

2026 NATIONAL HIGHWAY - RAIL GRADE
CROSSING SAFETY CONFERENCE

Grade Crossing Trends

A CLASS I PERSPECTIVE

Panelists

French Thompson,
General Director Public
Infrastructure and
Investments, BNSF



Annka O'Brien, Assistant
Director Public Works –
US, CPKC



Chris Keckeisen, Manager
Industry & Public
Projects, UPRR



Will Roseborough,
Director Public
Projects and Project
Development, CSX



Cherita Hunter, Senior
Manager Grade
Crossing & Wayside
Engineering, NS

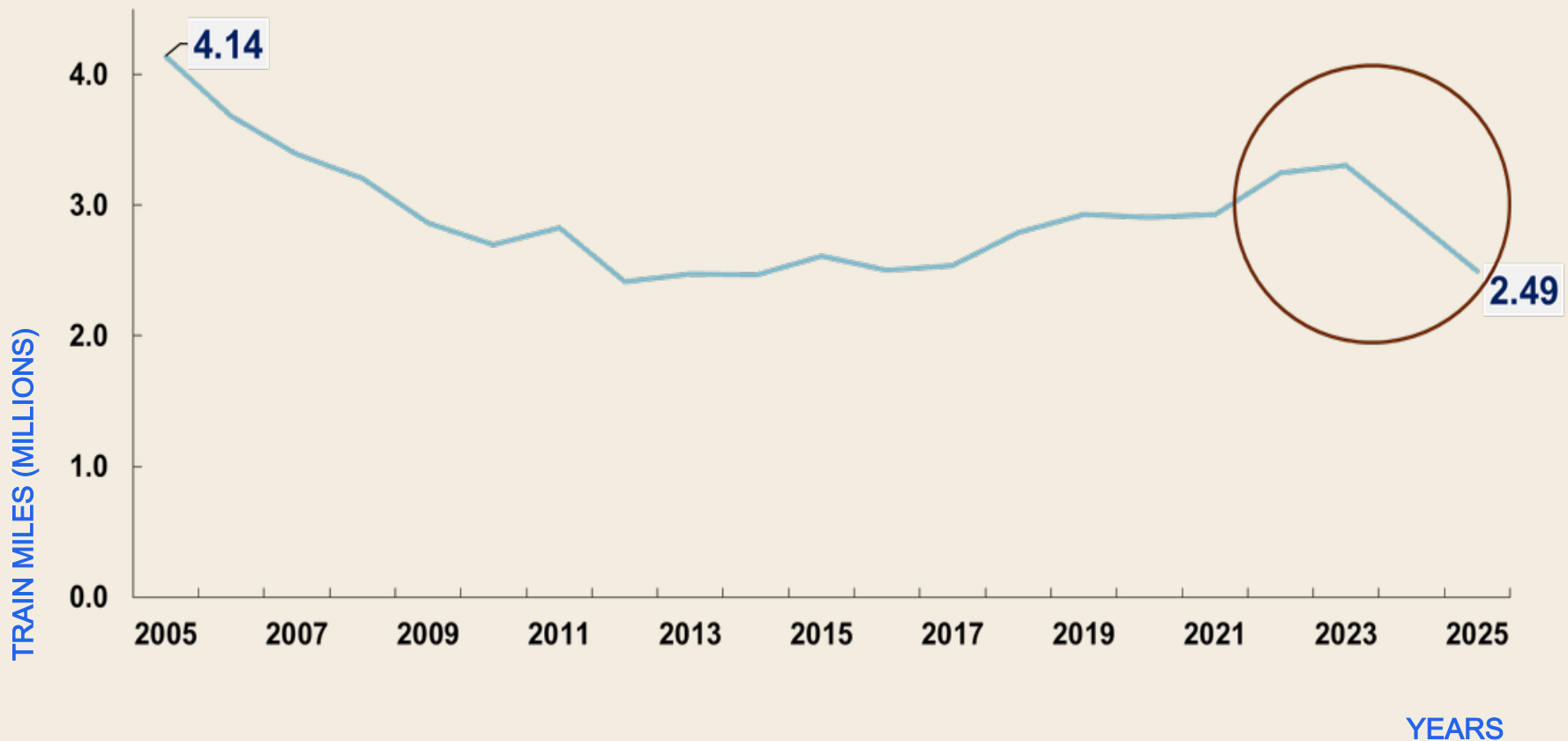


Jeff Moller,
AVP Transportation
Systems & Practices,
AAR



OVERALL SAFETY TRENDS

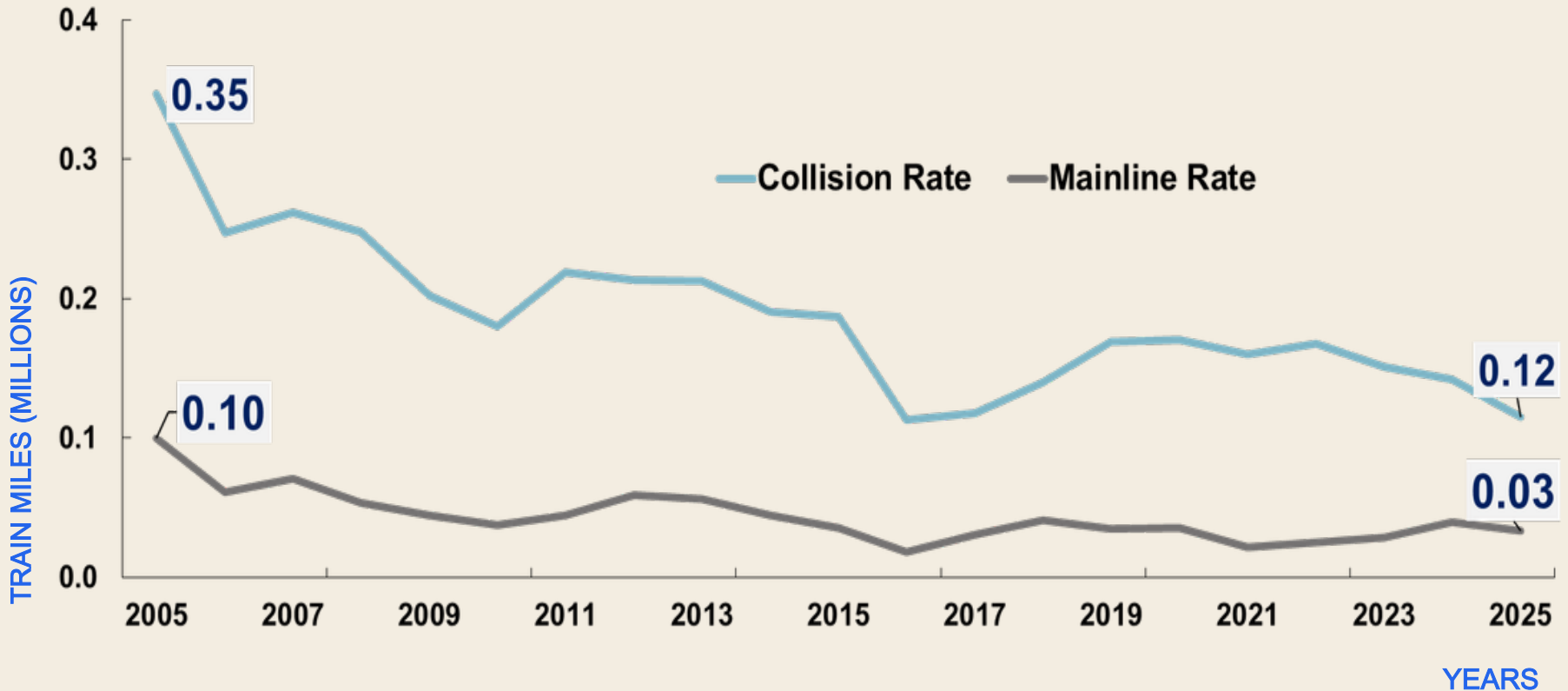
Train accident rates continue to fall—down 14% since 2005



SOURCES: [Rail Safety Overview Report \(1.12\)](#). Note: Excludes GRADE CROSSING ACCIDENTS. DATA FOR 2025 IS PRELIMINARY, AS OF MARCH 2026.

OVERALL SAFETY TRENDS

Train collisions rates down 67% since 2005, mainline collisions down 66%



SOURCE: [Rail Safety Overview Report \(1.12\)](#). DATA FOR 2025 ARE PRELIMINARY, AS OF MARCH 2026.

