

## **CHAPTER 6: WARNING DEVICES – ACTIVE**

### **CHAPTER OVERVIEW**

This chapter surveys the various state laws and regulations concerning active warning devices. Not all of the states have laws or regulations covering these devices. “Active warning devices” as used here means those devices at a highway-rail grade crossing that are activated automatically upon the approach of a train.

### **STATE LAWS AND REGULATIONS**

#### **ALABAMA**

Alabama has no requirement concerning active warning devices.

#### **ALASKA**

Alaska has no requirement concerning active warning devices.

#### **ARIZONA**

The Arizona State Corporation Commission is authorized to determine, after a public hearing, whether any particular crossing of a railroad and a public highway or street is sufficiently hazardous as to require the installation of automatic warning signals or devices, provided, that a public hearing shall not be required if the parties in interest have entered into an agreement for the construction of such crossing and for the apportionment between them of the cost of acquiring and installing such automatic warning signals or devices.

If the Commission finds that any crossing requires the installation of automatic warning signals or devices, it may order the installation. If the parties in interest are unable to agree as to the apportionment of the cost of acquisition and installation, then the costs shall be borne as follows:

- (1) The railroad, 50 percent.
  - (2) Where a city street is involved: the city, 50 percent.
  - (3) If a county highway: the county, 50 percent.
  - (4) If a state highway: the state highway fund, 50 percent.
- Ariz. Rev. Stat. Ann. § 40-337.01 (1999).

#### **ARKANSAS**

Arkansas has no requirement concerning active warning devices.

## **CALIFORNIA**

The Public Utility Commission, in apportioning the cost of maintenance of automatic grade crossing protection, shall divide the maintenance costs in the same proportion as the cost of constructing such automatic grade crossing protection is divided. The railroad or street railroad corporations and the public agencies affected may agree on a different division of maintenance costs. If the public agency affected agrees to assume a greater proportion of the cost of maintenance than the apportionment of the cost of construction, the difference shall be paid by the public agency from funds other than the State Highway Fund or any other state fund. Cal. Pub. Util. Code § 1202.2 (West 1999).

## **COLORADO**

The Colorado Public Utilities Commission has the power to determine, order, and prescribe the terms and conditions of installation, operation, maintenance and equipping of highway-rail crossings which may be constructed. This includes the placement of watchmen at the crossing and the installation and regulation of lights, blocks, interlocking, other signaling systems, safety appliance devices, or other such means as appear reasonable and necessary to promote public safety.

The Commission may order that automatic or other safety appliance signals or devices be installed, reconstructed, improved, and/or operated at any grade crossing of any public highway or road by any railroad. The Commission must also determine and order, after notice and hearing, how the cost of installing, reconstructing, or improving such signals or devices shall be divided between the affected railroads, the highway operations and maintenance division and the affected city, city and county, town, county or other political subdivision of the state. In determining how much of the cost is to be borne by the railroad, consideration will be given to the benefit, if any which will accrue from those signals or devices to the railroad. In every case, the part to be paid by the railroad is to be not less than 20 percent of the total cost of the signals or devices. In order to compensate for the use of such crossings by the public, the Commission will generally order that such part of the total not paid by the railroad will be divided between the state highway crossing fund and the city, town, city and county, county or other political subdivision in which the crossing is located; in which case, the Commission shall also fix the amount to be paid. Colo. Rev. Stat. § 40- 4-106 (1999).

## **CONNECTICUT**

The Commissioner of Transportation has authority to adopt regulations to ensure the safe maintenance inspection, and testing of signal systems and devices at railroad grade crossings. Conn. Gen. Stat. § 13b-345b (West 1997).

The Commissioner of Transportation, when requested in writing by the selectmen of any town, the mayor and common council of any city, of the warden and burgesses of any borough to order gates, a flagman or electric signals or other signal device to be installed and maintained at any railroad crossing where a railroad crosses a public highway at grade. After reasonable notice

and a hearing, and a finding that public safety requires it, the Commissioner shall order the railroad company to install and maintain at the crossing, gates, a flagman, or such electric signals or other signal device as may be approved by the Commissioner. Conn. Gen. Stat. § 13b-343 (West 1997).

Each town, city or borough, upon receipt of a report of a malfunctioning grade crossing gate or signal is required by law to dispatch local police or firemen to the crossing to direct traffic across the crossing or to an alternate route until such time as the railroad company repairs the gate or signal or assumes responsibility for directing traffic. Conn. Gen. Stat. § 13b-344 (West 1997).

## **DELAWARE**

Delaware has no requirement concerning active warning devices.

## **DISTRICT OF COLUMBIA**

The District of Columbia Municipal Regulations require that if, in the opinion of the Mayor, the volume of pedestrian or vehicular traffic at any intersection at grade sufficient to justify additional safeguards, the intersection shall, if ordered by the Mayor, be guarded also by a standard railway cross-arm warning sign, gate, electric bells, electric automatic flashing red signal lights, or other appliance, or combination of appliances, to be approved by the Mayor. The safeguarding appliances shall be constructed, operated, and maintained by and at the cost of the company operating the railway. 24 DCMR 120.5 (2001).

## **FLORIDA**

The Florida Department of Transportation, in conjunction with other governmental units, and the private sector, is tasked with the responsibility of developing and implementing a state-wide rail program designed to ensure the proper maintenance, safety, revitalization, and expansion of the rail system. Among the myriad duties under the statute, the department shall administer rail operating and construction, including the regulation of maximum train operating speeds, the opening and closing of public grade crossings, the construction and rehabilitation of public grade crossings, and the installation of traffic control devices at public grade crossings. The administration of the program by the Department includes participation in funding. Fla. Stat. Ann. § 341.302 (West 1999 Supplement).

