inspections of vehicles, verification of compliance with the terms of the motor carrier's operating authority, driver license checks, crash reporting, and initiation of enforcement actions, when appropriate.

Monitoring and oversight of carriers and drivers participating in the pilot program would vary depending on the experience and safety record of the carrier. Stage 1 of the program would require the motor carrier's participating trucks and drivers to be inspected every time a vehicle crosses the U.S.-Mexico border northbound and vehicles must display current CVSA decals.

Carriers would progress to Stage 2 only after FMCSA evaluates the performance of the Mexico-domiciled long-haul carrier during Stage 1. A carrier will be permitted to progress to Stage 2 in the pilot program if FMCSA determines that the carrier has out-of-service rates that are at or below the U.S. national averages and its Safety Management System scores for trucks operating in the pilot program are below the FMCSA threshold levels. Once a motor carrier is in Stage 2, inspections at the border crossings would be at a rate similar to that of other Mexico-domiciled motor carriers that cross the U.S.-Mexico border. Stage 2 vehicles must continue to display current CVSA decals.

After the Mexico-domiciled motor carrier successfully completes a compliance review and receives a satisfactory rating within 18 months of beginning cross-border long-haul operations, and completes 18 months of operation with provisional operating authority, the motor carrier would be granted permanent authority. The vehicles and drivers would be inspected at border crossings at the same rate as commercial zone carriers. To maintain permanent authority, carriers must comply with all FMCSRs and continue to renew the CVSA safety decal every 90 days for three years. During the duration of the pilot program, carriers must update driver and vehicle records with FMCSA. Any additional vehicles or drivers the motor carrier wishes to include in

the pilot program must be approved by FMCSA before the carrier may use the driver or vehicle for long-haul transportation.

Upon granting provisional operating authority, FMCSA will assign a unique USDOT Number, including an "X" suffix, which identifies the CMVs authorized to operate beyond the U.S.-Mexico border commercial zones. FMCSA would also equip each vehicle approved for use by Mexico-domiciled long-haul motor carriers in this pilot program with an electronic monitoring device, such as a GPS and/or EOBR device. As part of participating in this pilot program, the device must be operational on the vehicle throughout the duration of the pilot program.

Data collected as a result of monitoring would be entered into FMCSA databases and made available for public review on the Agency's website. The data would be tracked and analyzed to identify potential compliance and safety issues. Appropriate action would be taken to resolve identified compliance and safety issues.

Enforcement is a key component of the monitoring and oversight effort. FMCSA is providing ongoing training and guidance to Federal and State auditors, inspectors and investigators to ensure the adequacy of their knowledge and understanding of the pilot program and the procedures for taking enforcement actions against carriers or drivers participating in the pilot.

Mexico-domiciled long-haul motor carriers are also subject to DHS and U.S. Customs and Border Protection cabotage requirements and are prohibited from providing domestic point-to-point transportation while operating in the U.S. Vehicles and drivers violating the prohibition on domestic point-to-point transportation will be placed out of service under the DOT regulations and may be subject to civil penalties. DHS may also prohibit the driver from entering the U.S. in the future. FMCSA, in coordination with the IACP, developed and is providing training to State and local law enforcement agencies on the cabotage requirements. FMCSA would require roadside enforcement officers to follow DHS guidance concerning the enforcement of DHS cabotage regulations.

Mexico-domiciled long-haul motor carriers participating in the pilot program must maintain a certificate of insurance or surety bond on file with FMCSA, as prescribed in 49 CFR 387.313, throughout the pilot program. The insurance or surety bond must be underwritten by a U.S. insurance or surety bond company. FMCSA will monitor the insurance filings of participating carriers to ensure that there are no lapses in coverage.

The operational safety and monitoring requirements proposed for the pilot program would ensure that Mexico-domiciled carriers operating in the U.S. beyond the border commercial zones would face similar requirements to U.S.-domiciled carriers. Under the Proposed Action, FMCSA expects no material difference in the safety profile of Mexico-domiciled carriers from their U.S. counterparts.

