

MODEL STATE LAW TO ADDRESS SIGHT OBSTRUCTIONS AT PASSIVE HIGHWAY-RAIL GRADE CROSSINGS

BACKGROUND

Maintaining and improving safety at more than 220,000 highway-rail grade crossings in the United States are of the utmost concern to both the Federal Railroad Administration (FRA) and State governments. In recent years highway-rail grade crossing collisions have been the second leading cause of railroad-related fatalities.¹ In 2008, for example, 36.1% of all railroad-related fatalities were attributable to highway-rail grade crossing collisions. Further, between 2001 and 2005, accident reports submitted by railroads to FRA reflected that 689 collisions, resulting in 242 injuries and 87 fatalities, occurred at highway-rail grade crossings where sight distance obstructions were noted. In light of this significant accident data, Congress focused its attention on the issue of enhancing safety at highway-rail grade crossings. Furthermore, an audit report issued by the Office of Inspector General (OIG) at the U.S. Department of Transportation raised awareness of the safety implications associated with sight obstructions at highway-rail grade crossings.

On May 3, 2007, OIG issued an audit report entitled “The Federal Railroad Administration Can Improve Highway-Rail Grade Crossing Safety by Ensuring Compliance With Accident Reporting Requirements and Addressing Sight Obstructions.”² This report was itself a follow-up to an earlier audit report,³ which had also addressed highway-rail grade crossing safety issues. One of the recommendations made by OIG was that FRA should “[w]ork with FHWA [Federal Highway Administration] to develop model legislation for states to improve safety by addressing sight obstructions at grade crossings that are equipped solely with signs, pavement markings, and other passive warnings.” This recommendation is reflected in the language of Section 203 of the Rail Safety Improvement Act of 2008 (RSIA), which was signed into law on October 16, 2008.

Section 203 of the RSIA (49 U.S.C. § 20159) requires FRA, as the Secretary of Transportation’s delegate,⁴ to work in consultation with the Federal Highway Administration and States to

develop and make available to States model legislation providing for improving safety by addressing sight obstructions, including vegetation growth, topographic features, structures, and standing railroad equipment, at highway-rail grade crossings that are equipped solely with passive warnings, as recommended by the Inspector General of the Department of Transportation in Report No. MH-2007-044.

The following is a summary of the development and key elements of the model State law on adequate sight distance at passive highway-rail grade crossings.

¹ In recent years the primary cause of railroad-related fatalities has been trespassing on railroad property.

² OIG Report No. MH-2007-044.

³ OIG Report No. MH-2006-016, “Audit of Oversight of Highway-Rail Grade Crossing Accident Reporting, Investigations, and Safety Regulations,” November 28, 2005.

⁴See 49 CFR 1.49(m), (oo).

REVIEW OF EXISTING LAWS

FRA has contracted with an independent firm to periodically update a compilation of State laws and regulations that affect highway-rail grade crossings. The latest version of this compilation of State laws and regulations, issued in October 2009, and posted on FRA's public website, contains a chapter (Chapter 12) that specifically addresses laws and regulations related to vegetation clearance along the railroad right-of-way within close proximity to highway-rail grade crossings.

As reflected in the compilation, 29 States and the District of Columbia do not appear to have any codified law or regulation that applies specifically to vegetation clearance along the railroad right-of-way within close proximity to highway-rail grade crossings.⁵ While a number of States with laws pertaining to vegetation clearance also address other types of sight obstructions such as structures and buildings along the railroad right-of-way, only a small minority of States seem to have laws that address topographic features or standing railroad equipment located along the railroad right-of-way within close proximity to highway-rail grade crossings. Thus, FRA believes that new State laws should be adopted, and the scope of existing State laws should be expanded, to address sight obstructions, such as topographic features and standing railroad equipment, as reflected in section 203 of RSIA.

