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TRACKING TOWARD ZERO: IMPROVING GRADE CROSSING SAFETY AND ADDRESSING COMMUNITY CONCERNS

(116–51)

HEARING

BEFORE THE

SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS

OF THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES

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JANUARY 31, 2020

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Railroads, Pipelines, and Hazardous Materials
FROM: Staff, Subcommittee on Railroads, Pipelines, and Hazardous Materials
RE: Subcommittee Hearing on "Tracking Toward Zero—Improving Grade Crossing Safety and Addressing Community Concerns."

PURPOSE

The Subcommittee on Railroads, Pipelines, and Hazardous Materials will meet on Wednesday, February 5, 2020, at 10:00 a.m. in 2167 Rayburn House Office Building to hold a hearing titled, "Tracking Toward Zero—Improving Grade Crossing Safety and Addressing Community Concerns." The purpose of this hearing is to learn from stakeholders about current challenges affecting highway-railroad grade crossing safety, trespassing and suicide incidents, blocked grade crossings, as well as efforts to mitigate safety and societal concerns of these issues. The Subcommittee will hear testimony from the Federal Railroad Administration (FRA); Illinois Commerce Commission; Alameda Corridor-East Construction Authority; Operation Lifesaver, Inc.; Chicago City Council; and Norfolk Southern Corporation.

BACKGROUND

I. HIGHWAY-RAIL GRADE CROSSINGS

Grade Crossing Safety

A highway-rail grade crossing ("grade crossing") is a location where a highway, road, or street intersects with a railroad right-of-way at the same level (at-grade). An estimated 210,000 grade crossings are located throughout the U.S. rail system as of 2018.[1] Public grade crossings are roadways that are under the jurisdiction of, and maintained by, a public authority. Private grade crossings are on privately owned roadways and are intended for use by the road's owner or by the owner's licensees and invitees. A private crossing is not intended for public use and is not maintained by a public highway authority. Grade crossings can be equipped with various warning devices such as: flashing lights, gates, or signage to alert motorists and pedestrians to an upcoming crossing; others may not be not equipped with any warning device.

[1] U.S. DOT, Office of Inspector General, Report No. ST2019063, *FRA Collects Reliable Grade Crossing Incident Data, but Needs To Update Its Accident Prediction Model and Improve Guidance for Using the Data To Focus Inspections*, 5 (2019).

According to FRA data, from 2009–2019,[2] 22,547 collisions occurred at grade crossings, resulting in 9,658 injuries and 2,731 fatalities.[3] Of these, individuals operating automobiles, truck-trailers, and pick-up trucks comprised the three leading categories of users involved in the incidents—a total of 16,732 collisions.[4] Moreover, more than 36 percent of the total incidents were caused by individuals failing to stop at a crossing, almost 26 percent due to individuals who stopped on a crossing, and nearly 14 percent due to those who went around a warning gate.[5]

Grade-crossing incidents involving pedestrians occur less frequently than those involving automobiles but have a higher fatality rate.[6] From 2009–2019, 1,674 collisions involving pedestrians occurred, of which 779 were fatal.[7] For comparison, while collisions involving pedestrians were the fourth most common types of incidents (7.42 percent of total grade crossing collisions) from 2009–2019, they represented 38.07 percent of the total number of fatal collisions.[8] Additionally, 406 grade crossing collisions (or 1.86 percent of all collisions) were found to be the result of those attempting or committing suicide over the same time period.[9]

Grade Crossing Data

Railroads must file monthly reports with FRA for grade crossing incidents. Such reports must be filed within 30 days following the end of month in which the incident occurred, and they must update or correct those reports upon becoming aware of an error or new information.[10] These reports are maintained in FRA's Railroad Accident/Incident Reporting System, and the agency receives and processes late and amended reports for up to five years following the year the incident report occurred.[11] Additionally, railroads must immediately report to the National Response Center when the operation of a railroad results in a fatality that occurs within 24 hours of a train incident at a grade crossing, among other reporting requirements.[12]

The Rail Safety Improvement Act (RSIA) of 2008 directed railroad carriers to report information, as specified by the Secretary of Transportation, about previously unreported grade crossings and to periodically update the information.[13] In 2015, the FRA issued a final rule requiring railroads to submit information to the U.S. Department of Transportation (DOT) National Highway-Rail Crossing Inventory, a publicly available, uniform national inventory database containing detailed information on each grade crossing in the country.[14] The Inventory can be used to gather data for planning and implementing crossing improvement programs.[15]

FRA also provides data tools and resources to support efforts to improve grade crossing safety. *GX Dash!* provides national and localized information about grade crossing collisions from 2009 to present.[16] FRA grade crossing inspectors and state and local officials can also rank grade crossings by using reports generated by FRA's Web Accident Prediction System (WBAPS) that list public crossings ranked by predicted incidents per year.[17] GradeDec.net allows state and local officials to change crossing parameters to assess grade crossing improvement projects' impacts on safety. Both WBAPS and GradeDec.net rely on an FRA accident prediction model, which include formulas for accident and severity prediction and a model for resource allocation. A September 2019 DOT Inspector General (IG) report found that FRA has not adjusted its accident prediction formula since 2013 despite updated incident

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[2] Data for 2019 is partial year data.

