DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Part 177

Federal Motor Carrier Safety Administration

49 CFR Part 392

[Docket Numbers PHMSA-2010-0319 (HM-255) & FMCSA-2006-25660]

RIN 2137-AE69 & 2126-AB04

Highway-Rail Grade Crossing; Safe Clearance

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), and Federal Motor Carrier Safety Administration (FMCSA), U.S. Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: FMCSA and PHMSA amend the Federal Motor Carrier Safety Regulations (FMCSRs) and Hazardous Materials Regulations (HMRs), respectively, to prohibit a driver of a commercial motor vehicle or of a motor vehicle transporting certain hazardous materials or certain agents or toxins (hereafter collectively referenced as “regulated motor vehicle”) from entering onto a highway–rail grade crossing unless there is sufficient space to drive completely through the grade crossing without stopping. This action is in response to section 112 of the Hazardous Materials Transportation Authorization Act of 1994, as amended by section 32509 of the Moving Ahead for Progress in the 21st Century Act (MAP-21). The intent of this rulemaking is to reduce highway–rail grade crossing crashes.
DATES: This rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN FEDERAL REGISTER].

ADDRESSES: You may review the final rule, the technical supporting documents, economic analysis, environmental assessment, and public comments for this proceeding identified by Federal Docket Management System Numbers PHMSA–2010–0319 (HM–255) and FMCSA–2006–25660.

Docket: For access to the docket to read background documents or comments received, go to http://www.regulations.gov at any time or to the ground floor, room W12–140, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m. e.t., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: At FMCSA: Mr. Thomas Yager, Driver and Carrier Operations, (202) 366-4325 or MCPSD@dot.gov, Federal Motor Carrier Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590-0001. Office hours are from 7:45 a.m. to 4:15 p.m., e.t., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

I. Executive Summary

A. Purpose and Summary of the Final Rule

This action is in response to section 112 of the Hazardous Materials Transportation Authorization Act of 1994 (HMTAA), as amended by section 32509 of MAP-21. The intent of this rulemaking is to reduce highway–rail grade crossing crashes. FMCSA and PHMSA implement the statutory mandate enacted in section 112 of the HMTAA, as amended, by changing the FMCSRs and HMRs, respectively, to prohibit drivers of regulated motor vehicles from entering onto a highway–rail grade crossing unless there is sufficient space to drive completely through the grade crossing without stopping. The Agencies published the notice of proposed rulemaking (NPRM) for this final rule on January 28, 2011 (76 FR 5120), which also included a history of actions from 1998 through 2006 that led to the 2011 NPRM.

B. Costs and Benefits

As explained in section VI. Regulatory Analyses below, FMCSA and PHMSA expect 2.62 fewer crashes per year, when all States adopt rules compatible with this Federal rule,\(^\text{1}\) and 0.3 fewer train derailments.\(^\text{2}\)

FMCSA and PHMSA estimate the total annual benefits from crashes avoided to be approximately $946,000. This consists of $473,000 in reduced injuries, $1,800 in reduced hazardous material spills, $33,000 in reduced highway property damage, and $438,000 in reduced costs for train derailments. Total implementation costs per year are

\(^1\) 0.000285 fewer incidents per grade crossing x 9,204 storage space impacted grade crossings in States without a similar rule equals 2.62 fewer crashes per year.

\(^2\) 14 derailments / 122 grade crossing incidents x 2.62 incidents prevented equals 0.3 fewer train derailments.
estimated to be $302,300 in the first year, based on the added costs to State enforcement agencies of administrative, enforcement, or training activities. The additional costs for driver training should be small as the training would occur as a modification of emphasis in existing railroad grade crossing training curricula. Railroad grade crossing training curricula for drivers would include training to comply with eight FMCSRs related to the safe operation of regulated motor vehicles at railroad grade crossings and penalties for non-compliance with these railroad grade crossing safe operation rules. In addition, drivers who operate in States with existing laws similar to the regulations in this final rule will be familiar with the requirements. The costs are projected to be about $11,200 in each of the 27 states (including the District of Columbia) that do not have an existing law or regulation similar to the requirements in the final rule. Thus, the annual net benefits from implementation of this final rule in the first year should be about $644,000. In subsequent years, there would be no costs, thus, $946,000 would be saved in subsequent years.

Table ES-1 displays the 10–year average annual and discounted net costs and benefits of the statute that we are implementing in this final rule.³

³ Note that the numbers for the 10-year costs and the discount rates differ from what was presented in the NPRM’s RIA due to a discovery of a minor mathematical error, the updating to current year costs with the new estimated average economic value of a statistical life for injury crashes (VSL), and the removal of annual fatality benefits, because zero fatal crashes were found in the analysis period of 1998-2005. The estimated mean VSL is derived from the DOT memorandum, “Treatment of the Economic Value of a Statistical Life in Departmental Analyses,” February 28, 2013. See http://www.dot.gov/sites/dot.dev/files/docs/VSL%20Guidance%202013.pdf.
Table ES-1
Total Estimated 10-Year Costs and Benefits for Implementing the Statute Mandating the Final Grade Crossing Storage–Space Rule (2013 Dollars, in Thousands, Rounded)

<table>
<thead>
<tr>
<th>First Year Impact</th>
<th>Annual Impact (Years 2-10)</th>
<th>10-Year Total</th>
<th>10-Year (Discounted at 3 percent)*</th>
<th>10-Year (Discounted at 7 percent)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>$946</td>
<td>$946</td>
<td>$9,460</td>
<td>$8,312</td>
</tr>
<tr>
<td>Costs</td>
<td>$302</td>
<td>$0</td>
<td>$302</td>
<td>$265</td>
</tr>
<tr>
<td>Net Benefits</td>
<td>$644</td>
<td>$946</td>
<td>$9,158</td>
<td>$8,047</td>
</tr>
</tbody>
</table>

* Present values of 10-year costs are discounted at 3 percent and 7 percent as specified in OMB Circular A-4, Regulatory Analysis, September 2004. Note that the first year costs and benefits are not discounted.