Most State laws establish a fixed distance in relation to the highway-rail grade crossing within which vegetation and other sight distance obstructions need to be addressed. However, this approach may ignore the unique characteristics associated with individual highway-rail grade crossings that would justify an adjustment to the general sight distance requirement. Through issuance of this model law, FRA is encouraging States to re-evaluate their approach and to adopt programs for the periodic evaluation of sight distances at passive highway-rail grade crossings. By establishing a more flexible approach for determining sight distance parameters for individual highway-rail grade crossings, FRA believes that this model law would allow States to focus their resources on the removal and/or mitigation of sight obstructions that have a demonstrable impact on highway-rail grade crossing safety.

CONSULTATION IN THE DEVELOPMENT OF THE MODEL STATE LAW

FRA's efforts to respond to the recommendations in the OIG audit report were initiated before RSIA was signed into law. A draft model law was presented to the Railroad Safety Advisory Committee (RSAC) in October 2007. The RSAC is a committee established by FRA, pursuant to the Federal Advisory Committee Act (5 U.S.C. App. II), to develop recommendations for new safety regulatory standards and other safety matters through a collaborative process with various members of the railroad community. During this presentation, RSAC attendees were encouraged

⁵ These States are Alabama, Alaska, Arizona, California, Delaware, Georgia, Hawaii, Kentucky, Maryland, Mississippi, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, West Virginia, and Wyoming.

to join in the development of the draft model law. Of those attendees, the Association of American Railroads, together with a small group of railroad representatives, responded to FRA's invitation and provided comments on the draft model law during the development process.

Pursuant to the statutory mandate in section 203 of RSIA, FRA also engaged in consultations with the Federal Highway Administration (FHWA) during the development of the draft model law. As part of the consultation process, FHWA provided comments on the draft model law during various phases of its development.

The American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on Rail Transportation was also invited to join the development effort behind the draft model law. In addition, FRA hosted an exhibit at the 2009 annual meeting of the National Conference of State Legislatures, where the draft model law was presented for comment.

SCOPE OF THE MODEL STATE LAW

Pursuant to the statutory mandate contained in section 203 of RSIA, this model law addresses sight obstructions at public, as well as private, highway-rail grade crossings.⁶ However, FRA acknowledges that private highway-rail grade crossings present a unique set of safety challenges and issues because of their private, or nonpublic, character.

A number of States have laws that address vegetation and sight distance obstructions, which are specifically tailored to address public highway-rail grade crossings. This conservative approach to the removal and/or mitigation of sight obstructions may be based upon the perception that the exercise of State jurisdiction over safety at highway-rail grade crossings is more clearly defined at public crossings. However, it should be noted that many of the safety concerns associated with public highway-rail grade crossings are shared with industrial and commercial private crossings, as well as private crossings that have a public use. In addition, by focusing exclusively on sight distance obstructions at public highway-rail grade crossings, State resources will only be targeted at a subset of the passive highway-rail grade crossings that may pose potential safety hazards. According to the U.S. Department of Transportation's National Highway-Rail Grade Crossing Inventory, the majority of private highway-rail grade crossings are either equipped with passive warning devices, such as stop signs, or no warning devices at all. Therefore, FRA encourages States to include private highway-rail grade crossings in their efforts to remove and/or mitigate sight obstructions at passive highway-rail grade crossings.

OVERVIEW

This model law on sight distances at passive highway-rail grade crossings is presented in a generally accepted format that should lend itself to being readily adapted to any individual State's statutory framework.

⁶ Public highway-rail grade crossings are locations where public highways, roads, or streets cross one or more railroad tracks at grade. Private highway-rail grade crossings are locations where roadways that are either not open to public travel or are not maintained by a public authority cross one or more railroad tracks at grade.

There are three types of sight distance measurements that are generally used to evaluate safety at passive highway-rail grade crossings: clearing sight distance; corner sight distance; and stopping sight distance.⁷ This model law contains several provisions that are directly relevant to the preservation of these sight distances at passive highway-rail grade crossings.

This model law would:

- Require the establishment of a statewide program for the periodic inspection and evaluation of sight distances at passive highway-rail grade crossings.
- Enumerate specific actions to address sight distance obstructions within close proximity to passive highway-rail grade crossings.
- Authorize the issuance of civil penalty citations against railroad companies and other private property owners, and the recoupment of costs from responsible public entities, who fail to comply with an order to remove or otherwise mitigate the sight distance obstruction.
- Establish a minimum and maximum stopping distance requirement for road users of passive highway-rail grade crossings.

