



**4910-06-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Railroad Administration**

[Docket No. FRA-2009-0041, Notice No. 2]

**49 CFR Part 234**

**RIN 2130-AC12**

**Systems for Telephonic Notification of Unsafe Conditions at Highway-Rail and Pathway Grade Crossings**

**AGENCY:** Federal Railroad Administration (FRA), Department of Transportation (DOT).

**ACTION:** Final rule.

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**SUMMARY:** This final rule requires certain railroads to establish and maintain systems that allow members of the public to call the railroads, using a toll-free telephone number, and report an emergency or other unsafe condition at highway-rail and pathway grade crossings. The rule refers to such a system as an “Emergency Notification System,” and it consists of the following components: the signs, placed at the grade crossing, that display the information necessary for the public to report an unsafe condition to the appropriate railroad; the method that the railroad uses to receive and process a telephone call reporting the unsafe condition; the remedial actions that the appropriate railroad or railroads take to address the report of the unsafe conditions; and the related recordkeeping conducted by the railroad(s).

**DATES:** This final rule is effective [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Petitions for reconsideration must be

received on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Petitions for reconsideration will be posted in the docket for this proceeding. Comments on any submitted petition for reconsideration must be received on or before [INSERT DATE 105 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** Petitions for reconsideration or comments on such petitions: Any petitions and any comments to petitions related to Docket No. FRA-2009-0041, Notice No. 2, may be submitted by any of the following methods:

- Web Site: Federal eRulemaking Portal, <http://www.regulations.gov>. Follow the online instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, W12-140, Washington, DC 20590.
- Hand Delivery: Room W12-140 on the Ground level of the West Building, 1200 New Jersey Avenue, SE, W12-140, Washington, DC between 9 a.m. and 5 p.m. Monday through Friday, except Federal holidays.

Instructions: All submissions must include the agency name and docket number or Regulatory Identification Number (RIN) for this rulemaking. Note that all comments received will be posted without change to <http://www.regulations.gov> including any personal information. Please see the Privacy Act heading in the **Supplementary Information** section of this document for Privacy Act information related to any submitted comments or materials.

Docket: For access to the docket to read background documents or comments received, go to <http://www.regulations.gov> at any time or to Room W12-140 on the Ground level of the West Building, 1200 New Jersey Avenue, SE, Washington, DC between 9 a.m. and 5 p.m. Monday through Friday, except Federal holidays.

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## **I. Executive Summary**

### A. In General

There are approximately 211,000 public and private highway-rail and pathway grade crossings in the United States. Each year since 1997, highway-rail and pathway grade crossing collisions have caused more railroad-related deaths than any other single factor, except for trespassing on railroad property.

This rule furthers FRA's efforts to reduce deaths and injuries at grade crossings and elsewhere along the Nation's railroads, by requiring railroads to implement a telephonic system, referred to as an "Emergency Notification System" or "ENS," through which they receive reports of unsafe conditions at crossings. Specifically, this rule implements Section 205 (Sec. 205) of the Rail Safety Improvement Act of 2008 (RSIA), Public Law No. 110-432, Division A, which was signed into law on October 16, 2008, and which is detailed later in this preamble. This rule uses experience gained through pre-existing voluntary, State, and Federal programs for systems similar to ENS, as well as the U.S. DOT National Crossing Inventory, which began as a voluntary program, and

reflects comments on FRA's Notice of Proposed Rulemaking (NPRM) published March 4, 2011 (76 FR 11992). To a certain extent, this rule also builds on pre-existing regulations in 49 CFR part 234 that govern a railroad's response to certain reports of a malfunction of a highway-rail grade crossing signal system and maintenance, inspection, and testing of highway-rail grade crossing signal systems.

## B. Overview of Rule Requirements

### 1. Telephonic Reporting of Unsafe Conditions at Crossings

This rule requires each railroad that dispatches a train, or otherwise provides the authority for the movement of a train, through a highway-rail or pathway grade crossing, to set up and maintain an ENS by which the railroad is able to directly receive telephonic reports from the public of certain unsafe conditions at the crossing and then take specified action to respond to those reports. There are four categories of reportable unsafe conditions for each highway-rail and pathway grade crossing. Generally, these categories are (1) malfunctions of signals, crossing gates, and other devices to promote safety at the grade crossing; (2) disabled vehicles and other obstructions blocking railroad tracks at the crossing; (3) obstructions to the view of a pedestrian or a vehicle operator for a reasonable distance in either direction of a train's approach to the crossing; and (4) any other unsafe condition at the crossing, such as a downed crossbuck sign or a pot hole in the crossing.

The railroad that dispatches a train through a crossing is called the "dispatching railroad." The dispatching railroad may receive these reports by a variety of methods. The railroad may have a live person answer the calls directly, or use a third-party telephone service. As will be discussed later in more detail, FRA made revisions to the

proposed rule that permit a railroad to set up an automated answering system, which ultimately results in the caller speaking to a live person, or, under certain circumstances, the railroad may use an answering machine to receive reports.

Sometimes a railroad does not have the responsibility for maintaining the particular crossing through which it dispatches a train. The rule provides that if the dispatching railroad does not have maintenance responsibility for the crossing that is the subject of the report received through the ENS, and if the report involves maintenance of the crossing, then the dispatching railroad must relay the report to the railroad responsible for maintaining the crossing (the maintaining railroad) for investigation and remedial action. Accordingly, the maintaining railroad must set up a telephonic system for receiving such phone calls from the dispatching railroad. Depending on the circumstances, the maintaining railroad may receive such calls through the use of an automated answering system, third-party telephone service, or answering machine.

It should also be noted that the rule addresses situations where multiple railroads dispatch trains through the same crossing, by requiring those railroads to identify one primary dispatching railroad that is responsible for receiving reports made via the ENS for the crossing.

## 2. Remedial Actions to Be Taken by Railroads

As will be discussed later in more detail, the receipt of a report made through the ENS of an unsafe condition at a crossing triggers certain responsibilities each for dispatching and maintaining railroads. The dispatching railroad upon receiving such a report and depending on the nature of the report, is required to contact all trains authorized to operate through the crossing to which the report pertains, inform local law

enforcement officers of the reported unsafe condition so that they may direct traffic or otherwise assist in ensuring the safety of the crossing, and then either investigate the report itself or request that the railroad with maintenance responsibility for the crossing investigate the report. If the report is substantiated, the railroad with maintenance responsibility for the crossing is required to take certain actions to remedy the unsafe condition.

### 3. Characteristics and Number of ENS Signs to Be Placed and Maintained at a Crossing

This rule establishes requirements for the physical characteristics, number, placement, and maintenance of ENS signs. In general, each ENS sign must display a minimum amount of information, the toll-free telephone number of the dispatching railroad, an explanation of the purpose of the sign (e.g., “Report emergency or problem to \_\_\_\_\_”), and the U.S. DOT National Crossing Inventory number assigned to that crossing.

The ENS signs also must meet certain color and size requirements. Furthermore, the signs must be posted at the crossing in a manner that they are conspicuous to the roadway or pathway user, do not obstruct other signs or traffic control devices, and do not limit the view of trains approaching the crossing. The signs also must be crashworthy if mounted on a post.

In general, an ENS sign must be placed on each approach to a highway-rail or pathway grade crossing. There are two exceptions. At a farm grade crossing, a railroad is required to install and maintain only one ENS sign. Additionally, one sign is sufficient at each vehicular entrance to a certain type of private industrial facility.

In general, the responsibility for the placement and maintenance of an ENS sign at a crossing is the responsibility of the maintaining railroad. However, it should also be

noted that, where there are multiple railroads that maintain the same crossing, the rule requires that those railroads identify one to be responsible for the placement and maintenance of the sign(s) at the crossing.

#### 4. Compliance Dates

In this rule, FRA extends several of the compliance dates beyond the dates proposed in the NPRM, to provide railroads a longer period of time to phase in implementation of an ENS. FRA made several significant changes from the proposed rule, which will be discussed later in more detail. For example, a railroad subject to the rule that has no type of ENS currently in place now has until September 1, 2015, to establish such a system. Additionally, for a railroad that currently has ENS signs in place at its crossings, the requirements for replacing the sign are as follows: if the sign is 60 square inches or greater with lettering that measures at least  $\frac{3}{4}$  inch high, the railroad is permitted to retain the sign for the duration of the sign's useful life; if the sign is 60 square inches or greater, but the lettering measures less than  $\frac{3}{4}$  inch high, the railroad must replace the sign by September 1, 2017; and if the sign is smaller than 60 square inches, regardless of the size of the lettering, the railroad must replace the sign by September 1, 2015.

#### C. Expected Costs and Benefits of the Rule

FRA has estimated the costs of this rule, evaluated over a 15-year period and using a discount rate of 7 percent. For the 15-year period analyzed, the estimated quantified cost that will be imposed on railroads totals \$15.6 million, with a present value (PV, 7 percent) of \$10.1 million. This rule is expected to improve railroad safety by ensuring that all crossings have adequate signage displaying a telephone number for

reporting unsafe conditions at the crossing to the railroad. The primary benefits include heightened safety at crossings from an earlier awareness of potential track obstructions, crossing signal malfunctions, and other safety issues, which FRA anticipates will reduce related crossing accidents and the associated fatalities, injuries, and damages. Thus, in general, implementation of this rule should decrease railroad accidents at crossings as well as other railroad accidents, and associated casualties and damages. Based on FRA’s analysis, the agency has found that the expected accident-reduction benefits will exceed the total cost of this rule. Over a 15-year period, this analysis concludes that \$57.8 million in cost savings will accrue through casualty prevention and damage avoidance. The discounted value of this casualty prevention and damage avoidance is \$31.7 million (PV, 7 percent).

The table below presents the estimated costs associated with this rule.

<b>15-Year Estimated Costs of the Final Rule</b>	
<b>Section 234.303 - Toll-Free Service</b>	\$989,870
<b>Section 234.306 – Multiple Dispatching or Maintaining Railroads</b>	\$9,800
<b>Section 234.307 - Third-Party Service</b>	\$2,881
<b>Section 234.309 - Signs (Materials)</b>	\$2,863,448
<b>Section 234.309 - Signs (Installation)</b>	\$2,007,754
<b>Section 234.311 - Post (Materials)</b>	\$238,621
<b>Section 234.311 - Post (Installation)</b>	\$200,775
<b>Section 234.313 - Initial Recordkeeping</b>	\$299,790
<b>Section 234.313 - Remedial Recordkeeping</b>	\$3,490,728
<b>Total</b>	\$10,103,668

Dollars are discounted at a present value rate of 7 percent. Note that numbers may not add due to rounding.

The table below presents the estimated benefits associated with this rule.

<b>15-Year Estimated Benefits of the Final Rule</b>	
<b>Fatalities (Prevented)</b>	\$21,519,783
<b>Injuries (Prevented)</b>	\$8,587,839
<b>Highway Vehicle Damage (Avoided)</b>	\$651,130
<b>Railroad Equipment Damage (Avoided)</b>	\$327,922
<b>Track/Structure Damage (Avoided)</b>	\$203,988
<b>Other Benefits</b>	\$416,974
<b>Total</b>	\$31,707,636

Dollars are discounted at a present value rate of 7 percent. Note that numbers may not add due to rounding.

## **II. Statutory Background**

This final rule is intended specifically to implement Sec. 205 of the RSIA, Public Law No. 110-432, Division A, which was enacted October 16, 2008, and generally to increase safety at highway-rail and pathway grade crossings. See 49 U.S.C. 20152, Notification of grade crossing problems, and definitions in revised 49 CFR 234.5 and new 49 CFR 234.301. Sec. 205 of the RSIA mandates that the Secretary of Transportation (Secretary) require certain railroad carriers (railroads) to take a series of specified actions related to setting up and using systems by which the public is able to notify the railroad by toll-free telephone number of safety problems at its highway-rail and pathway grade crossings. Such systems are commonly known as Emergency Notification Systems (ENS) or ENS programs. This rule is also being issued under the authority of a separate statutory provision, 49 U.S.C. 20103, which gives the Secretary very broad authority to prescribe rail safety regulations and issue rail safety orders pursuant to notice-and-comment procedures. The Secretary has delegated the responsibility to carry out both Sec. 205 of the RSIA and 49 U.S.C. 20103 to the

Administrator of FRA. 49 CFR 1.49(m), (oo). Essentially, Sec. 205 of the RSIA imposes a mandate requiring FRA as the Secretary's delegate to prescribe regulations or orders imposing the requirements specified in that section; this final rule implements that statutory mandate.

In particular, under Sec. 205 of the RSIA, FRA is to require each railroad to "establish and maintain a toll-free telephone service for rights-of-way over which it dispatches trains" through "the grade crossing of railroad tracks on those rights-of-way and public or private roads," "to directly receive calls reporting" any of three types of unsafe conditions at the grade crossing or other safety-related information involving such a grade crossing. Under that section, the three types of reportable unsafe conditions are as follows: (1) malfunctions of warning signals, crossing gates, and other devices intended to promote safety at the highway-rail grade crossing; (2) disabled vehicles blocking railroad tracks at such grade crossings; and (3) obstructions to the view of a pedestrian or a vehicle operator for a reasonable distance in either direction of a train's approach to such a grade crossing. To the extent that the requirements of the final rule exceed the requirements specified by the RSIA, FRA relies primarily upon its general safety rulemaking authority under 49 U.S.C. 20103.

In addition to specifying the requirement that the Secretary must impose on dispatching railroads to establish and maintain telephonic notification systems, the RSIA includes a series of additional specifications to be reflected in FRA's regulation. When a railroad receives through the ENS a report of a malfunction of a warning signal, crossing gate, and/or other device intended to promote safety at a grade crossing or a report of a disabled vehicle blocking a railroad track at a grade crossing through which the railroad

dispatches a train, the dispatching railroad must promptly contact trains operating near the grade crossing to warn them of the malfunctioning device or disabled vehicle. After contacting the trains, the dispatching railroad must contact appropriate public safety officials having jurisdiction over the grade crossing to provide them with the information necessary for them to direct traffic, assist in the removal of the disabled vehicle, or carry out other activities. When a railroad receives a report through the ENS of either an obstruction to the view of a pedestrian or a vehicle operator for a reasonable distance in either direction of a train's approach to a grade crossing through which it dispatches a train or a report of another unsafe condition involving such a grade crossing, the railroad must timely investigate the report, remove the obstruction if lawful and feasible to do so, or correct the unsafe condition if lawful and feasible to do so, or, if that railroad does not have maintenance responsibility for the crossing, ask the maintaining railroad to do so as required by the rule.

Further, under the RSIA, FRA must require that the owner of the track at a grade crossing "ensure the placement . . . of appropriately located signs" bearing, at a minimum, "a toll-free telephone number to be used for placing calls" to report unsafe conditions at the crossing to the railroad that dispatches trains on that right-of-way through the crossing, "an explanation of the purpose of that toll-free telephone number," and the "grade crossing number assigned for that crossing by the" U.S. DOT National Crossing Inventory (Crossing Inventory).

### **III. History of Accidents Relevant to this Rulemaking**

There are approximately 211,000 public and private at-grade highway-rail and pathway crossings (highway-rail and pathway grade crossings) in the United States. In

other words, the country has approximately 211,000 locations where a collision can occur between a train and a car, truck, or other motor vehicle, or a pedestrian at any one time. Grade crossing collisions are among the most challenging areas in FRA's efforts to reduce deaths and injuries along the Nation's railroads. In fact, since 1997, grade crossing collisions have caused more railroad-related fatalities per year than any other single factor except for trespassing on railroad property. During the 11-year period from 1999-2009, 2,306 collisions occurred at highway-rail and pathway grade crossings where a vehicle was stalled or sight obstructions were reported to FRA. See accident reporting regulations at 49 CFR part 225 and 49 CFR 234.7.

A train striking a pedestrian can result in serious injury or death. Further, a collision between a train and a vehicle of any size can be catastrophic. Serious injuries or deaths are far more likely to occur with a collision between a train and a vehicle than with a collision between two vehicles. While significant improvements in grade crossing safety have been achieved over the last two decades, grade crossing collisions still pose a significant public safety threat, and one that can spiral beyond the immediate impact of the vehicle and train. The derailment of a freight train as a result of a collision at the grade crossing can have a disastrous effect on the train crew or even on an entire community, especially if the derailment results in a release of hazardous material that necessitates the evacuation of a neighborhood or the community. Moreover, if a passenger train derails as a result of a collision, the risk of injuries extends beyond the vehicle occupants and train crew to the passengers of the train. An example of such an accident occurred in 1999 in Bourbonnais, Illinois, when a National Railroad Passenger Corporation (Amtrak) passenger train struck a truck loaded with steel at a highway-rail

grade crossing. Almost the entire train derailed, resulting in 11 deaths and 131 injuries to the passengers and crew of the train.

Other vehicles and pedestrians in the vicinity of a highway-rail or pathway grade crossing collision can also be at grave risk. This was the scenario in 1993 when an Amtrak passenger train collided with a gasoline tanker truck at a highway-rail grade crossing in Ft. Lauderdale, Florida. The truck driver was attempting to cross through a grade crossing where traffic was congested. The tanker truck was punctured when it was struck by the Amtrak train; a fire erupted and engulfed the truck and nine other vehicles near the crossing. The fire killed the driver of the truck and five occupants of three stopped vehicles near the grade crossing.

There are ancillary benefits associated with an ENS beyond its primary purpose of facilitating the telephonic reporting of unsafe conditions at highway-rail or pathway grade crossings and remedying those unsafe conditions. Railroads with an ENS also have received calls from the public reporting unsafe conditions in the general vicinity of the crossing, but not immediately at the crossing. Although not within the scope of this rule, responsive action by the railroads to such reports of other types of unsafe conditions often accrue significant benefits to the railroad and surrounding community.

The National Transportation Safety Board (NTSB) issued a report in March 2012 of a derailment on the Canadian National Railway Company (CN) that illustrates the potential benefit of having an ENS. The accident occurred in Cherry Valley, Illinois in 2009. The derailment, which resulted in a fatality, several injuries, and the evacuation of 600 residents, was caused by a washout of track near a highway-rail grade crossing, but not at the crossing. Before the derailment occurred, several individuals observed high

water conditions affecting the track. One individual was familiar with the practice of railroads posting emergency telephone numbers at grade crossings and attempted to locate such a sign. There was no sign posted at the crossing. Several calls were placed to the local 911<sup>1</sup> system to report the washout and warn of the potential of a train derailment. The first call was received by the 911 center 56 minutes before a train approached, but local police only first learned of the situation approximately 20 minutes after that first call was made to 911. Additionally, several critical minutes were lost as the local police attempted to identify the railroad that owned the track. The NTSB concluded that “[h]ad the emergency contact information been available, the citizen [*i.e.*, the individual who was unable to locate the railroad contact information at the Mulford Road crossing] would likely have called the CN instead of 911, or both. Even though the 911 center was able to identify the crossing, it was not until 41 minutes after the initial 911 call that the CN Police Emergency Call Center in Montreal was notified of the track washout.”

By the time the information was relayed to the proper railroad officials, the train derailed, and several of the cars, carrying flammable liquids, erupted in flames. As a result, several motor vehicles that had been stopped at the crossing waiting for the train to pass were impacted by the incident. One motor vehicle passenger was fatally injured; two other passengers in the vehicle were seriously injured along with five occupants of another car. The incident also resulted in the evacuation of 600 nearby residents. The NTSB concluded “that had the required CN grade crossing identification and emergency

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<sup>1</sup> The current 911 system in the United States was designed to provide a universal, easy-to-remember number, 9-1-1, for people to reach police, fire or emergency medical assistance from any phone in any location, without having to look up specific phone numbers.

contact information been posted at the Mulford Road crossing, the railroad would likely have been notified of the track washout earlier, and the additional time may have been sufficient for the [rail traffic controllers] to issue instructions to stop the train and prevent the accident.” Derailment of CN Freight Train U70691-18 With Subsequent Hazardous Materials Release and Fire, Cherry Valley, Illinois, June 19, 2009, Railroad Accident Report NTSB/RAR-12/01 (Washington, DC: National Transportation Safety Board, February 14, 2012), <http://www.nts.gov/doclib/reports/2012/RAR1201.pdf>.

#### **IV. History of Emergency Notification Systems (ENS)**

##### **A. In General**

The existence of an effective system by which a member of the public is provided with a telephone number that may be used to alert the appropriate railroad promptly to an emergency situation or other unsafe condition at a specific, identified highway-rail or pathway grade crossing enables the railroad and local public safety officials to respond to the crossing hazard earlier than they would otherwise be able to do so. Therefore, the railroad is provided with more time to take steps to avert an accident at the crossing before it happens or, in any event, to mitigate its consequences. Currently, all Class I railroads have put in place some sort of means by which they can receive prompt telephonic notification from the public of any emergency or other unsafe condition at most of their highway-rail grade crossings, whereas many regional and short line railroads do not have any such kind of notification system in place. The rule requires certain railroads to implement such a communication system, which this rule also calls an Emergency Notification System or ENS, covering public and private highway-rail and pathway grade crossings.

## **B. Various ENS Programs in the United States**

In 1983, the State of Texas established the first toll-free call-in program in the United States that enabled the public to notify a State call center by telephone of problems at the State's public highway-rail grade crossings equipped with automated warning devices. As the current Texas ENS program is organized today, after receiving such a call, the Texas call center, operated by the Texas Department of Public Safety, in turn notifies the railroad involved. The call-in system also requires that a sign be posted at the highway-rail grade crossing with the crossing's unique identifying number from the Crossing Inventory, as well as a toll-free telephone number. Texas's call center has a dedicated computer with a modified inventory database that facilitates the identification of the relevant crossing and railroad. The Center operator then calls the appropriate railroad and relays the report of the problem. At last report, the Texas system handles more than 1,200 calls per month for the State's public crossings, even though only those crossings equipped with active warning devices are equipped with the signs containing the Center's toll-free telephone number. It should be noted that under this final rule, railroads using State programs for notification of unsafe conditions at grade crossings, such as Texas's program, may no longer comply with the regulation. However, a State would be allowed to operate as a "third-party telephone service" as described in the rule, as long as the program complies with all the conditions specified.

Following the successful establishment of this ENS program in Texas, and in part at the urging of FRA and the NTSB, virtually all of the Nation's major railroads have voluntarily adopted similar systems for the majority of their highway-rail and pathway

grade crossings, sometimes including all grade crossings, i.e., systems not limited only to public highway-rail grade crossings or only to those equipped with active warning devices. Unfortunately, more than 72,000 public and private highway-rail and pathway grade crossings belonging to the Nation's short line and regional railroads are not included. Many of these railroads do not have 24-hour operations and do not have the resources to establish such a call-in program.

