

1 State of Arkansas
2 95th General Assembly
3 Regular Session, 2025
4

A Bill

HOUSE BILL 2004

5 By: Representative D. Whitaker
6
7

For An Act To Be Entitled

9 AN ACT TO AMEND THE LAW CONCERNING THE OPERATION AND
10 MAINTENANCE OF RAILROADS; TO CREATE STANDARD
11 REQUIREMENTS CONCERNING RAILROAD TRAIN DEFECT
12 DETECTORS AND TRENDING DEFECT DETECTOR TECHNOLOGY; TO
13 REQUIRE CERTAIN INFORMATION TO BE PUBLISHED REGARDING
14 DEFECT DETECTORS AND TRENDING DEFECT DETECTOR
15 TECHNOLOGY; TO CREATE A PROCEDURE FOR THE DETECTION
16 OF A DISCREPANCY IN THE NUMBER OF AXLES ON A RAILROAD
17 TRAIN BY A DEFECT DETECTOR; TO CREATE CIVIL
18 PENALTIES; AND FOR OTHER PURPOSES.
19
20

Subtitle

21 TO CREATE STANDARD REQUIREMENTS
22 CONCERNING RAILROAD TRAIN DEFECT
23 DETECTORS AND TRENDING DEFECT DETECTOR
24 TECHNOLOGY.
25
26

27 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:
28

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

Subchapter 11 – Train Defect Detector Safety

23-12-1101. Legislative findings and intent.

33 (a) The General Assembly finds that in light of the February 2023
34 railroad train derailment in East Palestine, Ohio, and in light of the
35 absence of any federal regulation of train defect detectors, the continuing
36



1 operation of railroad corporations with no oversight or regulation of hot box
 2 detectors operating within the state on a main railroad line or branch
 3 railroad line exposes the public to unnecessary dangers and disruptions of
 4 commerce.

5 (b) The General assembly intends for this act to eliminate unnecessary
 6 dangers and disruptions of commerce imposed on communities and residents of
 7 Arkansas.

8
 9 23-12-1102. Definitions.

10 As used in this subchapter:

11 (1)(A) "Defect detector" means an integrated or standalone
 12 electronic device that scans passing railroad trains or equipment for a
 13 defect, including without limitation:

14 (i) A hot wheel bearing;
 15 (ii) A hot wheel;
 16 (iii) A shipment that has an excessive height or
 17 width;

18 (iv) Shifted lading; and
 19 (v) Dragging equipment.

20 (B) "Defect detector" includes without limitation:

21 (i) An acoustic bearing detector;
 22 (ii) A dragging equipment detector; and
 23 (iii) A wheel impact detector;

24 (2)(A) "Railroad" means non-highway ground transportation that
 25 runs on rails or electromagnetic guideways in this state.

26 (B) "Railroad" includes without limitation a:

27 (i) Commuter railroad service or other short-haul
 28 railroad passenger service in a metropolitan or suburban area; and
 29 (ii) High-speed ground transportation system that
 30 connects metropolitan areas without regard to whether the high-speed ground
 31 transportation system uses new technologies not associated with traditional
 32 railroads.

33 (C) "Railroad" does not include a rapid transit operation
 34 in an urban area that is not connected to the general railroad system of
 35 transportation;

36 (3) "Railroad corporation" means a corporation, company, or

1 individual that owns or operates a railroad in this state as an owner,
 2 lessee, mortgagee, trustee, assignee, or receiver;

3 (4)(A) "Railroad train" means a locomotive, multiple locomotives
 4 coupled together, or one (1) or more locomotives coupled with one (1) or more
 5 cars that require an air brake test under 49 C.F.R. Part 232, as it existed
 6 on January 1, 2025, or 49 C.F.R. Part 238, as it existed on January 1, 2025.

7 (B) "Railroad train" does not include:

8 (i) A locomotive or car during switching operations;
 9 or

10 (ii) A locomotive or car is that operated to
 11 classify and assemble cars within a railroad yard for the purpose of making
 12 or breaking up railroad trains;

13 (5) "Restricted speed" means a speed that:

14 (A) Permits a railroad train to stop within one-half (1/2)
 15 of the range of vision; and

16 (B) Does not exceed twenty miles per hour (20 m.p.h.); and

17 (6)(A) "Trending defect detector technology" means an algorithm-
 18 based technology applied to a defect detector that allows for communication
 19 from one (1) defect detector to another defect detector in order to predict
 20 or detect a defect of a railroad train.