II. Background and Legal Basis for the Rulemaking


Sec. 112 Grade Crossing Safety.
The Secretary of Transportation shall, within 6 months after the date of enactment of this Act, amend regulations –
(1) under chapter 51 of title 49, United States Code (relating to transportation of hazardous materials), to prohibit the driver of a motor vehicle transporting hazardous materials in commerce, and
(2) under chapter 311 of such title (relating to commercial motor vehicle safety) to prohibit the driver of any commercial motor vehicle, from driving the motor vehicle onto a highway-rail grade crossing without having sufficient space to drive completely through the crossing without stopping.

The report by the Senate Committee on Commerce, Science, and Transportation states that section 112 is intended to:

improve safety at highway–railroad crossings in response to fatalities that have occurred from accidents involving commercial motor vehicle operators who failed to use proper caution while crossing. The number of
fatalities resulting from such accidents often is increased because of the
presence of hazardous materials. . . . [T]he Committee believes that
imposing a Federal statutory obligation on drivers of all commercial motor
vehicles to consider whether they can cross safely and completely…will
help to reduce the number of tragedies associated with grade crossing
accidents.

1773). In sum, section 112 specifically directs DOT to prohibit drivers of motor vehicles
subject to Federal hazmat law and the HMRs issued thereunder and the commercial
motor vehicle operators subject to 49 U.S.C. chapter 311 and the FMCSRs issued
thereunder from driving “onto a highway–rail grade crossing without having sufficient
space to drive completely through the crossing without stopping.” PHMSA and FMCSA
are carrying out this statutory mandate in this final rule.

With respect to section 112(1), PHMSA has been delegated the authority in
Federal hazardous material transportation law (Federal hazmat law), chapter 51 of Title
49 U.S.C., to “designate material . . . or a group or class of material as hazardous when
the Secretary determines that transporting the material in commerce in a particular
amount and form may pose an unreasonable risk to health and safety or property” and to
“prescribe regulations for the safe transportation, including security, of hazardous
material in intrastate, interstate, and foreign commerce” which apply to a person who
“transports hazardous material in commerce.” 49 U.S.C. 5103(a), (b)(1); see 49 CFR
1.97(b)(2).

With respect to section 112(2), FMCSA has been delegated authority under the
Motor Carrier Safety Act of 1984 (Pub. L. 98-554, Title II, 98 Stat. 2832, October 30,
1984), as amended, to “prescribe regulations on commercial motor vehicle safety” in
order to ensure that “commercial motor vehicles are . . . operated safely.” See 49 U.S.C.
Other factors under 49 U.S.C. 31136(a)(1) (commercial motor vehicle maintenance, equipment, and loading), and factors under section 31136(a)(2) (responsibilities on drivers not to impair safe commercial motor vehicle operation) and (3) (physical condition of drivers enables safe commercial motor vehicle operation) are not germane to this rulemaking. Section 31136(a)(4) (commercial motor vehicle operation does not have deleterious effect on driver’s physical condition) is only indirectly related in that this rule will protect drivers from certain accidents/crashes. Finally, given the minimal distances and time required to avoid prohibited rail grade crossings, the lack of opportunity for motor carriers, shippers, receivers, and transportation intermediaries to communicate timely with drivers regarding decisions to cross, and the obvious personal safety risk to the commercial motor vehicle operator of attempting to cross where there is not sufficient space, the Agency considers any risk of driver coercion under 49 U.S.C. 31136(a)(5) (commercial motor vehicle operator not to be coerced by motor carrier, shipper, receiver, or transportation intermediary into operating commercial motor vehicle in violation of certain regulations) in connection with this rulemaking to be negligible.

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4 For purposes of section 31136, “commercial motor vehicle” means a self-propelled or towed vehicle used on the highways in interstate commerce to transport passengers or property, if the vehicle has a gross vehicle weight rating or gross vehicle weight of at least 10,001 pounds, whichever is greater; is designed or used to transport more than 8 passengers (including the driver) for compensation; is designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation; or is used in transporting material found by the Secretary of Transportation to be hazardous materials under section 5103 of this title and transported in a quantity requiring placarding under regulations prescribed by the Secretary under section 5103.

49 U.S.C. 31132(1); see also 49 CFR 390.5.
III. History

PHMSA and FMCSA published the NPRM for this final rule on January 28, 2011 (76 FR 5120). That notice included a history of FMCSA’s and its predecessor’s actions from 1998 through 2006 that led to the 2011 NPRM. The 2011 NPRM provides a discussion of the history of this proceeding, including the survey of State statutes on grade crossings laws, grade crossing safety outreach activities, and the 2006 public meeting that provided interested parties an opportunity to express their views before issuance of the January 28, 2011 NPRM.

Since publication of the NPRM, section 112(2) was amended in MAP-21 to correct the statutory reference from chapter 315 to chapter 311 (“commercial motor vehicle safety”) of Title 49, United States Code. This clarifies that the authority for FMCSA’s final rule is the direction to “prescribe regulations on commercial motor vehicle safety” in section 31136. Accordingly, with respect to the final rule issued by FMCSA, the definition of “commercial motor vehicle” in 49 U.S.C. 31132(1) and 49 CFR 390.5 applies to the prohibition being adopted in 49 CFR 392.12.\(^5\)

In the NPRM, PHMSA proposed to add a new paragraph 49 CFR 177.804(b) to the HMR, making the prohibition in 49 CFR 392.12 applicable to drivers of motor vehicles transporting a quantity of hazardous materials requiring placarding under subpart F of 49 CFR part 172 or a material listed as select agent or toxin listed in 42 CFR part 73.