GRADE CROSSING TRENDS

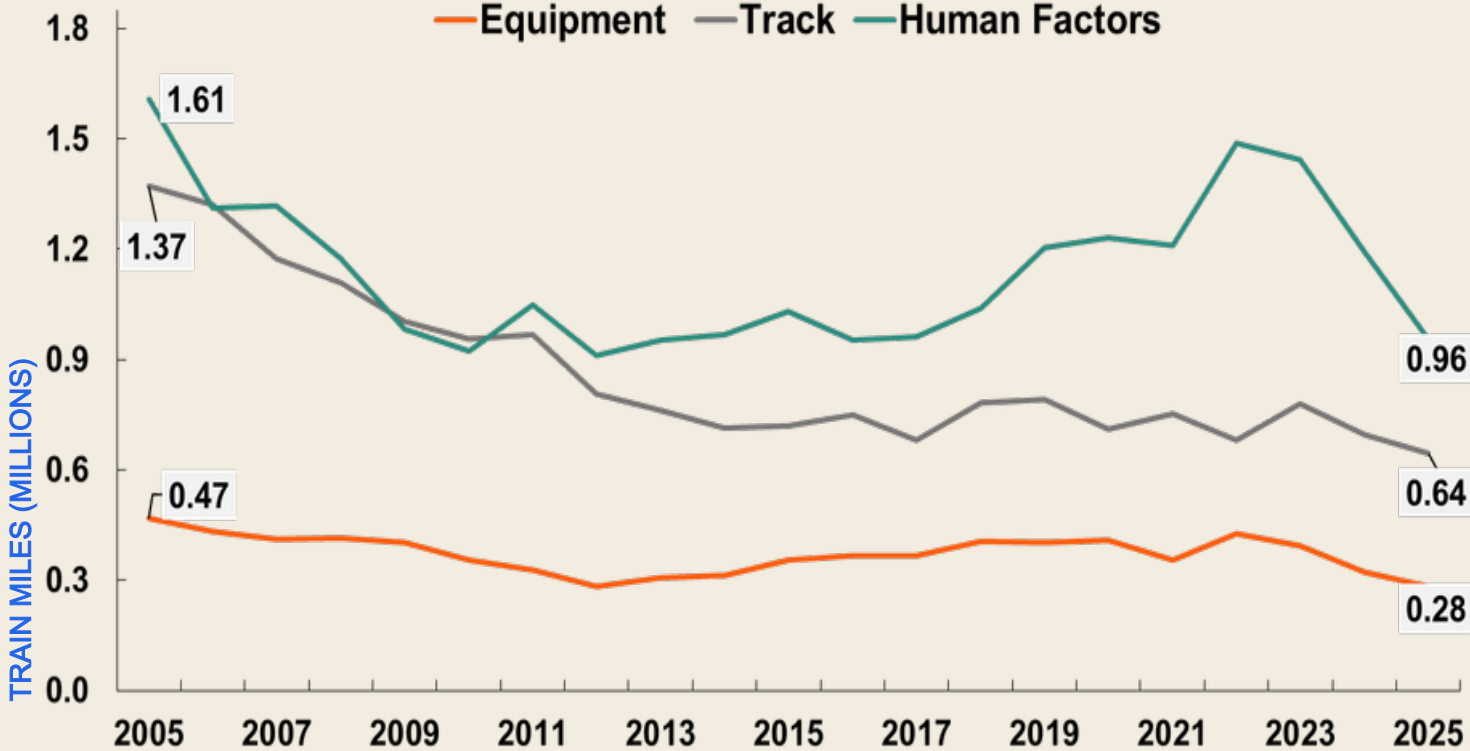
SINCE 2025

Human factors - caused accident rate down 41%. 20% year over drop

Track-caused accident rate down 53%. 2025 was an all-time low

Equipment-caused accident rate down 40%. 2025 was an all-time low

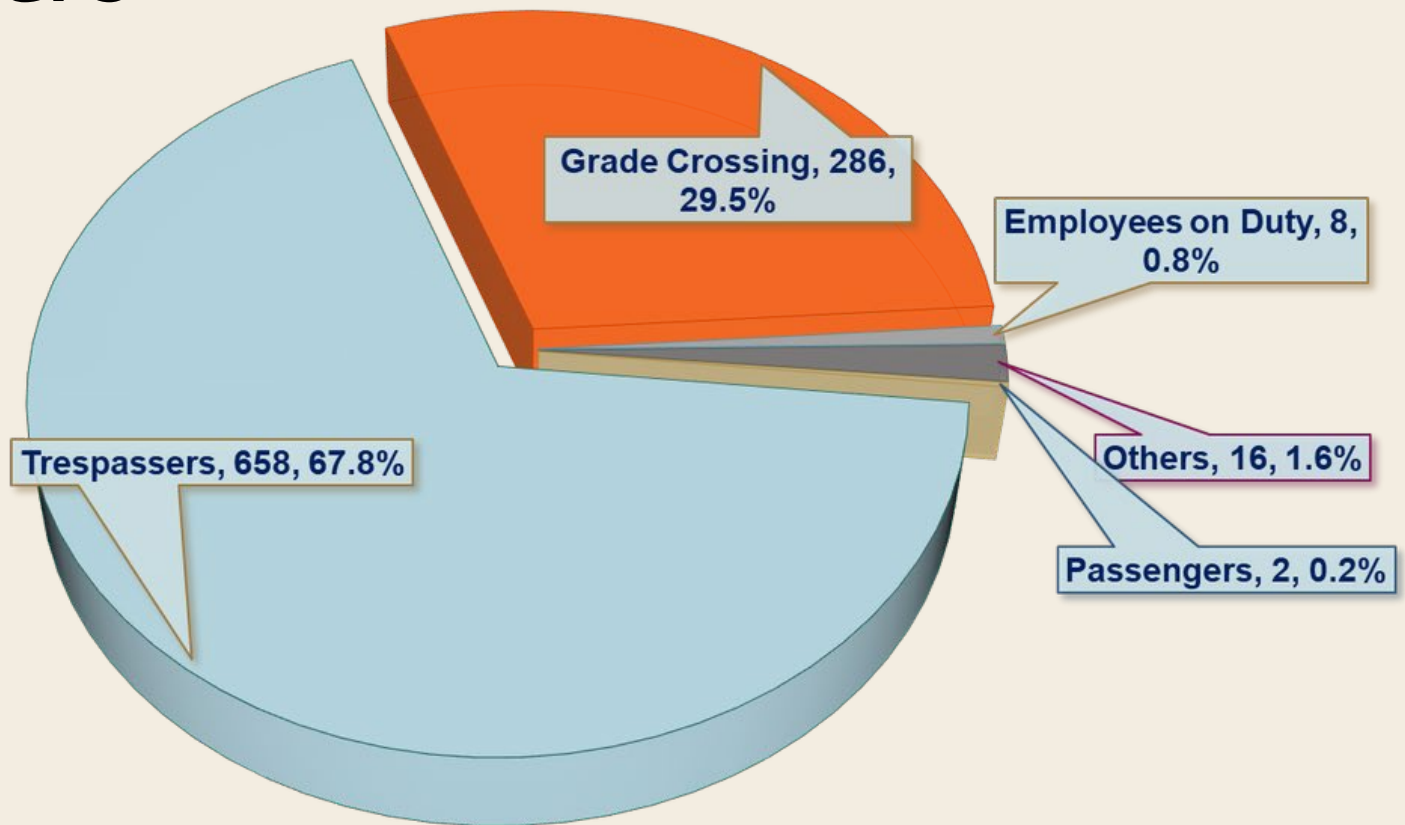
Train accident rate improvements span all major accident causes



SOURCES: [Rail Safety Overview Report \(1.12\)](#) Note: Excludes grade crossing accidents. DATA FOR 2025 IS PRELIMINARY, AS OF MARCH 2026.