⁷ “Clearing sight distance” means the distance required along each direction of track for the road user stopped 15 feet short of the near rail at a highway-rail grade crossing to be able to see far enough down the track, in both directions, to determine if sufficient time exists for moving safely across the tracks to a point 15 feet past the far rail, prior to the arrival of a train.

“Corner sight distance” means the length of highway on the approach to a highway-rail grade crossing that would be required by a road user to detect an approaching train from either direction of track in sufficient time to safely stop a vehicle traveling at the posted speed limit at least 15 feet before the near rail.

“Stopping sight distance” means the length of highway on the approach to a highway-rail grade crossing required to safely stop a vehicle traveling at the posted speed limit at least 15 feet before the near rail.

SECTION-BY-SECTION ANALYSIS OF THE ADEQUATE SIGHT DISTANCE AT PASSIVE HIGHWAY-RAIL GRADE CROSSINGS ACT

Section 1. Section 1 would provide that the Act may be cited as the “Adequate Sight Distance at Passive Highway-Rail Grade Crossings Act”.

Section 2. Section 2 would provide that the purpose of this Act would be to mandate that the highest official of the public authority that has responsibility to inspect highway-rail grade crossings (hereinafter referred to as the “head of the responsible public agency”) establish a Statewide program to improve sight distance at passive highway-rail grade crossings. Sight distance obstructions, such as vegetation, topographic features, structures and standing railroad equipment, have been shown to contribute to grade crossing collisions by reducing the road user’s ability to detect approaching trains and other railroad equipment. In the absence of train-activated warning devices, such as automatic gates and flashing lights, sight distances at highway-rail grade crossings play a critical role in the road user’s determination as to whether it will be safe to enter and travel through the crossing.

Section 3. Section 3 consists of two broad proposals. The first would require the head of the responsible public agency to establish a program to improve sight distances at passive highway-rail grade crossings. The second proposal would establish a minimum and maximum stopping distance requirement for road users of passive highway-rail grade crossings.

Under the first proposal addressing sight distances, the responsible public agency would conduct periodic evaluations of the clearing sight distance, corner sight distance, and stopping sight distance at passive highway-rail grade crossings and take corrective

action where needed. Section 3 would also establish a minimum and maximum stopping distance requirement for road users at passive highway-rail grade crossings.

If the Act is enacted, the responsible public agency charged with implementation of this sight-distance evaluation program should employ the sight distance analysis methods outlined in the publication entitled, “Guidance On Traffic Control Devices At Highway-Rail Grade Crossings,” and “Railroad-Highway Grade Crossing Handbook – Revised Second Edition (August 2007)” which have been published by the Federal Highway Administration (FHWA). In addition, personnel qualified in engineering and design should be deployed by the responsible public agency to perform the sight distance evaluations that are required herein. The responsible public agency should also consider including provision, in its sight-distance evaluation program, for unscheduled or “expedited” sight distance evaluations, in response to complaints regarding moveable objects (such as standing rail equipment) that may be obstructing the required clearing sight distance, corner sight distance, or stopping sight distance at individual passive highway-rail grade crossings.

Subsection (b) would address the requisite inspection authority that the responsible public agency would need to implement the sight-distance evaluation program described in subsection (a). At a minimum, officers, employees, and agents of the responsible public agency would need authority to enter private, as well as public, property for the purposes of determining the adequacy of the clearing sight distance, corner sight distance, and stopping sight distance at passive highway-rail grade crossings and evaluating sight distance obstructions caused, in whole or in part, by structures,

topography, standing railroad equipment, trees, and other vegetation located within close proximity to those crossings.

Subsection (c) would require the responsible public agency to take action, upon discovery of an obstruction of the clearing sight distance, corner sight distance, or stopping sight distance at a passive highway-rail grade crossing. In light of the economic realities associated with the removal of permanent physical obstructions, subsection (c)(1) would provide a list of alternate options that would be authorized to be available to the responsible public agency in order to mitigate the impact of the obstruction. For example, if removal of the obstruction would be cost-prohibitive or otherwise unfeasible, the responsible public agency may choose to install speed limit signs with a reduced regulatory speed or advisory speed plaques to better accommodate a limited corner sight distance condition.