The 1994 Rail-Highway Crossing Safety Action Plan Support Proposals issued by DOT recommended an automated, computer-based system to "receive, catalogue and forward telephone calls from the concerned" public regarding signal malfunctions and other safety-related problems at highway-rail grade crossings. Rail-Highway Crossing Safety Action Plan Support Proposals, 17 (Washington, DC: FRA, June 13, 1994).

However, the automated system that was envisioned in 1994 was a type of automated answering and message forwarding system that relied on the caller to enter the required information. Once entered, this information would then be forwarded to the appropriate railroad. Unlike the automated answering system prescribed in this rule, the caller would not have been directed to speak to a live operator. In FRA's experience fully automated systems have proven to be unworkable, whereas staffed systems have been successful.

In 1994, Congress directed FRA to conduct pilot projects in at least two States to demonstrate the efficiency of such "emergency notification system" programs covering highway-rail grade crossings and to report to Congress on the results of the pilot projects. Section 301, "Emergency Notification of Grade Crossing Problems," of Public Law 103-440, November 2, 1994 (108 Stat. 4626). Also, in 1996, Congress appropriated funds for

the development of software and hardware to support the demonstration of a toll-free ENS to report emergencies and other safety problems at crossings.

Initially, FRA joined in a cooperative effort with the Texas Department of Emergency Management to evaluate the Texas notification system. Texas was designated one of the pilot States, and an extensive array of software, hardware, and operating improvements was developed. FRA prepared and implemented new software on an upgraded system in 1999. Based on comments and suggestions, further improvements were implemented in 2001 when the Texas call center operation was transferred to the Texas Department of Public Safety.

This 2001 version of the software was modified for use by a “9-1-1” center in Clinton County, Pennsylvania, with the participation of eight short line railroads. A 30-month demonstration program was initiated in November 2001. See [Project Plan: 1-800 Toll-Free Emergency Notification System for Shortline Railroad Highway-Rail Crossings in the Commonwealth of Pennsylvania](#) (Washington, DC: Federal Railroad Administration, September 20, 2000), [http://www.fra.dot.gov/downloads/safety/emergency\\_notification\\_system.pdf](http://www.fra.dot.gov/downloads/safety/emergency_notification_system.pdf).

In 2002, an agreement was reached with the Paducah & Louisville Railway, Inc. (PAL) to conduct an additional pilot project (the third). At the time PAL was a regional railroad with 24-hour operations and approximately 400 grade crossings. FRA modified the program software to accommodate the railroad’s needs.

As a result of these pilot programs, FRA continued to modify its software for use by States and railroads. The software enables the timely reporting of emergencies, malfunctions, and other unsafe conditions at grade crossings. Call center operators can

log the reported problem, access the Crossing Inventory files to look up the proper crossing number, and notify the correct railroad dispatch center and other emergency responders. FRA makes this software freely available to railroads and emergency response centers. Furthermore, FRA strongly encourages railroads and States with ENS programs to keep their crossing inventory information current, as required by Sec. 204 of the RSIA (codified at 49 U.S.C. 20160 and 21301(a), with respect to railroads, and 23 U.S.C. 130, with respect to States). A key component of an effective ENS is to be able to correctly and quickly identify the crossing number upon receiving a report of an unsafe condition at a crossing.

**C. FRA's 2006 Report to Congress**

In May 2006, as mandated by Congress in Section 301, "Emergency Notification of Grade Crossing Problems," of Public Law 103-440, FRA published a report to Congress outlining the development of ENS programs (Report). Pilot Programs for Emergency Notification Systems at Highway-Rail Grade Crossings, (Washington, DC: Federal Railroad Administration, May 2006), [http://www.fra.dot.gov/downloads/safety/1\\_800\\_report.pdf](http://www.fra.dot.gov/downloads/safety/1_800_report.pdf). The Report covered, among other things, the Texas ENS program, the Pennsylvania ENS program, Congressional action, NTSB recommendations, and FRA actions. Based on the findings of the Report, FRA made certain recommendations, to Congress. These recommendations were as follows: (1) Class I railroads should continue to implement, augment, and review the ENS programs that they have initiated; (2) smaller railroads, including commuter railroads, should work cooperatively through The American Short Line and Regional Railroad Association (ASLRRA), or another suitable organization or organizations, to

establish ENS programs serving member railroads; (3) signs installed or replaced at highway-rail grade crossings should be displayed prominently to crossing users (e.g., mounted on signal masts where practicable) and should conform to the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) guidance; and (4) any program that does not currently include passive highway-rail grade crossings be expanded to include, at minimum, all such public crossings where it is practicable to do so.

The Report concluded that the pilot ENS programs in both Texas and Pennsylvania afforded the general public a quick and easy means of alerting appropriate railroad officials to safety-related problems. Additionally, the Report concluded that the Texas ENS likely resulted in the prevention of numerous accidents and injuries, and Pennsylvania's ENS, albeit on a smaller scale than Texas's, demonstrated that it is possible to create emergency call systems through the development of agreements with multiple railroads. Finally, the Report emphasized that the Pennsylvania ENS also showed the value of including all highway-rail grade crossings, not just those with train-activated warning devices.

## **V. Section-by-Section Analysis**

### Section 234.1 Scope

FRA is expanding this part to include new subpart E, Emergency Notification Systems for Telephonic Reporting of Unsafe Conditions at Highway-Rail and Pathway Grade Crossings. For this reason, FRA is amending the description of the scope of the part, § 234.1, by converting it into two paragraphs, dividing the first paragraph into four enumerated subparagraphs, and inserting in new § 234.1(a)(4) the following reference to

new subpart E: “Requirements that certain railroads establish systems for receiving toll-free telephone calls reporting various unsafe conditions at highway-rail grade crossings and at pathway grade crossings, and for taking certain actions in response to those calls.” Further, for improved readability of the section, FRA is designating the last sentence of the current § 234.1 as paragraph (b) of revised § 234.1.

### Section 234.3 Application and Responsibility for Compliance

This section is being adopted as proposed in the NPRM, with the exception of minor typographical revisions. FRA received public comment on this section from three commenters—an individual, the California Public Utilities Commission (CPUC), and the ASLRRA.

The individual commenter noted that even though the NPRM clearly stated that proposed part 234, subpart E, requires a railroad that dispatches or otherwise provides the authority for the movement of one or more trains through a highway-rail or pathway grade crossing to establish and maintain an ENS,<sup>2</sup> some small railroads may be confused by the language in the rule. The commenter claimed that some small railroads may incorrectly interpret the meaning of “dispatch” in a narrow sense, such as only a railroad that employs an individual in a “dispatcher” position as actually “dispatching” trains. In the final rule, FRA’s definitions in § 234.301 of “dispatching railroad,” “dispatches a train or dispatches trains,” and “maintaining railroad,” and the associated duties and obligations for these railroads described in the rule clearly explain which railroads are subject to subpart E. Despite the commenter’s concerns, railroads have the burden of

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<sup>2</sup> E.g., the proposed rule, defined “[d]ispatching railroad” to mean “a railroad that dispatches or otherwise provides the authority for the movement of one or more trains through a highway-rail or pathway grade crossing.” 76 FR 11992, 12009 (March 4, 2011).

complying with FRA regulations, requiring them to carefully read the final rule in its entirety and thoroughly understand their duties and obligations as stated in the rule. For this reason, FRA sees no need, as the commenter recommended, to contact small railroads to inform them of their responsibilities pursuant to this final rule.

The CPUC recommended that all public highway-rail grade crossings be covered by this rule, to include those through which a “plant railroad” dispatches trains. In § 234.3(a)(1), a “plant railroad” is excepted from part 234. CPUC expressed concern that a “plant railroad,” as defined in § 234.5, might dispatch trains through a public highway-rail grade crossing, yet still not be required by subpart E to establish and maintain an ENS. CPUC may be correct that a small number of plant railroads may dispatch trains through public highway-rail grade crossings and not be required to establish an ENS because a “plant railroad” is excepted from part 234. However, FRA historically has not regulated plant railroads. By their very nature, most plant railroads operate at very low speed, which allows them to avoid collisions. Furthermore, the low speed would reduce the severity of any collision that does occur. Additionally, since the public crossing is actually within the confines of the plant, the owner of the crossing would be very evident to any user of the public crossing. Consequently, the user of the crossing is better positioned to report signal malfunctions, poor sight distance, or other unsafe conditions to the plant. Finally, plant railroads would be free to implement their own ENS if they choose to do so.

ASLRRA recommended that the rule not apply to Class II and Class III railroads that operate at restricted speed for their primary operating practice, in order to relieve those railroads of the rule’s financial burden. FRA is not in a position to make such an

exception since the RSIA statutorily mandates that each railroad “establish and maintain a toll-free telephone service for rights-of-way over which it dispatches trains.” However, FRA has carefully considered the various monitoring and sign placement costs that the rule imposes on small railroads and has made several changes with respect to these costs in the final rule to lessen the financial burden. These changes are described in more detail in the section-by-section analysis of §§ 234.303 and 234.311.

#### Section 234.5 Definitions

FRA received no public comments related specifically to the definitions in this section. This section is being adopted as proposed in the NPRM, with the exception of minor typographical and stylistic changes, and a new definition. First, FRA is adding clarification to the defined term “Credible report of warning system malfunction,” by also calling it a “credible report of warning system malfunction at a highway-rail grade crossing.” Second, this section now defines the term “Warning system malfunction” or “warning system malfunction at a highway-rail grade crossing.” “Warning system malfunction” or “warning system malfunction at a highway-rail grade crossing” means an activation failure, a partial activation, or a false activation of a highway-rail grade crossing warning system.

#### **Subpart E—Emergency Notification Systems for Telephonic Reporting of Unsafe Conditions at Highway-Rail and Pathway Grade Crossings**

As proposed in the NPRM, FRA is amending part 234 by adding new subpart E, which includes §§ 234.301-234.317. In the final rule, FRA is revising the title of the subpart to read—Emergency Notification Systems for Telephonic Reporting of Unsafe Conditions at Highway-Rail and Pathway Grade Crossings.

## Section 234.301 Definitions

Unless otherwise stated here, FRA is adopting the definitions for new subpart E as proposed in the NPRM. FRA received public comments regarding several of the proposed definitions in this section. The organization Crossing Call recommended that the proposed definition in the NPRM of “Automated answering service” be amended to permit incoming calls to be answered by an initial recorded announcement so long as thereafter the call is handled by a live operator. Many of the Class I railroads already have similar emergency notification systems in place that respond to reports of emergencies and other unsafe conditions at crossings in a timely manner and effectively route callers to an automated menu of options before reaching a live operator. FRA agrees with this recommendation, and is changing the term “Automated answering service” to “Automated answering system,” and revising the definition, accordingly, to mean a type of answering system that directs a telephone caller to a single menu of options, where the caller has the choice to select one of the available options to report an unsafe condition at a highway-rail or pathway grade crossing; and immediately after selecting one of the available menu options, the caller must be transferred to a live telephone operator.

Separately, in this final rule, FRA is adding the term “Answering machine,” which means either a device or a voicemail system that allows a telephone caller to leave a recorded message to report an unsafe condition at a highway-rail or pathway grade crossing, and the railroad is able to retrieve the recorded message either remotely or on-site. In this final rule, § 234.303(b) permits the use of an answering machine by certain dispatching railroads under certain circumstances to receive reports of unsafe conditions

at crossings through which they dispatch trains. Additionally, § 234.305(h)(2) permits a maintaining railroad under certain circumstances to use an answering machine to receive from a dispatching railroad reports of unsafe conditions at crossings that it maintains.

In the NPRM, FRA solicited comments with respect to setting a maximum amount of time a caller must wait before the call is answered by the railroad. FRA received responses from a handful of industry associations, two State agencies, and individuals. Advocates for a maximum wait time included the Brotherhood of Railroad Signalmen (BRS), the CPUC, the Illinois Commerce Commission (ILCC), and the American Association for Justice (AAJ), in addition to a few individuals. These organizations and individuals recommended that the maximum wait time experienced by a caller be between one and two minutes. The AAJ also suggested that the railroads have an automated system to inform a caller of how long the wait time will be to speak to a live operator. However, the Angels on Track Foundation commented that public calls reporting unsafe conditions at grade crossings should receive immediate attention and that a caller should not experience any waiting time.

Separately, at the public hearing held by FRA on September 29, 2011, FRA asked the Association of American Railroads (AAR) to consider a standard for the time that it takes for a live operator to answer a call concerning a problem at a crossing. AAR submitted supplemental comments that address this issue. AAR argued that it is impossible to establish a meaningful performance standard for the time that it takes to contact a live operator through toll-free numbers posted at crossings. Furthermore, AAR stated that calls to railroad telephone systems are typically answered “expeditiously.” AAR also stated that, from the time a caller selects a telephone menu option for

“emergency” or “malfunctioning signal device,” on average it is no more than one minute before a live person answers. Crossing Call suggested that if FRA promulgated standards for answering calls, those standards should conform to the metrics tracked by answering services (e.g., percent of calls answered within a certain time period).

FRA recognizes that the more promptly a railroad routes a caller to a live operator, the sooner the railroad can avert a potential accident or remedy a problem at a crossing. FRA encourages all railroads to promptly route grade crossing emergency phone calls to a live operator; but, at this time, FRA assesses that there is little additional safety benefit to be derived from imposing a maximum call wait time in light of the final rule’s requirements in § 234.303.

There were two commenters who took issue with the use of the term “dispatching railroad.” The NPRM proposed to define the term to mean, “a railroad that dispatches or otherwise provides the authority for the movement of one or more trains through a highway-rail or pathway grade crossing.” The Everett Railroad Company recommended that FRA apply a narrow meaning to the term so as to make this final rule applicable only to rail operations that employ a dispatcher and have controlled trackage. FRA disagrees with this recommendation as contrary to the statutory mandate for the rulemaking.

Section 205 of the RSIA states, in part, that

the Secretary of Transportation shall require each railroad carrier to—(1) establish and maintain a toll-free telephone service for rights of way over which it dispatches trains, to directly receive calls reporting—(A) malfunctions of . . . devices to promote safety at the grade crossing of railroad tracks on those rights-of-way and public or private roads; (B) disabled vehicles blocking railroad tracks at such grade crossings; (c) obstructions to the view of a pedestrian or a vehicle operator for a reasonable distance in either direction

of a train's approach; or (d) other safety information involving such grade crossings.

Section 205 of the RSIA does not define the word “dispatches” nor does it limit the scope of this rule only to those railroads that have a position of a dispatcher or have controlled trackage. So in developing the final rule, FRA considered the plain meaning of the word and the definition of “dispatches” in the final rule is consistent with this plain meaning. The other commenter noted that smaller railroads may be confused by the language in § 234.305(a) of the NPRM, and may interpret the language in the narrowest sense, meaning that only railroads that “dispatch” trains using a dispatcher would be considered a “dispatching railroad,” and required to comply with Part 234. The final rule also defines “dispatching railroad” to mean, “a railroad that dispatches or otherwise provides the authority for the movement of one or more trains through a highway-rail or pathway grade crossing.” The definition makes clear that this rule applies to both railroads that dispatch in the traditional sense, *or* by other means control train movement through highway-rail or pathway grade crossings. Furthermore, to clarify the meaning of the use of the verb “to dispatch,” in the final rule, FRA is adding the definition of the phrase “Dispatches a train” or “dispatches trains” to mean dispatches or otherwise provides the authority for the movement of the train or trains through a highway-rail or pathway grade crossing.

To properly receive notification of unsafe conditions at grade crossings, a railroad or group of railroads is required to implement a system that consists of multiple components. To refer to the entire set of these various components, the term “Emergency

Notification System” or its abbreviation (“ENS”) is used. In the final rule, FRA adopted the definition of “Emergency Notification System” as proposed in the NPRM, with the exception of minor typographical and stylistic changes. As explained previously in the NPRM, although the word “emergency” is part of the term “Emergency Notification System,” FRA does not intend to imply that all reportable unsafe conditions are emergencies, i.e., conditions that create an imminent hazard of death or injury to an individual or damage to property. In other words, some reportable unsafe conditions are not emergencies. The term “Emergency Notification System” is used in part because of its use in the 1994 legislation and its use colloquially by persons managing or working with the already existing ENS programs.

In the final rule, FRA is adding the term “farm grade crossing” to explain that farm grade crossings are a subset of highway-rail grade crossings that are on private roadways and that are used for the movement of farm motor vehicles, farm machinery, or livestock in connection with agricultural pursuits, forestry, or other land-productive purposes. In consideration of public comments on the number of signs that would be required at crossings, the final rule in § 234.311 permits farm grade crossings to have just one ENS sign. This revision is discussed more thoroughly in the section-by-section analysis of § 234.311.

As mentioned previously in the NPRM, the railroad that dispatches a train through a highway-rail or pathway grade crossing and the railroad that maintains the crossing may not necessarily be the same entity. To address this scenario, FRA proposed a definition for “maintaining railroad.” In response to public comments, FRA is revising the definition of “Maintaining railroad” to clarify the responsibilities of a maintaining

railroad and to account not only for an owner of the track, but also for a lessee of the track. “Maintaining railroad” now means the entity (e.g., track owner or lessee) that is responsible for maintenance of the highway-rail or pathway grade crossing warning device or other aspects of safety maintenance at the crossing. If the maintenance responsibility is handled by a contractor, such as maintaining a warning system or track structure at the highway-rail or pathway grade crossing, then the contractor is considered the “maintaining railroad” for the purposes of this subpart.

The Kansas City Southern Railway Company (KCS) found the proposed definition of “Pathway grade crossing” to be unclear and recommended that the phrase “explicitly authorized” be further explained to ensure that FRA’s enforcement of the rule is consistent. KCS suggested that for a public authority to “explicitly authorize” a pathway grade crossing that public entity needs to have taken some affirmative act that is memorialized in its records. Furthermore, KCS stated that for a railroad to have “explicitly authorized” a pathway grade crossing, there should at a minimum be a written agreement between the railroad and some other entity allowing for public use of a pathway across the railroad’s tracks. KCS argued that “continued use” alone is insufficient to establish a pathway grade crossing as “explicitly authorized.” FRA agrees with KCS on this point. Continuous use of a pathway grade crossing would constitute only one of several elements of either an easement by prescription or by implication. By their very nature, neither prescriptive nor implied easements are explicitly authorized. In the NPRM, FRA’s definition of “Pathway grade crossing” was taken from Section 2 of the RSIA, which defines “crossing,” as used in the RSIA, as a location, other than a

location where one or more railroad tracks cross one or more railroad tracks at-grade, where—

(B) a pathway explicitly authorized by a public authority or a railroad carrier that is dedicated for the use of nonvehicular traffic, including pedestrians, bicyclists, and others, that is not associated with a public highway, road, or street, or a private roadway, crosses one or more railroad tracks either at grade or grade-separated.

122 Stat. 4848, 4849-50.

After careful consideration of the comment by KCS, FRA decided not to revise the proposed definition of “pathway grade crossing.” There are a number of ways that a pathway could be “explicitly authorized,” to include but not limited to, by easement stated in a deed, will, or other written instrument, by public ordinance, or by written agreement with a railroad or a public authority. In other words, there must be a clear understanding between the interested parties that the existence of the pathway is authorized.

In the final rule, FRA is adding the term “Public report of warning system malfunction,” or “Public report of warning system malfunction at a highway-rail grade crossing,” to distinguish between the two types of reports that may be received by a dispatching railroad of a warning system malfunction at a highway-rail grade crossing. The first type of report, a “public report of warning system malfunction,” originates from a member of the general public, that is, not a railroad employee, law enforcement officer, highway traffic official, or other employee of a public agency acting in an official capacity. In contrast, a “credible report of warning system malfunction” is supplied by a railroad employee, law enforcement officer, highway traffic official, or other employee of

a public agency acting in an official capacity. The receipt of a credible report of warning system malfunction triggers the duty to comply with subpart C. Subpart C does not apply to public reports of warning system malfunction.

In the final rule, FRA is also adding the term “third-party telephone service,” to describe the use of a third-party service by a dispatching or maintaining railroad, pursuant to § 234.307, to receive telephonic reports of unsafe conditions at highway-rail and pathway grade crossings. This term is described in more detail in the section-by-section analysis for § 234.307.

FRA is also adding the term “warning system failure at a pathway grade crossing” to mean a failure of an active pathway grade crossing warning system to perform as intended. The term would include, but not be limited to, such problems as the failure of the device to activate as a train approaches the pathway crossing, a false activation of the device when no train is approaching the pathway crossing, or a burnt out light on the device. This definition is being added to explain the term, which appears in § 234.305, Remedial actions in response to reports of unsafe conditions at highway-rail and pathway grade crossings. Note that a “warning system failure at a pathway grade crossing” does not trigger the remedial action requirements of subpart C. The term “warning system failure at a pathway grade crossing” is being added to differentiate it from the terms “warning system malfunction” and “warning system malfunction at a highway-rail grade crossing,” which describe the various activation failures that may occur at a highway-rail grade crossing and that if the subject of a credible report of warning system malfunction at a highway-rail grade crossing do trigger the remedial action requirements of subpart C.

## Section 234.303 Emergency Notification Systems for Telephonic Reporting of Unsafe Conditions at Highway-Rail and Pathway Grade Crossings

Section 234.303(a) requires each railroad that dispatches a train, or otherwise provides the authority for the movement of a train, through a highway-rail or pathway grade crossing, to set up a system to directly and promptly receive telephonic notification of certain unsafe conditions at the crossing. In particular, § 234.303(a) requires these dispatching railroads to establish and maintain a toll-free telephone service by which the railroad can directly receive calls reporting any of the unsafe conditions listed in paragraph (c) (with respect to highway-rail grade crossings) and paragraph (d) (with respect to pathway grade crossings).

Further, § 234.303(a) specifically requires that the railroad either have a live person answer the calls directly and promptly, or else use an automated answering system or a third-party telephone service for answering the calls, except as provided in paragraph (b).

One of the comments expressed concern that this rule would conflict with the hours of service laws (49 U.S.C. ch. 211). FRA disagrees that this rule presents a conflict with the hours of service laws. One of the many provisions in the current hours of service laws mandates that a railroad dispatching service employee, such as an operator, train dispatcher, or any other employee who by use of an electrical or mechanical device dispatches, reports, transmits, receives, or delivers orders related to or affecting train movements, may not remain or go on duty for more than 9 or 12 hours in a 24-hour period, depending on the number of shifts employed at the tower, office, station, or place that the employee is on duty. (49 U.S.C. 21105). This final rule does not stipulate which

employees would be assigned to receive and respond to emergency notification calls as required by subpart E. It is the railroad's responsibility to divide employees' duties in a way that would not violate the hours of service laws, and/or hire additional employees, if necessary. FRA recognizes that some of the small railroads may operate with fewer employees and would have less flexibility in scheduling staff to receive and respond to incoming calls. To that end, FRA has made several changes in the final rule to address such concerns. These changes are discussed in the relevant sections that follow.