\(^5\) FMCSA acknowledges a drafting error in the NPRM resulting in an inconsistency between the preamble and the proposed regulatory text. Whereas the preamble addressed FMCSA’s authority over “motor carrier[s]” and “motor private carrier[s],” terms used in chapter 315 of Title 49, the regulatory text in proposed 49 CFR 392.12 referenced “commercial motor vehicle[s],” as defined 49 CFR 390.5, and consistent with chapter 311 of Title 49 and related provisions in the FMCSRs, issued under the authority of § 31136. See, e.g. 49 CFR 392.11 (Railroad grade crossings; slowing down required). However, none of the commenters addressed that anomaly. The amendments to section 112 of the HMTAA by MAP-21 ratified the reference to “commercial motor vehicle” in 49 CFR 392.12 as proposed in the NPRM and adopted in this final rule.
As discussed, this would make the prohibition against driving onto a highway-rail grade crossing without having sufficient space to drive completely through the crossing without stopping applicable to “drivers of motor vehicles of any size that are used to transport [these materials]. Additionally, it includes drivers engaged in intrastate or interstate commerce.” 76 FR at 5122; see also id. at 5123-24.

However, 49 CFR 177.804(b) is no longer available, because in a final rule published on February 28, 2011, PHMSA (in coordination with FMCSA) adopted a new § 177.804(b) providing that “a person transporting a quantity of hazardous materials requiring placarding under 49 CFR part 172 or any quantity of a material listed as a select agent or toxin in 42 CFR part 73 may not engage in, allow, or require texting while driving.” 76 FR 10771, 10778. PHMSA (also in coordination with FMCSA) adopted a new § 177.804(c) on December 2, 2011, providing that “a person transporting a quantity of hazardous materials requiring placarding under Part 172 [of 49 CFR] or any quantity of a material listed as a select agent or toxin in 42 CFR part 73 may not engage in, allow, or require use of a hand-held mobile telephone while driving.” 76 FR 75470, 75485-6.

Therefore, as all the recent joint PHMSA and FMCSA rules have been applicable to “a person transporting a quantity of hazardous materials requiring placarding under 49 CFR part 172 or any quantity of a material listed as a select agent or toxin in 42 CFR part 73,” PHMSA is consolidating this final rule with the anti-texting and anti-mobile-telephone rules by creating a new introductory phrase at 49 CFR 177.804(b) that reads as set forth in the regulatory text of this rule; and adopting three subparagraphs: (b)(1) the substance of the prohibition proposed in the NPRM; (b)(2) the prohibition against texting while driving; and (b)(3) the prohibition against using a hand-held mobile telephone
while driving. The cross-reference to the definition of “hazardous materials” in 49 CFR 383.5 is deleted because it is not needed. As in the current provisions against texting and hand-held mobile telephone use previously located in 49 CFR 177.804(b) and (c), these categories appear to be the materials with which the Senate Report had concern in stating that the “number of fatalities resulting from [highway-rail grade crossing] accidents often is increased because of the presence of hazardous materials.” 1994 U.S.C.C.A.N. at 1773.

IV. Comments on the Proposed Rule

Overview of Comments.

FMCSA and PHMSA received 16 comments to the jointly issued NPRM. Comments were received from two truck drivers, four private individuals, and the following industry associations, State agencies, and advocacy groups:

- Association of American Railroads (AAR)
- American Trucking Associations, Inc. (ATA)
- National Association of Chemical Distributors (NACD)
- National Tank Truck Carriers, Inc. (NTTC)
- Owner Operator Independent Drivers Association, Inc. (OOIDA)
- California Public Utilities Commission (CPUC)
- Nebraska Department of Roads (NEDR)
- North Carolina Department of Transportation (NCDOT)
- Commercial Vehicle Safety Alliance (CVSA)
- Advocates for Highway and Auto Safety (Advocates).

A private individual, the AAR, and the NCDOT fully support the proposal. The CVSA and the CPUC support the proposal, but believe it will be difficult to enforce.

Other comments and responsive considerations are as follows.
Require Others to Mark Crossings.

The two truck drivers, ATA, NACD, NTTC, and Advocates recommend that FMCSA and PHMSA require State and local jurisdictions to specially mark and provide signs at the 21,208 grade crossings that the proposal identified as likely having limited clear storage distances to accommodate commercial motor vehicles.

Response. As FMCSA and PHMSA indicated in the NPRM, recommendations to require States and local jurisdictions have been made previously. The Agencies have a clear mandate from Congress to prohibit a driver of a regulated motor vehicle from driving the vehicle onto a highway–rail grade crossing without having sufficient space to drive completely through the crossing without stopping. FMCSA and PHMSA lack authority to require the States and local governments to install markings and signage as suggested.

Further, as discussed in the NPRM, Federal Highway Administration (FHWA) has funding available annually under the Highway Safety Improvement Program (HSIP)\(^6\) for a variety of highway safety improvement projects. Eligible projects include (1) construction and improvement of a railway-highway grade crossing safety feature, including the installation of protection devices; (2) installation, replacement, and other improvements of highway signage and pavement markings or projects to maintain minimum levels of retroreflectivity that address a highway safety problem consistent with a State strategic highway safety plan; and (3) installation of traffic control or other warning devices at locations with high crash potential.

Also, FHWA has funding available under the Railway-Highway Crossings Program (23 U.S.C. 130) for the elimination of hazards at grade crossings. FMCSA and PHMSA have brought commenters’ suggestions to the attention of FHWA. We noted in the NPRM that competition for limited HSIP resources means that States and other public authorities must decide whether and when particular grade crossings might get pavement markings and signage and that not all grade–crossing improvements are likely to be funded.