Subsection (c)(2) would contain a penalty provision for use by the responsible public agency, should the responsible public agency choose to order a railroad corporation or other private property owner to remove or otherwise mitigate an obstruction located on private property. This penalty reflects current civil penalty provisions under State law for the failure of railroad companies to comply with vegetation standards at highway-rail grade crossings. See ARK. CODE ANN. § 23-12-201 (Michie 2010)(Arkansas law that imposes a fine of not less than \$100 or more than \$500 for each violation); IND. CODE § 8-6-7.6-2 (2010); LA. REV. STAT. ANN. § 48:386.1 (West 2010)(Indiana and Louisiana laws that impose a fine of \$100 per day subject to a maximum fine of \$5,000); MINN. STAT. ANN. § 219.384 (West 2010)(Minnesota law that imposes a fine of \$50 per day); S.C. CODE ANN. § 58-17-

1450 (Law. Co-op. 2009)(South Carolina law that imposes a fine of not less than \$100 or more than \$500, plus \$100 per day after a specified period of time); and VA. CODE ANN. § 56-411 (Michie 2009)(Virginia law that imposes a fine of not more than \$500 for each offense). However, the responsible public agency may also choose to exercise independent authority to address sight obstructions through the pursuit of injunctive relief against particularly recalcitrant private property owners. If the responsible public agency does not possess such authority, the State may wish to add a provision to this model state law that would confer such authority to the responsible public agency upon enactment. In recognition of the right of the railroad corporation or other private property owner to appeal an order issued by the responsible public agency in the exercise of its power of eminent domain, subsection (c)(2) would allow the railroad corporation or other private property owner to toll the issuance of civil penalties by filing an appeal of the order.

If the obstruction is located on public property maintained by a State or local government, subsection (c)(3) would authorize the responsible public agency itself to remove or otherwise mitigate the obstruction, after providing written notice and adequate opportunity for the State or local government to do so. If the responsible public agency chooses to remove or otherwise mitigate the obstruction, the responsible public agency would be authorized to seek reimbursement for any costs incurred from the State or local government with maintenance responsibility for the public property on which the obstruction had been located. A comparable provision can be found in South Carolina law, which specifically authorizes reimbursement of expenses incurred by the State department of transportation to remove sight distance obstructions located on the right-

of-way of highways and roads maintained by counties and municipalities. See S.C. CODE ANN. § 58-17-1450 (Law. Co-op. 2009).

Subsection (d) would define certain terms, including “clearing sight distance” and “corner sight distance”. With respect to the term “clearing sight distance”, it should be noted that the determination of minimum required clearing sight distance would be dependent upon maximum train speed over the crossing, as well as the length and acceleration characteristics of the various types of motor vehicles that routinely use the crossing. Similarly, the determination of “corner sight distance” would be dependent upon train and vehicular speeds on approach to the crossing. The corner sight distance requirement would, however, also require an unobstructed field of vision along the approach sight triangle.

Subsection (d) would also provide a definition of “passive highway-rail grade crossing”, which includes private and public highway-rail grade crossings that are solely equipped with traffic control devices that are not activated by trains (such as one or more signs and pavement markings). While this definition closely follows the definition of “crossing” contained in section 2 of the Rail Safety Improvement Act of 2008 (division A of Public Law No. 110-432), the definition of “passive highway-rail grade crossing” would exclude pedestrian crossings that are equipped with passive warning devices.

The second proposed amendment under Section 3 titled, “Vehicles approaching passive highway-rail grade crossings”, would establish a minimum and maximum stopping distance requirement for road users of passive highway-rail grade crossings. This amendment would also require road users to observe conditions along both

directions of the railroad track and determine that the crossing will remain clear for a sufficient amount of time before entering and clearing the crossing.