21 (B) "Trending defect detector technology" includes without
 22 limitation the communication between defect detectors of information
 23 concerning:

24 (i) The changing temperature of wheel bearings on a
 25 railroad;

26 (ii) Acoustic information; and

27 (iii) Other data that would lead to the discovery of
 28 a failure of rolling equipment.

29
 30 23-12-1103. Defect detector – Minimum requirements.

31 (a) A defect detector shall be equipped with:

32 (1) A hot box detector;

33 (2) A hot wheel detector; and

34 (3) Dragging equipment detector technology.

35 (b)(1) A defect detector shall be equipped with an audible alarm that
 36 broadcasts on a radio channel frequency assigned to the specific territory in

1 which the defect detector is located by the Association of American
 2 Railroads.

3 (2) If a defect is detected, a defect detector shall be equipped
 4 to:

5 (A) Sound an alarm over the assigned radio channel
 6 frequency three (3) consecutive times for no longer than five (5) seconds and
 7 with five (5) seconds of silence in between each sounding of the alarm; and

8 (B) Repeat an audible message three (3) times with twenty
 9 (20) seconds of silence between each broadcast of the audible message stating
 10 the following information:

11 (i) The defect detector location milepost and name;

12 (ii) The track number if the defect detector is
 13 located in multiple track territory;

14 (iii) The total number of axles in the railroad
 15 train, including motive power; and

16 (iv) The location of defects within the railroad
 17 train or equipment.

18 (3) If a defect is not detected, the defect detector shall be
 19 equipped to provide an audible message that states the following:

20 (A) The location of the defect detector milepost and name;

21 (B) The track number in multiple track territory;

22 (C) The total number of axles in the railroad train,
 23 including motive power;

24 (D) The speed of the railroad train; and

25 (E) A statement that no defect was detected, including the
 26 phrase, "repeat no defects, out".

27
 28 23-12-1104. Trending defect detector technology.

29 (a) A defect detector equipped with trending defect detector
 30 technology or similar technology shall:

31 (1) Not have a silent alarm; and

32 (2) Be listed to all operating crew who operate equipment on the
 33 railroad track on which the defect detector is located.

34 (b) If a railroad train passes a defect detector equipped with
 35 trending defect detector technology and a trending defect issue is detected:

36 (1) The operating crew of the railroad train shall stop in

1 accordance with safe railroad train handling procedures issued by the
2 railroad corporation that owns or operates the railroad train;

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

5 (3) The railroad train inspection results shall be noted by the
6 operating crew and presented to the appropriate officer of the railroad
7 corporation, the dispatcher, or another qualified person; and

8 (4) If the inspection under subdivision (b)(2) of this section
9 finds that the railroad train is safe to move, the railroad train may proceed
10 at a speed that does not exceed:

11 (A) Ten miles per hour (10 m.p.h.) if the railroad train
12 is carrying hazardous materials; or

13 (B) Thirty miles per hour (30 m.p.h.) if the railroad
14 train is not carrying hazardous materials.

15 (c) If a railroad train that has a trending defect issue detected
16 under subsection (b) of this section passes another defect detector equipped
17 with trending defect detector technology and a trending defect issue is
18 detected a second time:

19 (1) The operating crew of the railroad train shall stop in
20 accordance with safe railroad train handling procedures issued by the
21 railroad corporation that owns or operates the railroad train;

22 (2) The railroad train or equipment shall be inspected by the
23 operating crew from a position on the ground;

24 (3) A determination shall be made by a qualified person whether
25 the railroad train is safe to move based on the inspection required under
26 subdivision (c)(2) of this section;

27 (4) After the inspection required under subdivision (c)(2) of
28 this section, the railroad train or equipment shall be set out immediately by
29 the operating crew at the nearest siding, spur, or designated repair track;
30 and

31 (5) The railroad train or equipment shall not be moved unless a
32 qualified person has thoroughly inspected and repaired the railroad train or
33 equipment.

34
35 23-12-1105. Defect detector – Requirements.

36 (a) An installed defect detector shall remain on with all audible

1 alarms set to a volume high enough for an operating crew to hear reporting
2 from the defect detector.

3 (b) A defect detector that is equipped with a hot wheel bearing
4 detector shall have a sensitivity level no higher than one hundred ten
5 degrees Fahrenheit (110°F).

6 (c)(1) If the repair of a defect detector is required, the railroad
7 corporation that owns the defect detector shall notify the Arkansas
8 Department of Transportation.