Under the Proposed Action, Mexico-domiciled long-haul carriers would travel throughout the U.S. Therefore, because of increased exposure, the likelihood that these carriers will be involved in accidents will increase under the Proposed Action. Whether Mexican trucks will pose an increased risk or likelihood of accidents cannot be evaluated with any degree of certainty. Accidents are a function of a wide range of variables, including road conditions, weather, time of day, traffic density/congestion, speed, vehicle condition, driver training, driver alertness, or drug or alcohol use. Some of these variables will be the same for U.S. as for Mexico-domiciled carriers operating in the U.S. For example, Mexico-domiciled trucks would be driving on the same roads and under the same weather conditions as U.S. trucks.

The change in the operating procedures of Mexico-based trucks could reduce the opportunities for accidents slightly for the small fraction of accidents attributable to the trailer-tractor connection. Currently, most trailers carrying cargo between the U.S. and Mexico are dropped off by drayage carriers and then picked up by U.S.-domiciled long-haul carriers. Under the Proposed Action, some Mexico-domiciled long-haul carriers will carry the same trailer for the entire trip without exchange to another carrier. Decreasing the number of equipment transfers by allowing Mexico-domiciled long-haul carriers to handle the operations from origin to destination could lessen the potential for human errors made when connecting tractors to trailers.

#### *Hazardous Materials and Passengers*

Consistent with section 6901(d) of the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Act, 2007, Public Law 110-28, operating authority granted under the pilot program cannot include cross-border operations by Mexico-domiciled CMVs transporting placardable quantities of hazardous materials or passengers. Hazardous materials means any material that has been designated as hazardous under 49 U.S.C. 5103 and is required to be placarded under subpart F of 49 CFR part 172. Therefore, there would be no affect on safety by hazardous materials transportation under the pilot program.

#### *No Action Alternative*

The No Action Alternative is a continuation of the current operations of CMVs. Therefore, under the No Action Alternative, there would be no change in safety attributable to selecting this alternative.

### **3.5 ENVIRONMENTAL JUSTICE**

Executive Order 12898 on Environmental Justice issued on February 11, 1994, directs Federal agencies to identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." A separate presidential memorandum to all departments and agencies on Executive Order 12898 states that mitigation measures recommended in Environmental Impact Statements conducted under NEPA "should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities," (Cover Memorandum to Executive Order 12898, 1994).

3.5.1 Affected Environment

Table 3-6 shows the minority presence in the border counties adjacent to the main ports of entry on the U.S.-Mexico border. The total minority presence, mostly made up of Hispanics/Latinos, is almost twice the total minority presence in the U.S. as a whole and over 50 percent of the total population. FMCSA considers the U.S. border counties adjacent to the main ports of entry to constitute a minority population for the purpose of the environmental justice analysis.

**Table 3-6 Minority Presence, 2010**

|  | United States | U.S.-Mexico Border counties adjacent to main ports of entry <sup>a</sup> |
|--|---------------|--|
| Total Population   | 308,745,538   | 5,549,201  |
| White  | 72.41%        | 72.64%   |
| Black or African American  | 12.61%        | 3.55%  |
| Alaska Native or American Indian   | 0.95%         | 0.74%  |
| Asian  | 4.75%         | 6.47%  |
| Native Hawaiian and Other Pacific Islander   | 0.17%         | 0.30%  |
| Some other race alone  | 6.19%         | 12.57%   |
| Two or more races  | 2.92%         | 3.73%  |
| Hispanic or Latino <sup>b</sup>  | 16.35%        | 56.38%   |
| Total Minority Population <sup>c</sup>   | 36.25%        | 68.48%   |
| Source: U.S. Census Bureau, 2011b  |               |  |
| a. Counties of San Diego and Imperial (CA); Santa Cruz (AZ); Cameron, El Paso, Hidalgo and Webb (TX).  |               |  |
| b. Individuals who identify themselves as Hispanic, Latino, or Spanish might be of any race; the sum of the "Hispanic or Latino" row, with rows on race, therefore does not equal 100 percent. |               |  |
| c. The total minority population, for the purposes of this analysis, is the total population minus the non-Latino/Spanish/Hispanic white population.   |               |  |