GRADE CROSSING TRENDS

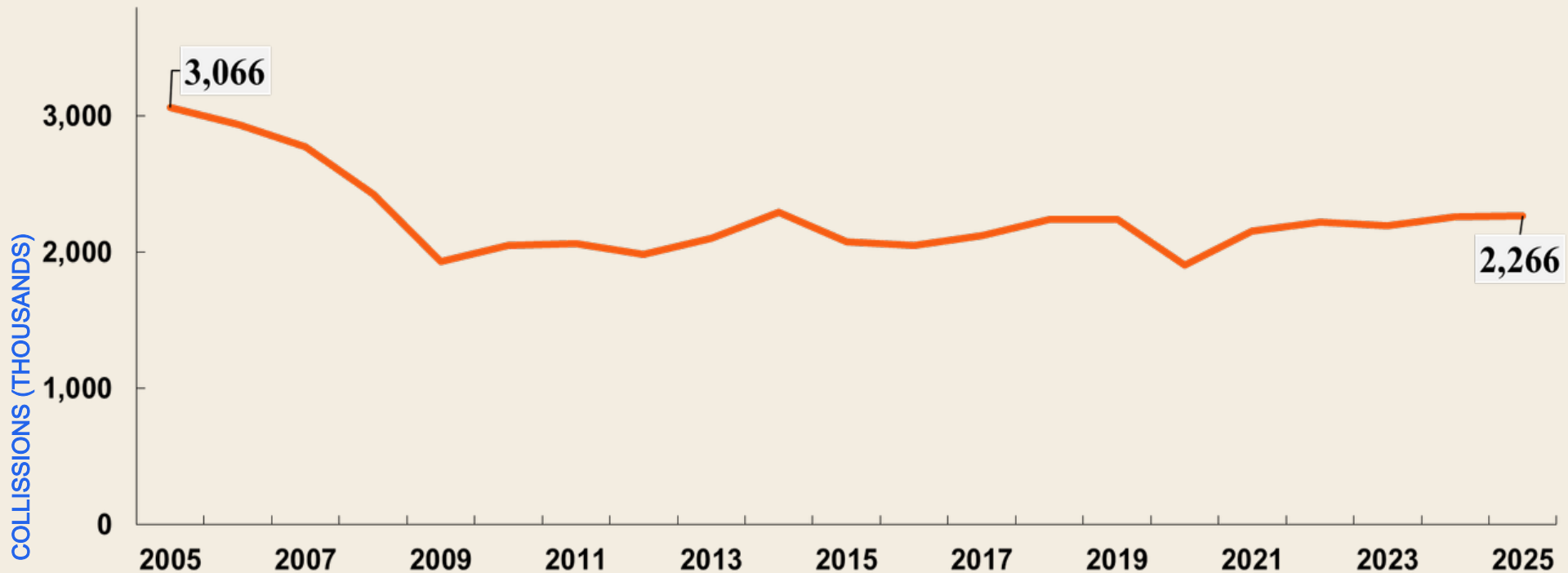
In 2025, more than 97% of rail-related fatalities were grade crossing users/ trespassers



SOURCE: FRA website (2025 data as of March 2026): [Fatalities, Injuries, and Illnesses in Train Accidents, Highway Incidents \(4.08\)](#) - Rail Incidents, and Other Incidents. NOTE: 2025 DATA ARE PRELIMINARY. THE 2 EMPLOYEE ON DUTY FATALITIES THAT OCCURRED AT GRADE CROSSINGS ARE CLASSIFIED AS EMPLOYEE ON DUTY FATALITIES ONLY, TO AVOID DOUBLE-COUNTING.

GRADE CROSSING TRENDS

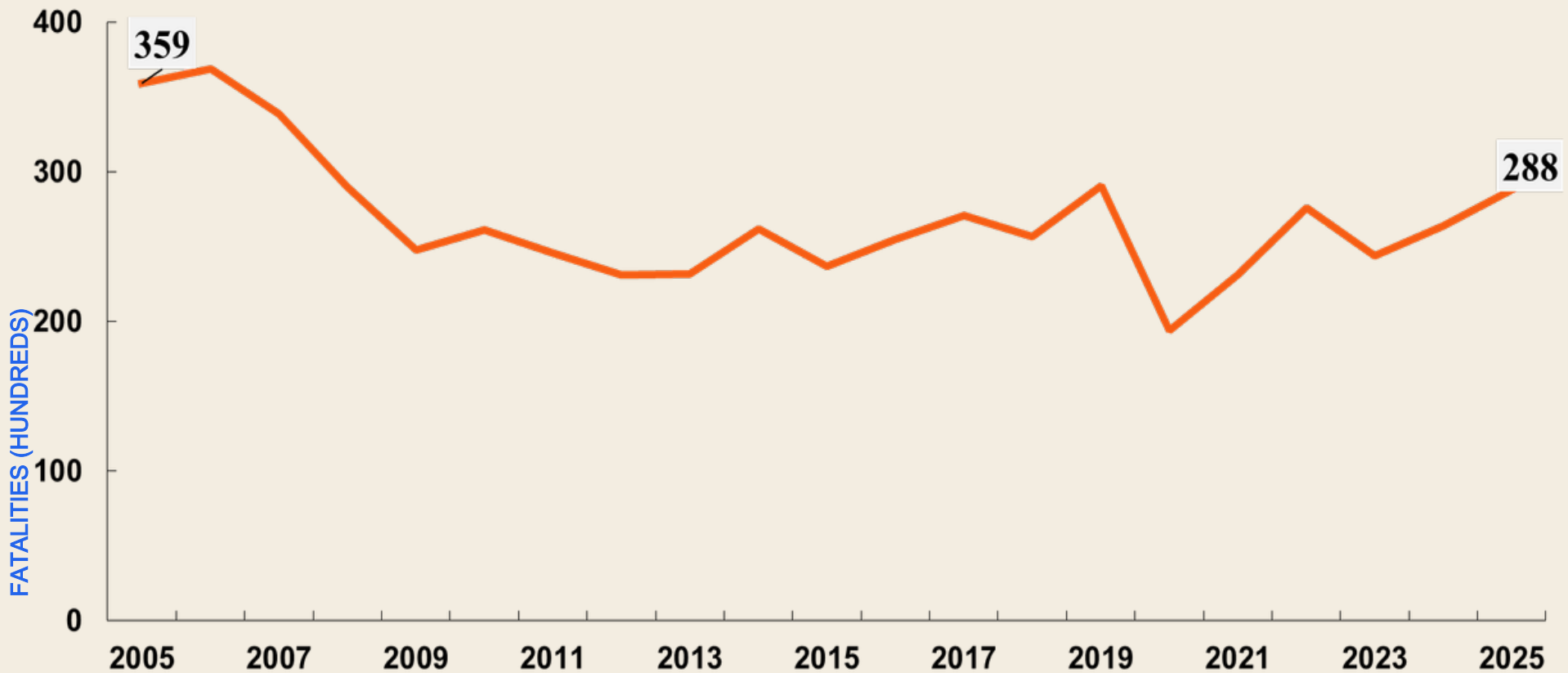
Grade crossing collisions declined 26% since 2005 and plateaued since 2009



SOURCES: [Rail Safety Overview Report \(1.12\)](#) Notes: Includes collisions involving pedestrians. Includes COLLISIONS AT PRIVATE CROSSINGS. DATA FOR 2025 IS PRELIMINARY, AS OF MARCH 2026.

GRADE CROSSING TRENDS

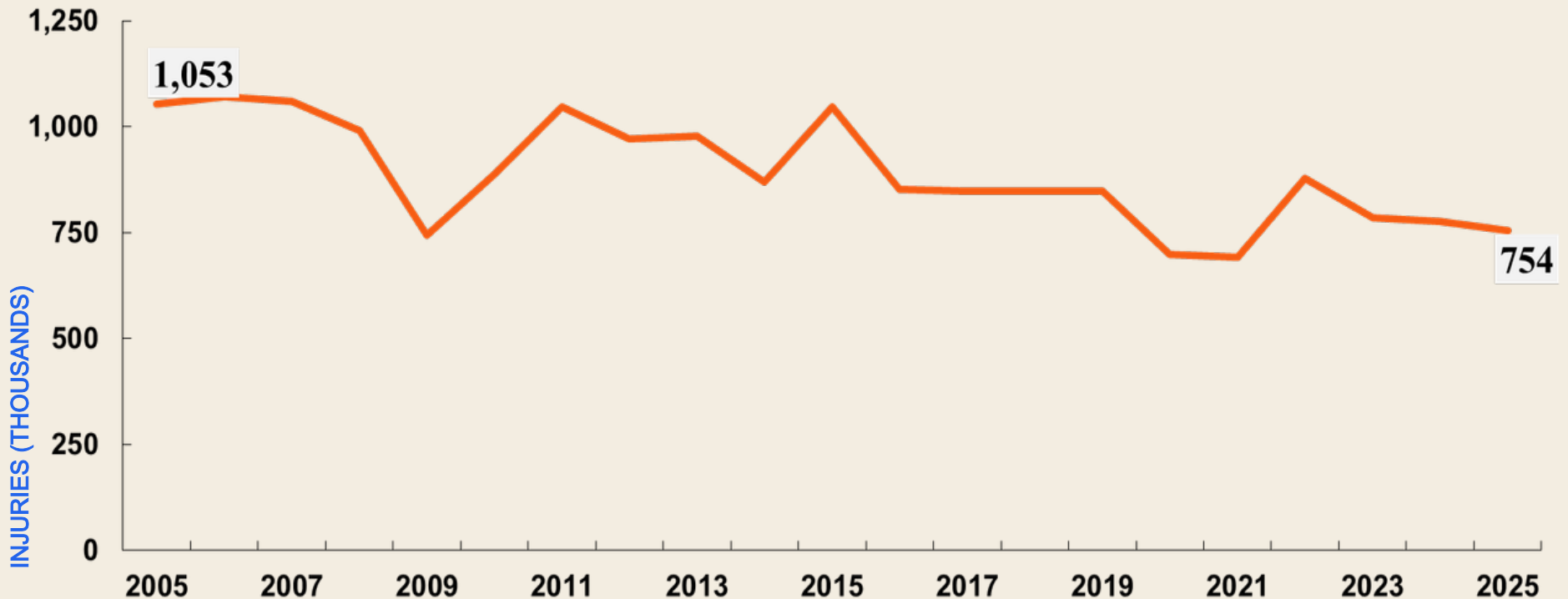
Grade crossing fatalities in 2023 were 20% lower than in 2005