Subsection (a) would establish a stopping distance requirement for road users of passive highway-rail grade crossings under certain specified conditions. This subsection would require road users to stop within 15 to 50 feet of the nearest rail of the track at the passive highway-rail grade crossing under the following conditions: 1) upon approach of a train or other railroad equipment that is likely to occupy the crossing before the road user can safely enter and clear the crossing, 2) if a train approaching the crossing is sounding the locomotive horn or other locomotive audible warning device, or 3) if a stop sign is posted at the crossing. By complying with this stopping distance requirement, the road user should be able to determine whether the crossing will remain clear long enough to safely enter and clear the railroad tracks.

Subsection (b) would govern the actions that must be taken before the road user enters the passive highway-rail grade crossing. To make a well-informed decision as to whether it will be safe to enter and travel across the crossing, especially in the absence of train-activated warning devices such as automatic gates and flashing lights, the road user must look, as well as listen, in both directions along the railroad track for evidence of an approaching train or other railroad equipment before entering the crossing. The road user may enter the crossing after determining that the crossing will remain clear for a sufficient amount of time within which to enter, travel through the crossing, and then reach a location at which the entire length of the road user's vehicle would be at least 15 feet past the far rail prior to the arrival of a train or other railroad equipment at the crossing.

Subsection (c) would define certain terms, including “passive highway-rail grade crossing”, and “road user”. The definition of “passive highway-rail grade crossing” would include private and public highway-rail grade crossings that are solely equipped with traffic control devices that are not activated by trains (such as one or more signs or pavement markings). While this definition closely follows the definition of “crossing” contained in section 2 of the Rail Safety Improvement Act of 2008, the definition of “passive highway-rail grade crossing” would exclude pedestrian crossings that are equipped with passive warning devices. It should also be noted that the definition of “road user” would be somewhat broad in scope and include individuals other than motor vehicle operators, such as bicyclists, pedestrians, and persons with one or more disabilities.

A BILL

To amend [State or Commonwealth Code], and for other purposes.

Be it enacted by [] legislature assembled in the [State or Commonwealth] of [],

SECTION 1. SHORT TITLE.

This Act may be cited as the “Adequate Sight Distance at Passive Highway-Rail Grade Crossings Act”.

SEC. 2. PURPOSE.

The purpose of this Act is to establish a Statewide program to improve sight distance at passive highway-rail grade crossings.

SEC. 3. AMENDMENTS TO THE TRANSPORTATION LAWS.

Section [] of chapter [], of title [], [State or Commonwealth General Laws], is amended [to read as follows:] [Chapter [] of title [], [State or Commonwealth General Laws], is amended by adding at the end thereof the following new sections:]

“§[]. Adequate sight distance at passive highway-rail grade crossings

“(a) PERIODIC EVALUATION OF SIGHT DISTANCE AT PASSIVE HIGHWAY-RAIL

GRADE CROSSINGS.--The [head of the public authority that has the responsibility to inspect highway-rail grade crossings] (hereinafter referred to as the “head of the responsible public agency”) shall establish a program to determine the adequacy of the clearing sight distance, corner sight distance, and stopping sight distance at each passive highway-rail grade crossing on a periodic basis.

“(b) INSPECTION AUTHORITY.—To carry out this section, an officer, employee, or agent of the public authority that has the responsibility to inspect highway-rail grade crossings

(hereinafter referred to as the “responsible public agency”), at reasonable times and in a reasonable way, may enter public or private property for the purposes of determining the adequacy of the clearing sight distance, corner sight distance, and stopping sight distance at passive highway-rail grade crossings and evaluating sight distance obstructions caused, in whole or in part, by structures, topography, standing railroad equipment, trees, or other vegetation located within close proximity to those crossings.

“(c) ACTIONS TO IMPROVE SIGHT DISTANCE AT PASSIVE HIGHWAY-RAIL GRADE CROSSINGS.—

“(1) If the head of the responsible public agency finds that structures, topography, standing railroad equipment, trees, or other vegetation are obstructing the required clearing sight distance, corner sight distance, or stopping sight distance at a passive highway-rail grade crossing, the head of the responsible public agency shall take action to correct the deficiency. Such action may include, but shall not be limited to the following:

“(A) ordering the removal or other mitigation of the obstruction by the owner of any private property on which the obstruction may be located;

“(B) providing written notice of the obstruction to the appropriate State or local government with maintenance responsibility for any public property on which the obstruction may be located;

“(C) installing additional traffic control devices; or

“(D) installing speed limit signs with a reduced regulatory speed or advisory speed plaques for road users.