Logistical Challenges.

In its comments, ATA noted that there are logistical challenges in implementing and enforcing the rule. OOIDA noted that the Agencies erroneously assumed drivers are aware of crossings consisting of inadequate storage space and that alternative routes exist.

Response. While we acknowledge commenters’ concerns, FMCSA and PHMSA do not believe the logistical challenges warrant a further delay in issuing the rule. The rule places upon drivers the responsibility to approach grade crossings with caution and to avoid going through the crossing unless there is enough room to completely clear the tracks without stopping. Admittedly, this may be difficult without knowing in advance all the crossings that may be along the route, the space around those crossings, and where there are traffic control devices and intersections that could result in a driver being forced to stop unexpectedly before clearing the track. The Agencies encourage enforcement discretion in those circumstances. However, the statutory mandate is clear and the Agencies do not have discretion whether to issue the rule, as drafted. The Agencies note that motor carriers are required by §§ 397.67 and 397.101 to plan routes for certain
hazardous material shipments and create a written route plan document for the driver. To the extent practicable, this mandatory planning should include preparation for grade crossings.

In addition, the Agencies remind all those involved with the arrangement for transportation services that the National Transportation Safety Board (NTSB) has found situations where shippers and receivers often know of the logistical and physical challenges truck drivers would face in getting to their loading and delivery locations, yet fail to communicate those challenges to the carrier and driver. Therefore, motor carriers and brokers should ask shippers and receivers about any logistical or physical challenges that might exist near, or on the roads leading to, loading and delivery locations. The Agencies recognize that avoidance of problematic grade crossings will not always be practicable. However, in many cases, industry will have opportunities to effectively address this issue.

Access to Grade Crossing Information.

OOIDA noted that maps, global positioning systems (GPS), and internet-generated directions often do not include grade crossing information, let alone storage space information. ATA suggested that motor carriers are more frequently using GPS and other guidance technologies to plot routes. Because these technologies can specifically target certain locations if those locations have been built into the technology’s databases, ATA suggested the Agencies share their data reflecting the locations of these grade crossings.

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crossings with GPS device manufacturers. The Agencies should encourage manufacturers
to incorporate these points into their products so that grade crossings can be displayed
and detoured around when necessary.

Response. The Agencies agree that data about the locations of potentially
problematic grade crossings should be made available to the industry and GPS navigation
system service providers, whenever possible. The Agencies worked with the John A.
Volpe National Transportation Systems Center (Volpe) to conduct a variety of
supplemental analyses which augment the Federal Railroad Administration (FRA) Grade
Crossing Inventory System (GCIS) data that is available to the public. The GCIS served
as the initial basis for determining the set of highway–rail grade crossings at which
insufficient clear storage distance may be a concern. Volpe supplemented data from the
GCIS with grade crossing latitude and longitude coordinate information available through
the FRA’s Office of Policy and Program Development.8

In June 2013, FRA released a mobile phone application (app) for Apple brand
iPhone™ and iPad™ users. The Rail Crossing Locator mobile app provides users with
access to grade crossing inventory information and accident data from the GCIS
database. The application allows users to: locate crossings by USDOT Crossing ID,
address or geo-location; access inventory records submitted by states and railroads; and
view accident history. Users can also select from multiple base map features to see the
crossing location, expand or narrow the buffer radius of a location, or get detailed
information about a specific crossing. The inventory record for a public crossing will

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8 Proprietary digital road network data files were also used and analyzed for potential storage space issues
on the basis of geographic information system (GIS) techniques described in more detail in the docketed
study. The procedures the Agencies used to create the dataset are fully explained in the technical supporting
document.
provide information about the presence of a nearby intersection as follows: less than 75 feet, 75 to 200 feet, and 200 to 500 feet and if the intersection has a traffic signal. Although this app will not provide complete information to ensure compliance with the rule, it will assist drivers in more strategically planning their routes. FMCSA and PHMSA remind regulated vehicle drivers of their duty to follow both § 392.82, prohibiting a driver from using a hand-held mobile telephone while driving, and current § 177.804(c), being reorganized and renumbered as § 177.804(b)(3) in this final rule, prohibiting certain intrastate HM drivers from using a hand-held mobile telephone while driving. Industry and GPS navigation system service providers can now use the Rail Crossing Locator mobile app to plot routes to comply with this final rule.

**Exception When No Reasonable Alternative Routes Are Available.**

The Nebraska Department of Roads and OOIDA suggested the rule should include an exception to allow for situations where there is no reasonable alternate route available. They argue that in rural States and industrial areas there are many crossings where no reasonable detour route exists. Nebraska also argued that the potential cost to implement the rule in Nebraska would be an unfunded mandate.

**Response.** As indicated above, in many situations, communications among shippers, receivers, freight forwarders, brokers, and motor carriers about issues in the vicinity of pick-up and drop-off points that may make it difficult for large trucks, especially combination vehicles, may help to address this issue. However, the Agencies acknowledge alternative routes may not be available. In certain circumstances, the railroad could be brought into the planning conversation with regard to the train schedules as the specialized equipment hauling industry does regularly and as the NTSB
recommended in its 2002 report about the November 17, 2000, crash in Intercession City, FL.\footnote{National Transportation Safety Board. 2002. Collision Between Amtrak Train 97 and Molnar Worldwide Heavy Haul Company Tractor-Trailer Combination Vehicle at Highway-Rail Grade Crossing in Intercession City, Florida, on November 17, 2000, Highway Accident Summary Report. NTSB/HAR-02/02. Washington, DC. The NTSB determined “that the probable cause of the November 2000 collision of Amtrak train 97 with the tractor-combination vehicle was the failure of the Kissimmee Utility Authority, its construction contractors and subcontractors, and the motor carrier to provide for the safe passage of the load over the grade crossing.” \url{http://www.ntsb.gov/doclib/reports/2002/HAR0202.pdf}.}

**Consistency with Executive Order 13563.**

Citing Executive Order 13563, “Improving Regulation and Regulatory Review,” which President Obama issued in January 2011, a commenter urged the withdrawal of the NPRM.