SOURCES: [Rail Safety Overview Report \(1.12\)](#) Note: Includes pedestrians, employees, passengers, and collisions at private crossings. EXCLUDES DOCUMENTED SUICIDES. IN 2020, DUE TO THE PANDEMIC MANY WERE UNDER "STAY AT HOME" ORDERS FOR A PERIOD. DATA FOR 2025 IS PRELIMINARY, AS OF MARCH 2026.

GRADE CROSSING TRENDS

Grade crossing injuries declined 28% since 2005

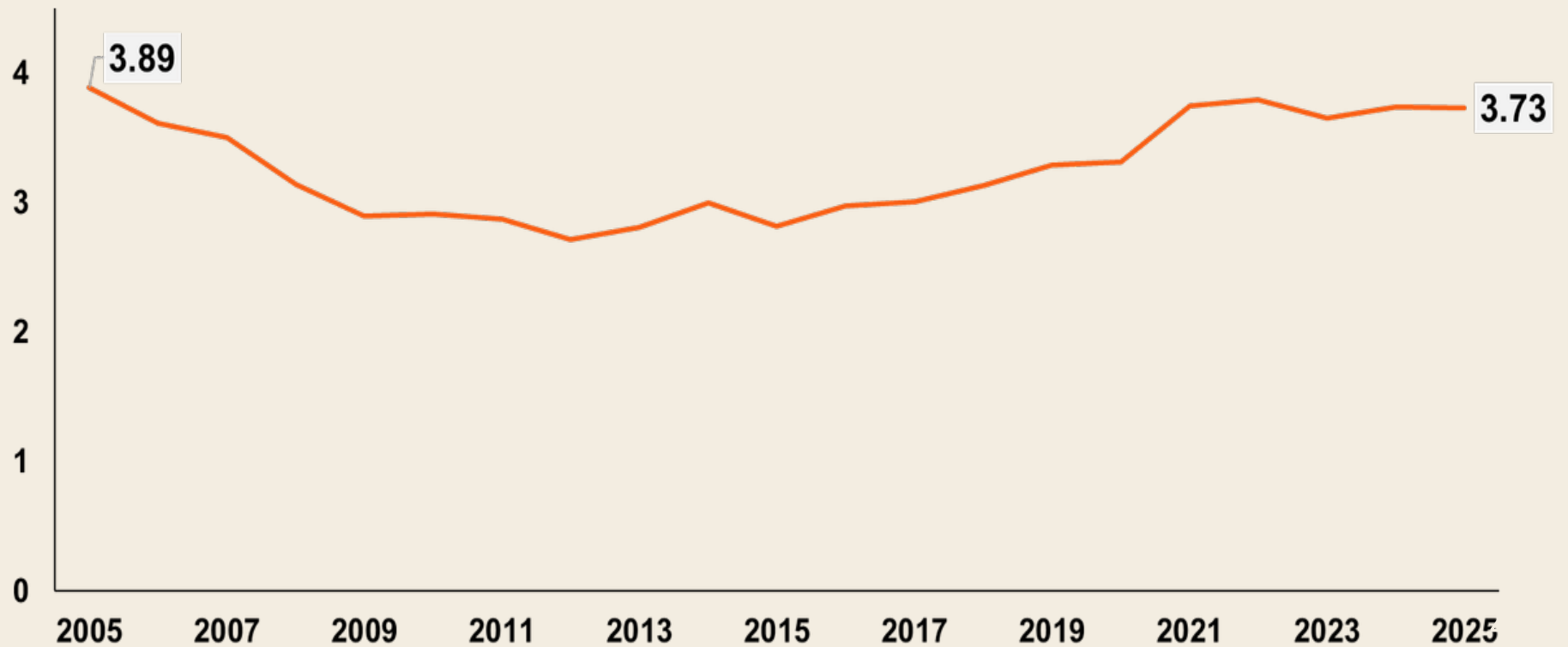


SOURCES: [Rail Safety Overview Report \(1.12\)](#) Note: Includes pedestrians, employees, passengers, and collisions at private crossings. DATA FOR 2025 IS PRELIMINARY, AS OF MARCH 2026.

GRADE CROSSING TRENDS

Grade crossing collision rates declined 4% since 2005

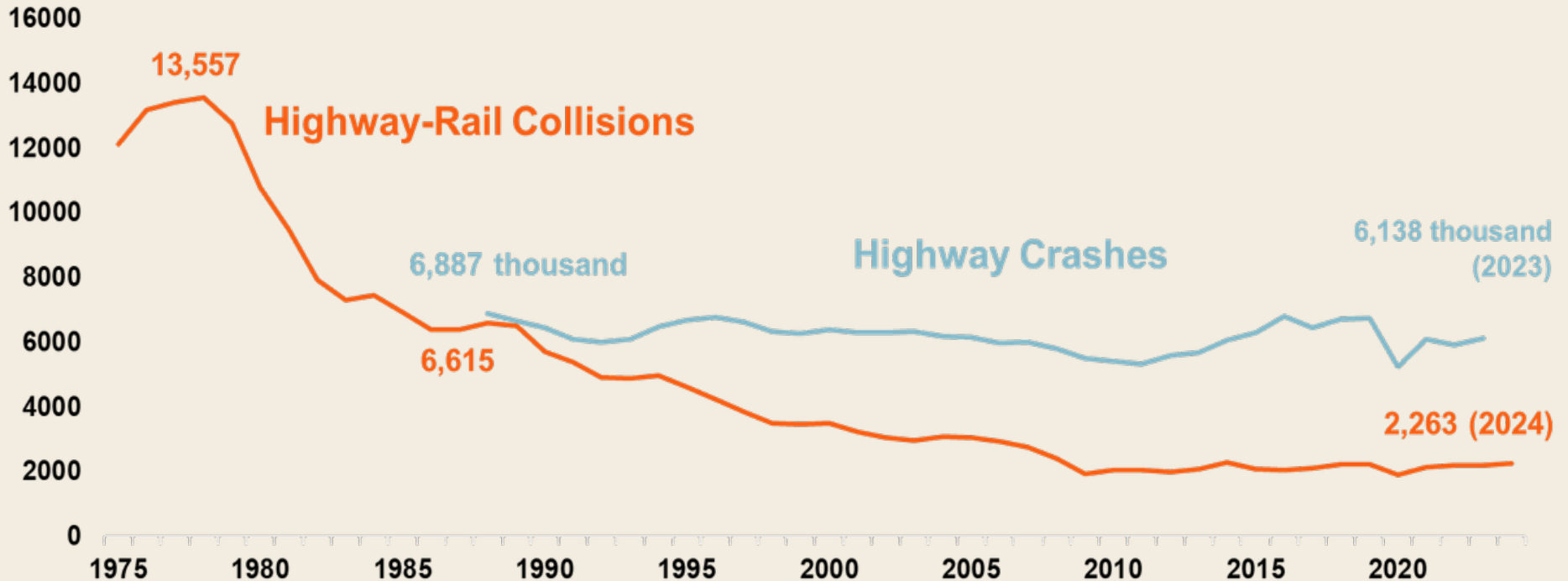
Grade Crossing Collisions per Million Train-Miles



SOURCES: [Rail Safety Overview Report \(1.12\)](#) No te : In cl u des acciden ts involving p ed estrians and cOLLISIONS AT PRIVATE CROSSINGS. DATA FOR 2025 IS PRELIMINARY, AS OF MARCH 2026.