## **GEORGIA**

Georgia has no requirement concerning active warning devices.

## **HAWAII**

Hawaii has no requirement concerning active warning devices.

## **IDAHO**

In order to promote the public safety at railroad grade crossings and public streets, roads or highways and to provide for the payment of all or part of the costs of installing, reconstructing, maintaining, or improving automatic or other safety appliances, signals or devices at railroad grade crossings of public streets, roads or highways over the tracks of any railroad company, there is hereby created in the dedicated fund in the state treasury an account to be known as the railroad grade crossing protection account.

The Idaho Department of Transportation is responsible for the administration of the grade crossing protection fund. The Department is required to establish a priority rating for railroad crossings, assigning priority first to the most hazardous locations, giving proper weight to traffic volume over the crossing by school buses and vehicles transporting dangerous commodities, and if the public safety does not require installation of protective signals or devices at a crossing under consideration, it may refuse to order the installation of signals or devices or may defer their installation until more hazardous crossings have been protected. Every railroad company is required to file with the Idaho Transportation Department a copy of each report of accident which is filed with the Idaho Public Utilities Commission, for the Transportation Department to consider in making its determination. Idaho Code §§ 304A-B-C-D (1998).

## **ILLINOIS**

The Illinois Commerce Commission shall have the power, upon its own motion, or upon complaint, and after having made proper investigation, to require the installation of adequate and appropriate luminous reflective warning signs, luminous flashing signals, crossing gates illuminated at night, or other protective devices in order to promote and safeguard the health and safety of the public. The Commission shall have authority to determine the number, type, and location of such signs, signals, gates, or other protective devices which, however, shall conform as near as may be with generally recognized standards, and the Commission shall have authority to prescribe the division of the cost of the installation and subsequent maintenance of such signs, signals, gates, or other protective devices between the rail carrier or carriers, the public highway authority in interest, and in instances involving the use of the Grade Crossing Protection Fund, the Illinois Department of Transportation. 625 ILCS 5/18c- 7401 (1999).

## **INDIANA**

The Indiana Department of Transportation, in authorizing the construction of new highway-rail crossings under the provisions of IC 8-6-1- 7, has statutory authority to order the installation of automatic train-activated warning devices at the crossing. The Department also has authority to order the installation, replacement, relocation, modernization or improvement of automatic train-activated warning devices at any highway-rail crossing in the state. This authority is exclusive of and supersedes the power of any other state or local government agency. Ind. Code Ann. § 8-6-7.7- 2 (Burns 1999).

The Indiana Department of Transportation shall, upon proper petition by five or more citizens of the state, or a board of county commissioners, conduct a hearing to declare as

dangerous or extra hazardous any grade crossing in the state that the Department finds to be of such a character that the safety of the users of the highway requires the installation of automatic train-activated warning signals or other crossing safety devices. Ind. Code Ann. § 8-6-7-1 (2002)

## **IOWA**

Whenever a railroad track crosses, or is planned to cross a highway, street or alley, the affected railroad and the Department of Transportation in the case of a primary highway, the Board of Supervisors of the county in the case of secondary roads, or the City Council in the case of streets or alleys, may agree upon the location, manner, vacation, physical structure, characteristics, and maintenance of the crossing and flasher lights or gate arm signals, as well as the allocation of costs. The Iowa Department of Transportation may be a party to any agreement if grade crossing safety funds are to be used. Up to seventy-five percent of the maintenance cost of flasher lights or gate arm signals and an unlimited portion of the costs associated with installation may be paid from the grade crossing safety fund. Iowa Code § 327G.15 (1999). See also, entries in Chapters 1 and 2 in this book.

## **KANSAS**

At the request of the governing body of any city, county or township, and after proper investigations made in cooperation with the Secretary of Transportation, the State Corporation Commission shall designate those railroad grade crossings on city, county or township roads which are dangerous. At all crossings so designated the corporation commission shall order the of appropriate safety devices to be installed and maintained by the railroad or railroads.

The State Corporation Commission has the authority to determine the number, type and location of such safety devices which must conform to generally recognized standards. The Corporation Commission has additional authority to close and abolish grade crossings on city, county, or township roads that are in proximity to crossings on which safety devices have been ordered, subject to the approval of the governing body of such city, county, or township, and to require the payment of a portion of the cost of the installation of the safety devices by the affected railroad or railroads: provided, that the cost to the railroad or railroads shall by not less than twenty percent nor more than fifty of the total installation costs. Kan. Stat. Ann. § 66-321a (1998).

## **KENTUCKY**

If, at any time, a warning device at a highway-rail crossing is activated for thirty minutes or more in the absence of an approaching train and this activation is due to track maintenance or train movements in the vicinity, and the affected railroad is unable to disengage the device, then the railroad must position a flagman at the crossing. Ky. Rev. Stat. Ann. § 189.562 (Baldwin 1998).

The Transportation Cabinet has the power to investigate any public grade crossing not equipped with gates and with an average daily traffic of four thousand or more, at which two or

more accidents involving a train and a vehicle traversing a highway-rail crossing have occurred in a consecutive five year period beginning January 1, 1986. The cabinet shall request written comments from the affected local government prior to reaching a decision on a particular crossing. After the cabinet receives a report from the affected local government supporting the installation of gates, the cabinet, utilizing matching funds available from the Federal Highway Administration's highway-rail grade crossing safety program, shall program the installation of gates at the crossing. The cost of installing gates shall be the responsibility of the Cabinet and the affected railroad, and shall not be charged to any unit of local government. Ky. Rev. Stat. Ann. § 189.561 (1998).