**Response.** The final rule is required by statute and nothing in the Executive Order suggests that the Agency should delay implementation of statutory provisions for which the options for implementation are as limited as the 1994 provision implemented in today’s final rule. The rule will reduce regulated motor vehicle–train crashes, while having relatively small impacts on business productivity.

**Intrastate Transportation of Hazardous Materials**

An anonymous commenter stated that “the proposed rule is a direct attack on the sovereignty of the several states” on the alleged ground that the Commerce Clause in Article I, Section 8 of the U.S. Constitution authorizes Congress only “[t]o regulate Commerce with foreign nations, and among the several States, and with the Indian Tribes.”

**Response:** In *United States v. Lopez*, 514 U.S. 549, 558-559 (1995), and *United States v. Morrison*, 529 U.S. 598, 608-609 (2000), the Supreme Court observed
that “modern Commerce Clause jurisprudence” has “identified three broad categories of activity that Congress may regulate under its commerce power…

- “First, Congress may regulate the use of the channels of interstate commerce…
- “Second, Congress is empowered to regulate and protect the instrumentalities of interstate commerce, or persons or things in interstate commerce, even though the threat may come only from intrastate activities…
- “Finally, Congress' commerce authority includes the power to regulate those activities having a substantial relation to interstate commerce, …\textit{i.e.}, those activities that substantially affect interstate commerce.” (internal citations omitted).

Accordingly, there is no doubt that Congress is empowered to regulate “activities that substantially affect interstate commerce.” Congress has explicitly done this by providing that the purpose of the Federal hazardous material transportation law “is to protect against the risks to life, property, and the environment that are inherent in the transportation of hazardous material in intrastate, interstate, and foreign commerce,” 49 U.S.C. 5101, and defining “commerce” to include “trade or transportation in the jurisdiction of the United States . . . that affects trade or transportation between a place in a State and a place outside of the State.” 49 U.S.C. 5102(1).\footnote{As enacted in 1975, the Hazardous Material Transportation Act declared that it was “the policy of Congress in this chapter to improve the regulatory and enforcement authority of the Secretary of Transportation to protect the Nation adequately against the risks to life and property which are inherent in the transportation of hazardous material in commerce.” Pub. L. 93-633, Title I, sec. 102, 88 Stat. 2156 (Jan. 3, 1975). In the same Act, “commerce” was defined to mean “trade, traffic, commerce, or
In the *Lopez* and *Morrison* cases, the Supreme Court noted that, “[w]here economic activity substantially affects interstate commerce, legislation regulating that activity will be sustained.” 514 U.S. at 560, 529 U.S. at 610. Here, the transportation of hazardous materials in commerce directly involves an economic activity, and the safety of intrastate transportation of hazardous materials has the potential of a substantial effect on interstate transportation of both hazardous and non-hazardous materials. Indeed, a crash at a highway-rail grade crossing involving any motor vehicle transporting hazardous materials necessarily has a direct effect upon the train involved in that crash, and that grade crossing is part of the national railroad system. Moreover, a grade crossing crash may result in injuries and fatalities to members of the train crew as well as to the motor vehicle operator, his or her passengers, and other persons in the vicinity of the crash.

For these reasons, we disagree that the prohibition adopted in this final rule is in violation of the Commerce Clause of the U.S. Constitution.

**Expand Applicability to All Vehicles**

A commenter suggested FMCSA and PHMSA should expand the applicability of this final rule to “all vehicles” and “not just Commercial vehicles” that cross highway–rail grade crossings. She stated that this is a dangerous problem for all traffic as she lives near a grade crossing and sees vehicles trapped on the tracks regularly.

**Response.** As discussed above, PHMSA has authority to prescribe regulations for the transportation of hazardous material “in intrastate, interstate, and foreign commerce.”

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transportation, within the jurisdiction of the United States, (A) between a place in a State and any place outside of such State, or (B) which affects trade, traffic, commerce, or transportation described in clause (A).” *Id.*, sec. 103(1).
49 U.S.C. 5103(b)(1). For this reason, the HMRs do not apply to “[t]ransportation of a hazardous material by an individual for non-commercial purposes in a private motor vehicle.” 49 CFR 171.1(d)(6). Similarly, FMCSA has authority to “prescribe regulations on commercial motor vehicle safety.” 49 U.S.C. 31136(a). But neither Agency has statutory authority to regulate non-commercial vehicles, i.e., vehicles not transporting persons or property in commerce. Accordingly, in HMTAA section 112, Congress directed DOT to prohibit the driver of “a motor vehicle transporting hazardous materials \textit{in commerce}” or “any \textit{commercial} motor vehicle” from entering a highway-rail grade crossing when there was not “sufficient space to drive completely through the crossing without stopping.” (emphasis supplied). This final rule carries out that mandate without going beyond the statutory authority of the two Agencies.

\textbf{V. The Final Rule}

\textit{49 CFR 392.12}

This final rule implements the statutory mandate enacted in section 112 of the HMTAA, as amended. The rule prohibits regulated motor vehicles from using certain grade crossings.

To proceed through a grade crossing with inadequate storage distance, a driver of a regulated motor vehicle will have to either ignore the traffic control device or comply with the traffic control device but violate the rule by driving onto the grade crossing without having sufficient space to drive completely through the crossing without stopping. As discussed earlier, the shipper, receiver, broker, and motor carrier should communicate about problematic routes in advance to avoid placing drivers in such untenable positions by re-routing standard-sized regulated motor vehicles around such
grade crossings, using smaller regulated motor vehicles at the crossings, or ensuring that the railroad company is informed well ahead of the planned crossing time and is given an opportunity to inform train crews and flagmen. Also, as discussed earlier, FRA’s Rail Crossing Locator mobile app will provide access to grade crossing inventory information that will assist drivers in more strategically planning their routes to avoid problematic grade crossings.