[3] Federal Railroad Administration, GX Dash!, Highway-Rail Crossing Collisions 2009–2019, Accessed Jan. 7, 2020, Accessible at: https://explore.dot.gov/t/FRA/views/Highway-RailCrossingCollisions2009-2019/National?iframeSizedToWindow=true&%3Aembed=y&%3AshowAppBanner=false&%3Adisplay__count=no&%3AshowVizHome=no.

[4] Id. When comparing all crossing types, all fatalities and injuries for years 2009–2019.

[5] Id.

[6] Id.

[7] Id.

[8] Id. When comparing all vehicle and crossing types, only fatalities, and no injuries for years 2009–2019. Data accessed Jan. 7, 2020.

[9] Id.

[10] 49 CFR Part 225.

[11] "Overview Reports," Federal Railroad Administration website. Accessible at: https://cms8.fra.dot.gov/accident-and-incident-reporting/overview-reports/overview-reports.

[12] 49 CFR Part 225.

[13] Division A, Sec. 204, Rail Safety Improvement Act of 2008, Public Law 110–432.

[14] *National Highway-Rail Crossing Inventory Reporting Requirements Final Rule*, 80 Fed. Reg. 3,746 (Jan. 5, 2015).

[15] Id.

[16] Accessible at: https://explore.dot.gov/t/FRA/views/Highway-RailCrossingCollisions2009-2019/National?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display__count=no&:showVizHome=no.

[17] Accessible at: https://safetydata.fra.dot.gov/webaps/.

data and grade crossing inventory reporting, potentially limiting the formula's ability to reflect current conditions and new safety issues.[18] FRA agreed with the IG recommendation that FRA implement a procedure for determining when to evaluate and, if necessary, adjust the normalizing constants for the accident prediction formula.[19] FRA says it is working to meet the IG recommendation.[20]

States' Grade Crossing Action Plans

As part of RSIA 2008, Congress directed the DOT Secretary to identify the 10 states with the most grade crossing collisions on average over the previous three years. The law required those states to develop and submit to the DOT Secretary for approval a state highway-rail grade crossing action plan that focuses on crossings that had experienced multiple accidents or were at high risk for accidents and identifies specific solutions for improving safety at crossings.[21] Based on FRA's analysis, Alabama, California, Florida, Georgia, Illinois, Indiana, Iowa, Louisiana, Ohio, and Texas developed action plans to comply with the mandate.[22]

In 2015, as part of the Fixing America's Surface Transportation (FAST) Act, Congress directed the FRA to develop a model of a state-specific grade crossing action plan.[23] FRA issued this model plan in conjunction with the Federal Highway Administration (FHWA) in November 2016.[24] The FAST Act also directed the agency to issue regulations, within 18 months of distributing that model action plan, to require each state to develop and implement a state action plan. The 10 states required by RSIA 2008 to develop an action plan were to update their action plans, submit them for review, and submit an implementation report.[25] Per statute, these action plans were required to identify grade crossings that have experienced recent accidents or incidents or multiple accidents or incidents, or at high-risk for accidents or incidents; identify specific strategies for improving crossings safety; and designate a state official responsible for managing the state action plan. In November 2019, the FRA issued a notice of proposed rulemaking intended to fulfill the FAST Act mandate.[26]

II. Blocked Grade Crossings

Grade crossings can become blocked when trains prevent the flow of vehicular or pedestrian traffic from crossing railroad tracks. Blocked crossings can congest traffic and cause travel delays, which not only frustrates communities but also may create safety risks when drivers and pedestrians attempt to cross the tracks to beat an oncoming train or try to go around or through a stopped train. Additionally, safety can be impacted when first responders responding to an emergency encounter one or more blocked crossing and cannot quickly find an alternative route.

According to the FRA, 35 states and Washington, D.C. have laws in place attempting to address blocked crossings by on-track railroad equipment.[27] More specifically, seven states have no time limit; 14 states and Washington, D.C. allow no longer than five minutes; 10 states allow no more than 10 minutes; three states allow no more than 15 minutes; and one state allows for no more than 20 minutes for a train to block a crossing.[28] However, in recent years railroads have been successful in challenging many of these state laws in the courts on the grounds that those laws are pre-empted by federal law. A recent legal challenge to a state law on blocked highway-rail grade crossings occurred in 2018 in Indiana. Indiana had a statute that barred railroads from blocking crossings for more than 10 minutes,

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[18] U.S. DOT, Office of Inspector General, Report No. ST2019063, *FRA Collects Reliable Grade Crossing Incident Data, but Needs To Update Its Accident Prediction Model and Improve Guidance for Using the Data To Focus Inspections*, 7–9 (2019).