## **LOUISIANA**

In 1998, the Louisiana Legislature enacted legislation that authorized the Department of Transportation and Development to require closure of state-maintained railroad grade crossings.

The legislation requires a prioritization of proposed crossing closures, along with notification of affected parties prior to closure. It provides for public hearing, alternative actions to closing by a local government authority, spells out the responsibility for funding by the local governing authority, directs promulgation of rules and regulations by the department, and requires certain factors for consideration in development of criteria for crossing closure, and other related matters.

The Secretary of the Department of Transportation and Development can require the closure of crossings. The statute provides for the Department of Transportation and Development to complete a study no later than March 1, 1999 to establish priorities for railroad grade crossing closures and to develop a prioritized plan for implementing railroad grade crossing closures.

Any local governing authority which opposes the closure of a grade crossing within its territorial jurisdiction may agree to undertake the upgrading of warning devices and additional safety alternatives in compliance with requirements determined by the department as an alternative to the proposed closing. The expense of the alternative upgrade of the crossing shall be borne by the local government. La. Rev. Stat. Ann. § 48:390 (West 1999)

## **MAINE**

The Maine Department of Transportation may require each railroad to install, operate and maintain an automatic signal, crossing gate or other protective device at any highway-rail crossing if, after proper notice and hearing, the Department decides that public safety concerns warrant such action. Notice and hearing are not required if such automatic grade crossing protection is funded and installed under the Federal program. The affected railroad will pay all costs, except at any crossing with state highways and state aid highways, where the installation costs are to be split between the railroad and the state as determined by the Department of Transportation. Me. Rev. Stat. Ann. tit. 23, § 7221 (West 1999).

## **MARYLAND**

The Maryland Secretary of Transportation has general authority to approve the construction or modification of a railroad grade crossing or a change of crossing protection equipment and to impose conditions necessary to insure public safety at the crossing. No other approval, safety condition, or protective measure may be required by any public authority.

Except for an industrial track spur or siding, a railroad may not construct, reconstruct, improve, widen, relocate, or otherwise alter a railroad grade crossing over a State, county, or municipal highway, except in Baltimore City or over a private road, or change the crossing protection at such a crossing unless approved by the Secretary .

The same section provides that a person may not construct, reconstruct, improve, widen, relocate, or otherwise alter either a railroad grade crossing over a public highway or a private road over a railroad or, change the crossing protection at such a crossing unless approved by the Secretary. Md. Ann. Code art. 8 § 639 (Michie 1998).

## **MASSACHUSETTS**

The law in Massachusetts law requires a railroad whose track is intersected by a public way, to install at the railroad's expense, a hand-activated warning device which is capable of audibly or visibly warning an approaching train of danger at any crossing so designated by the Massachusetts Department of Transportation. Mass. Ann. Laws ch. 160, § 138A (1999).

## **MICHIGAN**

The Michigan Department of Transportation may prescribe active traffic control devices to warn of the approach of trains about to cross a street or highway at public railroad grade crossings consisting of signals with signs, circuitry, or crossing gates and other appurtenances as depicted in the Michigan *Manual of Uniform Traffic Control Devices*.

The cost of any installation, alteration, or modernization of active traffic control devices shall be divided equally between the railroad and road authority.

Standard active railroad-highway traffic control devices consisting of side of street flashing light signals with or without half-roadway gates and cantilevers shall include the railroad crossing (crossbuck) sign, "stop on red signal" sign, and number of tracks sign located, designed, and maintained on the signal support as prescribed by the Michigan Manual of Uniform Traffic Control devices. The railroad shall perform actual installation and maintenance of these signs. The railroad must also install, renew, and maintain any signs placed on cantilevered signal supports. Whenever active traffic control devices are installed at any crossing, they must be so arranged that for every train or switching movement over the grade crossing, the active traffic control device shall be in operation for a period of not less than 20 seconds or more than 60 seconds in advance of the train movement reaching the nearest established curb line or highway shoulder, and the devices shall continue to operate until the train movement has passed the established curb line or shoulder on the far side of the highway.

The Department may order a railroad, at the railroad's expense, to stop and flag a crossing for normal train service or when active traffic control devices may become inoperable. Mich. Comp. Laws Ann. § 462.315 (1999).

## **MINNESOTA**

If the Transportation Regulation Board in Minnesota finds, after an investigation, that conditions at a highway-rail crossing require additional safeguards such as crossing gates or other suitable devices, the Board may specify any such device and order the affected railroad to install them. Minn. Stat. § 219.24 (1999).

## **MISSISSIPPI**

Title 65, Chapter 1, § 8 of the Mississippi Code grants the Transportation Commission the authority to regulate and abandon grade crossings on any road fixed as a part of the state highway system. Whenever the commission, in order to avoid a grade crossing with the railroad, builds a road on one side of the railroad, it shall have the power to abandon and close the grade crossing whenever an underpass or an overhead bridge is substituted for a grade crossing. The commission is also granted the authority to require the railroad to install signal posts with lights or other warning devices, at the expense of the railroad, and to regulate and abandon an underpass or overhead bridge. Where the underpass or bridge was abandoned because of the building of a new underpass or bridge, the commission can close the old underpass or bridge or, in its discretion, return jurisdiction for the underpass or bridge back to the county board of supervisors. Miss. Code Ann. § 65-1-8 (1999).