49 CFR 177.804

To ensure that the statutory language of section 112, as amended, applies to both interstate and intrastate motor carriers transporting hazardous materials, PHMSA revises 49 CFR 177.804. PHMSA has revised paragraph (b) by creating a new introductory phrase as set forth in the regulatory text of this rule. New paragraph (b)(1) requires the driver of a motor vehicle transporting this type and quantity of hazardous materials to comply with the safe clearance requirements for highway–rail crossings in 49 CFR 392.12. As such, motor carriers and drivers who engage in the transportation of covered materials must comply with the safe clearance requirements in § 392.12 of the FMCSRs. Current paragraph (b) has become paragraph (b)(2), and current paragraph (c) has become paragraph (b)(3).

VI. Regulatory Analyses

Executive Order 12866 (Regulatory Planning and Review), Executive Order 13563 (Improving Regulation and Regulatory Review) and DOT Regulatory Policies and Procedures

FMCSA and PHMSA have determined that this action is a non-significant regulatory action within the meaning of Executive Order 12866, as supplemented by
Executive Order 13563, issued January 18, 2011 (76 FR 3821). FMCSA and PHMSA expect the final rule will have minimal costs and generate minimal public interest. Of the 16 comments submitted to the January 28, 2011 NPRM, none provided data or information that would suggest the economic impact would meet or exceed the threshold for the Executive Order.

**Costs and Benefits of Rule Implementation**

The Agencies are required by statute to implement a rule prohibiting drivers of regulated motor vehicles from entering a highway-rail grade crossing unless there is sufficient space to clear the crossing completely without stopping. The data available to FMCSA indicate that those States with existing statutes or regulations similar to the proposed Federal rule have somewhat lower crash rates at grade crossings identified as having significant risk of storage–related issues. While factors other than the States’ storage–space rules may be responsible for some crash rate differences, the Agencies believe the differential is large enough to suggest that such rules have safety benefits. The number of States which have voluntarily adopted storage–space rules also suggests that the costs of implementing the requirements have not proven to be an issue with the motor carrier industry. Based on the safety impacts seen in the States that have adopted requirements similar to those addressed in this rulemaking, FMCSA and PHMSA believe the rule will provide a cost–beneficial enhancement to safety.

In the cost and benefit discussions that follow, the Agencies consider the costs and benefits applicable to the total population of carriers affected by this rule. Because the final rule does not mandate specific changes in carrier operations, driver training, or grade crossing infrastructure enhancements and no specific comments were received
providing any data to change the Agencies’ analyses, FMCSA and PHMSA conclude that the cost impacts will not be significant. Because a substantial number of States already have in place storage–space rules, drivers of regulated motor vehicles operating in or through those States should have the experience and knowledge needed to ensure compliance. FMCSA and PHMSA do not believe the rule will require special training of drivers operating in the other States. The Agencies requested public comment on this issue, but received none.

For regulated vehicles, the storage–distance related annual crash rate per 1,000 grade crossings is 0.72 based on data from 1998–2005.\textsuperscript{11} FMCSA and PHMSA found that the difference in this rate between States that have laws/regulations similar to the Federal rule adopted today and those that do not is 0.285 crashes per 1,000 grade crossings per year. Thus, FMCSA and PHMSA expect 2.62 fewer crashes per year, when all States adopt this Federal rule,\textsuperscript{12} and 0.3 fewer train derailments.\textsuperscript{13}

FMCSA and PHMSA estimate the total annual benefits from crashes avoided to be approximately $946,000. This consists of $473,000 in reduced injuries, $1,800 in reduced hazardous material spills, $33,000 in reduced highway property damage, and $438,000 in reduced costs for train derailments. Total implementation costs per year are estimated to be $302,000 in the first year, based on the added costs to State enforcement agencies of administrative, enforcement, or training activities. The additional costs for driver training should be small as the training would occur as a modification of emphasis.

\textsuperscript{11} 122 crashes / 8 years / 21,208 grade crossings with limited storage space x 1,000 = 0.72.
\textsuperscript{12} 0.000285 fewer incidents per grade crossing x 9,204 storage space impacted grade crossings in States without a similar rule equals 2.62 fewer crashes per year.
\textsuperscript{13} 14 derailments / 122 grade crossing incidents x 2.62 incidents prevented equals 0.3 fewer train derailments.
in existing railroad grade crossing training curricula. Railroad grade crossing training curricula for drivers would include training to comply with eight FMCSRs related to the safe operation of regulated motor vehicles at railroad grade crossings and penalties for non-compliance with these railroad grade crossing safe operation rules. In addition, drivers who operate in States with existing laws similar to the regulations in this final rule will be familiar with the requirements. Thus, costs are projected to be about $11,200 in each of the 27 states (including the District of Columbia) that do not have an existing law or regulation similar to the requirements in the final rule. Thus, the annual net benefits from implementation of this final rule in the first year should be about $644,000. In subsequent years, there would be $946,000 in annual savings.