Several of the comments that FRA received noted that either local law enforcement or 911 systems are capable of handling emergency calls for unsafe conditions at grade crossings. FRA disagrees. A system in which a telephone call gets routed directly to the dispatching railroad is more efficient than one that relies on local law enforcement agencies or 911 systems. While some local law enforcement agencies may be familiar with the railroad's contact information in the event of an emergency, FRA believes that many local law enforcement agencies and 911 systems lack the knowledge or information to properly notify the railroad in these kinds of situations. For example, some local law enforcement agencies and 911 systems may incorrectly contact the wrong railroad or identify the crossing by its street name rather than the Crossing Inventory number. Furthermore, some local law enforcement agencies may have neither the capacity nor the capabilities to promptly route this information to the dispatching railroad. It is imperative for improved crossing safety that the dispatching railroad receives precise information so that it can act quickly to take the steps necessary to attempt to prevent a collision or other crossing incident and any resulting casualties and, in any event, to mitigate their severity.

A dispatching railroad must be able to directly receive calls through the toll-free telephone service, unless the railroad is permitted to use a non-toll-free number as provided in paragraph (e) of this section. “Directly” does not necessarily mean that the railroad must be the first entity that receives the telephone call when the toll-free service is used. In the NPRM, FRA proposed that only one entity may exist between the caller and the railroad. In the final rule, “directly” does mean that only one entity—a third-party telephone service—may be placed between the caller reporting the unsafe condition(s) at the grade crossing and the dispatching railroad. The rationale for the use of a third-party telephone service is addressed further in the discussion of § 234.307. Regardless if an additional entity is used, the dispatching railroad ultimately remains responsible for setting up and using a system by which it can receive notification of unsafe conditions at a grade crossing and take the appropriate action in response to such notification. This responsibility is placed on the dispatching railroad because it is in the best position to immediately contact and warn the affected train crew(s) of the reported unsafe condition(s) prior to each train’s arrival at the crossing to which the report pertains.

One comment noted that placing signs at private highway-rail grade crossings (i.e., a highway-rail grade crossing on a private roadway) and pathway grade crossings would not result in a benefit to the public. FRA believes that providing a mechanism to report an unsafe condition is vital, regardless of the type of crossing. Incidents such as a downed tree, or a recreational vehicle hung up on the crossing can and do happen at all types of highway-rail and pathway grade crossings, both public and private. Furthermore, as FRA stated in the NPRM, the frequency with which a highway-rail or

pathway grade crossing is used does not determine whether it is included in the system established pursuant to § 234.303(a). FRA believes that it is important to provide an immediate means to communicate a notice of an unsafe condition even at such grade crossings traversed infrequently. Imagine, for example, the driver of a logging truck stuck at a seldom-used private highway-rail grade crossing in the Rocky Mountains with no knowledge of what actions to take or whom to contact. FRA agrees that some private highway-rail grade crossings, such as farm grade crossings, have characteristics that lend themselves to a modification of the requirement to have a sign on each approach to the crossing. Farm grade crossings are discussed in more detail in the analysis of § 234.311.

In the final rule, FRA is creating a new paragraph (b) in § 234.303 to provide exceptions to § 234.303(a) that allow certain railroads under certain conditions to use an answering machine, as defined in § 234.301, to receive reports of unsafe conditions at highway-rail and pathway grade crossings through which they dispatch trains. The exceptions in § 234.303(b) reduce the economic burden placed on smaller railroads, allowing many of these railroads to use an existing phone line to receive ENS reports and, thereby avoiding any additional expense for a toll-free service.

Paragraph (b)(1) permits a railroad that dispatches trains each of which is authorized to travel through a highway-rail or pathway grade crossing at speeds not greater than 20 miles per hour (mph) to use an answering machine to receive calls regarding unsafe conditions at the crossing. If the railroad uses an answering machine under these circumstances, the railroad must retrieve its messages immediately prior to the start of its operations for the day to ensure that a report of an unsafe condition does not come in after the answering machine has been checked, but before the first train of

the day departs. FRA's rationale for this exception is that at speeds of 20 mph or less the train engineer would have a greater ability to stop the train in advance of a crossing that has an unsafe condition, and thereby have a greater opportunity to avert an accident at the crossing, than would a train traveling at higher speeds.

Paragraph (b)(2) permits a railroad that dispatches one or more trains through a highway-rail or pathway grade crossing on a seasonal or intermittent basis (e.g., a tourist, biweekly, or non-24-hour service), and any of the trains is authorized to travel through the crossing at speeds greater than 20mph to use an answering machine, but only during hours of non-operation. During periods of non-operation, the railroad is required to retrieve its messages once daily. However, the railroad must retrieve its messages immediately prior to the start of its operations for the day, to ensure that a report of an unsafe condition does not come in after the answering machine has been checked, but before the first train of the day departs. During hours of operation, the railroad must comply with § 234.303(a) by either having a live person answer calls directly and promptly, using an automated answering system, or employing a third-party telephone service to receive reports of unsafe conditions at crossings through which it dispatches such trains.

The four types of unsafe conditions at highway-rail grade crossings that are to be reportable through the ENS are set forth in § 234.303(c). In the final rule, FRA is adopting this paragraph as proposed in the NPRM, with the exception of typographical and stylistic changes. The first type of reportable unsafe condition at a highway-rail grade crossing is a warning system malfunction at the crossing.

The second type of reportable unsafe condition at a highway-rail grade crossing is a disabled vehicle or other obstruction blocking a railroad track at the crossing. As mentioned in Section II of this preamble, a significant number of collisions between a train and a vehicle have occurred at highway-rail grade crossings due to a vehicle blocking the railroad tracks at the crossing, with many of these collisions resulting in injuries and fatalities. While FRA acknowledges that not all of these incidents may have been prevented by the presence of an ENS, such a system increases the likelihood that the dispatching railroad will learn of the disabled vehicle in time to alert the train crew(s) prior to each train's arrival at the crossing, thus potentially averting a collision and any resulting casualties. Other obstructions, aside from a disabled vehicle, also may block the tracks at a crossing and create an unsafe condition that needs to be reported to the railroad. For instance, as a result of a severe storm, a large tree may fall onto the tracks at a highway-rail grade crossing, and if a railroad is not alerted about this unsafe condition, a train that is authorized to operate through that crossing could collide with the downed tree, thus potentially causing a derailment. Under Sec. 205 of the RSIA, the second category of unsafe conditions is a disabled vehicle blocking the tracks at a grade crossing. To the extent that FRA's final rule requires more than Sec. 205 of the RSIA would have it require, the agency relies on its general safety rulemaking authority.

The third type of a reportable unsafe condition at a highway-rail crossing is an obstruction to the view of a pedestrian or a vehicle operator for a reasonable distance in either direction of a train's approach to the crossing. FRA's Track Safety Standards provide that "vegetation on railroad property which is on or immediately adjacent to the roadbed shall be controlled so that it does not [o]bstruct visibility of railroad signs and

signals [a]t highway-rail grade crossings.” 49 CFR 213.7(b)(1) (§ 213.7(b)(1)). Section 234.303(c)(3) allows a member of the public to inform the railroad of conditions at highway-rail grade crossings that may not fall under § 213.7(b)(1), but that, in the individual’s opinion, present an unsafe condition involving a sight obstruction at the crossing. In the NPRM, FRA solicited comments regarding what is a “reasonable distance” to determine whether an obstruction to a pedestrian or vehicle operator’s view of a train’s approach to a highway-rail grade crossing presents an unsafe condition at the grade crossing. Amtrak in its comments noted that the regulation does not define “reasonable distance,” which depends on the particular facts of the situation and makes it a very subjective standard. AAR remarked that there can be legitimate disagreements over whether an obstruction even poses an unsafe condition. The AAJ commented that no one sight distance should apply to all crossings, and thus, all reports of sight distance obstruction should be investigated. Several of the comments, including AAJ suggested using the Federal Highway Administration’s Railroad-Highway Grade Crossing Handbook to determine appropriate minimum sight distances. After careful consideration, FRA is not qualifying the meaning of “reasonable” in this final rule. Since a crossing user is unlikely to have knowledge of this specific FRA regulation, the individual will report an unsafe condition based on their personal judgment and perspective of the situation, and the particular conditions at the crossing at the time. What actions, if any, the railroad must take in response to such reports is discussed in § 234.305.

The final type of reportable unsafe condition at a highway-rail grade crossing is described in § 234.303(c)(4) as any condition at the crossing that may be considered

unsafe and is not covered by § 234.303(c)(1)-(3). This catch-all provision is intended to provide the public with the opportunity to report other types of unsafe conditions that are not covered by § 234.303(c)(1)-(3). In the NPRM, FRA explained that a downed or missing crossbuck sign illustrates the type of condition at a highway-rail grade crossing that may be deemed unsafe and, therefore, should be reported to the railroad, but does not fall into one of the three other categories. The CPUC in its comments provided a few other examples of unsafe conditions that do not fall into one of the three other categories, such as “rough pavement or broken track paneling.” These are merely some examples of the various conditions that may be considered unsafe under this catch-all provision.

The four types of reportable unsafe conditions at pathway grade crossings as opposed to highway-rail grade crossings are set forth in § 234.303(d). In the final rule, FRA is adopting this paragraph as proposed in the NPRM, with the exception of typographical and stylistic changes. The four types of reportable unsafe conditions at pathway grade crossings are, essentially, the same as those for highway-rail grade crossings, but, as detailed below, the four types of reportable unsafe conditions at pathway grade crossings are not described in the exact same words, and unlike the first type of report for a highway-rail grade crossing, the first type of report for a pathway grade crossing does not trigger the duty to address the report in the manner prescribed by existing subpart C.

The first type of reportable condition for a pathway grade crossing is a failure of the active warning system at the pathway grade crossing to perform as intended. Section 234.303(c)(1) does not use the term “warning system malfunction” to refer to a failure of an active warning system at a pathway grade crossing because, as defined in § 234.5, a

“warning system malfunction” is an activation failure, partial activation, or false activation of the active warning system at a highway-rail grade crossing, not a pathway grade crossing. Further, “activation failure,” “partial activation,” and “false activation” are all defined in § 234.5 and only apply to highway-rail grade crossings. In the final rule, FRA does not establish specific standards regarding the maintenance and repair of active warning systems at pathway grade crossings. However, the final rule does require a railroad to provide the public with a means to report when the active warning system at a pathway grade crossing through which it dispatches a train is not performing as intended and is creating an unsafe condition at the crossing.

While the term “failure of the active warning system at the pathway grade crossing to perform as intended” as used in § 234.303(d)(1) is not specifically defined, FRA believes that the term sufficiently addresses the scenarios in which an active warning system at a pathway grade crossing malfunctions and poses a significant safety risk to a pathway grade crossing user. The term includes, but is not limited to, such problems as the failure of the device to activate as a train approaches the pathway crossing, a false activation of the device when no train is approaching the pathway crossing, or a burnt out light on the device. Although FRA solicited comments regarding the types of failures of an active warning system at a pathway grade crossing that may differ from failures of active warning systems at highway-rail grade crossings, there were no public comments received on this issue. Additionally, FRA sought comments regarding how the maintenance and repair of an active warning system at a pathway grade crossing differ from the required maintenance and repair of an active warning system at a highway-rail grade crossing. The ILCC replied that there should be no

difference in the testing, maintenance, and repair of an active warning system whether it be at a highway-rail grade crossing or a pathway grade crossing. In fact, FRA notes that pathway grade crossing warning systems typically have different designs than those of traditional grade crossing warning systems.

The second type of reportable unsafe condition at a pathway grade crossing is an obstruction blocking a railroad track at the crossing. To avoid confusion, the term “disabled vehicle” is purposely omitted from § 234.303(d)(2), though it is used in § 234.303(c)(2), because, as defined in § 234.301, a “pathway grade crossing” is, among other things, dedicated for the use of nonvehicular traffic; thus, by the definition, a vehicle should not be using a pathway grade crossing. However, to ensure that all possible scenarios in which an obstruction could be blocking the tracks at a pathway grade crossing, including certain disabled vehicles that may be using the pathway (such as all-terrain vehicles, golf carts, maintenance vehicles, or snowmobiles), § 234.303(d)(2) uses the broad term “obstruction.”

The third type of reportable unsafe condition at a pathway grade crossing is an obstruction to the view of a pathway user for a reasonable distance in either direction of a train’s approach to the crossing. See discussion above of § 234.303(c)(3).

The final type of reportable unsafe condition at a pathway grade crossing is any condition at the crossing that may be considered unsafe and is not covered by § 234.303(d)(1)-(3). See discussion above of § 234.303(c)(4).

FRA believes that there may be certain scenarios in which a caller would be discouraged from reporting an unsafe condition at a grade crossing because the use of a non-toll-free number would impose an additional cost on the caller as opposed to if a toll-

free number was used. Yet, the requirement for the number to be toll-free may be overly burdensome to a short line or other small railroad. To avoid these types of situations, FRA adopts § 234.303(e) in this final rule (as proposed in the NPRM), which states that if a railroad classified by the Surface Transportation Board (STB) as a Class II or Class III rail carrier dispatches trains within an area in which the use of a non-toll-free number would incur no additional fees for the caller than if a toll-free number were used, then that railroad may use that non-toll-free number to receive calls pursuant to § 234.303(a) regarding each grade crossing in that area.

FRA adopts as paragraph (f) in this section, the text proposed as paragraph (e) of §234.303 in the NPRM. Paragraph (f) provides that if a report of an unsafe condition at a highway-rail or pathway grade crossing was not made through the telephone service described in § 234.303(a), then subpart E does not apply to the report. Subpart E only sets forth the requirements for the establishment and use of an ENS within the meaning of subpart E, and the response to a report of an unsafe condition received through a required ENS. A report that is not received through a required ENS falls outside the scope of the requirements of subpart E and, therefore, does not trigger the duty to comply with the requirements of subpart E.

#### Section 234.305 Remedial Actions in Response to Reports of Unsafe Conditions at Highway-Rail and Pathway Grade Crossings

Section 234.305 addresses the actions that a railroad must take in response to an ENS-generated report of an unsafe condition at a highway-rail or pathway grade crossing. In the final rule, FRA adopts the majority of this section as proposed in the NPRM. Specific changes that were made in the final rule are explained in detail below.

In response to the NPRM, the AAR commented that the words “promptly” and “immediately” are used in an inconsistent manner throughout the proposed section with respect to the railroad’s response to reports of unsafe conditions at highway-rail and pathway grade crossings. The term “promptly” is already used in subpart C, so in the final rule, where it was appropriate, FRA replaced “immediately” with “promptly” to correspond with subpart C.

Additionally, AAR recommended that FRA amend the language proposed in the NPRM, requiring a railroad to “immediately contact all trains that are authorized to operate through the highway-rail grade crossing [or pathway grade crossing] and warn the trains of the reported malfunction [or failure].” AAR suggested incorporating the phrase “prior to the trains’ arrival at the crossing,” which is similar to language already used in subpart C, § 234.105 and § 234.107. To remain consistent with current regulations and to enhance clarity in this final rule, FRA is changing the text from that proposed in the NPRM to require in the final rule that a railroad promptly contact all trains that are authorized to operate through the highway-rail or pathway grade crossing, in an effort to notify the train crews of the reported malfunction or failure prior to each train’s arrival at the crossing.

Paragraph (a) of this section is the general rule on response to ENS-generated credible reports of warning system malfunctions at highway-rail grade crossings. If a railroad receives an ENS-generated report of a warning system malfunction that is a credible report of warning system malfunction and the railroad has maintenance responsibility for the warning system at the highway-rail grade crossing to which the report pertains, the railroad is required to take the action required by subpart C. As

defined in § 234.5, a “credible report of warning system malfunction” is “a report that contains specific information regarding a malfunction of a highway-rail grade crossing warning system at an identified highway-rail grade crossing, supplied by a railroad employee, law enforcement officer, highway traffic official, or other employee of a public agency acting in an official capacity.” If a report of a warning system malfunction is not provided by one of the four specific types of people listed, then the report is not a credible report of warning system malfunction within the meaning of either subpart C or subpart E, and subpart C does not require any remedial action in response to those reports. It should be noted that the term “credible report of warning system malfunction” only applies to highway-rail grade crossings and does not include pathway grade crossings. Thus, for these technical reasons, regardless of who reports a warning system malfunction at a pathway grade crossing, the report is not considered a “credible report of warning system malfunction” within the meaning of either subpart C or subpart E.

Several of the comments that FRA received in response to the NPRM indicated that FRA’s use of the term “credible report of a warning system malfunction” may need some clarification. The term, as used in part 234, is simply a technical term. “Credible report of warning system malfunction” refers to reports of signal malfunctions by a specific class of public officials and railroad personnel acting in an official capacity. These regulations have been in existence for many years. The use of the word “credible” in that term does not go to the accuracy or truthfulness of the report; rather, the term simply denotes the type of report the receipt of which is the precondition that triggers the duty for a railroad to perform certain actions, pursuant to subpart C. In other words, when a credible report of warning system malfunction at a highway-rail grade crossing is

received from one of the four specific types of people listed, as opposed to reports received from a member of the general public, the railroad having maintenance responsibility for the warning system must promptly take the actions prescribed by subpart C. Just because a report originates from a member of the general public and, therefore, is not classified as a “credible report of warning system malfunction” as defined by § 234.5, does not mean that the report is any less accurate or truthful.

In consideration of the many comments received on this issue, FRA decided in the final rule to refrain from the use of the phrase “not a credible report,” so as not, however inadvertently, to disparage or undermine the legitimacy of reports that originate from the general public. Instead, FRA created the new, defined term, “public report of warning system malfunction at a highway-rail grade crossing,” which means a report that contains specific information regarding a warning system malfunction at a highway-rail grade crossing that is supplied to a railroad via the ENS by a member of the public who does not belong to one of the categories of individuals listed in the definition of “Credible report of warning system malfunction” in § 234.5. In other words, public report of warning system malfunction means a report that contains specific information regarding a warning system malfunction at a highway-rail grade crossing that is supplied to a railroad via the ENS by someone who is not a railroad employee, law enforcement officer, highway traffic official, or other employee of a public agency acting in an official capacity. The term “public report of warning system malfunction at a highway-rail grade crossing” only applies to warning system malfunctions that occur at highway-rail grade crossings. If a report is neither a “credible report of warning system malfunction at a highway-rail grade crossing” nor a “public report of warning system malfunction at a

highway-rail grade crossing,” then it is just referred to in the final rule as a “report” of another type of unsafe condition, e.g., “report of warning system failure at a pathway grade crossing.”

Paragraph (a) of § 234.305 explains that if the report is a credible report of warning system malfunction, but the railroad that initially receives the report is not the railroad that has maintenance responsibility for the warning system at the highway-rail grade crossing to which the report pertains, that railroad is already responsible for contacting the trains that are authorized to operate through the highway-rail grade crossing and warn the trains of the reported malfunction under subpart C. After warning the trains, the railroad must then contact the railroad that has maintenance responsibility for the warning system at the highway-rail grade crossing, which will then be responsible for taking the appropriate remedial action under subpart C. FRA recognizes that in some instances the railroad that initially receives the report may not be the railroad that has maintenance responsibility over the warning system at that crossing. Therefore, to ensure that the responsibility to take the appropriate remedial action as required by subpart C falls on the appropriate railroad, § 234.305(a)(2) requires the railroad with maintenance responsibility to take the appropriate remedial action under subpart C, except for promptly contacting the trains operating through the crossing and the law enforcement agency with jurisdiction for the crossing; these responsibilities remain with the dispatching railroad.

Paragraph (b) of § 234.305 is the general rule on response to an ENS-generated public report of a warning system malfunction at a highway-rail grade crossing, and requires that railroads take certain specified remedial action in response to such a report.

In other words, § 234.305(b) addresses ENS-generated reports of warning system malfunctions that do not fall within the amended definition of “credible report of warning system malfunction” in § 234.5 because the report is made by someone who is not a railroad employee, law enforcement officer, highway traffic official, or other employee of a public agency acting in an official capacity. In particular, if a railroad receives such a public report of a warning system malfunction and that railroad has maintenance responsibility for the warning system at the crossing, the railroad must promptly contact all trains that are authorized to operate through the grade crossing about which the report pertains, in an effort to notify the train crews of the reported malfunction prior to each train’s arrival at the crossing. The railroad must then promptly contact the law enforcement agency that has jurisdiction over the crossing and provide the necessary information for the law enforcement agency to direct traffic or carry out other activities to maintain safety at the grade crossing. Further, the railroad must promptly investigate the report and determine the nature of the malfunction and, if necessary, take appropriate action as required by a provision of existing 49 CFR part 234, subpart D, i.e., § 234.207(a), which requires that “[w]hen any essential component of a highway-rail grade crossing warning system fails to perform its intended function, the cause shall be determined and the faulty component adjusted, repaired, or replaced without undue delay.”

If a railroad receives a public report of a warning system malfunction and that railroad does not have maintenance responsibility for the warning system at the highway-rail grade crossing, the railroad must promptly contact the train crews of all trains that are authorized to operate through the grade crossing to which the report pertains, in an effort

to notify the train crews of the reported malfunction prior to each train's arrival at the crossing. The railroad must then promptly contact the law enforcement agency that has jurisdiction over the grade crossing and provide the necessary information for the law enforcement agency to direct traffic or carry out other activities to maintain safety at the grade crossing. The railroad must then promptly contact the railroad that has maintenance responsibility for the warning system and inform that railroad of the reported malfunction. The railroad having maintenance responsibility must promptly investigate the report, determine the nature of the malfunction, and take the appropriate action as required by 49 CFR 234.207(a) if necessary.

Paragraph (c) of § 234.305 is the general rule on response to a report of a warning system failure at a pathway grade crossing. If the dispatching railroad for the pathway crossing receives a report pursuant to § 234.303(c)(1) and that railroad also has maintenance responsibility for the active warning system at the pathway grade crossing, the railroad shall promptly contact all trains that are authorized to operate through the pathway grade crossings to which the report pertains, in an effort to notify the train crews of the reported failure prior to each train's arrival at the crossing. The railroad shall then promptly contact the law enforcement agency having jurisdiction over the pathway grade crossing and provide the necessary information to the law enforcement agency to direct traffic or carry out other activities to maintain safety at the pathway grade crossing. Finally, the railroad shall then promptly investigate the report, determine the nature of the reported failure, and without undue delay repair the active warning system if necessary.