Mississippi uses a multi-disciplinary diagnostic team study approach to determine the need for protective or warning devices at railroad crossings. If the findings of any study reveal a need for warning or protective devices at or in the vicinity of a railroad crossing of a public highway under the jurisdiction of any county or incorporated municipality, the Mississippi Highway Department is authorized to construct protective or warning devices and to pay up to a maximum of one percent of available monies in the State Highway Fund for construction, provided that the municipality complies with conditions necessary for Federal matching funds to complete the balance. Miss. Code Ann. § 57-43 13 (1999).

## **MISSOURI**

The Missouri Division of Motor Carriers and Railroad Safety of the Department of Economic Development has exclusive power to determine the use and type of warning devices at each crossing of a public road by a railroad. The same is true at any private crossing where the Division has determined that the crossing is or will be utilized by the public to the extent that it is necessary to protect the safety of the public. Mo. Rev. Stat. § 389.610 (1999). See also, Missouri's entries in chapters 1 and 11 in this book.



## **MONTANA**

Montana has no requirement concerning active warning devices.

## **NEBRASKA**

When any railroad track crosses a public road in a cut, on a curve or side hill, in timberlands, near buildings or near any object restricting the view from the road, the Department of Roads, either on its own motion or upon complaint of interested parties, may order that certain precautions be taken to promote public safety. Each railroad carrier must provide and maintain whatever the Department may direct, including gates, crossings, signs, alarm bells and warning personnel. The Department has the authority to adopt a uniform crossing sign design and direct that it be used at any crossing or other place. It may also direct the placement of special signs where the physical conditions of the crossing warrant, except with regard to automatic grade crossing warning devices. Neb. Rev. Stat. § 75-1334 (1998).

## **NEVADA**

Chapter 704 of Title 58 of Nevada Revised Statutes sets forth the powers of the Public Service Commission, which include exclusive power over railroad crossings.

The Public Service Commission, after an investigation and hearing, may determine and order any of the options below for the safety of the traveling public. The investigation and hearing result from the filing of a formal complaint by the Department of Transportation, the board of county commissioners, the town board or councilor any railroad company.

After a formal hearing the Commission may determine and order:

- (1) The elimination, alteration, addition or change of a highway crossing(s) over any railroad at-grade or grade separated, including its approaches and surface.
- (2) Changes In the method of crossing at, above or below grade.
- (3) The closing of a crossing and the substitution of another therefore.
- (4) The removal of obstacles to the public view upon approach.
- (5) Any other changes and improvements for the safety of the public.

The commission is also empowered to order the costs for any such work to be divided and laid by the railroad and the state, county, town or municipality. Nev. Rev. Stat. § 704.300 (1997).

The entire cost of a new grade crossing or separation, including any automatic warning devices, is the responsibility of the government unit affected if they initiated the proceeding or the railroad if it initiated the proceeding, provided that the crossing is not at or near the location of a previous grade crossing elimination project.

Where a new grade separation results in the elimination or reconstruction of an existing grade crossing, the railroad will be responsible for thirteen percent of the costs, the remainder is to be borne by the affected government unit.

Where automatic warning devices are added or materially altered at an existing grade crossing, 87 percent of the costs shall be the responsibility of the railroad.

The affected railroads will pay 50 percent of the maintenance costs for any new or altered automatic crossing warning device, with the remaining 50 percent being paid by the affected government units. Nev. Rev. Stat. § 704-305 (1997).

## **NEW HAMPSHIRE**

Every railroad operating in New Hampshire is required to construct, or improve, and operate and maintain at every grade crossing of its railroad with another railroad or highway such warning signs, gates or other protection as the Department of Transportation, after notice and hearing, may find necessary in the interest of safety of the railroad or of the public. After installation, the railroad is required to maintain signs, signals, gates or other equipment installed within the limits of its right-of-way. N.H. Rev. Stat. Ann. § 373:10 (1999). See also, Section 373:3 regarding apportionment of cost.

## **NEW JERSEY**

New Jersey law requires that every railroad shall provide protection to pedestrians and the traveling public at every highway-rail crossing. Such protection may take the form of safety gates, flagmen, electric bells, electric signs or other recognized systems of alarm or protection approved by the Department of Transportation. N.J. Rev. Stat. §§ 48:12-34, 12-29 (1999). See also, Section 48:12-55.

## **NEW MEXICO**

New Mexico has no requirement concerning active warning devices.

## **NEW YORK**

New York has no requirement concerning active warning devices.

## **NORTH CAROLINA**

The General Statutes of North Carolina, Chapter 136, Section 20, provides guidance on the elimination or safeguarding of at-grade crossings and inadequate underpasses or overpasses.

The Secretary of Transportation is empowered to order grade separation and the installation and maintenance of gates, alarm signals and other approved safety devices. Any such orders shall specify that the cost of construction of any underpass or overpass or the installation of safety devices is to be allocated between the railroad company and the Department

of Transportation in the same ratio as the net benefits received by the railroad and the net benefits occurring to the public using the highway, but in no case shall the railroad be responsible for more than 10 percent. After any such order is issued by the Secretary, it will be the responsibility of the railroad to construct the grade separation and to install and maintain all safety devices.

Beginning January 1, 1995, if any railroad refuses to comply with any order of the Secretary, they shall be guilty of a Class 3 misdemeanor and may be fined not less than fifty nor more than one hundred dollars for each day in which they fail to comply.