9 (2) A railroad train operating on a railroad around a defect
10 detector that requires repair:

11 (A) Shall not exceed the restricted speed; and

12 (B) May resume timetable speed if the next defect detector
13 on the railroad indicates that the railroad train has no defects.

14
15 23-12-1106. Information required to be published.

16 A railroad corporation shall publish and make known to all operating
17 crews that operate railroad trains over railroad tracks equipped with defect
18 detectors that:

19 (1) An operating crew of a railroad train that receives an alarm
20 from a defect detector or a defect detector equipped with trending defect
21 detector technology shall reduce the speed of the railroad train in
22 accordance with the railroad corporation's operating rules until the defect
23 detector is cleared;

24 (2) After receiving a defect detector message indicating a
25 defect, the operating crew of the railroad train shall stop in accordance
26 with the railroad corporation's operating rules and inspect the railroad
27 train from a position on the ground;

28 (3) An operating crew of a railroad train receiving a defect
29 message of dragging equipment or a similar message from a defect detector
30 shall stop immediately in accordance with the railroad corporation's
31 operating rules and inspect the railroad train from a position on the ground;

32 (4) If defects are found, the railroad train shall be inspected
33 by the operating crew based on the industry standard of twenty (20) axles
34 before and after the reported defect on both sides of the railroad train;

35 (5) An inspection of a railroad train that is required based on
36 a report from a defect detector shall not be made from a vehicle or any other

1 form of transportation; and

2 (6) A person shall not relieve a railroad train operating crew
3 or an operator of a railroad train or equipment from an inspection under this
4 section while operating the railroad train or equipment within the state.

5
6 23-12-1107. Discrepancy in number of axles detected by defect
7 detector.

8 (a) If a defect detector detects that a railroad train has at least
9 two (2) fewer axles than the number of axles known to be in the railroad
10 train, the discrepancy shall be reported to the proper railroad authority
11 governing railroad train movement in the territory.

12 (b) If an axle count provided by a defect detector is at least two (2)
13 or more axles than the number of axles known to be in the railroad train:

14 (1) The proper railroad authority governing railroad train
15 movement in the territory shall be notified;

16 (2) The extra equipment or extra railroad train car shall be
17 identified within five (5) miles of the location where the defect detector
18 reported the defect;

19 (3) If communication is not established with the proper railroad
20 authority, all movement of the railroad train shall stop within five (5)
21 miles of the location where the defect detector reported the defect;

22 (4) The railroad train shall not proceed unless the extra
23 equipment or extra railroad train has been identified;

24 (5) If the extra equipment is known to be hazardous, the
25 railroad train shall not proceed without a radio waybill or proper
26 documentation; and

27 (6) Operating crew at the operating controls of a moving
28 railroad train or equipment shall not be permitted to copy or repeat radio
29 waybill information.

30
31 23-12-1108. Civil penalty.

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

36 (2) A person or railroad corporation that violates this

1 subchapter is subject to a one-time civil penalty of five hundred thousand
 2 dollars (\$500,000) if the Director of the State Highways and Transportation
 3 finds:

4 (A) The violation to be grossly negligent; or

5 (B) That a pattern of repeated violations has caused:

6 (i) An imminent hazard of death or injury to an
 7 individual; or

8 (ii) Death or injury to an individual.

9 (b) A civil penalty collected under this section shall be deposited
 10 into the State Highway and Transportation Department Fund to be used for the
 11 maintenance, repair, and construction of the state highway system.

12 (c) If a violation of this subchapter results in a railroad train
 13 derailment in the vicinity of a municipality and a civil penalty is assessed
 14 under subdivision (a)(2) of this section, one-half (1/2) of the civil penalty
 15 shall be remitted to the Arkansas Department of Transportation and one-half
 16 (1/2) of the civil penalty shall be remitted to the affected municipality.

17 (d) The director shall determine the amount of a civil penalty imposed
 18 under subsection (a) of this section based on:

19 (1) The nature, circumstances, extent, and gravity of the
 20 violation;

21 (2) With respect to the violator, the:

22 (A) Degree of the violator's culpability;

23 (B) Violator's history of violations;

24 (C) Violator's ability to pay; and

25 (D) Effect on the violator's ability to continue to do
 26 business; and

27 (3) Any other factors required by law.

28
 29 SECTION 2. DO NOT CODIFY. Compliance.

30 A railroad corporation operating within this state has twelve (12)
 31 months from the effective date of this act to retune all defect detectors
 32 within the state to ensure compliance with this act.