GRADE CROSSING TRENDS

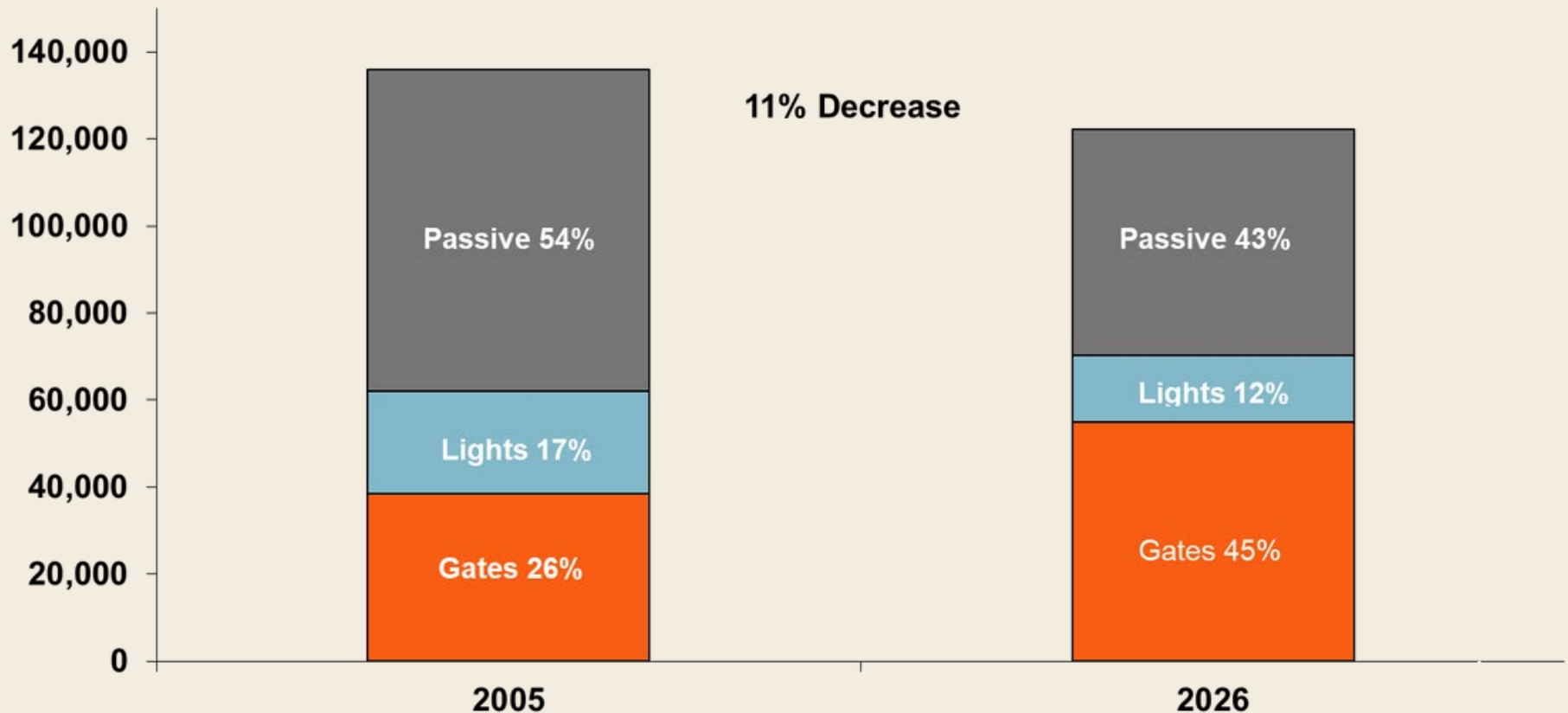
Highway-rail collisions declined 83% from their 1978 peak. From 1988 -2023, they declined 67% , while highway crashes decreased 11%



SOURCES: [Rail Safety Overview Report \(1.12\)](#) (2010 thru 2024 data as of Mar 2026). FRA, Railroad Safety Statistics Annual Report, 1997 -2010, Table 1-1. FRA Highway/Rail Crossing Accident/Incident & Inventory Bulletin, 1980 - 1996, Table S. [2023 Data](#) - [Summary of Motor Vehicle Traffic Crashes](#) (most recent year available as of Mar 2026). NHTSA Traffic Safety Facts Annual Report, Table 1. SOURCES: [Rail Safety Overview Report \(1.12\)](#) Note: INCLUDES accidents involving pedestrians and COLLISIONS AT PRIVATE CROSSINGS. DATA FOR 2025 IS PRELIMINARY, AS OF F M ARCH 2026. NOTES: INCLUDES COLLISIONS INVOLVING PEDESTRIANS. INCLUDES COLLISIONS AT PRIVATE CROSSINGS. (HIGHWAY CRASHES ARE IN THOUSANDS FOR COMPARABILITY OF TREND WITH HIGHWAY -RAIL COLLISIONS TREND.) STAY AT HOME ORDERS AND WORK FROM HOME POLICIES DURING THE PANDEMIC REDUCED EXPOSURE IN 2020 AND 2021.

GRADE CROSSING TRENDS

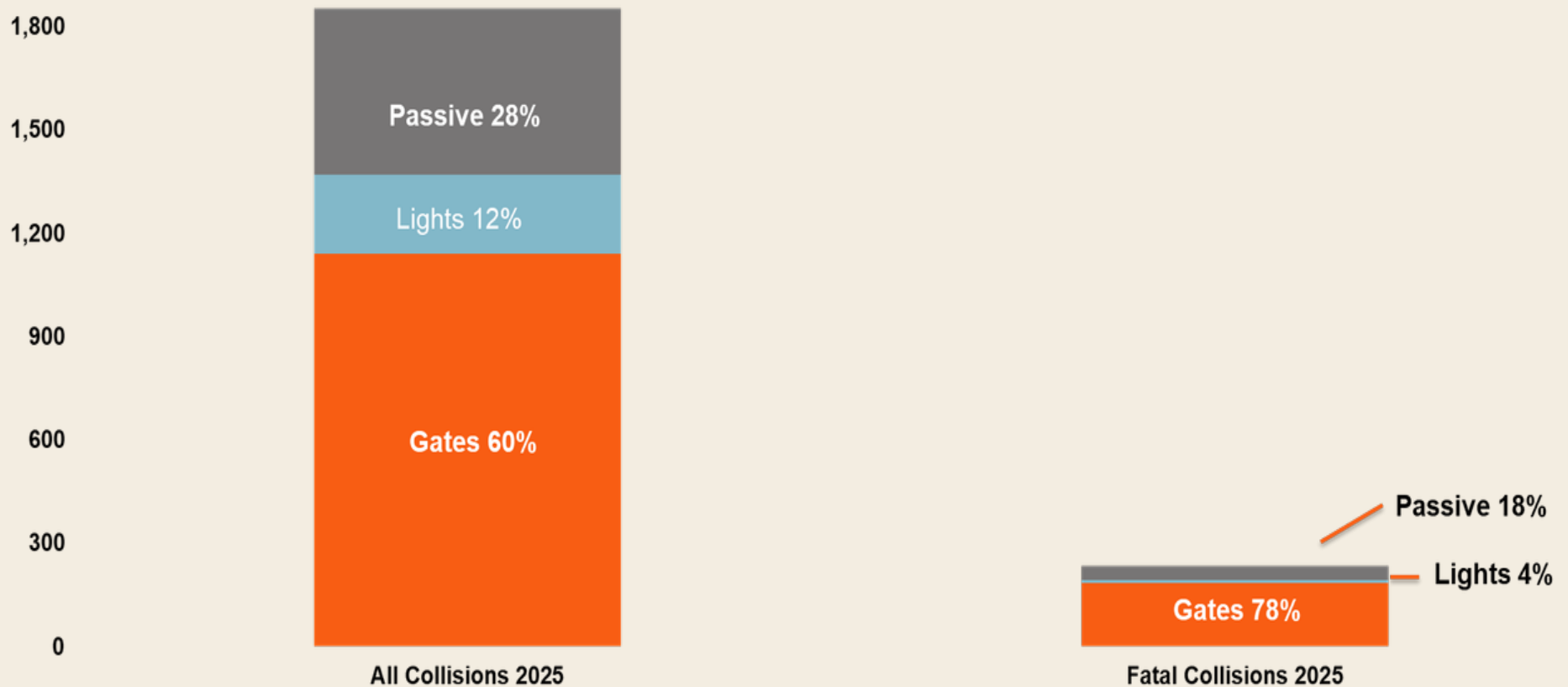
Since 2005, the total number of public crossings declined 11%, while the number with gates increased 43%



SOURCES: FRA Analysis of Grade Crossing Inventory for 2005. FRA analysis of Inventory as of March 9, 2026.
Note: Percentages are rounded. Warning device information WAS NOT REPORTED FOR SOME CROSSINGS.