Table 1 displays the 10–year average annual and discounted net costs and benefits of the statute that we are implementing in this final rule.14

<table>
<thead>
<tr>
<th></th>
<th>First Year Impact</th>
<th>Annual Impact (Years 2-10)</th>
<th>10-Year Total</th>
<th>10-Year (Discounted at 3 percent)*</th>
<th>10-Year (Discounted at 7 percent)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>$946</td>
<td>$946</td>
<td>$9,460</td>
<td>$8,312</td>
<td>$7,109</td>
</tr>
<tr>
<td>Costs</td>
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<td>$0</td>
<td>$302</td>
<td>$265</td>
<td>$227</td>
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<tr>
<td>Net Benefits</td>
<td>$644</td>
<td>$946</td>
<td>$9,158</td>
<td>$8,047</td>
<td>$6,882</td>
</tr>
</tbody>
</table>

* Present values of 10–year costs are discounted at 3 percent and 7 percent as specified in OMB Circular A-4, Regulatory Analysis, September 2004. Note that the first year costs and benefits are not discounted.

14 Note that the numbers for the 10-year costs and the discount rates differ from what was presented in the NPRM’s RIA due to a discovery of a minor mathematical error, the updating to current year costs with the new estimated average economic value of a statistical life for injury crashes (VSL), and the removal of annual fatality benefits, because zero fatal crashes were found in the analysis period of 1998-2005. The estimated mean VSL is derived from the DOT memorandum, “Treatment of the Economic Value of a Statistical Life in Departmental Analyses,” February 28, 2013. See http://www.dot.gov/sites/dot.dev/files/docs/VSL%20Guidance%202013.pdf.
Regulatory Flexibility Act

In compliance with the Regulatory Flexibility Act (5 U.S.C. 601–612), FMCSA and PHMSA have considered the effects of this regulatory action on small entities and determined that this final rule will not have a significant economic impact on a substantial number of small entities, as defined by the U.S. Small Business Administration’s Office of Size Standards.

FMCSA has determined that the requirements in this rulemaking apply to a substantial number of small entities (i.e., small owner/operator motor carriers and other small businesses employing drivers of regulated motor vehicles). However, the final rule does not mandate specific changes in carrier operations or driver training. Rerouting (as estimated by the sensitivity analysis in the NPRM) and other logistics costs that might be borne by small carriers are expected to be minimal in comparison to overall operating costs and would be incorporated into the carrier’s cost of business to the extent that the carrier found the delivery profitable.

Additionally, there will probably be only minimal additional costs for driver training as the training will probably occur as a modification of emphasis in existing training curricula and will not likely add extra time to the training requirement. The widespread use of communications and mapping systems, electronic and physical, as well as FRA’s Rail Crossing Locator mobile app, also work well to inform drivers of routing issues and provide assistance with complying with this final rule.

We estimate that a preponderance of this rule’s implementation costs – expected to be a one-time cost composed of government administrative, enforcement, or training
activities – will affect transportation personnel in the 27 States, including the District of Columbia, that do not have an existing law or regulation similar to the Federal rule.

Accordingly, the Administrators of FMCSA and PHMSA hereby certify that this final rule will not have a significant economic impact on a substantial number of small entities.

**Unfunded Mandates Reform Act of 1995**

Title II of the Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531, et seq.) requires Agencies to evaluate whether an Agency action would result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $143.1 million or more ($100 million, as adjusted for inflation) in any 1 year, and if so, to take steps to minimize these unfunded mandates. This rulemaking would result in private sector expenditures less than the $143.1 million threshold. The analysis shows a positive net benefit, with normal costs to industry falling far below the $143.1 million threshold.

The Nebraska Department of Roads commented that the Agencies’ rule is an unfunded mandate, unless language is included to allow for situations where there is no reasonable alternate route available. This is speculative, as the Nebraska Department of Roads did not provide any specific examples of this occurring within its road network. It is also worth mentioning that the rule does not require States to take any specific action, further reducing the claim of an unfunded mandate.

PHMSA and FMCSA, therefore, believe that this rule would not impose an unfunded Federal mandate.
Executive Order 12988 (Civil Justice Reform)

This action meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

Executive Order 12630 (Takings of Private Property)

This rulemaking does not effect a taking of private property or otherwise have takings implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

Executive Order 13132 (Federalism)

This action has been analyzed in accordance with the principles and criteria in Executive Order 13132. FMCSA and PHMSA have determined that this rulemaking does not have federalism implications in that it does not have a substantial direct effect on States, on the relationship between the National government and the States, or on the distribution of power and responsibilities among the various levels of government. This rulemaking is required by Federal law addressing a matter of national concern. State statutory provisions were reviewed and the Agencies are not aware of any State law that would be preempted by this rulemaking. Furthermore, States have been involved actively throughout the history of the rulemaking process. For example, State officials were consulted on anticipated enforcement efforts impacted by this rule.

Executive Order 12372 (Intergovernmental Review)

The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities do not apply to this final rule.
Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that FMCSA and PHMSA consider the impact of paperwork and other information collection burdens imposed on the public. FMCSA and PHMSA have determined there are no current or new information collection requirements associated with this final rule.

National Environmental Policy Act and Clean Air Act

The Agencies analyzed this final rule for the purpose of the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et seq.) and determined under FMCSA’s environmental procedures Order 5610.1, issued March 1, 2004 (69 FR 9680), that there is no adverse impact to air quality because this final rule should result in a decrease in highway and rail vehicle emissions as a result of fewer crashes. We expect moderately positive impacts to public safety, specifically at grade crossings, based on a decrease in the likelihood of fatalities and injuries as a result of crashes due to insufficient storage distance at grade crossings. There are no identified overall negative environmental or socioeconomic impacts associated with the final rule.

The beneficial impacts of the final rule include the positive effect on hazardous materials transportation, reduced locomotive idling time otherwise incurred as follow-on trains are delayed by derailments at grade crossings, and improved public safety, specifically at grade crossings. There are also net positive socioeconomic benefits, to motor and rail carriers in particular, in addition to positive indirect impacts to aspects of the physical and human environment.