If the dispatching railroad receives a report of a warning system failure at a pathway grade crossing and that dispatching railroad does not have maintenance

responsibility for the warning system at the pathway grade crossing, the dispatching railroad must promptly contact all trains that are authorized to operate through the pathway grade crossing to which the report pertains, in an effort to notify the train crews of the reported failure prior to each train's arrival at the crossing. The dispatching railroad must then promptly contact the law enforcement agency that has jurisdiction over the pathway grade crossing and provide the necessary information for the law enforcement agency to direct traffic or carry out other activities to maintain safety at the pathway grade crossing. The dispatching railroad must then promptly contact the railroad that has maintenance responsibility for the warning system at the pathway grade crossing and inform that railroad of the reported failure. The railroad having maintenance responsibility shall then promptly investigate the report, determine the nature of the reported failure, and without undue delay repair the warning system if necessary.

Paragraph (d) of § 234.305 is the general rule on response to a report of a disabled vehicle or other obstruction blocking a railroad track at a highway-rail or pathway grade crossing, pursuant to § 234.303(c)(3) or (d)(2), respectively. If the dispatching railroad receives a report of a disabled vehicle or obstruction blocking a railroad track at a grade crossing, and that railroad also has maintenance responsibility for the crossing, the railroad must promptly contact all trains that are authorized to operate through the grade crossing to which the report pertains, in an effort to notify the train crews of the reported disabled vehicle or obstruction prior to each train's arrival at the crossing. The railroad must then contact the law enforcement agency having jurisdiction over the grade crossing to provide that agency with the information necessary to assist in the removal of the

disabled vehicle or other obstruction, or to carry out other activities to maintain safety at the crossing. In the NPRM, FRA solicited comments on whether to require the railroad that receives the report (*i.e.*, dispatching railroad) to contact the maintaining railroad if the obstruction is anything other than a disabled vehicle, stating that “[t]he maintaining railroad would then be responsible for contacting the law enforcement agency and any other entities to assist in directing traffic (if necessary) and removing the obstruction.” AAR commented that the obstruction could be something beyond the power of the maintaining railroad to address and that requiring the maintaining railroad to be notified in such circumstances serves no purpose. FRA disagrees. In the final rule, paragraph (d)(2) of this section requires that, if the dispatching and maintaining railroad are not the same entity, after the dispatching railroad promptly contacts the appropriate trains and law enforcement agency, it must then promptly contact the maintaining railroad to inform it of the obstruction blocking the track. FRA has determined that the quickest way to contact the law enforcement agency is to have the dispatching railroad make the contact. Because the obstruction is blocking the railroad track it has to be removed in order for train operations to be resumed, and this action is the responsibility of the maintaining railroad. Once informed of the obstruction, the maintaining railroad shall then promptly investigate the report, determine the nature of the obstruction, and without undue delay take the necessary action to have the obstruction removed.

Paragraph (e) of § 234.305 is the special rule on contacting a train that is not required to have communication equipment. Section 220.9 of FRA’s regulations on railroad communications sets forth communication equipment standards for trains. 49 CFR 220.9. These standards vary according to specific criteria set forth in § 220.9.

According to § 220.9(b), no communication equipment is required on a train if that train does not transport passengers or hazardous material and does not engage in joint operations or operate at a speed greater than 25 miles per hour. See 63 FR 47188 (Sept. 4, 1998); § 220.9(b)(1)-(4). However, in subpart E, upon receipt of a credible report of warning system malfunction at a highway-rail grade crossing, a public report of warning system malfunction at a highway-rail grade crossing, a report of warning system failure at a pathway grade crossing, or a report of disabled vehicle or other obstruction blocking a track, a railroad will be required to promptly contact all trains authorized to operate through the highway-rail or pathway grade crossing to which the report pertains, to notify the train crews of the reported unsafe condition prior to each train's arrival at the crossing. If that train is not required by § 220.9 to have any communications equipment, the railroad must contact that train by the quickest means available. Currently, railroad employees are required by 49 CFR 220.13(a) to immediately report certain emergencies by the quickest means available. To maintain consistency among FRA regulations, § 234.305(e) requires that the quickest means used to contact a train upon receipt of a report of a warning system malfunction, warning system failure, or disabled vehicle or other obstruction blocking a track at the crossing is consistent with the quickest means that an employee would use to report an emergency pursuant to § 220.13(a).

Paragraph (f) of § 234.305 is the general rule on response to a report of an obstruction to the view of a pedestrian or a vehicle operator for a reasonable distance in either direction of a train's approach to the highway-rail or pathway grade crossing (i.e., visual obstruction). When the dispatching railroad receives a report of a visual obstruction and the railroad also has maintenance responsibility for the highway-rail or

pathway grade crossing, the railroad shall timely investigate the report and remove the visual obstruction if it is lawful and feasible to do so. If the dispatching railroad does not have maintenance responsibility for the highway-rail or pathway grade crossing, the dispatching railroad shall promptly contact the railroad having maintenance responsibility for the highway-rail or pathway grade crossing, which shall timely investigate the report and remove the visual obstruction, if it is lawful and feasible to do so. FRA recognizes that in certain instances it may not be possible to remove a visual obstruction, such as a natural visual obstruction due to the steepness of the road or path approaching the crossing or a visual obstruction due to the curvature of the track, or it may not be lawful to do so. Therefore, § 234.305(f) imposes a duty on the maintaining railroad to remove the visual obstruction only if it is lawful and feasible to do so.

In the NPRM, FRA solicited comments on what types of visual obstructions are not feasible to remove. AAR responded that “not all obstructions are within the control of the railroads and can be cleared.” Other commenters expressed similar concerns, to include the ILCC, which cited topographical features, appurtenances, and structures required by local conditions, such as retaining walls, and drainage structures, as types of obstructions that may not be feasible for the railroad to correct or remove. FRA recognizes that not all obstructions to view are feasible to correct, or within the legal right of the railroad to do so. Additionally, some commenters noted that the use of the words “obstruction” and “feasible” are vague concepts. FRA intentionally chose to use such ambiguous terms. Individuals who use a crossing may have varying degrees of perspective on what constitutes an unsafe obstruction. Furthermore, it is the responsibility of the railroad, once a report of this type is received, to investigate and

make its own determination as to whether it is lawful and feasible to correct the situation. Additionally, the ILCC urged FRA to refrain from categorically excluding certain types of reports of visual obstructions from the reports that a railroad would be required to investigate. FRA agreed with the ILCC's suggestion, and the final rule does not limit the types of obstructions to view that a railroad would be required to investigate and correct, if lawful and feasible to do so.

Paragraph (g) of § 234.305 is the general rule on response to a report of other unsafe conditions at a highway-rail or pathway grade crossing. In the final rule, FRA combined proposed (g)(1) and (g)(2) into one paragraph. If the dispatching railroad receives a report related to a safety device at a highway-rail or pathway grade crossing, such as a downed crossbuck or other similar grade crossing device, or a report of any other unsafe condition, such as a pothole in the crossing, that is not covered by paragraphs (a), (b), or (c) of this section, and the railroad has maintenance responsibility for the crossing, the railroad must timely investigate the report, and if the railroad finds that the unsafe condition exists, the railroad must timely correct it if it is lawful and feasible to do so. However, if the dispatching railroad that receives the report does not also have maintenance responsibility for the crossing, upon receipt of the report, the railroad must timely inform the maintaining railroad of the reported unsafe condition. The maintaining railroad must then timely investigate the report, and if it finds that the unsafe condition exists, it must timely correct it if it is lawful and feasible to do so. In the NPRM, FRA solicited comments on what types of other unsafe conditions are not feasible to correct. AAR noted that the failure of nearby highway signals to properly coordinate timing with crossing signals may not be feasible to correct. FRA agrees that

improperly programmed highway signals are beyond the ability of the railroad to correct. However, when such hazards are reported to the railroad, the railroad is encouraged to report the condition to the appropriate highway authority.

In the final rule, FRA clarifies the purpose of paragraph (h), by renaming it the general rule on a maintaining railroad's responsibilities for receiving reports of unsafe conditions at highway-rail and pathway grade crossings. If the dispatching railroad is not the same as the maintaining railroad, the maintaining railroad shall provide the dispatching railroad with sufficient contact information by which the dispatching railroad may timely contact the maintaining railroad upon receipt of a report, as required. Furthermore, to receive calls from the dispatching railroad of reports of unsafe conditions, the maintaining railroad must have either a live person answer calls directly and promptly, or use an automated answering system, unless it is permitted by the exceptions in § 234.305(h)(2) to use an answering machine or a third-party telephone service. If a maintaining railroad uses a third-party telephone service it must do so in accordance with § 234.307. The exceptions in paragraph (h)(2) of this section provide, in particular, smaller maintaining railroads a less costly option for receiving telephonic reports of unsafe conditions from dispatching railroads. These exceptions are similar to those extended to dispatching railroads in § 234.303(b).

#### Section 234.306 Multiple Dispatching or Maintaining Railroads with Respect to the Same Highway-Rail or Pathway Grade Crossing; Appointment of Responsible Railroad

In the NPRM, under the section-by-section analysis for §§ 234.303 and 234.311, FRA solicited comments on how to handle a highway-rail or pathway grade crossing where there are multiple railroads dispatching trains on one or more tracks through the

crossing, and possibly, multiple maintaining railroads each responsible for various maintenance responsibilities at the same crossing.

FRA recognizes that there are some situations where there are multiple tracks at a grade crossing where each railroad dispatches trains over its own track. Under these circumstances, FRA believes it would create confusion if each railroad posts a sign with its own emergency telephone number. Having more than one emergency number posted at such crossings would not only be more confusing for the users of the crossing and an unnecessary cost for the multiple railroads, but also a less effective method of responding to reports of unsafe conditions.

AAR and CPUC suggested that under circumstances where there are multiple railroads that dispatch trains through the same crossing, the railroads should coordinate among themselves to delineate their individual responsibilities. AAR also stated that in such situations the railroads should “make arrangements as to whose telephone number will be displayed on the sign.” FRA agrees that one point of contact for the crossing is the most efficient and safest means to address a situation where multiple railroads dispatch trains through the same crossing.

Separately, AAR also suggested that FRA include in its Crossing Inventory database an indicator of where multiple railroads dispatch through the same crossing. FRA will not be doing this since it is outside of the scope of this rule. The recommendation by AAR does not enhance the effectiveness of the rule.

In this final rule, FRA is creating § 234.306 to address the situation of multiple railroads that dispatch trains through the same crossing, and the possibility that multiple railroads have maintenance responsibilities for the same crossing. FRA notes that with

respect to the requirements of this section, the railroads are free to work out a cost-sharing agreement among themselves.

Paragraph (a) of § 234.306 requires that where multiple railroads dispatch trains through the same crossing, the railroads must appoint one of their number to be the primary dispatching railroad for the crossing and, as such, to receive reports of unsafe conditions pursuant to § 234.303. The emergency phone number of the primary dispatching railroad for the crossing shall be displayed on the ENS sign(s) at the crossing. Furthermore, when the primary dispatching railroad receives a report of an unsafe condition at the crossing, it is responsible for promptly contacting all the other railroads that dispatch trains through the crossing to notify them of the report. Each of these other dispatching railroads to which the report pertains must carry out the appropriate remedial action as required by § 234.305 and recordkeeping as required by § 234.313.

The primary dispatching railroad for the crossing is also responsible for notifying each railroad that has maintenance responsibility for the crossing of a reported unsafe condition, if the maintaining railroad is a different entity from the dispatching railroad already contacted. Finally, in response to reports of unsafe conditions, the primary dispatching railroad, as a railroad that also dispatches trains through the crossing, must otherwise carry out its own duties as a dispatching railroad under this subpart.

Paragraph (b) of this section, similarly requires that if there is more than one maintaining railroad for the same crossing, the maintaining railroads must appoint one of their number to be responsible for placing and maintaining the ENS sign(s) at the crossing as required by §§ 234.309 and 234.311. The railroad appointed under this paragraph must post the emergency telephone number of the dispatching railroad, or if

applicable, that of the primary dispatching railroad, for the crossing on the ENS sign(s) at the crossing. Additionally, after receiving a report of an unsafe condition at the crossing from the dispatching railroad, each of the maintaining railroads to which the report pertains must carry out the appropriate remedial action as required by § 234.305 and recordkeeping as required by § 234.313.

Where there are multiple maintaining railroads for a crossing, paragraph (c) of this section imposes a duty on a dispatching railroad, or if applicable, the primary dispatching railroad, to promptly contact and inform the appropriate maintaining railroad(s) of a reported problem at that crossing. After being informed of a report of an unsafe condition that pertains to the maintaining railroad's maintenance responsibilities for the crossing, the railroad must carry out the appropriate remedial action as required by § 234.305 and recordkeeping as required by § 234.313.

#### Section 234.307 Use of Third-Party Telephone Service by Dispatching and Maintaining Railroads

Section 234.307 addresses the option for a dispatching railroad to use a third-party telephone service to receive reports concerning an unsafe condition at a highway-rail or pathway grade crossing pursuant to § 234.303. This section also describes the duties of maintaining railroads with respect to their use of a third-party telephone service as permitted by § 234.305(h)(2).

In response to the NPRM, the Angels on Track Foundation objected to the use of a third-party telephone service, asserting that it would compromise safety because railroads would not be receiving calls "directly." FRA does not believe that this method of receiving reports of unsafe conditions at highway-rail and pathway grade crossings

would compromise safety. All of the Class I railroads currently have telephone systems in place by which they receive reports of unsafe conditions at highway-rail and pathway grade crossings. As a result, Class I railroads are unlikely to employ a third-party telephone service. Permitting the use of a third-party telephone service provides smaller railroads with a more economical and less burdensome option, without compromising safety. As previously stated in the NPRM, FRA recognizes that many regional and short line railroads may not have the capability and resources to set up and operate a 24-hour system to receive and respond to reports of unsafe conditions at highway-rail and pathway grade crossings. Indeed, requiring such a system could divert limited resources from more vital safety projects. The results of the pilot project that FRA conducted with eight short line railroads in Pennsylvania from October 15, 2001 through May 31, 2003, proved to be extremely successful and demonstrated that a third-party telephone service is a reasonable approach when considered from both a safety and economic perspective.

In the NPRM, FRA stated that for a railroad to “directly” receive calls reporting unsafe conditions at a crossing as required by § 234.303, one entity should be the maximum number of entities that may exist between (1) a caller reporting an unsafe condition at a grade crossing and (2) the railroad. FRA believes that allowing more than one entity in between could potentially delay the railroad’s receipt of the report and therefore delay its response to the unsafe condition, to the extent that the ENS would not be effective. On review of § 234.307, the BRS suggested in its comments that FRA revise § 234.307 to ensure that the third-party telephone service is the only entity allowed between a caller reporting an unsafe condition at a grade crossing and the railroad. In the final rule, FRA created a defined term for “third-party telephone service” in § 234.301,

which stipulates that the third-party telephone service is the only entity between a caller who is reporting an unsafe condition at a highway-rail or pathway grade crossing and the transmission of the report to the dispatching railroad. The definition also stipulates that a third-party telephone service that receives reports from a dispatching railroad, on behalf of a maintaining railroad, is the only entity between the receipt of the report and the transmission of the report to the maintaining railroad. FRA also revised the language in § 234.307 to permit the third-party telephone service to utilize an automated answering system, as defined in § 234.301, to receive reports of unsafe conditions at highway-rail or pathway grade crossings.

Paragraphs (a) and (b) of § 234.307 permit a dispatching railroad and a maintaining railroad to use a third-party telephone service to receive reports pursuant to §§ 234.303 and 234.305(h)(2), respectively. FRA believes that it may be in the railroad's interest to use a third-party telephone service that is in the business of receiving and processing calls from the public or from dispatching railroads because that is the third party telephone service's specialty. However, even if the railroad uses a third-party telephone service, the railroad ultimately remains responsible for receiving the report initially received by the third party telephone service, and the railroad is responsible for taking the appropriate remedial action as required by § 234.305 and complying with the proper recordkeeping requirements in § 234.313. The third-party telephone service is merely an extension of the railroad.

In response to the NPRM, several commenters suggested that the third-party telephone service should perform the function of notifying the train crews and public safety officials when it receives reports of unsafe conditions at highway-rail and pathway

grade crossings, asserting that this would result in faster transmission of the information to the appropriate parties. FRA disagrees. The dispatching railroad is the only entity that has the authority to control train movements through a crossing, and the dispatching railroad is the only entity with the practical ability to notify train crews in the event of an emergency or any other unsafe condition. Police do not dispatch or otherwise authorize movement of trains. One of the only means available to the police to warn a train of an emergency would be to flag the train down with the use of fuses, which in most cases is neither efficient nor practical when compared to the railroad's ability to notify its train crews. Furthermore, to allow the third-party telephone service to directly communicate with train crews, as some commenters suggested, would in effect alter train movements and create a conflict with other train movements being controlled by the dispatching railroad. Third-party telephone services do not have the knowledge, training, or authority to control train movements.

With respect to dispatching railroads, the role of the third-party telephone service is intended to be limited to receiving calls from the public of an unsafe condition, recording the information, and relaying that information to the dispatching railroad that has contracted for the third-party telephone service. As previously stated, the railroad then is required to take the appropriate action as prescribed in the rule, to include, if applicable, contacting the train crews, the local public safety officials, and the maintaining railroad (if the maintaining railroad is a separate entity from the dispatching railroad) depending on the nature of the report. Similarly, with respect to maintaining railroads, the role of the third-party telephone service is intended to be limited to receiving calls from the dispatching railroad of an unsafe condition, recording the

information, and relaying that information to the maintaining railroad that has contracted for the third-party telephone service.

Paragraph (a) also requires that the third-party telephone service is reached directly and promptly by the telephone number displayed on the sign pursuant to § 234.309. In the final rule, FRA decided to permit the third-party telephone service to receive calls using an automated answering system, as defined in § 234.301, which has a single menu of options for a caller to select to report an unsafe condition at a crossing immediately prior to the caller being transferred to a live person.

Paragraph (c) sets forth the duties of the third-party telephone service. The third-party telephone service is required to contact the railroad immediately when it receives a report pursuant to §§ 234.303 or 234.305. The third-party telephone service must then provide the railroad with a minimum amount of information. First, the third-party telephone service must provide the nature of the reported unsafe condition. The nature of the reported unsafe condition must fall into one of the categories listed in § 234.303(c)(1)-(4) or (d)(1)-(4) so that the dispatching railroad can take the appropriate remedial action as required by § 234.305. Second, the third-party telephone service must provide information on the location of the unsafe condition, which includes providing the Crossing Inventory number for the crossing. Third, the third-party telephone service must inform the railroad whether or not the person reporting the unsafe condition is a railroad employee, law enforcement officer, highway traffic official, or other employee of a public agency acting in an official capacity. The third-party telephone service is required to provide this information so that the dispatching railroad can determine whether the report is a credible report of warning system malfunction and, if it is, the

railroad must take the appropriate remedial action required by § 234.305 and existing subpart C. Additionally, the third-party telephone service must provide the railroad with the date and time that the report was received by the third-party telephone service—this requirement was added to the final rule and is consistent with the recordkeeping duties in § 234.313. Finally, the third-party telephone service must provide the railroad with any additional information provided by the caller that may be useful to restore the crossing to a safe condition.

Paragraph (d) requires a railroad that uses a third-party telephone service to provide the service with sufficient contact information so that when the third-party service receives a report of an unsafe condition at a grade crossing, it can immediately contact the railroad. In the final rule, FRA requires the railroad to have a live person answer calls directly from the third-party telephone service, unless the railroad is permitted pursuant to either § 234.303(b) or § 234.305(h)(2) to use an answering machine. There may be an unsafe condition for which immediate action by the railroad is necessary, such as a disabled vehicle blocking a track at the crossing; therefore, the contact information that the railroad provides the third-party telephone service must be sufficient to the extent that when the third-party telephone service contacts the railroad, a railroad employee answers the call and takes the appropriate action necessary under § 234.305. The responsibility of the third-party telephone service is solely to receive reports and relay those reports to the railroad; any remedial action that is necessary to correct the unsafe condition is the responsibility of the railroad.

Paragraph (d) also requires a railroad to inform FRA in writing of its intent to use a third-party telephone service to receive reports before the implementation of such a

service. The railroad must also provide FRA with the contact information of the third-party telephone service that the railroad intends to use. Further, the railroad must provide FRA with a list identifying the grade crossings about which the third-party service will be receiving reports. In the final rule, FRA is adding a requirement that the railroad must inform FRA in writing within 30 days following any changes in the use or discontinuance of a third-party telephone service. All of this information that the railroad provides to FRA will allow FRA to evaluate the impact that the use of a third-party telephone service has on a railroad's ability to comply with the provisions of this subpart. Finally, paragraph (d) reaffirms the requirement that once a railroad receives a report of an unsafe condition at a grade crossing, the railroad must take the remedial action required by § 234.305.

In response to the NPRM, the organization Crossing Call commented that proposed § 234.307(d) put an undue burden on the third-party telephone service by requiring it to comply with all of subpart E because proposed paragraph (d) stated that "A third-party service is responsible for complying with this subpart." FRA did not intend to hold a third-party telephone service responsible for compliance with all of subpart E. Accordingly, in the final rule, FRA in paragraph (e) of this section, clarifies that the third-party telephone service is responsible only for carrying out the duties of § 234.307, in addition to the recordkeeping duties under § 234.313, and, if applicable, § 234.315. Furthermore, the railroad is responsible for any acts or omissions of the third-party telephone service under the contract that violate these specified sections of subpart E.

FRA recognizes that future advances in technology may provide opportunities for call-in systems that are not specifically described in this rule. FRA is willing to review

any new technology and consider its applicability to the regulation, or consider amending the regulation in the future if warranted. FRA welcomes the opportunity to review any such technologies that meet the requirements of the regulation.

#### Section 234.309 ENS Signs in General

Section 234.309 specifies the color, minimum content and size requirements, and other aspects of the signs that § 234.311 requires to be placed and maintained at highway-rail and pathway grade crossings as part of an ENS. A minimum amount of information must be displayed on the sign so that the unsafe condition may be properly reported and remedied. Paragraph (a) of this section requires that if the dispatching railroad and the maintaining railroad(s) are not the same entity, the dispatching railroad for the crossing must provide to the maintaining railroad the telephone number that is to be displayed on the ENS sign at the crossing, not later than 180 calendar days before the implementation of an ENS is required. In this final rule, FRA is increasing the amount of time from 30 days as proposed to 180 days to provide the maintaining railroad with sufficient time to notify the sign manufacturer of the phone number to be displayed on the signs, to allow for the production of the signs, and then for the installation of the signs at the crossings by the maintaining railroad.

Paragraph (b) describes the minimum information that is to be displayed on an ENS sign, which includes the following: the toll-free number established to receive reports pursuant to § 234.303(a) (or non-toll-free number as provided for in § 234.303(e)); an explanation of the purpose of the sign (e.g., “Report emergency or problem to \_\_\_\_\_”); and the U.S. DOT National Crossing Inventory number assigned to the crossing.