GRADE CROSSING TRENDS

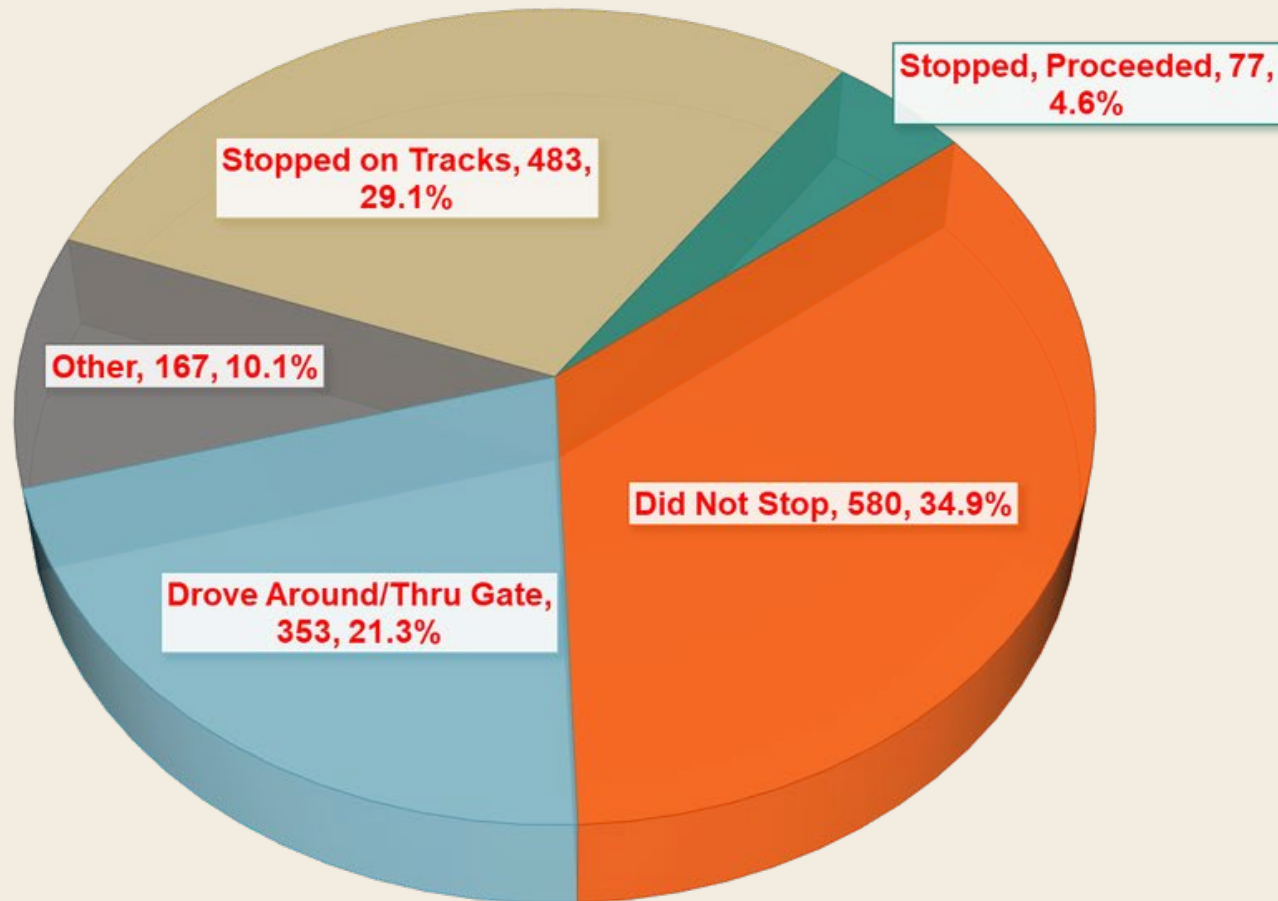
In 2025, 60% of all grade crossing collisions and 78% of all fatal grade crossing collisions occurred at gated crossings



SOURCES: AAR Analysis of FRA Highway-Rail Crossing Incident Database as of March 2024. Note: All U.S. Railroads. All Collisions at Public Highway-RAIL CROSSINGS, INCLUDING THOSE WITH PEDESTRIANS. PERCENTAGES ARE ROUNDED

GRADE CROSSING TENDS

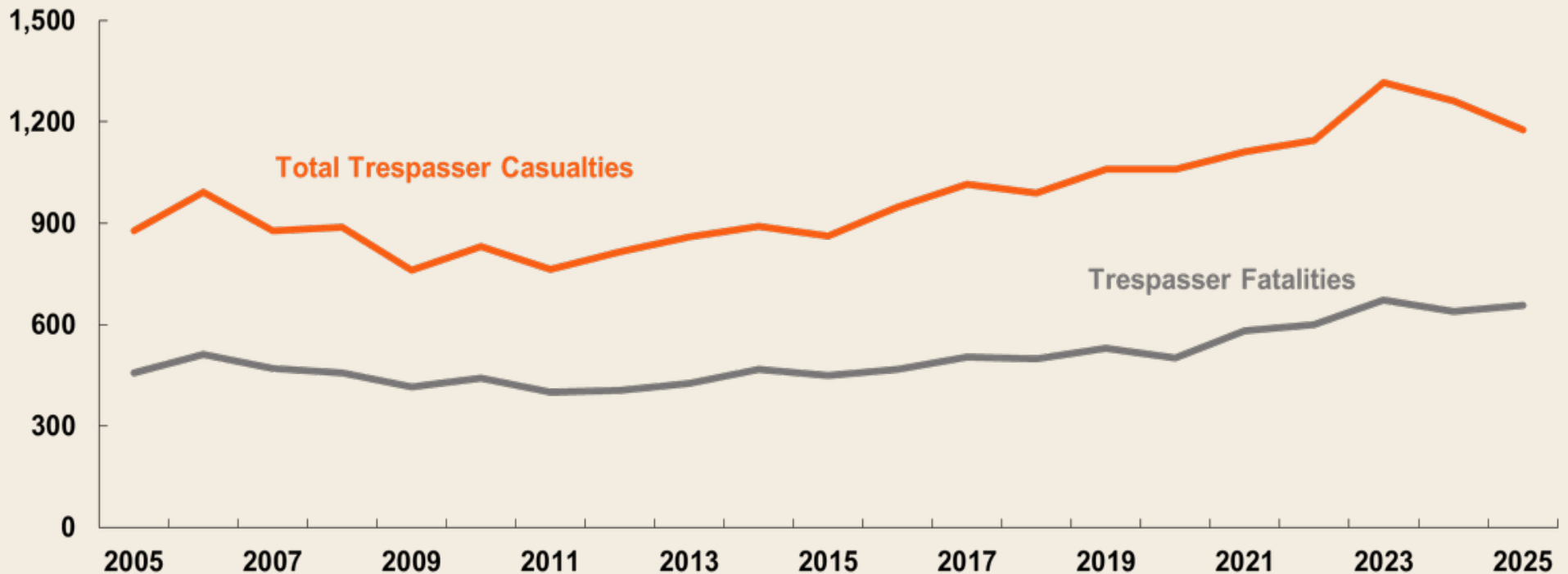
Gradecrossing collisions are usually caused by motorist actions



SOURCE: AAR Analysis of Highway -Rail Incident Database for 2025 (as of March 2026). Note: Motor vehicle highway -rail incidents at public crossings. DOES NOT INCLUDE 3 SUICIDES/ATTEMPTED SUICIDE INVOLVING A MOTOR VEHICLE OR INCIDENTS INVOLVING PEDESTRIANS, BICYCLES, OR OTHER NON-MOTORIZED VEHICLES.