From any order made by the Secretary, the railroad company has the right to appeal to the superior court of the county wherein the crossing is located. N.C. Gen. Stat. § 136-20 (e)-(g) (1999). See also, Section 136-18 for general powers of the Department of Transportation including the power to regulate, abandon, and close grade crossings on any road designated as part of the State highway system.

Railroad crossings in the cities of North Carolina are regulated by the cities themselves. A city has the authority to direct, control and prohibit the laying of railroad tracks and switches in public streets and alleys and to require that all railroad tracks, crossings and bridges be constructed so as not to interfere with ordinary travel or drainage patterns. The costs relating to construction, reconstruction and improvement of such streets and alleys are to be borne equally by the city and the railroad, but the costs of maintenance and repair after construction is the responsibility of the railroad.

A city has the authority to order the installation, construction, erection, reconstruction and improvements of warning signs, gates, lights and other safety devices at grade crossings. The city is responsible for 90 percent of the cost and the railroad is responsible for 10 percent. N.C. Gen. Stat. § 160A-298 (a)-(c)-(d) (1999).

## **NORTH DAKOTA**

The North Dakota Public Service Commission, upon written application made to it by the Director, the Board of County Commissioners of any county, the Board of Supervisors of any township, any municipality, the railroad company or upon its own motion, shall investigate and determine whether any highway-rail crossing over any state, county, township or municipal highway in the state is a danger to life and property and needs protection beyond what is set out in this chapter (crossbucks, advance warning signs and STOP signs). The Commission may then order that the protection be carried out. N.D. Cent. Code § 24-09-08 (1999).

Generally, the North Dakota Department of Transportation has authority to apportion the cost of automatic grade crossing protection devices. However, in the event such protection devices are ordered by the Public Service Commission in accordance with § 24-09-08, the Commission, as a part of its order may apportion the costs of installation between the affected railroad, the political subdivision having jurisdiction of the highway involved and the state of North Dakota. Such cost must be apportioned to such parties or to anyone or more of the parties on the basis of the benefit derived respectively by highway users and the railroad from the

installation of such crossing protection device. The cost attributable to the benefit of the highway users must be apportioned to the State of North Dakota. N.D. Cent. Code § 24-09-08.1 (1999).

## **OHIO**

The Ohio Public Utility Commission is required to conduct a survey and devise a formula for the classification of all public crossings, and using such formula, will prioritize crossings, giving highest priority to the crossings at which the Commission finds the highest probability of accidents occurring. Applying the formula, the Commission may then designate as dangerous and hazardous any highway-rail crossing it deems to be in need of additional protective devices. Once a crossing has been designated “high priority,” the Commission may negotiate with the affected railroad and with the state agency or political subdivision having jurisdiction over the crossing in question for the installation of such devices as luminous reflecting warning signs, luminous flashing signals, crossing gates illuminated at night or other protective devices. The number, type and location of the signs, signals, gates or other devices will be determined by agreement among the Commission, the affected railroad and the state agency or political subdivision.

The Commission may assign the costs among all parties in any proportion it determines proper. In doing so, it will take into consideration such things as volume of vehicular traffic, volume of train traffic, train type and speed, limitations of view, savings, if any, which will inure to the railroad as a result of the installation, benefits to the public, the cost of initial installation and maintenance costs over time.

The affected railroad may disagree as to the need for installation of additional protective devices, or to the type or location. In the event that an agreement cannot be reached with the railroad, the Commission may hold a public hearing with written notice being given to the railroad at least thirty days in advance. If the Commission determines that the safety of the public requires additional protective devices, it may order the railroad to comply. The railroad may, if acceptable to the Commission, offer its agreement to maintain the protective devices as its share of the costs. Ohio Rev. Code Ann. § 4907.47. I (A)(B)(C) (Anderson 1999).

Any gates, bells, or devices ordered erected by the Public Utilities Commission must be built within the time, in the manner, and of materials approved by the Commission. If the Commission has ordered automatic bells at any crossing, the bells must be constructed to ring in advance of the approach of a train within three hundred or more feet of the crossing and continue to ring until a train has reached the crossing. Ohio Rev. Code Ann. § 4907.48 (Anderson 1999).

## **OKLAHOMA**

The Oklahoma Corporation Commission has exclusive jurisdiction to determine and prescribe the particular location of highway-rail crossings, the amount and kind of warning devices required, the removal of all obstructions in view of such crossings, the altering or abolishment of any such crossings and to require, where practicable, a separation of grade at any such crossing, either current or projected for the future. Okl. Stat. tit. 17, § 84 (1998).

The cost of construction and maintenance of public highway-rail crossings is borne by the affected railroad company. For above grade, or under grade public highway crossings, the apportionment of cost and maintenance is left to the discretion of the Corporation Commission, but under no circumstances is the city, town or municipality assessed more than 50 percent of the actual cost of above grade or under grade crossings.

The Corporation Commission has the authority to designate certain crossings “extra hazardous” and to order the installation of appropriate warning devices. The installations are performed by the railroad. The Commission prescribes the division of the cost of the installation of signs, signals, gates, or other warning devices between the railroad and the state or its political subdivision. In any case, the cost to the railroad will not be less than 10 percent or more than 25 percent of the total costs. The railroads are responsible for all subsequent maintenance costs. Okl. Stat. tit. 17, §§ 82-86 (1998).

In the State of Oklahoma, a public authority having jurisdiction and control over any public highway or street in the state may determine that the safety of lives and property requires the installation of an automatic or mechanically operated barricading device; and any such public authority with appropriate jurisdiction, may construct and install such a barrier or they may order the affected railroad to construct, install and maintain the barrier. Before any such construction or installation begins, the detained plans, including the proposed mode of operation of the devices and a map showing the proposed location, must be submitted to and approved by the State Highway Commission of Oklahoma. Okla. Stat. tit. 66 § 125a (1994).

