

2 State of Arkansas
3 94th General Assembly
4 Regular Session, 2023

A Bill

HOUSE BILL 1768

5
6 By: Representative D. Whitaker
7 By: Senator R. Murdock

8 Filed with: House Committee on Public Transportation
9 pursuant to A.C.A. §10-3-217.

For An Act To Be Entitled

10
11 AN ACT TO CREATE STANDARD REQUIREMENTS CONCERNING
12 RAILROAD TRAIN DEFECT DETECTORS; AND FOR OTHER
13 PURPOSES.

Subtitle

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15
16 TO CREATE STANDARD REQUIREMENTS
17 CONCERNING RAILROAD TRAIN DEFECT
18 DETECTORS.
19

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21
22 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

23
24 SECTION 1. Arkansas Code Title 23, Chapter 12, is amended to add an
25 additional subchapter to read as follows:

Subchapter 11 – Defect Detector Safety

26
27
28 23-12-1011. Legislative intent.

29 The General Assembly finds that:

30 (1) In light of the February 2023 railroad train derailment in
31 East Palestine, Ohio, and the absence of any federal regulation of defect
32 detectors, the continuance of railroad corporations with no oversight or
33 regulation of hot box detectors operating within the state on a main line or
34 branch line exposes the public to unnecessary dangers and disruptions of
35 commerce; and

36 (2) The intent of this act is to eliminate unnecessary dangers

1 and disruptions of commerce imposed upon communities and residents of
2 Arkansas.

3
4 23-12-1102. Definitions.

5 As used in this subchapter:

6 (1) "Defect detector" means an electronic device:

7 (A) That scans passing railroad trains or equipment for a
8 defect, including without limitation a defect in the:

9 (i) Hot wheel bearing;

10 (ii) Hot wheel;

11 (iii) Acoustic bearing detection; or

12 (iv) Dragging equipment as a primary function;

13 (B) That may be integrated to detect excessive height or
14 excessive wide shipments and shifted lading; and

15 (C) With wheel impact integration or that stands alone as
16 a singular unit to detect a wheel defect;

17 (2)(A) "Railroad" means a form of non-highway ground
18 transportation that runs on rails or electromagnetic guideways within this
19 state, including without limitation:

20 (i) Commuter railroad service or other short-haul
21 railroad passenger service in a metropolitan or suburban area; and

22 (ii) High-speed ground transportation systems that
23 connect metropolitan areas, without regard to whether those systems use new
24 technologies not associated with traditional railroads.

25 (B) "Railroad" does not include rapid transit operations
26 in an urban area that are not connected to the general railroad system of
27 transportation;

28 (3) "Railroad corporation" means all corporations, companies, or
29 individuals owning or operating any railroad in this state whether as owner,
30 contractor, lessee, mortgagee, trustee, assignee, or receiver;

31 (4)(A) "Railroad train" means one (1) or more locomotives
32 coupled with or without cars, requiring an air brake test in accordance with
33 49 C.F.R. § 232, as it existed on January 1, 2023, or 49 C.F.R. § 238, as it
34 existed on January 1, 2023, including without limitation:

35 (i) A single locomotive;

36 (ii) Multiple locomotives coupled together; or

1 (iii) One (1) or more locomotives coupled with one
2 (1) or more cars.

3 (B) "Railroad train" does not include a locomotive or car
4 during switching operations or when the operation of the locomotive or car is
5 that of classifying and assembling cars within a railroad yard for the
6 purpose of making or breaking up railroad trains;

7 (5) "Restricted speed" means a speed that permits a railroad
8 train to stop within one half (1/2) the range of vision but does not exceed
9 twenty miles per hour (20 m.p.h.); and

10 (6) "Trending defect detector technology" means an algorithm
11 technology applied to a defect detector that allows for communication from
12 one (1) defect detector to another to predict or detect a defect, including
13 without limitation the communication of:

14 (A) The changing temperature of wheel bearings on railroad
15 equipment;

16 (B) Acoustic information; or

17 (C) Other data that would lead to the discovery of a
18 failure of the rolling equipment.