To maintain a certain amount of consistency among the signs so that a grade crossing user may be able to easily identify and understand them, paragraph (c) requires the signs to meet the following requirements: measure at least 12 inches wide by 9 inches high; be retroreflective; have legible text, i.e., lettering and numerals, with a minimum character height of 1 inch for the information required in paragraph (b) of this section; and the sign must have white text set on a blue background with a white border, except that the Crossing Inventory number may be black text set on a white rectangular background.

In the NPRM, FRA solicited comments regarding which standards and guidance provided in the FHWA's MUTCD or Standard Highway Signs and Markings book (SHSM) should be adopted in the final rule as the requirements for the signs placed at crossings pursuant to §§ 234.309 and 234.311. The majority of commenters supported using the MUTCD as the standard sign design.

The MUTCD defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, and bikeways, and on private roads open to public traffic. The MUTCD is approved by the FHWA and recognized as the national standard for traffic control on all public roads. It is incorporated by reference into the Code of Federal Regulations at 23 CFR part 655.

MUTCD specifications include the shapes, colors, and fonts used in road markings and signs. In the United States, all traffic control devices must generally conform to these standards. The manual is used by State and local agencies as well as private construction firms to ensure that the traffic control devices they use conform to the national standard. While some State agencies have developed their own sets of

standards, including their own MUTCDs, these must substantially conform to the Federal MUTCD.

Section 8B.18 of the MUTCD<sup>3</sup> provides both guidance and a technical standard for emergency notification signs. Specifically, the guidance states that—

Emergency Notification signs [see Figure 1] should be installed at all highway-rail grade crossings . . . to provide information to road users so that they can notify the railroad company . . . about emergencies or malfunctioning traffic control devices.

Specifically, the standard includes the following—

- When Emergency Notification signs are used at a highway-rail grade crossing, they shall, at a minimum, include the U.S. DOT grade crossing inventory number and the emergency contact telephone number.
- Emergency Notification [s]igns shall have a white legend and border on a blue background.
- The Emergency Notification signs shall be positioned so as to not obstruct any traffic control devices or limit the view of rail traffic approaching the grade crossing.

Section 8B.18 of the MUTCD provides the following additional guidance for emergency notification signs, which specifically states—

- Emergency Notification signs should be retroreflective.
- Emergency Notification signs should be oriented so as to face highway vehicles stopped on or at the grade crossing or on the traveled way near the grade crossing.
- At station crossings, Emergency Notification signs or information should be posted in a conspicuous location.
- Emergency Notification signs mounted on Crossbuck Assemblies or signal masts should only be large enough to provide the necessary contact information. Use

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<sup>3</sup> Manual on Uniform Traffic Control Devices for Streets and Highways, 762-63 (Washington DC: Federal Highway Administration, December 2009).

of larger signs that might obstruct the view of rail traffic or other highway vehicles should be avoided.

After consideration of the public comments in support of the MUTCD, the final rule establishes broad requirements relating to the physical sign characteristics in § 234.309 and the placement of the sign in § 234.311 that are similar to the standards and guidance contained in the MUTCD for emergency notification signs. However, FRA chose not to include a specific requirement that ENS signs conform to the MUTCD. Rather, FRA believes that the broad requirements contained in this section and in § 234.311 are sufficient. Because the requirements in §§ 234.309 and 234.311 are quite similar to the standards and guidance on emergency notification signs in the MUTCD, FRA will refer to the MUTCD as a guide to inform its enforcement of the provisions in §§ 234.309 and 234.311. Moreover, if a railroad follows the standards and guidance in the MUTCD, FRA will find the railroad in compliance with §§ 234.309 and 311. Figure 1 below is an example of an emergency notification sign provided in the MUTCD. Figure 2 is an example of an alternate design that, like Figure 1, also would meet the requirements of § 234.309.

The ILCC commented that the sign dimensions and letter size proposed in the NPRM, and adopted in the final rule, may be too small for a motorist to read. FRA believes that the minimum required size of the sign and its lettering reflects the attributes of many highway signs that are currently in use, and that the size of both is sufficiently large enough for a user of a highway rail or pathway grade crossing to read. The ILCC also suggested that the Crossing Inventory number assigned to that crossing be highlighted on the sign. Paragraph (c) of this section provides the option to highlight the

Crossing Inventory number by displaying the number using black-colored text set on a white rectangular background. Separately, FRA acknowledges that each crossing may have different geometric characteristics that can pose challenges when positioning a sign. As a result, § 234.309 sets minimum design requirements to allow railroads the flexibility to install signs appropriate to the individual environment of the crossing. The final rule does not prohibit a railroad from using larger dimensions, for example, or adding certain stylistic features, so long as they do not conflict with § 234.309.

One commenter expressed concern about the use of the term “emergency” on the sign, believing that most people are accustomed to dialing 911 and may call the railroad regarding emergencies not related to the highway-rail or pathway grade crossing. The final rule does not require the use of the term “emergency” on the sign, only that the sign convey the purpose of the sign pursuant to paragraph (b)(2) of this section. FRA recognizes that the use of the term “emergency” is one acceptable method of explaining the purpose of the sign. In the many ENS-style systems that are in place today, from Class I railroads to the pilot programs in Pennsylvania and Kentucky, FRA is not aware that calls of this nature have been an issue, and believes the term “emergency” appropriately conveys the intent of the sign.

Comments submitted by the Everett Railroad Company expressed concern that posting of an emergency number could lead to nuisance calls and false reports of emergencies, placing an excessive burden on small railroads. History has proven this concern to be unwarranted for the most part. As railroads began to adopt various forms of emergency notification systems, the expectation of nuisance calls was a concern, but did not materialize. This fact was supported by the pilot projects, discussed previously,

that FRA conducted in the State of Kentucky, the State of Texas, and with several short line railroads in the Commonwealth of Pennsylvania. See Pilot Programs for Emergency Notification Systems at Highway-Rail Grade Crossings, (Washington, DC: Federal Railroad Administration, May 2006), [http://www.fra.dot.gov/downloads/safety/1\\_800\\_report.pdf](http://www.fra.dot.gov/downloads/safety/1_800_report.pdf). The pilot programs did not find that false reports, or nuisance calls were an issue. In fact, the report concluded that railroads and the public overwhelmingly benefit from emergency call-in systems, noting,

[t]he preponderance of calls have reported broken or malfunctioning warning devices, but other calls have reported trains blocking crossings, rough roadway surfaces, obstructions on tracks (often vehicles that are stuck), fires, vandalism, trespassers, etc. Trains have been slowed or stopped to avoid obstructions. Warning devices have been repaired more quickly because railroads have been provided more timely notifications that problems existed.

In order for the public to have an effective means to report warning system malfunctions and other unsafe conditions, a sign(s) must be located at the crossing with the pertinent information in order to contact the appropriate railroad and provide the railroad with sufficient information to correct the unsafe condition. The organization Crossing Call commented that while collisions on smaller railroads with reduced speeds may pose less of a hazard, there are additional benefits to an ENS other than reporting a stalled vehicle at the crossing. Crossing Call noted that—

[a] properly functioning warning systems [sic] promotes a public perception that the warning ought to be heeded . . . . An Emergency Notification System facilitates prompt attention to malfunctioning equipment and fosters the perception that railroads are concerned that equipment operates as intended.

FRA agrees. Although railroads have previously been obligated to take certain actions as required by subpart C if a report of a crossing system malfunction was reported by a person belonging to one of the categories defined in “credible report of warning system malfunction” in § 234.5, this rule expands the duty of the railroad to take certain actions when reports are received from the general public.

Figure 1—Example from the MUTCD of an Emergency Notification Sign



Figure 2—Example of an Alternate Design



#### Section 234.311 ENS Sign Placement and Maintenance

Section 234.311 requires signs of the type specified by § 234.309 to be placed and maintained at highway-rail and pathway grade crossings. The maintaining railroad for the crossing would be responsible for the proper placement and maintenance of the sign. The dispatching railroad for the crossing would be responsible for providing the telephone number posted on the sign to the maintaining railroad, if the two are not the same railroad.

FRA received comments from a handful of railroads and industry associations, two State agencies, and some individuals with respect to the placement and maintenance of ENS signs. Paragraph (a) of this section requires ENS signs to be placed and maintained on each approach at all public and private highway-rail and pathway grade crossings. An exception is provided in paragraph (a)(2)(i), which was not proposed in the NPRM, that allows for only one sign to be placed and maintained at farm grade crossings, as defined in § 234.301. FRA believes that this exception is warranted because farm grade crossings generally have less vehicular traffic and people who traverse these crossings typically are more familiar with the crossings and likely will have prior knowledge of the presence and location of the ENS sign, if they need to report an unsafe condition.

Another exception is provided in paragraph (a)(2)(ii), which was not proposed in the NPRM and which allows for one sign to be placed and maintained at each vehicular entrance to a railroad yard, port or dock facility, or a private industrial facility that does not meet the definition of a “plant railroad” in § 234.5, rather than signs at each crossing within the yard, port or dock facility or private industrial facility.

As mentioned previously in the NPRM, FRA considered whether to expand subpart E to cover all public highway-rail grade crossings located within a port or dock facility, railroad yard, or private industrial facility and to make such a facility or yard subject to part 234. The ILCC recommended expanding subpart E to cover all public highway-rail grade crossings located within a port or dock facility. The CPUC made a similar recommendation. However, these facilities are typically not open to the general public. FRA believes that a sign located at each vehicular entrance sufficiently provides

an invitee with the telephone number of the dispatching railroad if necessary to report an unsafe condition. Furthermore, these facilities often have a significant number of crossings located within a small area, and FRA believes that it is impracticable to consider each crossing within these areas as a separate grade crossing, and posting a sign at every crossing may not be possible. Additionally, railroads typically operate in these facilities at very low speed and thus the hazards of a collision are reduced. Furthermore, treating all the public highway-rail grade crossings within these facilities/yards as one public highway-rail grade crossing is consistent with the Crossing Inventory, Policy, Procedures and Instructions for States and Railroads (Washington, DC: Federal Railroad Administration, August 2007), <http://www.fra.dot.gov/downloads/safety/RXIPolicyInstructions0807.pdf>.

A couple of commenters suggested that there be no requirement to have ENS signs placed and maintained at private highway-rail and pathway grade crossings because these private crossings typically are not accessible from public roads and many of them do not have crossbucks. FRA disagrees with this suggestion because probable invitees that use private crossings will not be familiar with the crossings nor have prior knowledge of the presence and/or location of the ENS signs. The presence of two signs—one on each approach—will enhance an invitee’s awareness and ability to utilize ENS. A collision that is caused by a vehicle that is stalled on a private grade crossing and is struck by a train has the same consequences as a similar collision that occurs on a public grade crossing. The users of a private grade crossing should have the same opportunity to utilize ENS, and thus FRA has determined that two signs are appropriate at private grade crossings.

Furthermore, one commenter recommended that the private party that operates over the private crossing should be responsible for the installation and maintenance of the ENS sign at the crossing, as opposed to the railroad. FRA believes that it is a maintaining railroad's responsibility to install and maintain the ENS sign; however, this final rule puts no restrictions on a railroad's authority to make a private crossing agreement to that effect, if so desired.

In the NPRM, FRA proposed general requirements regarding the placement of the sign so that the sign may be easily seen and does not obstruct any other sign or traffic control devices at the crossing. FRA sought public comment on "sign placement so the appropriate placement for optimal visual effectiveness of the sign may be determined." AAR was the only commenter opposed to what is now paragraph (b) of § 234.311. FRA made several changes to proposed paragraph (b) in this final rule. The paragraph now identifies four requisite characteristics related to the placement of an ENS sign—that it is conspicuous; does not obstruct other signs or traffic control devices at the crossing; does not limit the view of a train; and, if mounted on a post, it has supports that are crashworthy.

AAR contended that paragraph (b) as it was proposed in the NPRM should be deleted from this section because the MUTCD already addresses the placement of ENS signs. Additionally, AAR asserted that some of the requirements proposed in the NPRM were ambiguous, and therefore would result in compliance and enforcement problems. FRA believes that the revised requirements contained in paragraph (b) of this final rule are more understandable than those proposed in the NPRM. As stated previously, in the

discussion of § 234.309, FRA prefers to set its own standards for sign placement and maintenance rather than incorporate the MUTCD by reference.

Several other commenters made suggestions regarding the location and orientation of the signs. The BRS suggested that signs be placed in a location where a stopped motorist is not required to exit the vehicle to read the sign. FRA believes that the requirement in paragraph (b)(i) for an ENS sign to be conspicuous to roadway and pathway users by day and night, combined with the size and letter requirements in § 234.309(c), will limit the times that motorists need to exit their vehicles to read a sign and obtain the telephone number to report unsafe conditions at a crossing. With regard to ENS signs placed on signal bungalows, FRA stated in the NPRM that “[i]t is difficult to envision a scenario in which placing the sign on the signal bungalow would satisfy all of the [proposed] requirements [particularly those that require] a sign to be placed at a grade crossing so that it is conspicuous to the users of the roadway or pathway.” The CPUC and ILCC advocated that signs be placed directly at the crossing for each direction of traffic, and acknowledged that ENS signs placed solely on signal bungalows would be too distant from a crossing to be conspicuous to roadway and pathway users. Yet, Amtrak and New Jersey Transit Rail Operations (NJTR) each asserted that their signs currently placed on signal bungalows are sufficiently conspicuous since they are approximately four times larger than the minimum size required in the final rule, and the height of the lettering is two to three times greater than that required in the final rule. Although Amtrak’s and NJTR’s signs are much larger than the specifications required in the final rule, FRA believes that because they are not located at the crossing itself, but rather on the signal bungalow, the signs are less conspicuous to the roadway or pathway

user who is at the crossing and needs to report an emergency or other unsafe condition. Signal bungalows vary widely in their distance from a crossing, so even though the dimensions and lettering of the signs may be considerably larger than required by § 234.309, it still may be difficult for a user of a highway-rail grade crossing to read the sign. Accordingly, the final rule does not prohibit the placement of a sign on the signal bungalow, but a sign placed on the signal bungalow, but nowhere else at the crossing, does not comply with § 234.311. Railroads, like NJTR, that currently have ENS signs that are only located on the signal bungalow will have until September 1, 2017, for their signs to conform to the placement requirements in §234.311, pursuant to § 234.317.

In the NPRM, FRA solicited comments on other locations at grade crossings, besides signal bungalows, where the placement of the ENS sign would not satisfy proposed § 234.311. CPUC suggested that, in addition to the signal bungalow, it would not be appropriate to place an ENS sign facing the track, unless there is also a sign for each direction of traffic; outside of the crossing area; within a heavily fenced enclosure that would obscure the sign; immediately behind another sign; or more than 10 feet outside the public right of way unless supplemented by additional signs at the crossing. For the final rule, FRA determined that the requirement in § 234.311(b)(i) that the ENS sign be conspicuous to users of the roadway or pathway by day and night, adequately ensures that ENS signs placed in such locations would not comply.

In the final rule, a sign at a grade crossing is not required to be mounted on a post, but rather may be mounted anywhere at the crossing that is consistent with its being conspicuous to users of the roadway or pathway by day and night , as well as consistent with the other placement requirements in § 234.311. FRA did not require a specific

location at a crossing where a sign must be placed because such a specific location may not exist at every crossing. A few of the places suggested by commenters that would comply with § 234.311 include mounting the sign below the crossbuck, on the signal mast, below the gate mechanism, or on a post to the side of the crossbuck. NJTR is the only railroad that commented that there is not sufficient space on the crossing gate masts at their crossings to install ENS signs that meet the minimum sign size specified in § 234.309(c) of at least 12 inches wide by 9 inches high. FRA notes that signs of this size have been installed on crossing gate masts by other railroads so that they do not interfere with the operation of the automatic warning systems. Furthermore, the railroad may display the ENS sign on a separate post, if necessary.

#### Section 234.313 Recordkeeping

Section 234.313 sets forth the recordkeeping requirements for this subpart that apply to each railroad subject to this subpart. Paragraph (a) of this section requires each railroad to keep certain records pertaining to its compliance with this subpart. Records may be kept on paper forms generated by the railroad or kept electronically in a manner that conforms with § 234.315. In this final rule, FRA mainly adopts paragraph (a) as it was proposed in the NPRM, with the exception of stylistic changes and one addition. In addition to the recordkeeping requirements already enumerated in the NPRM, paragraph (a) now also requires that a railroad retain information regarding the reason why no remedial action was taken by it. In the NPRM, FRA solicited comments on what other information the railroad should be required to record. The CPUC recommended requiring information about why a railroad found a reported problem infeasible or unlawful to remedy. FRA believes that the new requirement in paragraph (a) addresses

the issue raised by CPUC. The ILCC also suggested that weather conditions at the crossing location be recorded when a caller makes a report of an unsafe condition. While this may be helpful information for some remedial actions undertaken by the railroad, FRA is not requiring that weather conditions be recorded. The recordkeeping requirements mandated by this section are minimum requirements; railroads are permitted to record additional information if they choose to do so.

Subpart C at 49 CFR 234.109 (§ 234.109) already has specific recordkeeping requirements for a railroad that receives a credible report of warning system malfunction; therefore, paragraph (b) of § 234.313 states there is no separate recordkeeping requirement in subpart E for credible reports of warning system malfunction.

In the final rule, FRA adds paragraphs (c) to this section to address the recordkeeping requirements associated with new § 234.306. In § 234.306, where multiple railroads dispatch trains through the same highway-rail or pathway grade crossing, the railroads are required to appoint one of their number to receive telephonic reports. Similarly, in § 234.306, where multiple railroads have maintenance responsibilities for the same crossing, the railroads are required to appoint one of their number to install and maintain the ENS sign(s) at the crossing. Paragraph (c) of § 234.313 requires that these appointments be recorded in writing and a copy of the document retained by each railroad for the duration of the appointment.

Paragraph (e) of this section requires that each railroad retain for at least one year (from the latest date of railroad activity in response to a report received under this subpart) all records that it makes that are required by this section. Records required to be kept must be made available to FRA as provided by statute (49 U.S.C. 20107). Some

public comments received by FRA indicated that one year is not a sufficient period of time for the railroads to retain the records required by this section. However, a one-year period for retention of records is consistent with other FRA regulations in part 234.

In the NPRM, FRA solicited comments on whether to require the railroad to record the caller's name and contact information so that the railroad could follow up with the caller if necessary. A few commenters, including the ILCC and the organization Crossing Call, supported obtaining the caller's name and contact information. However, the AAR recommended against this proposal, stating that the caller's identifying information is not necessary for enforcement purposes and that not all callers would be willing to provide such information. In light of these comments, FRA has decided not to require a dispatching railroad to record a caller's name or contact information in this final rule. Dispatching and maintaining railroads are required to take remedial actions pursuant to § 234.305, regardless of whether or not they know the identity of the caller. A railroad's knowledge of a caller's name and contact information would add little or no benefit to a railroad's remedial efforts. Moreover, some callers reporting an unsafe condition may be deterred from making a report if required to provide their name and contact information.

The Angels on Track Foundation recommended that railroads be required to provide State agencies that are responsible for selecting crossings for upgrades and enforcing regulations at crossings with documentation of the reports of unsafe conditions received through ENS. FRA believes this recommendation is outside the scope of this rule; however, railroads are at liberty to provide such information to State agencies.

Finally, Amtrak requested that FRA protect any documentation and data prepared, compiled, or collected under subpart E from discovery or admission into evidence or otherwise used for any other purpose in a Federal or State court proceeding for damages involving personal injury or wrongful death against a railroad. Specifically, Amtrak references 23 U.S.C. 409, which Congress enacted pursuant to an FHWA proposal to shield information provided to FHWA by State and local governments to further highway transportation safety. Congress in Sec. 205 of the RSIA did not provide a similar protection against the discovery or admission into evidence of certain information in a Federal or State court proceeding in any action for damages arising from information or data obtained as a result of this final rule. Without an express Congressional mandate, it is outside FRA's authority to provide the protections sought by Amtrak.

#### Section 234.315 Electronic Recordkeeping

Section 234.315 addresses the keeping of records required by subpart E electronically. This section applies to railroads that choose to conduct electronic recordkeeping under subpart E. These electronic recordkeeping requirements are modeled after the requirements set forth in FRA's Railroad Operating Rules at 49 CFR 217.9(g) (§ 217.9(g)). The final rule adopts § 234.315 as proposed in the NPRM, with the exception of typographical and stylistic changes and clarification that the section applies only to records required by subpart E and not to records required by part 234 in general. FRA received no public comments in response to this proposed section.

If a railroad chooses to conduct electronic recordkeeping of records required by subpart E, the railroad must provide adequate security measures to limit employee access to its electronic data processing system and must prescribe who is allowed to create,

modify, or delete data from the database. Although FRA does not identify the management position authorized to institute changes in the database, the railroad must indicate the source authorized to make such changes. The railroad must have a computer and a facsimile or printer connected to the computer to retrieve and produce records for immediate review by FRA representatives. Section 217.9(g) requires the computer to be a desktop computer. However, FRA recognizes that all railroads may not necessarily maintain their records on a desktop computer, so rather than adopting this requirement from § 217.9(g), FRA is allowing railroads the flexibility to maintain their records on other types of computers, such as laptops. It should be noted that, regardless of the type of computer on which the railroad maintains its electronic records, it must be possible for a facsimile or printer to be connected to the computer to retrieve and produce records for immediate review by FRA representatives. The documents must be made available for FRA inspection during “normal business hours,” which FRA interprets as the time, any day of the week, when railroads conduct their regular business transactions.

Nevertheless, FRA reserves the right to review and examine the documents prepared in accordance with the applicable section of subpart E, at any reasonable time if situations warrant it. Each railroad must also designate who is authorized to authenticate the hard copies produced from the electronic format. In short, each railroad electing to retain its records electronically must ensure the integrity of the information and prevent possible tampering with data, enabling FRA to fully execute its enforcement responsibilities.

Furthermore, if an electronic record kept by the railroad pursuant to this subpart does not comply with paragraph (a) of § 234.315, then the record must be kept on paper.

Section 234.317 Compliance Dates

Section 234.317 provides the date by which each of various groups of railroads must comply with this subpart. In response to the compliance dates proposed in the NPRM, FRA received several comments from railroads and other groups and individuals in the railroad industry. With respect to railroads that currently do not have an ENS of any kind in place, the ILCC recommended that these railroads have 12 months to implement a system that conforms to the subpart. The organization Crossing Call stated that the proposal in the NPRM to allow railroads without an ENS to implement one within 18 months (after the effective date of subpart E), as proposed in the NPRM, was an overly generous amount of time, and recommended allowing only 9 months to conform to the subpart. One individual commented that the compliance dates proposed in the NPRM failed to instill a sense of urgency and all railroads should be allowed somewhere between six and twelve months to conform to the subpart. After careful consideration of these comments, as well as comments from smaller railroads regarding the financial burden that the rule will place on their business operations (see Regulatory Evaluation for this final rule), FRA decided in the final rule to extend the implementation period for railroads that currently do not have any sort of ENS in place from 18 months, as proposed in the NPRM, to approximately three years after the effective date of the final rule, i.e., September 1, 2015. This additional time provides smaller railroads the opportunity to phase-in implementation of an ENS in stages, thus spreading out the costs of implementation.