## **OREGON**

Oregon Law declares that it is the policy of the State of Oregon to achieve uniform and coordinated regulation of railroad-highway crossings and to eliminate crossings at grade whenever possible. To these ends, the authority to control and regulate the construction, alteration, and protection of railroad-highway crossings is vested exclusively in the state, and in the Department of Transportation. Or. Rev. Stat. § 824.202(1999).

The Department of Transportation may, upon its own motion, upon application by a railroad, the public authority in interest, subsequent to a hearing, unless a hearing is not required under section 824.214, and after finding that such action is required by the public safety, necessity, convenience and general welfare:

- (1) Eliminate a grade crossing by relocation of the highway.
- (2) Alter or abolish any grade crossing, change the location thereof or require a separation of grades at any such crossing.
- (3) Alter or change any existing grade separation.
- (4) Require installation or alteration of protective or warning devices.

The Department has the authority to prescribe the time and manner of any such alteration, change, or installation and the terms and conditions thereof. Or. Rev. Stat § 824.206 (1999).

After receiving the application, the Department may schedule a hearing, unless one is not required. At the hearing the Department must determine whether the public safety, public convenience, and general welfare require a grade separation, and in the event the grade crossing is not required, determine whether the application should be refused or granted and any terms and conditions. If the grade crossing is approved, the Department shall determine and prescribe the manner of its construction, maintenance and use, the kind and location of protective devices to be installed, the allocation of the costs and the place of the crossing. Or. Rev. Stat. §§ 824.204-210 1999).

Installation costs of protective devices, unless the parties agree otherwise shall be apportioned as follows:

(1) At an existing crossing, a crossing relocated, or a crossing previously closed by order of the Department of Transportation and reopened :

(a) For devices to be installed at or in advance of the crossing and which are activated immediately in advance of, and during, each train movement over the crossing: 75 percent to the Grade Crossing Protection Account; 5 percent to the public authority in interest; and 20 percent to the railroad

(b) For devices which are primarily designed for the purpose of illuminating the crossing or its approaches during the hours of darkness: Not less than 90 percent to the Grade Crossing Protection Account; not more than five percent to the public authority in interest; and not more than 5 percent to the railroad company.

(c) For all other protective devices: 75 percent to the Grade Crossing Protection Account; 25 percent to the public authority in interest for such devices to be installed by it at or in advance of the crossing; and 25 percent to the railroad company for such devices to be installed at the crossing. Or. Rev. Stat. § 824.242 (1999).

One hundred percent of the maintenance costs is to be borne by the railroad if the devices were actually installed and maintained by the railroad company. One hundred percent shall be paid by the public authority in interest for devices at or in advance of the crossing actually installed and maintained by the authority. The costs shall be divided evenly between the railroad company and the public authority in interest in the case of devices installed and maintained by the public authority which are primarily designed for the purpose of illuminating the crossing during the hours of darkness and which are not activated immediately in advance of, or during, each train movement. Or. Rev. Stat. § 824.244 (1999). See also, Section 824.250 concerning apportionment where Federal funds are available.

## **PENNSYLVANIA**

No rail carrier shall, without Public Service Commission approval, remove the protection afforded by interlocking signals, crossing gates, watchmen, automatic crossing signals, or any other protection against accidents, or reduce the number of hours that manual protection is maintained, or substitute, or alter any existing form of protection at crossings, at grade, of the tracks of a carrier across a public highway, or the tracks of another carrier.

Prior to installing automatic crossing signals at any unprotected crossing of a public highway, at grade, across its track or tracks, or at such a crossing, which is protected by fixed signs only, a carrier shall submit to the Commission plans of such proposed installation and receive approval of such plans. 52 Pa. Code § 33.21 (1999). See also, Sections 33.23 and 33.31 relating to state aid for protective devices, aid from the Commission, and regulation and procedure. .

## **RHODE ISLAND**

At any highway-rail crossing not protected by a gate or flagman, the Public Utility Commission may, after proper notice and hearing, direct that the crossing be furnished with an electric signal(s). If any affected railroad refuses or neglects to comply with the order of the Commission within three months from the date of the order, the railroad may be fined twenty-five dollars for each day that the refusal or neglect continues, unless the railroad can furnish a satisfactory explanation to the Commission for the refusal or neglect. R.I. Gen. Laws § 39-8-11 (1999).

Every railroad corporation which has at-grade crossings within the city of Providence must, on receiving notice from the city council, install, maintain and operate gates and must fence its track within the city limits according to council requirements . Any violation of the provisions of this section carries a fine of fifty dollars for each day of neglect after twenty days' from notice, one-half for the use of the state and the other half for the use of the complainant. R.I. Gen. Laws § 39-8-12 (1999).

## **SOUTH CAROLINA**

South Carolina has no requirement concerning active warning devices.

## **SOUTH DAKOTA**

The Department of Transportation may determine, order and prescribe the reasonable manner in which the tracks or other facilities of any railroad company(s) may be constructed at, above or below grade across the track or facilities of any other railroad company, public highway or street. The Department also may determine order and prescribe the terms and conditions of installation, operation, maintenance, and equipping of all such crossings which may be constructed, including any watchman thereat or the installation and regulation of lights, blocks, interlocking or other signaling systems, safety appliance devices and such other means as determined by the Department. S.D. Codified Laws Ann. § 31-27-2 (1999).