19
20 23-12-1103. Defect detector minimum requirements.

21 (a) A defect detector installed within the state shall be equipped
22 with a:

23 (1) Hot box detector;

24 (2) Hot wheel detector; and

25 (3) Dragging equipment detector technology.

26 (b)(1) A defect detector shall be equipped with an audible alarm that
27 is assigned to the Association of American Railroads frequency assigned to
28 the specific territory in which the defect detector is located.

29 (2) In the event of a defect, the:

30 (A) Alarm shall sound over the assigned radio channel
31 three (3) consecutive times for no longer than five (5) seconds and with five
32 (5) seconds of silence in between the sounding of the alarm;

33 (B) Defect detector shall repeat an audible message three
34 (3) times with twenty (20) seconds of silence between messages stating the
35 following information to the operating crew or person, the:

1 (i) Detector location milepost and name;
2 (ii) Track number in multiple track territory;
3 (iii) Total number of axles in the railroad train,
4 which shall include motive power; and
5 (iv) Location of defects within the railroad train
6 or equipment.

7 (3) If no defects are found the defect detector shall provide an
8 audible message to the operating crew or person stating the following:

9 (A) The location of the defect detector milepost and name;
10 (B) The track number in multiple track territory;
11 (C) The total number of axles in the railroad train, which
12 shall include motive power;
13 (D) Railroad train speed; and
14 (E) A no defects message, including a "repeat no defects,
15 out" message.

16
17 23-12-1104. Trending defect detector technology.

18 (a) A defect detector equipped with trending defect detector
19 technology or similar technology shall not have a silent alarm and shall be
20 listed to all railroad personnel operating equipment on the railroad tracks.

21 (b) After a railroad train passes a defect detector with trending
22 defect detector technology and a trending defect issue is detected, the
23 following procedure is required:

24 (1) The railroad train shall stop in accordance with safe
25 railroad train handling procedures issued by the railroad corporation;

26 (2) An inspection of the railroad train shall be made by the
27 operating crew from a position on the ground;

28 (3) The railroad train inspection results shall be noted and
29 presented to the appropriate officer of the railroad corporation, dispatcher,
30 or qualified person; and

31 (4) Based on the inspection results, the railroad train may
32 proceed at a speed that does not exceed ten miles per hour (10 m.p.h.) if
33 carrying hazardous materials or thirty miles per hour (30 m.p.h.) if the
34 railroad train is not carrying hazardous materials.

1 (c) After a railroad train passes a defect detector with trending
2 defect detector technology and a trending defect issue is detected for the
3 second time, the following procedure is required:

4 (1) The railroad train shall stop in accordance with safe
5 railroad train handling procedures issued by the railroad corporation;

6 (2) The railroad train or equipment shall be inspected by a
7 position on the ground and a determination shall be made by a qualified
8 person whether the railroad train is safe to move;

9 (3) After the inspection required under subdivision (c)(2) of
10 this section, the equipment shall be set out immediately at the nearest
11 siding, spur, or designated repair track; and

12 (4) The equipment shall not be moved unless a qualified person
13 has thoroughly inspected the equipment and has repaired the equipment.

14
15 23-12-1105. Installation of defect detector.

16 (a) A defect detector shall be installed every ten (10) miles.

17 (b) If the terrain does not permit the installation of a defect
18 detector, a defect detector shall be installed at least fifteen (15) miles
19 from the location of the previous defect detector.

20 (c)(1) If installment of a defect detector is not possible, a railroad
21 train shall proceed at a restricted speed through the area until passing the
22 next defect detector.

23 (2) The railroad train may resume timetable speed if the defect
24 detector indicates that the railroad train has no defects.

25
26 23-12-1106. Publishing.

