

crossing because of queuing or other special problems).

6. If a roadway that runs parallel to the railroad tracks is within 100 feet of the railroad tracks when it crosses an intersecting road that also crosses the tracks, the appropriate advance warning signs should be posted as shown in the MUTCD.

7. Is the posted highway speed (on each approach to the crossing) appropriate for the alignment of the roadway and the configuration of the crossing?

8. Does the vertical alignment of the crossing create the potential for a "hump crossing" where long, low-clearance vehicles might get stuck on the crossing?

9. What are the grade crossing warning devices in place at each crossing? Flashing lights and gates are required for each public crossing in a New Quiet Zone. Are all required warning devices, signals, pavement markings and advance signing in place, visible and in good condition for both day and night time visibility?

10. What kind of train detection is in place at each crossing? Are these systems old or outmoded; are they in need of replacement, upgrading, or refurbishment?

11. Are there sidings or other tracks adjacent to the crossing that are often used to store railroad cars, locomotives, or other equipment that could obscure the vision of road users as they approach the crossings in the quiet zone? Clear visibility may help to reduce automatic warning device violations.

12. Are motorists currently violating the warning devices at any of the crossings at an excessive rate?

13. Do collision statistics for the corridor indicate any potential problems at any of the crossings?

14. If school buses or transit buses use crossings within the proposed quiet zone corridor, can they be rerouted to use a single crossing within or outside of the quiet zone?

PRIVATE CROSSINGS WITHIN A PROPOSED QUIET ZONE

In addition to the items discussed above, a diagnostic team should note the following issues when examining any private crossings within a proposed quiet zone:

1. How often is the private crossing used?
2. What kind of signing or pavement markings are in place at the private crossing?
3. What types of vehicles use the private crossing?
 School buses
 Large trucks
 Hazmat carriers
 Farm equipment
4. What is the volume, speed and type of train traffic over the crossing?
5. Do passenger trains use the crossing?
6. Do approaching trains sound the horn at the private crossing?
 State or local law requires it?

Railroad safety rule requires it?

7. Are there any nearby crossings where train horns sound that might also provide some warning if train horns were not sounded at the private crossing?

8. What are the approach (corner) sight distances?

9. What is the clearing sight distance for all approaches?

10. What are the private roadway approach grades?

11. What are the private roadway pavement surfaces?

PEDESTRIAN CROSSINGS WITHIN A PROPOSED QUIET ZONE

In addition to the items discussed in the section titled, "All crossings within a proposed quiet zone", a diagnostic team should note the following issues when examining any pedestrian crossings within a proposed quiet zone:

1. How often is the pedestrian crossing used?
2. What kind of signing or pavement markings are in place at the pedestrian crossing?
3. What is the volume, speed, and type of train traffic over the crossing?
4. Do approaching trains sound the horn at the pedestrian crossing?
 State or local law requires it?
 Railroad safety rule requires it?
5. Are there any crossings where train horns sound that might also provide some warning if train horns were not sounded at the pedestrian crossing?
6. What are the approach sight distances?
7. What is the clearing sight distance for all approaches?

APPENDIX G TO PART 222—EXCESS RISK ESTIMATES FOR PUBLIC HIGHWAY-RAIL GRADE CROSSINGS

BAN EFFECTS/TRAIN HORN EFFECTIVENESS
 [Summary table]

Warning type	Excess risk estimate
Nation (Except Florida East Coast Railway and Chicago Region Crossings)	
Passive	74.9.
Flashers only	30.9.
Flashers with gates	66.8.
Florida East Coast Railway Crossings	
Flashers with gates	90.9.
Chicago Region Crossings	
Passive	To be determined.
Flashers only	To be determined.
Flashers with gates	To be determined.

NOTE ONE: The warning type column reflects primary warning device types. FRA is

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aware that a variety of arrangements are in place at individual crossings.

NOTE TWO: The ‘‘excess risk estimate’’ is a figure that represents the amount by which collision frequency has been estimated to in-

crease when routine locomotive horn sounding is restricted at public highway-rail grade crossings.

[74 FR 46394, Sept. 9, 2009]

APPENDIX H TO PART 222—SCHEDULE OF CIVIL PENALTIES¹

Section	Violation	Willful violation
Subpart B—Use of Locomotive Horns		
§ 222.21 Use of locomotive horn		
(a) Failure to sound horn at grade crossing	\$5,000	\$7,500
Failure to sound horn in proper pattern	1,000	3,000
(b) Failure to sound horn at least 15 seconds and less than ¼-mile before crossing	5,000	7,500
Sounding the locomotive horn more than 25 seconds before crossing	1,000	2,000
Sounding the locomotive horn more than ¼-mile in advance of crossing	1,000	2,000
§ 222.33 Failure to sound horn when conditions of § 222.33 are not met	5,000	7,500
§ 222.45 Routine sounding of the locomotive horn at quiet zone crossing	5,000	7,500
§ 222.49 (b) Failure to provide Grade Crossing Inventory Form information	2,500	5,000
§ 222.59 (d) Routine sounding of the locomotive horn at a grade crossing equipped with wayside horn	5,000	7,500

¹ A penalty may be assessed against an individual only for a willful violation. The Administrator reserves the right to assess a penalty of up to \$100,000 for any violation where circumstances warrant. See 49 CFR part 209, appendix A.

[71 FR 47634, Aug. 17, 2006, as amended at 73 FR 79702, Dec. 30, 2008. Redesignated at 74 FR 46394, Sept. 9, 2009]

PART 223—SAFETY GLAZING STANDARDS—LOCOMOTIVES, PASSENGER CARS AND CABOOSES

Subpart A—General

Subpart A—General

- Sec.
- 223.1 Scope.
- 223.3 Application.
- 223.5 Definitions.
- 223.7 Responsibility.

Subpart B—Specific Requirements

- 223.8 Additional requirements for passenger equipment.
- 223.9 Requirements for new or rebuilt equipment.
- 223.11 Requirements for existing locomotives.
- 223.13 Requirements for existing cabooses.
- 223.15 Requirements for existing passenger cars.
- 223.17 Identification of equipped locomotives, passenger cars and cabooses.

APPENDIX A TO PART 223—CERTIFICATION OF GLAZING MATERIALS

APPENDIX B TO PART 223—SCHEDULE OF CIVIL PENALTIES

AUTHORITY: 49 U.S.C. 20102–20103, 20133, 20701–20702, 21301–21302, 21304; 28 U.S.C. 2461, note; and 49 CFR 1.49.

§ 223.1 Scope.

This part provides minimum requirements for glazing materials in order to protect railroad employees and railroad passengers from injury as a result of objects striking the windows of locomotives, caboose and passenger cars.

[44 FR 77352, Dec. 31, 1979]

§ 223.3 Application.

(a) This part applies to railroads that operate rolling equipment on standard gauge track that is a part of the general railroad system of transportation.

(b) This part does not apply to—
 (1) Locomotives, cabooses, and passenger cars that operate only on track inside an installation that is not part of the general railroad system of transportation;

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

(3) Locomotives, passenger cars and cabooses that are historical or antiquated equipment and are used only for excursion, educational, recreational purposes or private transportation purposes.