Every first or second class municipality in South Dakota has the power to require railroad companies to keep flagmen and maintain lights at railroad crossings of streets and provide for the safety of persons and property; to compel them to construct, maintain, and operate gates at railroad crossings of streets when the keeping of a flagmen is not sufficient protection; to compel them to raise or lower their tracks to conform to any grade which may be established by the municipality and to keep such tracks on the level with the street or highway surface, so that such

tracks may be crossed at any place on such street or highway; to require them to fence their railroads and construct and repair cattle guards, viaducts, or overhead crossings, and to provide for and change the location, grade, and crossing of any railroad; all subject to the powers vested in the Public Utilities Commission. S.D. Codified Laws Ann. § 9-35-9 (1999).

If, in the opinion of the Department of Transportation, it is necessary for the safety and protection of the public that street crossings over railroad tracks be lighted or street crossing alarms be installed to notify the public of approaching trains, the Department shall order the railroad to install crossing alarms or order the crossing to be lighted, or order both alarms and lighting by the railroad in a manner and method as, in the opinion of the Department, will be the most suitable for the protection of the public. S.D. Codified Laws Ann. § 49-16A-89 (1999).

Any railroad tracks over which an operating train travels which crosses a portion of the state trunk highway system shall have a crossing alarm or a lighting device, or both, to alert the public of approaching trains and to notify the public of trains crossing the highway. The crossing alarm or lighting device is required to be in place by December 31, 1998. The Department of Transportation shall decide the method which is most suitable for the protection of the public and shall use any Federal highway safety funds to pay for the crossing alarms and lighting devices. However, if Federal funds are not available, the railroad owning or operating the tracks is liable for the expenses of the crossing alarm or lighting device. S.D. Codified Laws Ann. § 49-16A-89.2 (1999).

## **TENNESSEE**

Tennessee law requires that, within six months after the occurrence of a fatality resulting from a collision between a train and a vehicle or pedestrian at an unmarked highway-rail crossing where there are regularly scheduled trains, one hundred or more vehicles cross daily, and a regular school bus crossing, and/or upon the order of the Commissioner of Transportation, the affected railroad company install a marker with automatic flashing signal lights and a bell on either side of the tracks along the street, road or highway crossing the tracks. Installation costs are to be apportioned equally to the railroad company, the State of Tennessee and the county, municipality or the metropolitan government in accordance with the fiscal procedures of each unit. Tenn. Code Ann. § 65-11-113 (1999).

## **TEXAS**

The Texas Department of Public Safety is required to maintain a statewide toll-free telephone service to receive and report of a malfunction of a device, including a signal or crossbar, placed at an intersection of a railroad track and a public road to promote safety.

At each intersection of a railroad track and a public road that is maintained by the state or a municipality and at which a mechanical safety device is placed, the Texas Department of Transportation is required to affix on the crossbars of the device the telephone number, an explanation for its purpose, and the crossing number. At each intersection that is maintained by a political subdivision other than a municipality at which a mechanical safety device is placed,



the political subdivision is required to affix on the crossbars of the device the number, an explanation of its purpose and the crossing number.

The Department of Public Safety must notify the identified railway company-of each report of a malfunction received through the telephone service.

The Department is required to maintain a computerized list of each intersection and of the railroad crossing safety equipment located at each, using crossing numbers compiled by the Texas Department of Transportation.

Not later than the fifth day after the date is places railroad crossing safety equipment in operation at an intersection, a state agency or a political subdivision of the state other than a municipality shall notify the Department of Public Safety of: the location and type of equipment installed, and the date it was placed in operation. Tex. Transp. Code 471.003 (1999).

## **UTAH**

The Department of Transportation, so as to promote the public safety, has a duty to provide for the installing, maintaining, reconstructing, and improving of automatic and other safety appliances, signals or devices at grade crossing on public highways or roads over the tracks of any railroad or street railroad in the state. Utah Code Ann. § 54-4-15.1 (1999).

The Department shall apportion the cost of the installation, maintenance, reconstruction or improvement of any signals or devices between the railroad and the public agency involved. Utah Code Ann. § 54-4-15.3 (1999).

## **VERMONT**

When three or more freeholders or registered voters of a city, town or village request in writing that a gate or electric signal be installed or a flagman be stationed at any highway-rail crossing within their city, town or village, the Transportation Board will visit the location and give notice to all concerned. If the public safety requires it, the Board will order the affected railroad to install the needed device and direct the state, municipality and the railroad to pay costs as the Board finds equitable. VT. Stat. Ann. tit.5, § 3584 (1999).

## **VIRGINIA**

When required by the State Highway and Transportation Commissioner, or by the governing body of any county, city or town, every railroad company will place and maintain, a highway-rail crossing protective device, including flashing electric lights, at each state highway-rail crossing. The device is to be automatically activated by an approaching train so as to be clearly discernible to travelers approaching the highway-rail crossing from each direction at a distance of two hundred feet. These lights will be installed at the initiative of counties, cities, or towns only when required by ordinance or resolution adopted by the governing body stating that such political subdivision will pay the initial installation costs and that such cost and maintenance costs will be fixed as provided by this article. The costs of installation and

maintenance of the lights may be apportioned by agreement between the railroad company and the governing body, or the Highway and Transportation Commissioner when he initiates it. If no agreement can be reached among the parties, anyone of the parties may petition the State Corporation Commission for a decision on the costs. Va. Code Ann. § 56-405.3 (Michie 1999). See also, Section 56-406.1.