Paragraph (a) of this section applies to railroads that do not have anything in place that could be considered an ENS as defined in § 234.301. However, if a railroad has a system in place, but some or all of the components do not conform to this subpart, the

amount of time the railroad has to bring it into compliance depends on which component is noncompliant.

In paragraph (b) of § 234.317, if a railroad already has its own ENS telephone service or is using a third-party telephone service, but that telephone service does not comply with the requirements in § 234.303 or § 243.307, respectively, the railroad must bring the ENS telephone service into compliance by March 1, 2014—as opposed to the six months proposed in the NPRM.

In paragraph (c)(1) of § 234.317, if a railroad already has ENS signs in place, but those signs do not comply with the requirements set forth in § 234.309, the railroad's ENS signs must conform to § 234.309 within certain time periods as required in paragraph (c)(1)(i)-(iii) of § 234.317.

In response to the NPRM, both the AAR and KCS recommended that all existing ENS signs be permitted to remain in place for their normal useful life. In consideration of these comments, in the final rule, FRA is allowing certain signs to remain in place for the lifecycle of the sign. Specifically, paragraph (c)(1)(i) permits a railroad to keep an ENS sign that is in place for its useful life if the sign size is greater than or equal to 60 square inches, and the height of the lettering on the sign is greater than or equal to  $\frac{3}{4}$  inch for the information required in § 234.309(b). FRA assesses that the useful life of a sign is approximately 15 years. This modification in the final rule decreased the estimated costs initially assessed in the NPRM by \$3.0 million over a 15-year period. At present, the majority of Class 1 railroad signs located at crossings meet the size and lettering requirements in paragraph (c)(1)(i).

However, AAR also advocated for railroads being allowed to use their existing inventory of signs if they contain the telephone number and Crossing Inventory number. FRA disagrees. Once a railroad replaces a sign, the new sign must conform to § 234.309, so that within a reasonable amount of time there is uniformity to the signs at crossings throughout the United States.

Paragraph (c)(1)(ii) requires that if a railroad has an ENS sign in place that is greater than or equal to 60 square inches, but the height of the lettering on the sign is less than  $\frac{3}{4}$  inch for the information required in § 234.309(b), the railroad must replace the sign with a compliant sign by September 1, 2017.

Paragraph (c)(1)(iii) requires that if a railroad has an ENS sign in place that is less than 60 square inches, regardless of the height of the lettering for the information required in § 234.309(b), the railroad must replace the sign with a compliant sign by September 1, 2015.

Paragraph (c)(2) of this section stipulates that if the railroad replaces a non-conforming sign before the expiration of the time periods in paragraph(c)(1)(i)–(iii), the railroad must replace the sign with one that conforms to § 234.309.

Under paragraph (d) of § 234.317, if a railroad already has ENS signs in place, but the placement of those signs does not comply with the requirements set forth in § 234.311, the placement of the signs must conform to § 234.311 by September 1, 2017. If the railroad changes the placement of the sign before the expiration of the five-year period, the placement of the sign must conform to § 234.311. Furthermore, if a railroad replaces a sign before September 1, 2017 so that the sign conforms to § 234.309 and the

placement of the sign does not conform to § 234.311, the railroad must also change the placement of the sign so that it conforms to § 234.311.

In the NPRM, FRA solicited comments on whether to reduce the amount of time that the railroad would have to bring the placement of the sign into compliance if the only sign at the crossing is placed on the signal bungalow. FRA received several comments on this issue. The BRS, the CPUC, and the ILCC all supported reducing the implementation period from 5 years to 18 months or less for signs placed on signal bungalows. However, to provide economic relief to railroads, FRA decided in the final rule to grant railroads until September 1, 2017, allotting the same amount of time as proposed in the NPRM.

Finally, paragraph (e) requires that if a railroad already conducts recordkeeping as part of its ENS, but the recordkeeping does not conform to § 234.313 or § 234.315, the railroad's recordkeeping must conform to § 234.313 or, as applicable, § 234.315, by September 1, 2013.

## **V. Regulatory Impact**

### **A. Executive Order 12866 and 13563 and DOT Regulatory Policies and Procedures**

This final rule has been evaluated in accordance with existing policies and procedures and determined to be non-significant under both Executive Order 12866 and 13563 and DOT policies and procedures. See 44 FR 11034 (February 26, 1979). FRA has prepared and placed in the docket a regulatory evaluation addressing the economic impact of this final rule. FRA has met with and made presentations to those who are likely to be affected by this rule in order to seek their views on the rule.

As part of the regulatory evaluation, FRA has assessed quantitative measurements of the cost streams expected to result from the implementation of this final rule. For the 15-year period analyzed, the estimated quantified cost that will be imposed on industry totals \$15.6 million with a present value (PV, 7 percent) of \$10.1 million. The requirements that are expected to impose the largest burdens relate to recordkeeping and the purchase and installation of signs at grade crossings. The table below presents the estimated costs associated with this final rule.

<b>15-Year Estimated Costs of the Final Rule</b>	
<b>Section 234.303 - Toll-Free Service</b>	\$989,870
<b>Section 234.306 – Multiple Dispatching or Maintaining Railroads</b>	\$9,800
<b>Section 234.307 - Third-Party Service</b>	\$2,881
<b>Section 234.309 - Signs (Materials)</b>	\$2,863,448
<b>Section 234.309 - Signs (Installation)</b>	\$2,007,754
<b>Section 234.311 - Post (Materials)</b>	\$238,621
<b>Section 234.311 - Post (Installation)</b>	\$200,775
<b>Section 234.313 - Initial Recordkeeping</b>	\$299,790
<b>Section 234.313 - Remedial Recordkeeping</b>	\$3,490,728
<b>Total</b>	<b>\$10,103,668</b>

Dollars are discounted at a present value rate of 7 percent. Note that numbers may not add due to rounding.

As part of the regulatory evaluation, FRA has explained what the likely benefits for this final rule will be, and provided numerical assessments of the potential value of such benefits. This final rule is expected to improve railroad safety by ensuring that all highway-rail and pathway grade crossings have adequate signage to enable the public to inform the railroad of emergencies and other unsafe conditions. The primary benefits include a heightened safety environment in grade crossing areas and potential avoidance of casualties, fatalities, and damage through earlier awareness of track obstructions,

including stalled highway vehicles, and other safety hazards. Thus, in general, the final rule should decrease grade crossing accidents and incidents and associated casualties and damages. Other than the reduction of accidents, fatalities, injuries, and associated damages, FRA is aware of several other benefits that will occur when accidents are prevented. Savings have been estimated for avoiding train delay, highway delay, emergency personnel responding, vehicle towing, and accident clean-up associated with grade crossing accidents.

Based on its analysis, FRA has found that the expected accident reduction benefits will exceed the total cost of this final rule. Over a 15-year period, this analysis finds that \$57.8 million in cost savings will accrue through casualty prevention, damage avoidance, and other benefits. The discounted value of this is \$31.7 million (PV, 7 percent). The table below presents the estimated benefits associated with this final rule.

<b>15-Year Estimated Benefits of the Final Rule</b>	
<b>Fatalities (Prevented)</b>	\$21,519,783
<b>Injuries (Prevented)</b>	\$8,587,839
<b>Highway Vehicle Damage (Avoided)</b>	\$651,130
<b>Railroad Equipment Damage (Avoided)</b>	\$327,922
<b>Track/Structure Damage (Avoided)</b>	\$203,988
<b>Other Benefits</b>	\$416,974
<b>Total</b>	\$31,707,636

Dollars are discounted at a present value rate of 7 percent. Note that numbers may not add due to rounding.

**B. Regulatory Flexibility Act and Executive Order 13272**

To ensure potential impacts of rules on small entities are properly considered, FRA has developed this final rule in accordance with Executive Order 13272 (“Proper Consideration of Small Entities in Agency Rulemaking”) and DOT’s procedures and

policies to promote compliance with the Regulatory Flexibility Act (5 U.S.C. 601 et seq.).

The Regulatory Flexibility Act requires an agency to review regulations to assess their impact on small entities. An agency must conduct a regulatory flexibility analysis unless it determines and certifies that a rule is not expected to have a significant economic impact on a substantial number of small entities.

As discussed earlier, FRA has initiated this rulemaking as a requirement of the RSIA. This final rule requires each railroad to establish and maintain a toll-free telephone service to directly receive calls from the public reporting an emergency or other unsafe condition at its grade crossings, and to remedy those unsafe conditions, as appropriate. As part of these duties, a railroad is required to install and maintain signs at its grade crossings that display its emergency telephone number.

(1) Description of Regulated Entities and Impacts. The “universe” of the entities under consideration includes only those small entities that can reasonably be expected to be directly affected by the provisions of this rule. For the rule there is only one type of small entity that is affected: small railroads.

“Small entity” is defined in 5 U.S.C. 601 (Section 601). Section 601(3) defines the term “small entity” as having the same meaning as “small business concern” under Section 3 of the Small Business Act. This includes any small business concern that is independently owned and operated, and is not dominant in its field of operation. Section 601(4) likewise includes within the definition of “small entity” a not-for-profit enterprise that is independently owned and operated, and not dominant in its field of operations.

The U.S. Small Business Administration (SBA) stipulates in its “Size Standards” that the largest a railroad business firm that is “for-profit” may be, and still be classified as a “small entity,” is 1,500 employees for “Line Haul Operating Railroads” and 500 employees for “Switching and Terminal Establishments.” See “Size Eligibility Provisions and Standards,” 13 CFR part 121 subpart A.

Federal agencies may adopt their own size standards for small entities in consultation with SBA, and in conjunction with public comment. Pursuant to the authority provided to it by SBA, FRA has published a final policy, which formally establishes small entities as railroads that meet the line haulage revenue requirements of a Class III railroad. See 68 FR 24891 (May 9, 2003), codified at Appendix C to 49 CFR part 209. Currently, the revenue requirements are \$20 million or less in annual operating revenue, adjusted annually for inflation. The \$20 million limit (adjusted annually for inflation) is based on the STB’s threshold for a Class III railroad, which is adjusted by applying the railroad revenue deflator adjustment. For further information on the calculation of the specific dollar limit, see 49 CFR part 1201. FRA is using the STB’s threshold in its definition of “small entities” for this rule.

Included in the entities impacted by this final rule are governmental jurisdictions or transit authorities—none of which are small for purposes of the SBA (i.e., no entity serves a locality with a population less than 50,000). Commuter railroads are part of larger transit organizations that receive Federal funds. Therefore, they are not included in this analysis. Additionally, this final rule is expected to indirectly impact sign and post manufacturers, but only to the extent that the demand increases for products and services

they supply. Such impact, however, will likely be both small and favorable to those small businesses.

Railroads. FRA estimates that there are 710 Class III freight and passenger (excluding commuter and intercity) railroads in the United States. Certain provisions of this final rule will apply to all railroads that dispatch trains through highway-rail or pathway grade crossings. Out of the 710 Class III railroads, FRA estimates that there are 153 small freight and passenger (excluding commuter and intercity) railroads that do not have a dispatching function as part of their operations; and therefore, would not be affected by these certain provisions of this final rule. Thus, FRA has concluded that 557 small railroads will be affected by those provisions of this final rule. Hence, FRA has concluded that a substantial number of small entities will be impacted. However, as explained below, the impact on these small railroads will not be significant.

The small railroads affected by this final rule are defined as Class III railroads with grade crossings. FRA estimates that Class III railroads dispatch trains over 59,845 grade crossings. To evaluate the impact on these railroads, it is helpful to separate them into three groups by number of employees. Thus, FRA subdivided these railroads into small railroads, very small railroads, and extremely small railroads. Small railroads are Class III railroads with 15 or more employees. Very small railroads are those with fewer than 15 employees, but more than 2 employees. Extremely small railroads are those with 2 or fewer employees. The table below shows the average annualized cost per small railroad, by category:

<b>Class III Affected Entities</b>	<b>Number of Railroads</b>	<b>Average Number of Crossings per Railroad</b>	<b>Average Annualized Cost per Railroad per Year</b>
<b>Small</b>	203	199	\$2,461
<b>Very Small</b>	217	69	\$944
<b>Extremely Small</b>	137	32	\$312

Source: Federal Railroad Administration 2009 data, compiled on September 1, 2010.

The cost to comply with this final rule largely depends upon the number of crossings that a railroad maintains. Throughout the regulatory evaluation, FRA has split the small railroads into three categories and analyzed the costs and benefits separately for each of these categories. The burden placed on the very small and extremely small Class III railroads is generally proportionately less because they usually maintain fewer crossings.

FRA estimates there are 203 small railroads with 15 or more employees. This group of railroads has 40,363 grade crossings; an average of approximately 199 crossings per railroad. FRA estimates the average total cost for small railroads to comply with this final rule is approximately \$4,304 per railroad for each of the first 3 years, and \$1,037 per railroad per year for each of the following 12 years.

FRA estimates there are 217 very small railroads; those with less than 15 employees but more than 2 employees. This group of very small railroads has 15,074 grade crossings, an average of approximately 69 crossings per railroad. The average total cost for very small railroads is approximately \$1,567 per railroad for each of the first 3 years, and \$428 per railroad per year for each of the following 12 years.

Extremely small railroads are those with two or fewer employees. There are 137 railroads in this category, accounting for 4,408 grade crossings. Extremely small railroads have an average of approximately 32 grade crossings. The average total cost for

extremely small railroads is approximately \$646 per railroad for each of the first 3 years, and \$104 per railroad per year for each of the following 12 years. Using the average annualized cost of \$312 per railroad per year, and an average of 32 crossings per railroad, FRA estimates the cost to these extremely small railroads to comply with this final rule is about \$10 per crossing per year over the 15-year analysis. Railroads with just a few crossings will incur very minimal costs to comply with this final rule. Thus, this final rule will not have a significant economic impact on extremely small railroads.

Many small railroads are subsidiaries of large short line holding companies with the expertise and resources comparable to larger railroads. The requirement to install two new signs per crossing and provide a toll-free telephone number in case of emergencies will not have a significant economic impact on these railroads. Short line railroads affected by this final rule might collaborate with other small railroads to implement its requirements, which would lower the burden on these small railroads.

FRA received several comments related to the impact on small entities and tourist railroads, regarding the regulatory flexibility analysis, and compliance with Executive Order 13272. FRA considered these comments and, accordingly, in this final rule, FRA examined the impact on small businesses, made cost-reducing changes, and re-evaluated the costs and benefits.

Several comments on the NPRM requested that FRA adjust the monitoring and signage requirements to give consideration to small entities. The changes to the final rule made since the NPRM will reduce the burden on small railroads. FRA revised the monitoring requirements for railroads that dispatch trains authorized to operate at speeds less than or equal to 20 mph through crossings. Also, those railroads that operate at

seasonally or intermittently and at speeds greater than 20 mph through crossings are not required to have live monitoring during hours of non-operation. Farm grade crossings are now only required to have one sign per crossing; this reduces the number of signs for Class III railroads by 13,510. These changes have moderately decreased the annual and total costs for small entities. Based on changes made in the regulatory requirements since the NPRM, FRA is even more confident that the impact on small entities will not be significant.

Previously, FRA sampled small railroads and found that revenue averaged approximately \$4.7 million (not discounted) in 2006. One percent of average annual revenue per small railroad, or \$47,000, is far more than the average annual cost that these railroads will incur because of this final rule. Very small and extremely small railroads likely do have smaller revenues than larger Class III railroads. However, FRA believes that this average provides a good representation of the small railroads, in general. If a railroad has annual average revenue greater than \$134,122, the annual cost per railroad will be less than 1 percent of revenue.

FRA concludes that the final rule will not have a noticeable economic impact on the competitive position of small entities, or on the small entity segment of the railroad industry as a whole.

(2) Certification. Pursuant to the Regulatory Flexibility Act (5 U.S.C. 605(b)), FRA certifies that this final rule will not have a significant economic impact on a substantial number of small entities. Although a substantial number of small railroads will be affected by the final rule, none of these entities will be significantly impacted.

#### C. Federalism

Executive Order 13132, “Federalism” (64 FR 43255, Aug. 10, 1999), requires FRA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” are defined in the Executive Order to include regulations that have “substantial direct effects on the 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.” Under Executive Order 13132, the agency may not issue a regulation with federalism implications that imposes substantial direct compliance costs and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, the agency consults with State and local governments, or the agency consults with State and local government officials early in the process of developing the regulation. Where a regulation has federalism implications and preempts State law, the agency seeks to consult with State and local officials in the process of developing the regulation.

This final rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13132. The rule will not have a substantial effect on the States or their political subdivisions; it will not impose any compliance costs; and it will not affect the relationships between the Federal government and the States or their political subdivisions, or the distribution of power and responsibilities among the various levels of government. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

This final rule amends part 234, which contains FRA’s principal regulations regarding grade crossing safety. Although the final rule on State-specific highway-rail grade crossing action plans published June 28, 2010 (75 FR 36552) removed the preemptive effect provision in part 234, part 234 still could have preemptive effect by operation of law under a provision of the former Federal Railroad Safety Act of 1970 (former FRSA), which was repealed and recodified at 49 U.S.C. 20106 (Section 20106). Section 20106 provides that States may not adopt or continue in effect any law, regulation, or order related to railroad safety or security that covers the subject matter of a regulation prescribed or order issued by the Secretary of Transportation (with respect to railroad safety matters) or the Secretary of Homeland Security (with respect to railroad security matters), except when the State law, regulation, or order qualifies under the “essentially local safety or security hazard” exception to Section 20106.

FRA believes that Section 20106 sufficiently addresses the preemptive effect of FRA's regulations. Providing a separate Federal regulatory provision in this final rule, as suggested by some public comments on the proposed rule, concerning the regulation's preemptive effect is duplicative and unnecessary.

In sum, FRA has analyzed this final rule in accordance with the principles and criteria contained in Executive Order 13132. As explained above, FRA has determined that this final rule has no federalism implications, other than the possible preemption of State laws under Federal railroad safety statutes, specifically 49 U.S.C. 20106.

Accordingly, FRA has determined that preparation of a federalism summary impact statement for this final rule is not required.

D. International Trade Impact Assessment

The Trade Agreement Act of 1979 prohibits Federal agencies from engaging in any standards or related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and where appropriate, that they be the basis for U.S. standards. This rulemaking is purely domestic in nature and is not expected to affect trade opportunities for U.S. firms doing business overseas or for foreign firms doing business in the United States.

E. Paperwork Reduction Act

The information collection requirements in this final rule are being submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq. The sections of the final rule that contain the new information collection requirements and the estimated time to fulfill each requirement are as follows:

CFR Section/Subject	Respondent Universe	Total Annual Responses	Average Time per Response	Total Annual Burden Hours
234.303(b) – Receipt by Dispatching RR of Report of Unsafe Condition at Highway-Rail Grade Crossing	594 railroads	63,891 reports	1 minute	1,065 hours
234.303(d)- – Receipt by Dispatching RR of Report of Unsafe Condition at Pathway Grade Crossing	594 railroads	1,860 reports/ 1,860 records	1 minute + 1 minute	62 hours

234.305 (a)(2) - Immediate Contact by Dispatching RR Not Having Maintenance Responsibility of All Trains Authorized to Operate through That Crossing in Response to Credible Report of Warning System Malfunction at Highway-Rail Grade Crossing	594 railroads	465 contacts	1 minute	8 hours
- (a)(2) Contact of Crossing Maintenance RR by Dispatching RR Not Having Maintenance Responsibility in Response to Credible Report of Warning System Malfunction at Highway-Rail Grade Crossing	594 railroads	465 contacts + 465 records	1 minute + 1 minute	16 hours
- (b)(1) In Response to Public Report of Warning System Malfunction at Highway-Rail Grade Crossing Immediate Contact by Dispatching RR Having Maintenance Duty for Crossing of All Trains Authorized to Operate Through That Crossing	594 railroads	925 contacts + 925 records	1 minute + 1 minute	30 hours
- Dispatching RR Having Maintenance Duty for Crossing Contact of Appropriate Law Enforcement Authority with Necessary Information regarding Reported Malfunction	594 railroads	925 contacts	1 minute	15 hours

- 234.305 (b)(2) In Response to Public Report of Warning System Malfunction at Highway-Rail Grade Crossing Immediate Contact by Dispatching RR Not Having Maintenance Duty for that Crossing of All Trains Authorized to Operate Through That Crossing	594 railroads	920 contacts	1 minute	15 hours
- Dispatching RR Contact of Law Enforcement Authority to Direct Traffic/Maintain Safety	594 railroads	920 contacts	1 minute	15 hours
- Dispatching RR Contact of Maintaining RR re: Reported Malfunction and Maintaining RR Record of Unsafe Condition	594 railroads	920 contacts + 920 records	1 minute + 1 minute	30 hours
234.305(c)(1) – In Response to Report of Warning System Failure at Pathway Grade Crossing Dispatching RR Having Maintenance Duty Contact of All Trains Authorized to Operate Thru It & Record of Unsafe Condition	594 railroads	2 contacts + 2 records	1 minute + 1 minute	.06666 hour
- In Response to Report of Warning System Failure at Pathway Grade Crossing Dispatching RR Having Maintenance Duty Contact of Law Enforcement Agencies to Direct Traffic & Maintain Safety	594 railroads	2 contacts	1 minute	.03333 hour
-234.305(d)(1) Upon Receiving Report of Disabled Vehicle or Other Obstruction Dispatching RR Having Maintenance Duty Contact of All Trains Authorized to Operate Through Highway-Rail or Pathway Grade Crossing & Record of Unsafe Condition	594 railroads	7,440 contact + 7,440 rcds.	1 minute + 1 minute	248 hours
- Dispatching RR Having Maintenance Duty Contact of Law Enforcement Authority Upon Receiving Report of Disabled Vehicle or Other Obstruction	594 railroads	7,440 contacts	1 minute	124 hours
- (d)(2) Dispatching RR Not Having Maintenance Duty Contact of All Trains Authorized to Operate through Highway-Rail or Pathway Grade Crossing After Report of Disabled Vehicle or Other Unsafe Condition	594 railroads	2,556 contacts	1 minute	43 hours
- Dispatching RR Not Having Maintenance Responsibility Contact of Law Enforcement Authority regarding Disabled Vehicle/Unsafe Condition	594 railroads	2,556 contacts	1 minute	43 hours
- Dispatching RR Contact of Maintaining RR regarding Unsafe Condition at Crossing & Record of Unsafe Condition	594 railroads	2,556 contacts + 2,556 records	1 minute + 1 minute	86 hours

234.305(h) – Provision of Contact Information by Maintaining RR to Dispatching RR in Order to Be Contacted regarding Reports of Unsafe Conditions at Highway-Rail and Pathway Grade Crossings	594 railroads	10 info. contacts	1 minute	.1667 hour
234.306(a) – Appointment of One Dispatching RR as Primary Dispatching RR Where Multiple RRs Dispatch Trains through Same Highway-Rail or Pathway Grade Crossing to Provide Info. for ENS Sign	594 railroads	50 appointments & records	60 minutes	50 hours
(b) -- Appointment of One Maintaining RR As Primary Maintaining RR Where Multiple RRs Maintain Same Highway-Rail or Pathway Grade Crossing for Placement and Maintenance of ENS Sign	594 railroads	50 appointments & records	60 minutes	50 hours
234.307(b) – 3 <sup>rd</sup> Party Telephone Service Report of Unsafe Conditions at Highway-Rail or Pathway Grade Crossings to Maintaining Railroad and Maintaining RR Record of Unsafe Condition	594 railroads	50 reports + 50 records	1minute + 1 minute	2 hours
(c)—3 <sup>rd</sup> Party Telephone Service Report to Dispatching RR of Unsafe Condition	594 railroads	50 reports	1 minute	1 hour
(d)(1) – Provision of Contact Information to 3 <sup>rd</sup> Party Telephone Service by Dispatching RR or Maintaining RR Using That Service to Receive Reports of Unsafe Conditions at Highway-Rail or Pathway Grade Crossings	594 railroads	17 contact calls	15 minutes	4 hours
(d)(2) – Written Notice to FRA by Railroad of Intent to Use 3 <sup>rd</sup> Party Svc.	594 railroads	17 letters	60 minutes	17 hours
(d)(3) – Railroad Written Notification to FRA of Any Changes in Use or Discontinuance of 3 <sup>rd</sup> Party Service	594 railroads	5 letters	60 minutes	5 hours
234.309(a) - ENS Signs – General - Provision of ENS Telephone Number to Maintaining RR by Dispatching RR If Two RRs Are Not the Same	594 railroads	10 contacts	30 minutes	5 hours
-(b) ENS Signs Located at Highway-Rail or Pathway Grade Crossings as required by § 234.311 with Necessary Information to Receive Reports Required under § 234.303	594 railroads	81,948 signs	30 minutes	40,974 hours

234.313 – Recordkeeping - Records of Reported Unsafe Conditions Pursuant to § 234.303	594 railroads	186,000 records	4 minutes	12,400 hours
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All estimates include the time for reviewing instructions; searching existing data sources; gathering or maintaining the needed data; and reviewing the information. For information or a copy of the paperwork package submitted to OMB, contact Mr. Robert Brogan at 202-493-6292 or Ms. Kimberly Toone at 202-493-6132 or via e-mail at the following addresses: [Robert.Brogan@dot.gov](mailto:Robert.Brogan@dot.gov); [Kimberly.Toone@dot.gov](mailto:Kimberly.Toone@dot.gov).