Table 3-7 shows the low-income presence in the border counties adjacent to the main ports of entry on the U.S.-Mexico border. The total low-income presence is approximately 43 percent higher than the presence in the U.S. as a whole. For the purpose of the environmental justice analysis, FMCSA also considers the border counties adjacent to the main ports of entry to constitute a low-income population.

**Table 3-7 Low-Income Population, 2009**

|  | United States <sup>a</sup> | U.S.-Mexico Border counties adjacent to main ports of entry <sup>b</sup> |
|--|----------------------------|--|
|  |                            |  |

|  |             |           |
|--|-------------|-----------|
| Total Population   | 299,777,364 | 5,280,224 |
| Population in Poverty  | 42,868,163  | 1,058,323 |
| Percent  | 14.30%      | 20.40%    |
| Source: U.S. Census Bureau, 2010   |             |           |
| a. Total population differs from that in Table 3-8 due to source and year: estimate for 2009 in Table 3-9, compared to census count for 2010 in Table 3-8. |             |           |
| b. Counties of San Diego and Imperial (CA); Santa Cruz (AZ); Cameron, El Paso, Hidalgo and Webb (TX).  |             |           |

### 3.5.2 Environmental Consequences

This section analyzes the impact of each alternative on minority and low-income populations. The existence of disproportionately high and adverse human health and environmental effects depends on the existence in the affected area of minority or low-income populations and on the existence of significant impacts of a proposed alternative.

To identify and address disproportionately high and adverse human health or environmental effects on minority or low income populations the following analytical process was adopted.

- (1) The affected area was identified as U.S.-Mexico border States and border countries adjacent to main ports of entry;
- (2) The affected area was then characterized regarding the presence of minority and low income populations. In doing so:
  - (a) Following CEQ guidance, areas were identified where: (a) minority or low-income presence exceeds 50 percent, or (b) minority or low-income presence is meaningfully greater than the percentage presence in the general population or other appropriate unit of geographic analysis;
  - (b) Also following CEQ guidance, transient communities sharing common conditions of environmental exposures were also considered as potential minority or low-income communities: in this case, truck drivers.
- (3) Potentially high and adverse human health or environmental effects described by other sections of this Draft EA were assessed;
- (4) If significant impacts were found in step 3, the existence of disproportionate high and adverse impacts on minority and/or low-income populations would then be determined based on CEQ guidance.

Steps 1 and 2 of the analytical process were conducted. FMCSA considers the seven counties adjacent to the main ports of entry, when taken as a whole, to be minority and low-income populations.

Step 3 requires assessing potentially high and adverse human health or environmental effects described by other sections in this Draft EA. Although potential adverse impacts to resources were identified among the alternatives, none were considered to be high and adverse to human health, or detrimental to the environment. Because no high and adverse human health or environmental effects were identified, FMCSA did not proceed to step 4. There would be no disproportionate impacts to minority or low-income populations.

#### *No Action Alternative*

Because no high and adverse human health or environmental effects were identified for the No Action Alternative, FMCSA did not proceed to step 4 in the analysis. There would be no disproportionate impacts to minority or low-income populations under the No Action Alternative.

### **3.6 CUMULATIVE IMPACTS**

In accordance with the CEQ's NEPA Regulations, 40 CFR 1508.7, and FMCSA's Order on NEPA Implementing Procedures, Ch.1(C)(2), Ch.1(D)(3)(12), FMCSA reviewed the potential impacts of the Proposed Action and No Action Alternative with other past, present, and reasonably foreseeable future actions, both Federal and non-federal, to determine if cumulative impacts could result. FMCSA intends to use this EA process and the proposed pilot program to gather data and conduct future studies of broader cross-border long-haul trucking provisions under NAFTA. In the event of a proposal to open the border beyond the scope of the pilot program, FMCSA will conduct the appropriate environmental analysis under NEPA. Therefore, the cumulative impacts analysis in this Draft EA qualitatively considers a broader border opening.