When, in the opinion of the State Highway and Transportation Commissioner, or the governing body of any county that has withdrawn its roads from the secondary system of state highways as to roads maintained by such county, or the council of any city or incorporated town, the public interest requires that automatically operated gates, wigwag signals or other electrical or automatic protection devices be installed at any highway, road or street crossing of one or more railroads at-grade, agreement may be made between any of these bodies and the affected railroad regarding the plans and specifications, the method of construction and the division of cost of installing such crossing protection devices. In the event that such governing bodies and the railroad company/s are unable to agree, they may petition the State Corporation Commission which shall determine what share of the costs of the project to be borne by the affected railroad is fair and reasonable. Va. Code Ann. § 56-406.1 (Michie 1999).

When any automatically operated gate, wigwag signal or other electrical or automatic crossing protection device has been installed at any highway-rail crossing by a railroad company outside the corporate limits of any city or inside the corporate limits of any incorporated town having a population of thirty-five hundred or less where the street involved is maintained by the state Highway and Transportation Board, the State Highway and Transportation Commissioner or he governing body may agree with the affected railroad company as to the division of cost of future maintenance of the devices. If the concerned parties are unable to agree, then the State Highway and Transportation Commissioner or the governing body may petition the State Corporation commission which shall determine what share of the costs of the future maintenance is to be borne by the railroad company and/or the State Highway and Transportation Commission or the county, with regard to the benefits accruing to the railroad from the continued maintenance of such protection of the crossing. Va. Code Ann. § 56-406.2 (Michie 1999).

## **WASHINGTON**

When the Secretary of Transportation, or the governing body of any city, town, or county, or any railroad company, deems that the public safety requires signals or other warning devices, other than crossbuck signs, at any highway-rail crossing (state, city, town or county highway, road, street, alley, avenue, boulevard, parkway or other), it may petition the Utilities and Transportation Commission. The Commission will decide on the necessity for such protection and apportion the entire cost of installation and maintenance. No railroad is required to install any signal or other warning device until the public body involved has either paid or executed its promise to pay its portion of the estimated cost to the railroad. Wash. Rev. Code Ann. § 81.53.261 (West 1999).

If the Utilities and Transportation Commission directs the installation of a grade crossing protection device, and a federal-aid funding program is available to participate in the costs of the installation, both installation and maintenance cost of the device shall be apportioned according

to 81.53.295 (see next entry). Otherwise, if installation is ordered by the Commission, it shall apportion the cost of installation and maintenance as provided in this section and described below:

- Installation: 60 percent to the Grade Crossing Protective Fund, 30 percent to the city, town, county or state, and 10 percent to the railroad. However, if the installation is to be located at a new crossing requested by a city, town, county or the state, 40 percent shall be paid by unit and none by the railroad. If the new crossing has been requested by the railroad, the entire cost must be borne by the railroad.
- Maintenance: 25 percent to the Grade Crossing Protective Fund, 75 percent to the railroad. If the crossing is a new crossing requested by the railroad, the entire cost is apportioned to the railroad. Wash. Rev. Code Ann. § 81.53.271 (West 1999).

If a city, town, county or the state petitions the Commission for closure of an existing crossing in proximity to the crossing for which installation of signals is described above, the share paid by the petitioning city, town, etc., will be reduced by 10 percent of the total cost for each crossing ordered closed and the share paid by the Grade Crossing Protective Fund will be increased accordingly. Wash. Rev. Code Ann. § 81.53.271 (West 1999).

If funds are not available from the Grade Crossing Protective Fund, the Commission shall apportion to the parties on the basis of the benefits to be derived by the public and the railroad respectively, that part of the cost which would otherwise be assigned to the Grade Crossing Protective Fund. Provided, that in such instances the city, town, county or state shall not be assessed more than 60 percent of the total costs of installation on other than Federal aid designated highway projects; and provided further, that the entire cost of maintenance be borne by the railroad. Wash. Rev. Code Ann. § 81.53.275 (West 1994). See also, Section 81.53.281 concerning creation of the Grade Crossing Protective Fund.

## **WEST VIRGINIA**

West Virginia has no requirement concerning active warning devices.

## **WISCONSIN**

If the Wisconsin Department of Transportation determines, either without, or after a hearing, that protection is not adequate at a public highway-rail crossing, it may order the railroad company to keep a flagman at the crossing or to install automatic signals or other suitable safety devices at specific locations at such crossings. The costs of such protection will be apportioned by the Department between the railroad and the State on the basis of benefits received by the railroad and the public respectively. Wis. Stat. § 195.28(2)(3) (1999).

## WYOMING

The Wyoming Public Service Commission, on the basis of a priority rating assigning priority first to the most hazardous highway-rail crossings, shall determine the type of crossing protection signals and devices required. Wyo. Stat. § 37-10-102 (1999).

Under the direction of the affected railroad, it shall be the duty of the Wyoming Public Service Commission to apportion the costs and expenses of installing or reconstructing such crossings and safety devices between the railroads and the State Highway Department or the county, city, or other governmental entity involved in proportion to the respective benefits to be derived. But, in any case, the Commission must limit the amount to be charged to the railroad to a maximum of thirty-three and one-third percent of the cost of the total project for installing or reconstructing any crossings or safety devices. Wyo. Stat. § 37-10-103 (1999).

The Public Service Commission shall fix in every case the amount to be paid from the Crossing Protection Account, which it administers, and the amount to be paid by the Highway Department or by the city, town, county or other political entity. The railroads will bear all costs of maintaining in good operating condition all such safety devices. Wyo. Stat. § 37-10-104 (1999).