Organizations and individuals desiring to submit comments on the collection of information requirements should direct them to the Office of Management and Budget, Office of Information and Regulatory Affairs, Washington, D. C. 20503, Attention: FRA Desk Officer. Comments may also be sent via e-mail to OMB at the following address: [oir\\_submissions@omb.eop.gov](mailto:oir_submissions@omb.eop.gov)

OMB is required to make a decision concerning the collection of information requirements contained in this final rule between 30 and 60 days after publication of this document in the **Federal Register**. Therefore, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication.

FRA is not permitted to impose a penalty on persons for violating information collection requirements which do not display a current OMB control number, if required. FRA intends to obtain current OMB control numbers for any new information collection requirements resulting from this rulemaking action prior to the effective date of this final rule. The OMB control number, when assigned, will be announced by separate notice in the **Federal Register**.

## F. Environmental Assessment

FRA has evaluated this final rule in accordance with its “Procedures for Considering Environmental Impacts” (FRA’s Procedures) (64 FR 28545, May 26, 1999) as required by the National Environmental Policy Act (42 U.S.C. 4321 et seq.), other environmental statutes, Executive Orders, and related regulatory requirements. FRA has determined that this final rule is not a major FRA action (requiring the preparation of an environmental impact statement or environmental assessment) because it is categorically excluded from detailed environmental review pursuant to section 4(c)(20) of FRA’s Procedures. (See 64 FR 28547, May 26, 1999.) Section 4(c)(20) reads as follows: “Actions categorically excluded. Certain classes of FRA actions have been determined to be categorically excluded from the requirements of these Procedures as they do not individually or cumulatively have a significant effect on the human environment. \* \* \*

The following classes of FRA actions are categorically excluded: \* \* \* Promulgation of railroad safety rules and policy statements that do not result in significantly increased emissions or air or water pollutants or noise or increased traffic congestion in any mode of transportation.”

In accordance with section 4(c) and (e) of FRA’s Procedures, the agency has further concluded that no extraordinary circumstances exist with respect to this regulation that might trigger the need for a more detailed environmental review. As a result, FRA finds that this final rule is not a major Federal action significantly affecting the quality of the human environment.

#### G. Unfunded Mandates Reform Act of 1995

Pursuant to Section 201 of the Unfunded Mandates Reform Act of 1995 (Public Law 104-4, 2 U.S.C. 1531), each Federal agency “shall, unless otherwise prohibited by law, assess the effects of Federal regulatory actions on State, local, and tribal governments, and the private sector (other than to the extent that such regulations incorporate requirements specifically set forth in law).” Section 202 of the Act (2 U.S.C. 1532) further requires that “before promulgating any general notice of proposed rulemaking that is likely to result in the promulgation of any rule that includes any Federal mandate that may result in expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more (adjusted annually for inflation) [\$140,800,000 or more in 2010] in any one year, and before promulgating any final rule for which a general notice of proposed rulemaking was published, the agency shall prepare a written statement” detailing the effect on State, local, and tribal governments and the private sector. This final rule will not result in the expenditure, in the aggregate, of more than \$140,800,000 or more in any one year, and thus preparation of such a statement is not required.

#### H. Energy Impact

Executive Order 13211 requires Federal agencies to prepare a Statement of Energy Effects for any "significant energy action." 66 FR 28355 (May 22, 2001). Under the Executive Order, a "significant energy action" is defined as any action by an agency (normally published in the **Federal Register**) that promulgates, or is expected to lead to the promulgation of, a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking: (1)(i) that is a

significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action. FRA has evaluated this final rule in accordance with Executive Order 13211. FRA has determined that this final rule will not have a significant adverse effect on the supply, distribution, or use of energy. Consequently, FRA has determined that this regulatory action is not a "significant energy action" within the meaning of Executive Order 13211.

#### I. Privacy Act Statement

Interested parties should be aware that anyone is able to search the electronic form of all comments received into any agency docket by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477-78), or you may visit <http://www.regulations.gov>.

#### **List of Subjects in 49 CFR Part 234**

Highway safety, Penalties, Railroad safety, and Reporting and recordkeeping requirements, State and local governments.

#### **The Final Rule**

In consideration of the foregoing, FRA amends part 234 of chapter II, subtitle B of title 49, Code of Federal Regulations, as follows:

**PART 234—GRADE CROSSING SAFETY, INCLUDING SIGNAL SYSTEMS,  
STATE ACTION PLANS, AND EMERGENCY NOTIFICATION SYSTEMS**

1. The authority citation for part 234 is revised to read as follows:

Authority: 49 U.S.C. 20103, 20107, 20152, 21301, 21304, 21311, 22501 note; Pub. L. 110-432, Div. A, Secs. 202, 205; 28 U.S.C. 2461, note; and 49 CFR 1.49.

2. The heading for part 234 is revised to read as set forth above.

3. Section 234.1 is revised to read as follows:

**§ 234.1 Scope.**

(a) This part prescribes minimum—

(1) Maintenance, inspection, and testing standards for highway-rail grade crossing warning systems;

(2) Standards for the reporting of failures of highway-rail grade crossing warning systems and for the actions that railroads must take when such systems malfunction;

(3) Requirements for particular identified States to develop State highway-rail grade crossing action plans; and

(4) Requirements that certain railroads establish systems for receiving toll-free telephone calls reporting various unsafe conditions at highway-rail grade crossings and pathway grade crossings, and for taking certain actions in response to those calls.

(b) This part does not restrict a railroad from adopting and enforcing additional or more stringent requirements not inconsistent with this part.

4. Section 234.3 is revised to read as follows:

**§ 234.3 Application and responsibility for compliance.**

(a) With the exception of § 234.11, this part applies to all railroads except the following:

(1) Operations of a plant railroad as defined in § 234.5;

(2) Rapid transit operations in an urban area that are not connected to the general railroad system of transportation; or

(3) Tourist, scenic, historic, or excursion operations conducted only on track used exclusively for that purpose (i.e., there is no freight, intercity passenger, or commuter passenger railroad operation on the track) and only on track inside an installation that is insular; i.e., the operations are limited to a separate enclave in such a way that there is no reasonable expectation that the safety of the public—except a business guest, a licensee of the railroad or an affiliated entity, or a trespasser—would be affected by the operation. An operation will not be considered insular if one or more of the following exists on its line:

(i) A public highway-rail crossing that is in use;

(ii) An at-grade rail crossing that is in use;

(iii) A bridge over a public road or waters used for commercial navigation; or

(iv) A common corridor with a railroad, i.e., its operations are within 30 feet of those of any railroad.

(b) Although the duties imposed by this part are generally stated in terms of the duty of a railroad, each person, including a contractor or subcontractor for a railroad, who performs any task covered by this part, shall perform that task in accordance with this part.

5. Section 234.5 is amended as follows:

a. Remove the definition of “Credible report of system malfunction” and add a definition of “Credible report of warning system malfunction or credible report of warning system malfunction at a highway-rail grade crossing” in its place.

b. Add definitions of “FRA” and “Plant railroad” in alphabetical order.

c. Remove the definition of “Warning system malfunction” and add a definition of “Warning system malfunction or warning system malfunction at a highway-rail grade crossing” in its place.

The additions read as follows:

**§ 234.5 Definitions.**

\* \* \* \* \*

Credible report of warning system malfunction or credible report of warning system malfunction at a highway-rail grade crossing means a report that contains specific information regarding a malfunction of a highway-rail grade crossing warning system at an identified highway-rail grade crossing, supplied by a railroad employee, law enforcement officer, highway traffic official, or other employee of a public agency acting in an official capacity.

\* \* \* \* \*

FRA means the Office of Railroad Safety, Federal Railroad Administration, 1200 New Jersey Avenue, S.E., Washington, DC 20590.

\* \* \* \* \*

Plant railroad means a plant or installation that owns or leases a locomotive, uses that locomotive to switch cars throughout the plant or installation, and is moving goods solely for use in the facility’s own industrial processes. The plant or installation could include track immediately adjacent to the plant or installation if the plant railroad leases the track from the general system railroad and the lease provides for (and actual practice entails) the exclusive use of that trackage by the plant railroad and the general system

railroad for purposes of moving only cars shipped to or from the plant. A plant or installation that operates a locomotive to switch or move cars for other entities, even if solely within the confines of the plant or installation, rather than for its own purposes or industrial processes, will not be considered a plant railroad because the performance of such activity makes the operation part of the general railroad system of transportation.

\* \* \* \* \*

Warning system malfunction or warning system malfunction at a highway-rail grade crossing means an activation failure, a partial activation, or a false activation of a highway-rail grade crossing warning system.

6. The heading for subpart C of part 234 is revised to read as follows:

**Subpart C—Response to Credible Reports of Warning System Malfunction at Highway-Rail Grade Crossings**

7. A new subpart E to part 234 is added to read as follows:

**Subpart E—Emergency Notification Systems for Telephonic Reporting of Unsafe Conditions at Highway-Rail and Pathway Grade Crossings**

Sec.

234.301 Definitions.

234.303 Emergency notification systems for telephonic reporting of unsafe conditions at highway-rail and pathway grade crossings.

234.305 Remedial actions in response to reports of unsafe conditions at highway-rail and pathway grade crossings.

234.306 Multiple dispatching or maintaining railroads with respect to the same highway-rail or pathway grade crossing; appointment of responsible railroad.

234.307 Use of third-party telephone service by dispatching and maintaining railroads.

234.309 ENS signs in general.

234.311 ENS sign placement and maintenance.

234.313 Recordkeeping.

234.315 Electronic recordkeeping.

234.317 Compliance dates.

**Subpart E—Emergency Notification Systems for Telephonic Reporting of Unsafe  
Conditions at Highway-Rail and Pathway Grade Crossings**

**§ 234.301 Definitions.**

As used in this subpart—

Answering machine means either a device or a voicemail system that allows a telephone caller to leave a recorded message to report an unsafe condition at a highway-rail or pathway grade crossing, as described in § 234.303(c) and (d), and the railroad is able to retrieve the recorded message either remotely or on-site.

Automated answering system means a type of answering system that directs a telephone caller to a single menu of options, where the caller has the choice to select one of the available options to report an unsafe condition at a highway-rail or pathway grade crossing, as described in § 234.303(c) and (d), and immediately after selecting one of the available menu options, the caller is transferred to a live telephone operator.

Class II and Class III have the meaning assigned by regulations of the Surface Transportation Board (49 CFR part 1201; General Instructions 1-1), as those regulations may be revised and applied by order of the Board (including modifications in class threshold based on revenue deflator adjustments).

Dispatches a train or dispatches trains means dispatches or otherwise provides the authority for the movement of the train or trains through a highway-rail or pathway grade crossing.

Dispatching railroad means a railroad that dispatches or otherwise provides the authority for the movement of one or more trains through a highway-rail or pathway grade crossing.

Emergency Notification System means a system in place by which a railroad receives, processes, and responds to telephonic reports of an unsafe condition at a highway-rail or pathway grade crossing. An Emergency Notification System includes the following components:

(1) The signs, placed and maintained at the grade crossings that display the information necessary for the public to report an unsafe condition at the grade crossing to the dispatching railroad by telephone;

(2) The method that the railroad uses to receive and process a telephone call reporting the unsafe condition;

(3) The remedial actions that a railroad takes to address the report of the unsafe condition; and

(4) The recordkeeping conducted by a railroad in response to the report of the unsafe condition at the grade crossing.

ENS means Emergency Notification System as defined in this section.

Farm grade crossing means a type of highway-rail grade crossing where a private roadway used for the movement of farm motor vehicles, farm machinery, or livestock in connection with agricultural pursuits, forestry, or other land-productive purposes crosses one or more railroad tracks at grade.

Highway-rail and pathway grade crossing means a highway-rail grade crossing and a pathway grade crossing.

Highway-rail or pathway grade crossing means either a highway-rail grade crossing or a pathway grade crossing.

Maintaining railroad means the entity (e.g., track owner or lessee) that is responsible for maintenance of the highway-rail or pathway grade crossing warning device, or for maintenance of other aspects of the highway-rail or pathway grade crossing. If the maintenance responsibility is handled by a contractor, such as maintaining a grade crossing warning system or track structure at the highway-rail or pathway grade crossing, then the contractor is considered the “maintaining railroad” for the purposes of this subpart.

Pathway grade crossing means a pathway that crosses one or more railroad tracks at grade and that is—

- (1) Explicitly authorized by a public authority or a railroad;
- (2) Dedicated for the use of non-vehicular traffic, including pedestrians, bicyclists, and others; and
- (3) Not associated with a public highway, road, or street, or a private roadway.

Public report of warning system malfunction or public report of warning system malfunction at a highway-rail grade crossing means a report that contains specific information regarding a warning system malfunction at a highway-rail grade crossing that is supplied to a railroad via the ENS by a member of the public who does not belong to one of the categories of individuals listed in the definition of Credible report of warning system malfunction or credible report of warning system malfunction at a highway-rail grade crossing in § 234.5.

Third-party telephone service means a service that receives telephonic reports of unsafe conditions at highway-rail and pathway grade crossings on behalf of a railroad. A third-party telephone service that receives reports on behalf of a dispatching railroad is

the only entity between the receipt of the report from the telephone caller and the transmission of the report to the dispatching railroad. A third-party telephone service that receives reports on behalf of a maintaining railroad is the only entity between the receipt of the report from a dispatching railroad and the transmission of the report to the maintaining railroad.

Warning system failure at a pathway grade crossing means failure of an active pathway grade crossing warning system to perform as intended.

**§ 234.303 Emergency notification systems for telephonic reporting of unsafe conditions at highway-rail and pathway grade crossings.**

(a) Duty of dispatching railroad in general. Each railroad shall establish and maintain a toll-free telephone service by which the railroad can directly and promptly receive telephone calls from the public reporting specific information about any of the conditions listed in paragraph (c) of this section with respect to a highway-rail grade crossing and paragraph (d) of this section with respect to a pathway grade crossing through which the railroad dispatches a train, except as provided in paragraphs (b) and (e) of this section, and in § 234.306(a). The dispatching railroad shall either have a live person answer calls directly and promptly, or use an automated answering system or a third-party telephone service for the purpose of receiving reports pursuant to this section, except as provided in paragraph (b) of this section.

(b) Exceptions for certain railroads. If a dispatching railroad operates in accordance with either of the conditions set forth in this paragraph, the railroad is not subject to the general duties stated in the last sentence of paragraph (a) of this section.

(1) If a railroad dispatches one or more trains through a highway-rail or pathway grade crossing, each of which is authorized to travel through the crossing at speeds not greater than 20 miles per hour (mph), the railroad may use an answering machine to receive calls regarding unsafe conditions at such a crossing. If using an answering machine pursuant to this paragraph, the railroad must retrieve its messages immediately prior to the start of its operations each day.

(2) If a railroad dispatches one or more trains through a highway-rail or pathway grade crossing on a seasonal or intermittent basis (e.g., tourist, biweekly service, or non-24-hour service), and any of the trains is authorized to travel through the crossing at speeds greater than 20 mph, the railroad may use an answering machine to receive calls regarding unsafe conditions at such a crossing, but only during hours of non-operation. If using an answering machine pursuant to this paragraph (b), during periods of non-operation, the railroad must retrieve its messages daily. However, the railroad must retrieve its messages immediately prior to the start of its operations for the day, and during hours of operation the dispatching railroad shall either have a live person answer calls directly and promptly, use an automated answering system, or employ a third-party telephone service, in accordance with paragraph (a) of this section, to receive reports regarding unsafe conditions at crossings through which it dispatches trains.

(c) Reportable unsafe conditions at highway-rail grade crossings. Each railroad shall establish a service pursuant to paragraph (a) of this section, except as provided in paragraphs (b) and (e) of this section, and in § 234.306(a), to receive telephone calls regarding the following conditions with respect to a highway-rail grade crossing through which it dispatches a train:

- (1) A warning system malfunction at the highway-rail grade crossing;
- (2) A disabled vehicle or other obstruction blocking a railroad track at the highway-rail grade crossing;
- (3) An obstruction to the view of a pedestrian or a vehicle operator for a reasonable distance in either direction of a train's approach to the highway-rail grade crossing; or
- (4) Any information relating to any other unsafe condition at the highway-rail grade crossing.

(d) Reportable unsafe conditions at pathway grade crossings. Each railroad shall establish a service pursuant to paragraph (a) of this section, except as provided in paragraphs (b) and (e) of this section, and in § 234.306(a), to receive telephone calls regarding the following conditions with respect to a pathway grade crossing through which it dispatches a train:

- (1) A failure of the active warning system at the pathway grade crossing to perform as intended;
- (2) An obstruction blocking a railroad track at the pathway grade crossing;
- (3) An obstruction to the view of a pathway grade crossing user for a reasonable distance in either direction of a train's approach to the pathway grade crossing; or
- (4) Any information relating to any other unsafe condition at the pathway grade crossing.

(e) Class II or Class III railroads. A Class II or Class III railroad that dispatches one or more trains through a highway-rail or pathway grade crossing within an area in which the use of a non-toll-free number would not incur any additional fees for the caller

than if a toll-free number were used, may use that non-toll-free number to receive calls pursuant to paragraph (a) of this section regarding each such crossing in that area.

(f) Reports not made through the ENS. If a report of an unsafe condition at a highway-rail or pathway grade crossing is not made through the telephone service described in paragraph (a) of this section, this subpart E does not apply to that report.

**§ 234.305 Remedial actions in response to reports of unsafe conditions at highway-rail and pathway grade crossings.**

(a) General rule on response to credible report of warning system malfunction at a highway-rail grade crossing. (1) If a railroad receives a credible report of a warning system malfunction at a highway-rail grade crossing pursuant to § 234.303(c)(1) and the railroad has maintenance responsibility for the warning system to which the report pertains, then it shall take the appropriate action required by subpart C of this part.

(2) If a railroad receives a credible report of a warning system malfunction at a highway-rail grade crossing pursuant to § 234.303(c)(1) and the railroad has dispatching responsibility for the crossing, but does not have maintenance responsibility for the warning system to which the report pertains, it shall promptly contact all trains that are authorized to operate through the highway-rail grade crossing in an effort to notify the train crews of the reported malfunction prior to each train's arrival at the crossing. After contacting the appropriate trains, the railroad shall then promptly contact the maintaining railroad and inform it of the reported malfunction. The maintaining railroad shall then take the appropriate action required by subpart C of this part.

(b) General rule on response to public report of warning system malfunction at a highway-rail grade crossing. (1) If a railroad receives a public report of a warning

system malfunction at a highway-rail grade crossing pursuant to § 234.303(c)(1) and the railroad has maintenance responsibility for the warning system to which the report pertains, the railroad shall promptly contact all trains that are authorized to operate through the highway-rail grade crossing in an effort to notify the train crews of the reported malfunction prior to each train's arrival at the crossing. After contacting the appropriate trains, the railroad shall then promptly contact the law enforcement agency having jurisdiction over the highway-rail grade crossing and provide the necessary information for the law enforcement agency to direct traffic or carry out other activities to maintain safety at the highway-rail grade crossing. The railroad shall then promptly investigate the report, determine the nature of the malfunction and take the appropriate action required by § 234.207.

(2) If a railroad receives a public report of a warning system malfunction at a highway-rail grade crossing warning system pursuant to § 234.303(c)(1) and the railroad does not have maintenance responsibility for the warning system at the highway-rail grade crossing, it shall promptly contact all trains that are authorized to operate through the highway-rail grade crossing to which the report pertains in an effort to notify the train crews of the reported malfunction prior to each train's arrival at the crossing. After contacting the appropriate trains, the railroad shall then promptly contact the law enforcement agency having jurisdiction over the highway-rail grade crossing and provide the necessary information for the law enforcement agency to direct traffic or carry out other activities to maintain safety at the highway-rail grade crossing. The railroad shall then promptly contact the maintaining railroad and inform it of the reported malfunction.