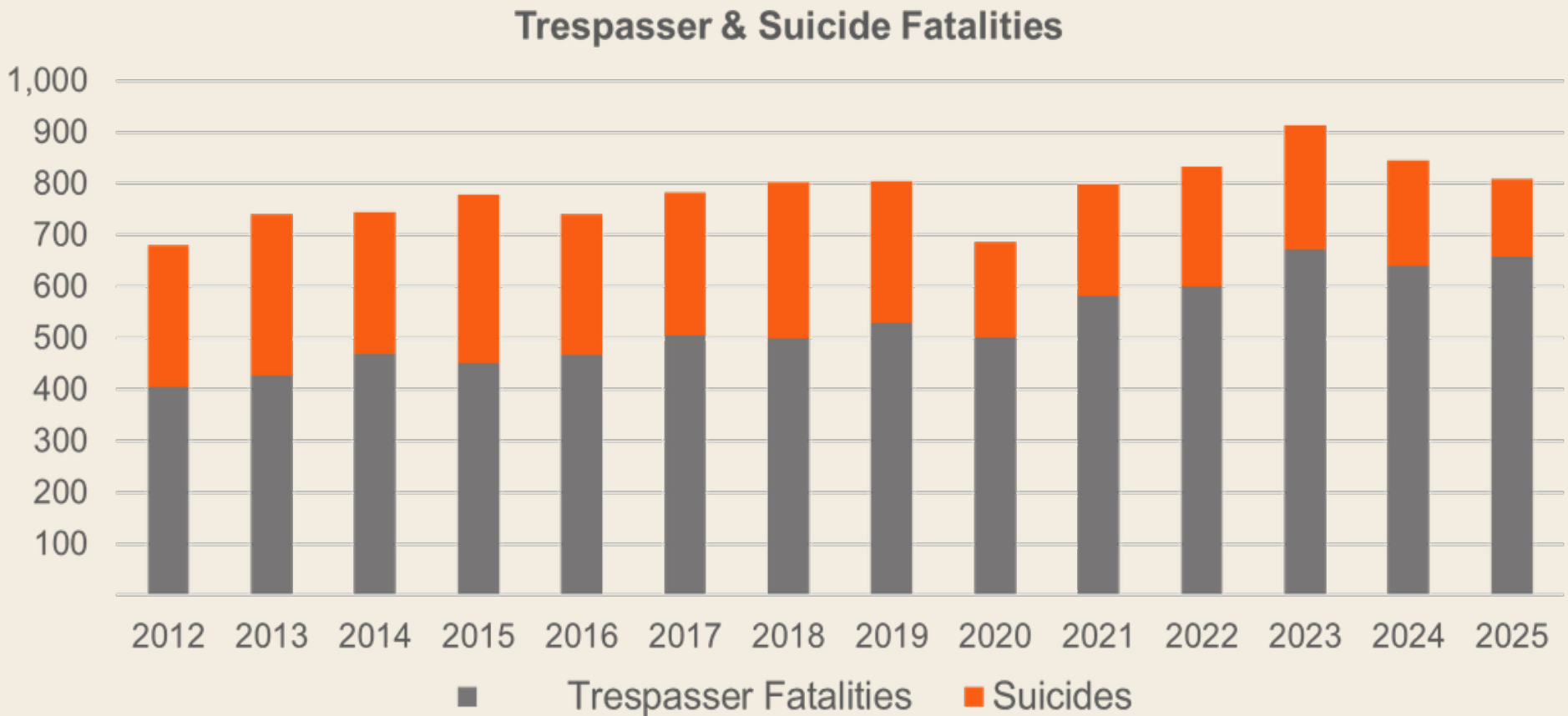
GRADE CROSSING TRENDS

Trespasser fatalities are a significant safety problem



SOURCE: [TRESPasser & Suicide Reports - Landing Page](#) as of March 2026. Note: Excludes fatalities in highway -rail cROSSING COLLISIONS, SUICIDES, AND ATTEMPTED SUICIDES. DATA FOR RECENT YEARS ARE PRELIMINARY. A PORTION OF TRESPASS CASUALTIES ARE RECLASSIFIED AS SUICIDES AS FINAL CORONER DETERMINATIONS ARE MADE. SUCH RECLASSIFICATION MOSTLY AFFECTS THE MOST RECENT TWO YEARS OF DATA.

Suicides are a large portion of trespass fatalities



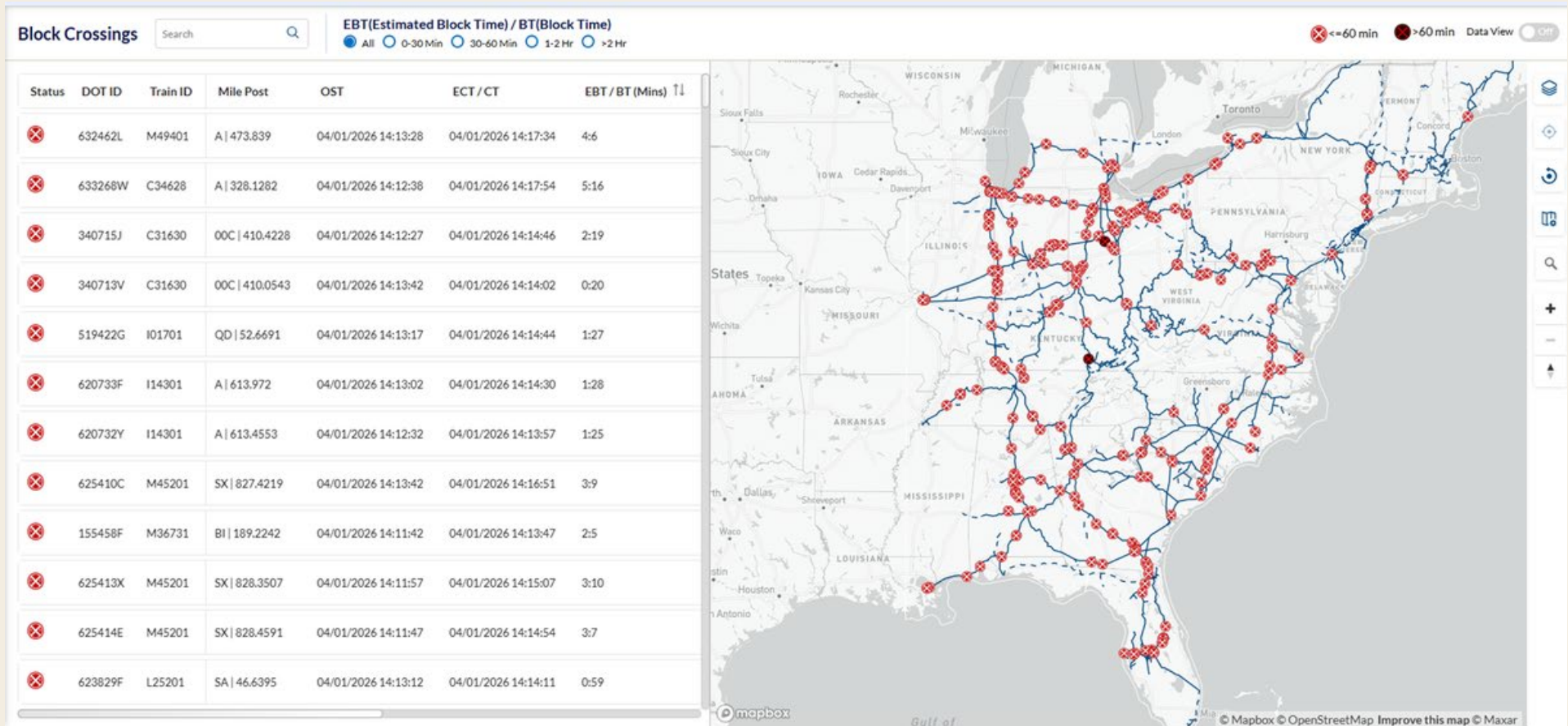
SOURCE: [TRESPasser & Suicide Reports - Landing Page](#) Data as of March 2026. FRA suicide data is only available for full years 2012 onward. No Excludes fatalities in highway -rail cROSSING COLLISIONS. A PORTION OF TRESPASS CASUALTIES ARE RECLASSIFIED AS SUICIDES AS FINAL CORONER DETERMINATIONS ARE MADE. SUCH RECLASSIFICATION MOSTLY AFFECTS THE MOST RECENT TWO YEARS OF DATA. DATA FOR RECENT YEARS IS PRELIMINARY.