27 A railroad corporation shall publish and make known to all operating
28 crews and personnel that operate equipment over railroad tracks and all types
29 of defect detectors the following:

30 (1) A railroad train receiving an alarm from any form of defect
31 detector or a defect detector equipped with trending defect detector
32 technology or similar technology in use shall reduce speed in accordance with
33 the railroad corporation's operating rules until the defect detector is
34 cleared;

35 (2) After receiving the defect detector message indicating a
36 defect, the railroad train shall stop in accordance with the railroad

1 corporation's operating rules and inspect the railroad train from a position
2 on the ground;

3 (3) A railroad train receiving a defect message of dragging
4 equipment or a similar message shall stop immediately in accordance with the
5 railroad corporation's operating rules and inspect the railroad train from a
6 position on the ground;

7 (4) If defects are found then the railroad train shall be
8 inspected based on the industry standard of twenty (20) axles before and
9 after the reported defect on both sides of the equipment;

10 (5) Inspections shall not be made from a vehicle or any form of
11 transportation; and

12 (6) A person shall not relieve railroad train operating crew or
13 an operator of any form of railroad equipment from inspections under this
14 section while operating the equipment within the state.

15
16 23-12-1107. Extra axles.

17 (a) If a defect detector detects that a railroad train has at least
18 two (2) fewer axles than the number of axles that should be in the railroad
19 train, the discrepancy shall be reported to the proper railroad authority in
20 charge of railroad train movement on the territory.

21 (b) If the axle count provided by a defect detector is at least two
22 (2) axles or more than the number of axles known to be in the railroad train,
23 the following procedure is required:

24 (1) The proper railroad authority governing train movement on
25 the territory shall be notified;

26 (2) The extra equipment or extra railroad train shall be
27 identified within five (5) miles of the location where the defect detector
28 reported the defect;

29 (3) If communication is not established with the proper
30 governing railroad authority, all movement of the railroad train shall stop
31 within five (5) miles from the location where the defect detector reported
32 the defect;

33 (4) The railroad train shall not proceed unless the equipment
34 has been identified;

35 (5) If the extra equipment is known to be hazardous, the
36 railroad train shall not proceed without a radio waybill or proper

1 documentation; and

2 (6) Employees at the operating controls of moving equipment
3 shall not be permitted to copy or repeat radio waybill information.

4

5 23-12-1108. Civil penalty – Compromise.

6 (a)(1) A person or railroad corporation who violates this subchapter
7 is subject to a civil penalty of at least ten thousand dollars (\$10,000) but
8 not more than twenty-five thousand dollars (\$25,000) for each day that the
9 violation persists.

10 (2) If the Director of State Highways and Transportation finds
11 the violation to be grossly negligent or that a pattern of repeated
12 violations has caused an imminent hazard of death or injury or has caused
13 death or injury to an individual, the person or the railroad corporation that
14 violates this subchapter is subject to a one-time fine of five hundred
15 thousand dollars (\$500,000).

16 (3) The civil penalties collected under subdivisions (a)(1) and
17 (2) of this section shall be deposited into a general fund account of the
18 Arkansas Department of Transportation to be used for the maintenance, repair,
19 and construction of the state highway system.

20 (b) If a violation of this subchapter results in a railroad train
21 derailment in the vicinity of a municipality triggering a one-time civil
22 penalty under subdivision (a)(2) of this section, the civil penalty collected
23 shall be split evenly between the Arkansas Department of Transportation and
24 the affected municipality.

25 (c)(1) The Director of State Highways and Transportation may
26 compromise the amount of the civil penalty under subsection (a) of this
27 section.

28 (2) In determining the amount of a compromise, the director
29 shall consider:

30 (A) The nature, circumstances, extent, and gravity of the
31 violation;

32 (B) With respect to the violator, the degree of
33 culpability, any history of violations, the ability to pay, and any effect on
34 the ability to continue to do business; and

35 (C) Any other matters that law requires.

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1 23-12-1109. Compliance.

2 Upon the effective date of this act, a railroad corporation operating
3 within the state shall have twelve (12) months to complete modifications to
4 railroad infrastructure to ensure compliance with this subchapter.

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9 Referred requested by the Arkansas House of Representatives

10 Prepared by: DTP/SJA

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