“(2) Any private property owner who receives an order to remove or otherwise mitigate an obstruction, pursuant to subsection (c)(1)(A) of this section, shall either comply with, or file an appeal to, the order within sixty (60) days of receipt. A person that fails to comply with, or properly file an appeal to, an order to remove or otherwise mitigate an obstruction that has been issued pursuant to subsection (c)(1)(A) of this section is liable to the [State or Commonwealth of []] for a civil penalty of not less than one hundred dollars, but not more than five hundred dollars, for each day on which the obstruction continues unabated. The head of the responsible public agency may, however, compromise the amount of a civil penalty citation imposed under this subsection.

“(3) If the responsible public agency provides written notice of an obstruction on public property maintained by the State or local government, the State or local government will have sixty (60) days to remove or otherwise mitigate the obstruction. Upon expiration of this sixty (60) day period, the responsible public agency may remove or otherwise mitigate the obstruction and then seek reimbursement for costs incurred from the State or local government with maintenance responsibility for the public property on which the obstruction was located.

“(d) **DEFINITIONS.**--In this section—

“(1) ‘clearing sight distance’ means the distance required along each direction of track for the road user stopped 15 feet short of the near rail at a highway-rail grade crossing to be able to see far enough down the track, in both directions, to determine if sufficient time exists for moving safely across the tracks to a point 15 feet past the far rail, prior to the arrival of a train;

“(2) ‘corner sight distance’ means the length of highway on the approach to a highway-rail grade crossing that would be required by a road user to detect an approaching train from either direction of track in sufficient time to safely stop a vehicle traveling at the posted speed limit at least 15 feet before the near rail;

“(3) ‘passive highway-rail grade crossing’ means a location, equipped solely with traffic control devices that are not activated by trains (such as one or more signs or pavement markings), where a public highway, road, or street, or a private roadway, including associated sidewalks and pathways, crosses one or more railroad tracks at grade;

“(4) ‘road user’ means a vehicle operator, bicyclist, or pedestrian, including a person with one or more disabilities, within a public highway, road, or street, or a private roadway, including associated sidewalks and pathways; and

“(5) ‘stopping sight distance’ means the length of highway on the approach to a highway-rail grade crossing required to safely stop a vehicle traveling at the posted speed limit at least 15 feet before the near rail.

“§[]. Vehicles approaching passive highway-rail grade crossings

“(a) STOPPING DISTANCE.--Upon approach to a passive highway-rail grade crossing, the road user shall come to a full stop within 15 to 50 feet of the nearest rail of the track under any of the following circumstances:

“(1) the approach of a train or other railroad equipment that is likely to occupy the crossing before the road user can safely enter and clear the crossing;

“(2) the sounding of a locomotive horn or other locomotive audible warning device by a train approaching the crossing; or

“(3) if a stop sign is posted at the crossing.

“(b) DURATION OF STOP.--While stopped at least 15 feet from the nearest rail of the track at a passive highway-rail grade crossing, the road user shall listen and look in both

directions along the railroad track for evidence of the approach of a train or other railroad equipment. The road user shall not enter the crossing until the road user has determined that the crossing will remain clear of approaching trains and other railroad equipment for a sufficient amount of time to allow the road user to enter and clear the crossing.

“(c) DEFINITIONS.--In this section—

“(1) ‘passive highway-rail grade crossing’ means a location, equipped solely with traffic control devices that are not activated by trains (such as one or more signs or pavement markings), where a public highway, road, or street, or a private roadway, including associated sidewalks and pathways, crosses one or more railroad tracks at grade; and

“(2) ‘road user’ means a vehicle operator, bicyclist, or pedestrian, including a person with one or more disabilities, within a public highway, road, or street, or a private roadway, including associated sidewalks and pathways.”