Discussion Topics

- Occupied Crossings
- Benefits of Grants for Mitigations
- Ways to Streamline BABA
- Railroads and Diagnostic Teams
- AASHTO – FHWA Concerns
- Some Other Effective Initiatives
- Your Questions

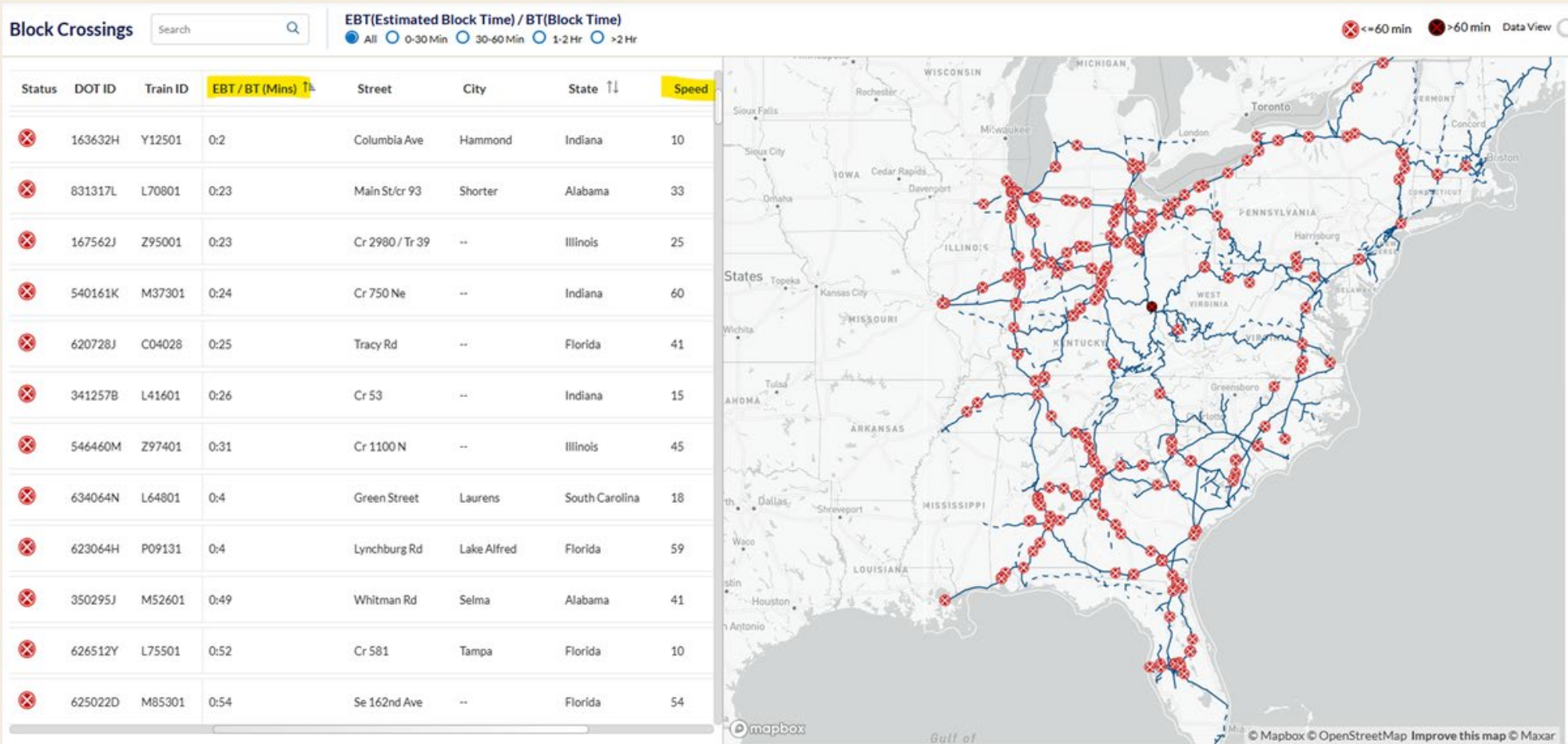
GRADE CROSSING TRENDS

Railroad led efforts to mitigate blocked crossings – sample CSX dashboard



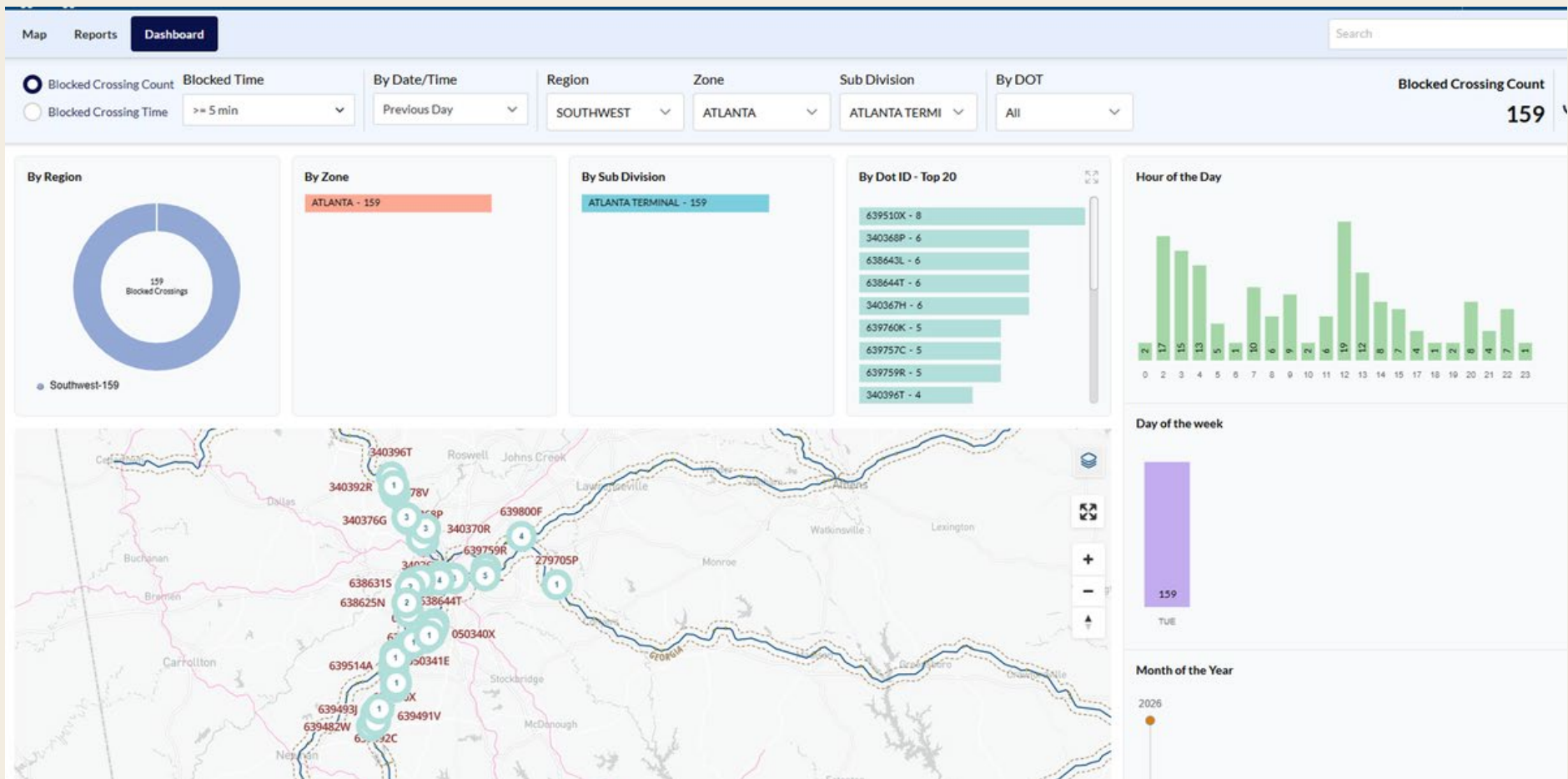
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GRADE CROSSING TENDS

Railroad led efforts to mitigate blocked crossings – sample CSX dashboard



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AASHTO + FHWA Areas of Concern

Flagging Coordination and Scheduling

Railroads work closely with agencies and internal partners to manage flagging needs while assuring network fluidity (*We can't have too many construction cones on the highway*)

Right of Entry and Permitting

Safety is #1 Priority, hundreds of request daily to access ROW, railroads need time to review and ensure proper authorization and need. (*Railroad ROW is our highway*)

Plan Review and Approval Processes

Every railroad has a Public Projects Manual and design and construction guidelines. Any variation from those guidelines may require additional approval. (*Simplicity is key*)

Legal and Insurance Requirements

Sample agreement templates and legal/insurance requirements are readily available from each railroad. Desire to protect the railroad from harm from non-railroad related projects (*We dislike court and lawyers*)

Invoicing and Reimbursement Delays

Audit and review layers take time to ensure accurate and quality invoices. (*Check twice, cut invoice once*)

Traffic Impacts and Right of Way

Our biggest impact with agencies is at crossings. Railroads work to limit that interaction, but crossings are critical to maintenance, operations and fluidity. (*Proactive coordination is our goal*)

Use of Third-Party Vendors

Complexity and volume of agency projects has necessitated supplemental resources to ensure understanding and coverage. (*We want to make sure what you say you're going to build you actually build*)

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THE END

Thank You