The FMCSA also relied on the guidance provided in a CEQ handbook entitled, "*Considering Cumulative Effects under the National Environmental Policy Act*" (1997). The analysis contained in this Draft EA reviewed the impacts of inspecting additional trucks and safety because the Presidential order lifting the moratorium remains in place, and FMCSA still lacks the discretion to countermand that order by completely excluding long-haul cross-border operations of Mexican motor carriers.

#### *3.6.1 Methodology*

The FMCSA identified the actions associated with the Proposed Action and No Action Alternative that would result in either adverse or beneficial air quality and safety effects. The Agency reviewed the effects of the past, present, and reasonably foreseeable future actions at the same level by resource. The following sections present a discussion of the cumulative impacts on Air Quality and Climate, and Safety. FMCSA performed a qualitative analysis of the other past, present, and reasonably foreseeable future actions associated with the Alternatives presented in this Draft EA.

### *3.6.2 Air Quality and Climate*

The FMCSA reviewed the potential for cumulative effects on air quality. The emission inventory from the Proposed Action was based upon a conservative approach based on the 2007 pilot program. This analysis looked at the possible additional inspections that the pilot program may incur, and, by extension, the additional emissions from these inspections. This inventory analysis shows that the additional inspections are very small when compared to the total number of roadside inspections performed annually and that the resulting emissions would be very small.

The release of anthropogenic GHGs and their potential contribution to climate change are inherently cumulative phenomena. The annual direct and indirect CO<sub>2</sub>e emissions from the Proposed Action in combination with past and future emissions from all other sources, would contribute incrementally to climate change impacts. In its Fourth Assessment Report, the Intergovernmental Panel on Climate Change stated that warming of Earth's climate system is unequivocal, and that warming is very likely due to manmade GHG concentrations (IPCC, 2007). The Fourth Assessment Report describes potential impacts of climate change.

### *3.6.3 Safety*

The FMCSA reviewed the potential for cumulative effects on safety. As discussed in Section 3.5, the safety audits and inspections performed by FMCSA under the Proposed Action would supplement existing safety audit and inspection programs, as well as current and future security and freight inspections performed by the DHS that would occur at border crossings. The cumulative impact of the FMCSA safety audit and inspection programs of the Proposed Action coupled with current safety programs and the current and future security and freight inspection programs implemented by DHS would be a beneficial impact on safety. Benefits arising from current and future requirements under the Proposed Action would generally improve safety performance for all carriers.

Under the No Action Alternative, there would be no cumulative impacts on safety because the existing FMCSA safety audit and inspection programs would not change.

## **3.7 CONCLUSION**

The FMCSA prepared this Draft EA to identify the potential environmental impacts associated with implementation of the proposed U.S.-Mexico cross border pilot program. Based on the analyses in this Draft EA, FMCSA has concluded that the proposed pilot program would not cause significant environmental impacts. Thus, an EIS is not required.

#### **4. CONSULTATION AND COORDINATION**

In the course of completing the NEPA compliance process for the implementation of the proposed U.S.-Mexico cross border pilot program, FMCSA consulted with technical experts within FMCSA that are familiar with the impact the pilot program could have, as well as the following outside agencies:

U.S. EPA – April 6, 2011

- Michael Horowitz, EPA's Office of the General Counsel.
- Karl Simon, EPA's Office of Transportation and Air Quality.
- Sue Stendebach, Sr. Advisor on International Air Quality, EPA's Office of Assistant Administrator for Air and Radiation.
- Anne Wick, EPA's Office of Enforcement.

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