FMCSA and PHMSA also analyzed this action under section 176(c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 et seq.), and implementing regulations
promulgated by the U.S. Environmental Protection Agency. FMCSA and PHMSA recognize that the action taken in this rulemaking could affect emissions of criteria pollutants from regulated motor vehicles. The air emissions analysis is discussed in the Environmental Assessment (EA) for this rule. In determining whether this action conforms to CAA requirements in areas designated as nonattainment under section 107 of the CAA and maintenance areas established under section 175A of the CAA, FMCSA and PHMSA are required (among other criteria) to determine if the total direct and indirect emissions are below or above de minimis levels. In the case of the alternatives proposed in this Final Rule, FMCSA and PHMSA consider the change in emissions to be an indirect result of the rulemaking action. FMCSA and PHMSA are requiring drivers and motor carriers to avoid railroad-grade crossings where not enough space exists to traverse the crossing completely, which, directly, does not result in additional emissions releases. Although emissions from additional VMT as a result of re-routing are foreseeable, under the definition of ‘indirect emissions’ in 40 CFR 93.152, FMCSA and PHMSA lack the ability to control emissions and do not have continuing program responsibility, two of the four criteria that must be met. Therefore, this action is exempt from the CAA’s general conformity requirement because it would not affect the amount of direct or indirect emissions. Moreover, based on FMCSA’s and PHMSA’s analysis, it is reasonably foreseeable that the action would not significantly increase total regulated motor vehicle mileage, nor would it change how these vehicles operate, or the vehicle fleet mix of motor carriers.

15 See EPA’s April 5, 2010 final rule “Revisions to the General Conformity Regulations.” Also included are EPA’s detailed discussion and clarification of its definitions of direct and indirect emissions at 75 FR 17254, 17260.
FMCSA and PHMSA conclude that the rule changes would have a negligible impact on the quality of several environmental components described in the EA and therefore would not require an Environmental Impact Statement. Subsequently, FMCSA and PHMSA are issuing a Finding of No Significant Impact with regard to potential environmental impact of this action.

A copy of the joint FMCSA and PHMSA Final Environmental Assessment (Final EA) is included in both dockets, FMCSA-2006-25660 and PHMSA-2010-0319 (HM-255). FMCSA and PHMSA sought public comment on its draft environmental assessment and received no comments about it.

Executive Order 12898 (Environmental Justice)

FMCSA and PHMSA evaluated the environmental effects of this final rule in accordance with Executive Order 12898 and determined there are neither environmental justice issues associated with its provisions nor any collective environmental impact resulting from its promulgation. Environmental justice issues would be raised if there were “disproportionate” and “high and adverse impact” on minority or low-income populations. None of the alternatives analyzed in the Agencies’ EA, discussed under NEPA, would result in high and adverse environmental impacts.

Executive Order 13045 (Protection of Children)

FMCSA and PHMSA analyzed this action under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. The Agencies have determined this rule does not create an environmental risk to health or safety that may disproportionately affect children. None of the alternatives analyzed in the
Agencies’ EA, discussed under NEPA, result in environmental risk to health or safety disproportionately affecting children.

Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments)

FMCSA and PHMSA analyzed this rulemaking in accordance with the principles and criteria in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments. This rulemaking is required by law and does not significantly or uniquely affect the communities of the Indian tribal governments or impose substantial direct compliance costs on tribal governments. Thus, the funding and consultation requirements of E. O. 13175 do not apply and no tribal summary impact statement is required.

Executive Order 13211 (Energy Effects)

FMCSA and PHMSA analyzed this action under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use. FMCSA and PHMSA determined that it will not be a “significant energy action” under that Executive Order because it will not be economically significant and will not be likely to have a significant adverse effect on the supply, distribution, or use of energy.

List of Subjects

49 CFR Part 177

Hazardous materials transportation, Motor carriers, Radioactive materials, Reporting and recordkeeping requirements.

49 CFR Part 392

Highway safety, Motor carriers.

In consideration of the foregoing, PHMSA and FMCSA amend title 49, Code of Federal Regulations, chapter I, part 177, and chapter III, part 392, as set forth below:
PART 177 – CARRIAGE BY PUBLIC HIGHWAY

1. The authority citation for part 177 is revised to read as follows:


2. Section 177.804 is revised to read as follows:

§ 177.804 Compliance with Federal Motor Carrier Safety Regulations.

   (a) General. Motor carriers and other persons subject to this part must comply with 49 CFR part 383 and 49 CFR parts 390 through 397 (excluding §§ 397.3 and 397.9) to the extent those regulations apply.

   (b) Additional prohibitions. A person transporting a quantity of hazardous materials requiring placarding under 49 CFR part 172 or any quantity of a material listed as a select agent or toxin in 42 CFR part 73:

       (1) Must comply with the safe clearance requirements for highway-rail grade crossings in § 392.12 of this title;

       (2) May not engage in, allow, or require texting while driving, in accordance with § 392.80 of this title; and

       (3) May not engage in, allow, or require the use of a hand-held mobile telephone while driving, in accordance with § 392.82 of this title.

PART 392 – DRIVING OF COMMERCIAL MOTOR VEHICLES

3. The authority citation for part 392 is revised to read as follows:

4. Section 392.12 is added to read as follows:

§ 392.12 Highway-rail crossings; safe clearance.

No driver of a commercial motor vehicle shall drive onto a highway-rail grade crossing without having sufficient space to drive completely through the crossing without stopping.

Issued in Washington, DC on August 21, 2013

under authority delegated in 49 CFR 1.97 (PHMSA) and 1.87 (FMCSA).

By the Pipeline and Hazardous Materials Safety Administration.

________________________________________

Cynthia L. Quarterman
Administrator

By the Federal Motor Carrier Safety Administration.

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Anne S. Ferro
Administrator

[FR Doc. 2013-23375 Filed 09/24/2013 at 8:45 am; Publication Date: 09/25/2013]