The maintaining railroad shall then promptly investigate the report, determine the nature of the malfunction, and take the appropriate action required by § 234.207.

(c) General rule on response to report of warning system failure at a pathway grade crossing. (1) If a railroad receives a report of a warning system failure at a pathway grade crossing pursuant to § 234.303(d)(1) and the railroad has maintenance responsibility for the warning system to which the report pertains, the railroad shall promptly contact all trains that are authorized to operate through the pathway grade crossing in an effort to notify the train crews of the reported failure prior to each train's arrival at the crossing. After contacting the appropriate trains, the railroad shall then promptly contact the law enforcement agency having jurisdiction over the pathway grade crossing and provide the necessary information for the law enforcement agency to direct traffic or carry out other activities to maintain safety at the pathway grade crossing. The railroad shall then promptly investigate the report, determine the nature of the failure, and without undue delay repair the active warning system if necessary.

(2) If a railroad receives a report of warning system failure at a pathway grade crossing pursuant to § 234.303(d)(1), but does not have maintenance responsibility for the warning system to which the report pertains, the railroad shall promptly contact all trains that are authorized to operate through the pathway grade crossing to which the report pertains in an effort to notify the train crews of the reported failure prior to each train's arrival at the crossing. After contacting the appropriate trains, the railroad shall then promptly contact the law enforcement agency having jurisdiction over the pathway grade crossing and provide the necessary information for the law enforcement agency to direct traffic or carry out other activities to maintain safety at the pathway grade crossing.

The railroad shall then promptly contact the maintaining railroad and inform it of the reported failure. The maintaining railroad shall then promptly investigate the report, determine the nature of the failure, and without undue delay repair the warning system if necessary.

(d) General rule on response to report of a disabled vehicle or other obstruction blocking a railroad track at a highway-rail or pathway grade crossing. (1) If a railroad receives a report of a disabled vehicle or other obstruction blocking a railroad track at a highway-rail or pathway grade crossing, pursuant to § 234.303(c)(2) or (d)(2), and the railroad has maintenance responsibility for the crossing to which the report pertains, the railroad shall promptly contact all trains that are authorized to operate through the crossing in an effort to notify the train crews of the reported obstruction prior to each train's arrival at the crossing. After contacting the appropriate trains, the railroad shall then promptly contact the law enforcement agency having jurisdiction over the crossing to provide it with the information necessary to assist in the removal of the reported track obstruction or to carry out other activities to maintain safety at the crossing. The railroad shall then promptly investigate the report, determine the nature of the obstruction, and without undue delay take the necessary action to have the obstruction removed.

(2) If a railroad receives a report of a disabled vehicle or other obstruction blocking a railroad track at a highway-rail or pathway grade crossing, pursuant to § 234.303(c)(2) or (d)(2), but does not have maintenance responsibility for the crossing to which the report pertains, the railroad shall promptly contact all trains that are authorized to operate through the crossing to which the report pertains in an effort to notify the train crews of the reported obstruction prior to each train's arrival at the crossing. After

contacting the appropriate trains, the railroad shall then promptly contact the law enforcement agency having jurisdiction over the crossing to provide it with the information necessary to assist in the removal of the reported track obstruction or to carry out other activities to maintain safety at the crossing. The railroad shall then promptly contact the maintaining railroad and inform it of the reported obstruction. The maintaining railroad shall then promptly investigate the report, determine the nature of the obstruction, and without undue delay take the necessary action to have the obstruction removed.

(e) Special rule on contacting a train that is not required to have communication equipment. If a railroad is not required by § 220.9 of this chapter to have a working radio or working wireless communications in each occupied controlling locomotive of its trains and the railroad receives a report pursuant to § 234.303(c)(1), (c)(2), (d)(1), or (d)(2) about a highway-rail or pathway crossing that any of the trains is authorized to operate through, the railroad shall promptly contact the occupied controlling locomotive of the train as required by paragraph (a), (b), (c), or (d) of this § 234.305 by the quickest means available consistent with § 220.13(a) of this chapter.

(f) General rule on response to report of an obstruction of view at a highway-rail or pathway grade crossing. (1) Upon receiving a report pursuant to § 234.303(c)(3) or (d)(3), the railroad, if it is both the dispatching and the maintaining railroad, shall timely investigate the report and remove the obstruction if it is lawful and feasible to do so.

(2) If the dispatching railroad is not also the maintaining railroad, it shall promptly contact the maintaining railroad, which shall timely investigate the report and remove the obstruction if it is lawful and feasible to do so.

(g) General rule on response to report of other unsafe condition at a highway-rail or pathway grade crossing. Upon receiving a report pursuant to § 234.303(c)(4) or (d)(4) related to the maintenance of a crossbuck sign or other similar grade crossing safety device or any other unsafe condition (such as a pot hole that could cause injury or damage) not covered by paragraph (a), (b), or (c) of this § 234.305, the railroad, if it is both the dispatching and the maintaining railroad, shall timely investigate the report; and, if the railroad finds that the unsafe condition exists, it shall timely correct it if it is lawful and feasible to do so. If the dispatching railroad is not also the maintaining railroad, it shall timely inform the maintaining railroad, which shall timely investigate the report; and, if the maintaining railroad finds that the unsafe condition exists, it shall timely correct it if it is lawful and feasible to do so.

(h) General rule on a maintaining railroad's responsibilities for receiving reports of unsafe conditions at highway-rail and pathway grade crossings. (1) In general. If the dispatching railroad is required under this section to contact the maintaining railroad, the maintaining railroad shall—

(i) Provide the dispatching railroad with sufficient contact information by which the dispatching railroad may timely contact the maintaining railroad upon receipt of a report; and

(ii) Have either a live person answer calls directly and promptly, or use an automated answering system for the purpose of receiving a call from the dispatching railroad of a report of an unsafe condition, except as provided in paragraph (h)(2) of this section.

(2) Exceptions for use of a third-party telephone service and answering machine by a maintaining railroad. (i) If a maintaining railroad is responsible for the maintenance of a highway-rail or pathway grade crossing through which a railroad dispatches one or more trains, each of which is authorized to travel through the crossing at speeds not greater than 20 mph, the maintaining railroad may use a third-party telephone service, in accordance with § 234.307, or an answering machine to receive reports from a dispatching railroad of unsafe conditions at such a crossing. If using an answering machine pursuant to this paragraph, the railroad must retrieve its messages immediately prior to the start of its operations for the day.

(ii) If a maintaining railroad is responsible for the maintenance of a highway-rail or pathway grade crossing only on a seasonal or intermittent basis (e.g., tourist, biweekly service, or non-24-hour service), the maintaining railroad may use a third-party telephone service, in accordance with § 234.307, or an answering machine to receive reports from a dispatching railroad of unsafe conditions at such a crossing. If using an answering machine pursuant to this paragraph, during periods of non-operation, the maintaining railroad must retrieve its messages daily. However, the railroad must retrieve its messages immediately prior to the start of its operations for the day, and during hours of operation the railroad shall either have a live person answer calls directly or use an automated answering system to receive reports regarding unsafe conditions at such a crossing.

**§ 234.306 Multiple dispatching or maintaining railroads with respect to the same highway-rail or pathway grade crossing; appointment of responsible railroad.**

(a) Duty of multiple dispatching railroads to appoint a primary dispatching railroad for the crossing. (1) Where more than one railroad dispatches a train through the same highway-rail or pathway grade crossing, the dispatching railroads for the crossing shall appoint one of the railroads to be the primary dispatching railroad for the crossing and, as such, the primary dispatching railroad for the crossing shall do the following:

(i) Provide its emergency telephone number to the railroad responsible for the placement and maintenance of the ENS sign(s) at the crossing;

(ii) Receive all reports through ENS of unsafe conditions at the crossing as required by § 234.303;

(iii) After receiving a report of an unsafe condition at the crossing, promptly contact all other railroads that dispatch trains through the crossing to warn them of the reported unsafe condition, and, as appropriate, promptly contact the maintaining railroad(s) for the crossing as required by § 234.305; and

(iv) Otherwise carry out its duties under this subpart as a dispatching railroad for the crossing, with respect to the crossing.

(2) After receiving a report of an unsafe condition at the crossing from the appointed dispatching railroad, each of the other dispatching railroad(s) to which the report pertains shall carry out the remedial action required by § 234.305 and the recordkeeping required by § 234.313.

(b) Duty of multiple maintaining railroads to appoint a railroad responsible for the placement and maintenance of the ENS sign(s). (1) Where more than one railroad maintains the same crossing, the maintaining railroads for the crossing shall appoint one

of the railroads to be responsible for the placement and maintenance of the ENS sign(s) at the crossing pursuant to §§ 234.309 and 234.311.

(2) The railroad appointed under paragraph (b)(1) of this section shall display on the ENS sign(s) at the crossing the emergency telephone number of the dispatching railroad for the crossing or, if more than one railroad dispatches a train through the crossing, the emergency telephone number of the primary dispatching railroad for the crossing identified under paragraph (a) of this section.

(c) Duty of multiple maintaining railroads with respect to remedial action at the crossing. Where there are multiple maintaining railroads for a crossing, the dispatching railroad (or, if more than one railroad dispatches a train through the crossing, the primary dispatching railroad for the crossing under paragraph (a) of this section) upon receipt of a report of an unsafe condition, shall promptly contact and inform the appropriate maintaining railroad(s) for the crossing of the reported problem. After each maintaining railroad for the crossing receives a report of an unsafe condition at the crossing that pertains to its maintenance responsibilities for the crossing, the maintaining railroad shall carry out the remedial action required by § 234.305 and the recordkeeping required by § 234.313.

**§ 234.307 Use of third-party telephone service by dispatching and maintaining railroads.**

(a) General use of a third-party telephone service by a dispatching railroad. A dispatching railroad may use a third-party telephone service to receive reports of unsafe conditions at highway-rail and pathway grade crossings pursuant to § 234.303. If a dispatching railroad chooses to use a third-party telephone service, the third-party

telephone service shall be reached directly and promptly by the telephone number displayed on the ENS sign pursuant to § 234.309. The third-party telephone service may use an automated answering system for the purpose of receiving such reports. The dispatching railroad shall have a live person answer calls directly and promptly from the third-party telephone service, unless permitted pursuant to § 234.303(b) to use an answering machine. The dispatching railroad shall ensure that the third-party telephone service complies with the applicable requirements of § 234.307.

(b) General use of a third-party telephone service by a maintaining railroad.

Pursuant to § 234.305(h)(2), a maintaining railroad that either maintains a highway-rail or pathway grade crossing on a seasonal or intermittent basis (e.g., tourist, biweekly service, or non-24 hours service), or a crossing through which a railroad dispatches one or more trains, each of which is authorized to travel through the crossing at speeds not greater than 20 mph, may use a third-party telephone service to receive reports of unsafe conditions at such a crossing from a dispatching railroad. The third-party telephone service may use an automated answering system for the purpose of receiving such reports. The maintaining railroad shall receive reports from the third-party telephone service by either having a live person answer calls directly and promptly, or using an answering machine. If using an answering machine pursuant to this paragraph, the railroad must use the answering machine in accordance with § 234.305(h)(2). The maintaining railroad shall ensure that the third-party telephone service complies with the applicable requirements of § 234.307.

(c) Duties of third-party telephone service in contacting dispatching and maintaining railroads. Upon receiving a report pursuant to §§ 234.303 or 234.305, on

behalf of either the dispatching railroad or maintaining railroad, respectively, the third-party telephone service shall immediately contact the railroad, and, at a minimum, provide it with the following information:

(1) The nature of the reported unsafe condition;

(2) The location of the unsafe condition, including the U.S. DOT National Crossing Inventory number for the crossing;

(3) Whether the person reporting the unsafe condition is a railroad employee, law enforcement officer, highway traffic official, or other employee of a public agency acting in an official capacity;

(4) The date and time that the report was received by the third-party telephone service; and

(5) Any additional information provided by the caller that may be useful to restore the crossing to a safe condition.

(d) Duties of railroad using third-party telephone service. If a dispatching or maintaining railroad uses a third-party telephone service to receive reports of unsafe conditions at a highway-rail or pathway grade crossing, the railroad shall—

(1) Provide the third-party telephone service with sufficient contact information by which the third-party telephone service may immediately contact the railroad upon receipt of a report;

(2) Inform FRA in writing, before the implementation of such a service, of the railroad's intent to use a third-party telephone service, and provide FRA with contact information for the third-party telephone service and information identifying the

highway-rail and pathway grade crossings about which the third-party telephone service will receive reports;

(3) Inform FRA in writing within 30 days following any changes in the use or discontinuance of a third-party telephone service; and

(4) Take appropriate action required by § 234.305, upon being contacted by the third-party telephone service about a report.

(e) Third-party telephone service and railroad responsibilities. If a railroad uses a third-party telephone service to receive reports pursuant to §§ 234.303 or 234.305, the third-party telephone service is responsible for carrying out the duties of this section and recordkeeping duties under § 234.313, and, if applicable under § 234.315. In addition, the railroad remains responsible for any acts or omissions of the third-party telephone service it utilizes that violate the provisions of this section or the recordkeeping requirements under § 234.313, and, if applicable under § 234.315.

**§ 234.309 ENS signs in general.**

(a) Provision of information. If the dispatching railroad and the maintaining railroad(s) are not the same entity, the dispatching railroad for a highway-rail or pathway grade crossing shall provide to the maintaining railroad the telephone number that is to be displayed on the ENS sign at the crossing, not later than 180 calendar days before the date that implementation of an ENS is required.

(b) Information to be displayed. Each ENS sign located at each highway-rail or pathway grade crossing as required by § 234.311 shall display the necessary information for the dispatching railroad to receive reports of unsafe conditions at the crossing. This information, at a minimum, includes the following:

- (1) The toll-free telephone number (or non-toll-free telephone number as provided for in § 234.303(e)) established to receive reports pursuant to § 234.303(a);
  - (2) An explanation of the purpose of the sign (e.g., “Report emergency or problem to \_\_\_\_\_”); and
  - (3) The U.S. DOT National Crossing Inventory number assigned to that crossing.
- (c) Sign size and other physical features. Each ENS sign shall—
- (1) Measure at least 12 inches wide by 9 inches high;
  - (2) Be retroreflective;
  - (3) Have legible text (i.e., letters and numerals) with a minimum character height of 1 inch for the information required in paragraph (b) of this section; and
  - (4) Have white text set on a blue background with a white border, except that the U.S. DOT National Crossing Inventory number may be black text set on a white rectangular background.

**§ 234.311 ENS sign placement and maintenance.**

- (a) Number of signs at highway-rail or pathway grade crossing. (1) In general. The maintaining railroad, or the railroad appointed pursuant to § 234.306(b), for a highway-rail or pathway grade crossing shall place and maintain a sign on each approach to the crossing that conforms to § 234.309, except as provided in paragraph (a)(2) of this section.
- (2) Exceptions. (i) At a farm grade crossing, the responsible railroad shall place and maintain a minimum of one sign that conforms to § 234.309 at the crossing.
- (ii) At a railroad yard, port or dock facility, or a private industrial facility that does not meet the definition of “plant railroad” in § 234.5, the responsible railroad shall

place and maintain a minimum of one sign at each vehicular entrance to the facility in accordance with § 234.309, in lieu of placing signs at each crossing within the yard, port or dock facility, or private industrial facility. Each sign must be placed so that it is clearly visible to a driver of a motor vehicle located at the vehicular entrance to the facility.

(b) Placement of sign(s). (1) Each sign required by paragraph (a) of this section must be located at the crossing, except as provided in paragraph (a)(2)(ii) of this section, and maintained by the responsible railroad so that the sign—

(i) Is conspicuous to users of the roadway or pathway by day and night;

(ii) Does not obstruct any other sign or traffic control device at the crossing;

(iii) Does not limit the view of a train approaching the highway-rail or pathway grade crossing; and

(iv) If mounted on a post, has supports that are crashworthy (i.e., breakaway or yielding).

(2) A sign placed on the signal bungalow does not comply with paragraph (b)(1)(i) of this section.

### **§ 234.313 Recordkeeping.**

(a) In general. Each railroad subject to this subpart shall keep records in accordance with this section. Records may be kept either on paper forms provided by the railroad or by electronic means in a manner that conforms with § 234.315. Each dispatching railroad responsible for receiving reports pursuant to § 234.303(a), each third-party telephone service responsible for receiving reports pursuant to § 234.307, and,

if applicable, each maintaining railroad shall keep, at a minimum, the following information for each report received under this subpart:

- (1) The nature of the reported unsafe condition;
  - (2) The location of the highway-rail or pathway grade crossing, by highway name, if applicable, and the U.S. DOT National Crossing Inventory number.
  - (3) The time and date of receipt of the report by the railroad;
  - (4) If applicable, whether the person who provided the report was a railroad employee, law enforcement officer, highway traffic official, or other employee of a public agency acting in an official capacity;
  - (5) Actions taken by the railroad prior to resolving the reported unsafe condition at the grade crossing (e.g., warning train crews, notifying the maintaining railroad, or contacting law enforcement or other public authorities);
  - (6) If the reported unsafe condition is substantiated, actions taken by the railroad to remedy the reported unsafe condition, if lawful and feasible;
  - (7) The time and date when the reported unsafe condition was remedied;
  - (8) If no remedial action was taken, the reason why; and
  - (9) If a dispatching railroad, in accordance with § 234.305, is required to contact a maintaining railroad, the time and date when it contacted the maintaining railroad.
- (b) Records of credible reports of warning system malfunction. A railroad that has maintenance responsibility over warning devices at a highway-rail grade crossing and maintains records pursuant to § 234.109, shall be deemed to comply with the recordkeeping requirements of this subpart with regard to credible reports of warning system malfunctions.

(c) Records involving multiple dispatching or maintaining railroads. (1) Where multiple railroads dispatch trains through the same highway-rail or pathway grade crossing and appoint one railroad to receive telephonic reports regarding unsafe conditions at such crossings pursuant to § 234.306, the appointment must be recorded in writing and a copy of the document retained by each railroad for the duration of the appointment or for one year, whichever period is longer.

(2) Where multiple railroads have maintenance responsibility for the same highway-rail or pathway grade crossing and they appoint one railroad to be responsible for installing and maintaining the ENS sign(s) at the crossing pursuant to § 234.306, the appointment must be recorded in writing and a copy of the document retained by each railroad for the duration of the appointment or for one year, whichever period is longer.

(d) Record retention period; records availability. Each railroad shall retain for at least one year (from the latest date of railroad activity in response to a report received under this subpart) all records referred to in paragraphs (a) and (b) of this section. Records required to be kept under this subpart shall be made available to FRA as provided by 49 U.S.C. 20107.

**§ 234.315 Electronic recordkeeping.**

(a) If a railroad subject to this subpart maintains records required by this subpart in electronic format in lieu of on paper, the system for keeping the electronic records must meet all of the following conditions:

(1) The railroad adequately limits and controls accessibility to the records retained in its electronic database system and identifies those individuals who have such access;

(2) The railroad has a terminal at the location designated by the railroad as the general office for the railroad system and at each division headquarters;

(3) Each such terminal has a computer and either a facsimile machine or a printer connected to the computer to retrieve and produce information in a usable format for immediate review by FRA representatives;

(4) The railroad has a designated representative who is authorized to authenticate retrieved information from the electronic system as a true and accurate copy of the electronically kept record; and

(5) The railroad provides FRA representatives with immediate access to the record(s) for inspection and copying during normal business hours and provides a printout of such record(s) upon request.

(b) If a record required by this subpart is in the form of an electronic record kept by an electronic recordkeeping system that does not comply with paragraph (a) of this section, then the record must be kept on paper.

**§ 234.317 Compliance dates.**

(a) Railroads without an ENS of any kind. If a railroad subject to this subpart does not have an ENS of any kind in place on [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], the railroad shall implement an ENS that conforms to this subpart no later than September 1, 2015.

(b) Railroads with nonconforming ENS telephone service. If a railroad subject to this subpart already has its own ENS telephone service or is using a third-party ENS telephone service, and that telephone service does not conform to the requirements in § 234.303 or § 234.307, respectively, on [INSERT DATE 60 DAYS AFTER DATE OF

PUBLICATION IN THE FEDERAL REGISTER], the railroad shall comply with § 234.303 or § 234.307, respectively, no later than March 1, 2014.

(c) Railroads with ENS signs of nonconforming size. (1) If a railroad subject to this subpart already has ENS signs in place, and those signs do not conform to the requirements in § 234.309 on [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], the railroad's ENS signs shall conform to § 234.309 no later than as required below:

(i) If the railroad's sign size is greater than or equal to 60 square inches and the height of the lettering on the sign is greater than or equal to  $\frac{3}{4}$  inch for the information required in § 234.309(b) on [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], the railroad may maintain the sign for its useful life.

(ii) If the railroad's sign size is greater than or equal to 60 square inches but the height of the lettering is less than  $\frac{3}{4}$  inch for the information required in § 234.309(b) on [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], the railroad's sign must conform to § 234.309 no later than September 1, 2017.

(iii) If the railroad's sign size is less than 60 square inches, regardless of the height of the lettering for the information required in § 234.309(b), on [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], the railroad's sign must conform to § 234.309 no later than September 1, 2015.

(2) If the railroad chooses to replace an ENS sign of non-conforming size before the applicable compliance date stated, the railroad shall replace that sign with a sign that conforms to § 234.309.

(d) Railroads with ENS signs having nonconforming placement. If a railroad subject to this subpart already has ENS signs in place, and the placement of those signs does not conform to the requirements in § 234.311 on [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], the placement of the railroad's ENS signs shall conform to § 234.311 no later than September 1, 2017. If a railroad changes the placement of the sign before September 1, 2017, the placement of the sign must conform to § 234.311. If a railroad replaces a sign before September 1, 2017, so that the sign conforms to § 234.309, and the placement of that sign does not conform to § 234.311, the railroad shall also change the placement of the sign so that it conforms to § 234.311.

(e) Railroads with nonconforming ENS recordkeeping. If a railroad subject to this subpart already conducts recordkeeping as part of its ENS, and that recordkeeping does not conform to § 234.313 or § 234.315, the railroad's recordkeeping shall conform to § 234.313 or § 234.315 no later than September 1, 2013.

Issued in Washington, DC, on June 1, 2012.

**Joseph C. Szabo,**  
Administrator,  
Federal Railroad Administration.

[FR Doc. 2012-13843 Filed 06/11/2012 at 8:45 am; Publication Date: 06/12/2012]