[19] Id. at 11 and 22.

[20] Bipartisan meeting with Subcommittee staff, Jan. 23, 2020.

[21] Public Law 110–432 Sec. 202.

[22] FHWA–SA–16–075.

[23] Public Law 114–94 Sec. 11401.

[24] Id.

[25] Public Law 114–94 Sec. 11401.

[26] *State Highway-Rail Grade Crossing Action Plans Notice of Proposed Rulemaking*, 84 Fed. Reg. 216, 60032 (Nov. 7, 2019).

[27] According to the FRA, these include: Alabama; Arizona; Arkansas; Connecticut; Delaware; District of Columbia; Florida; Georgia; Idaho; Illinois; Indiana; Iowa; Kansas; Kentucky; Louisiana; Maine; Massachusetts; Minnesota; Mississippi; Missouri; Montana; Nebraska; New Hampshire; New Jersey; New York; North Dakota; Ohio; Oregon; Pennsylvania; Rhode Island; South Carolina; South Dakota; Texas; Utah; Vermont; Virginia; and West Virginia. Accessible at: https://www.fra.dot.gov/StateLaws.

[28] GAO Report 19–443, *Rail Safety: Freight Trains are Getting Longer, and Additional Information is Needed to Assess Their Impact*, Page 21, FN 42 (May 2019).

except in situations outside of the railroads' control.[29] Violations were considered civil violations and carried a minimum $200 fine. After 23 violations, Norfolk Southern challenged the state's regulation in court. In September 2018, the Indiana Supreme Court ruled that local governments do not have the authority to fine railroads that block crossings, because while no federal law explicitly regulates railroads from blocking grade crossings, the Interstate Commerce Commission Termination Act (ICCTA) included an express preemption provision to limit state government regulation over interstate commerce.

While there are no federal regulations that directly address the amount of time a train may block public grade crossings, 49 C.F.R. Section 234.209 prohibits standing trains, locomotives, and other railroad equipment from unnecessarily activating grade crossing warning devices. According to FRA, this is not limited to standing trains, locomotives, and other railroad equipment that block vehicular access to the crossing. In May 2019, FRA Administrator Ronald Batory sent letters to each of the seven Class I railroads, writing that FRA had "noticed a sharp increase in the frequency and volume of complaints it has been receiving about blocked highway-rail grade crossings across the United States." The letter also noted that federal regulations do not set a specific limit on the time a crossing may be blocked but instead believes that railroads, states, and local jurisdictions are best positioned to address specific concerns about blocked crossings "because each community has unique road networks and emergency response characteristics and needs."[30]

In a report issued in May 2019 by the Government Accountability Office (GAO), which focused on the safety and other impacts of longer freight trains, GAO recommended the FRA Administrator "work with railroads to engage state and local governments to (a) identify community-specific impacts of train operations, including longer trains, where streets and highways cross railroad rights-of-way and (b) develop potential solutions to reduce those impacts."[31]

In December 2019, the FRA launched a Blocked Crossing Incident Reporter website where the public and law enforcement can report the date, time, location, and duration that a crossing was blocked.[32] The agency intends to use the data collected to achieve a better understanding of the location, duration, and impacts of blocked crossings. Moreover, as part of RSIA 2008, Congress directed the DOT Secretary to require each railroad carrier to maintain a toll-free telephone service for the rights-of-way over which it dispatches trains to receive calls from the public reporting malfunctions of safety devices at crossings, disabled vehicles blocking railroad tracks at crossings, obstructions of the view of a train's approach, or the safety information about crossings.[33] These telephone numbers and the number registered to each grade crossing are required to be posted on signs at crossings.

III. Trespassers

Rail trespassers most often are pedestrians who walk across or along railroad tracks as a shortcut,[34] with 74 percent of trespassing casualties occurring within 1,000 feet of a grade crossing, based on data from November 2013 to October 2017.[35] According to FRA data seen in the figure below, approximately 400 to 500 trespass fatalities and a similar number of injuries occurred each year nationally from 2012 to 2019.[36]

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[29] Ind. Code § 8–6–7.5–1 (2018).

[30] Federal Railroad Administrator Ronald Batory, Letter to Class I railroads, May 16, 2019.

[31] GAO Report 19–443, *Rail Safety: Freight Trains are Getting Longer, and Additional Information is Needed to Assess Their Impact*, Page 28 (May 2019).

[32] Accessible at: www.fra.dot.gov/blockedcrossings.

[33] Public Law 110–432 Sec. 205, 49 U.S.C. 20152.

[34] Volpe National Transportation Systems Center, sponsored by the FRA, *Characteristics of Trespassing Incidents in the United States (2012–2014)*, July 2018. Accessible at: https://rosap.ntl.bts.gov/view/dot/36451

[35] Federal Railroad Administration, *Report to Congress: National Strategy to Prevent Trespassing on Railroad Property*, Oct. 2018.

[36] "Trespass and Suicide Dashboard," Federal Railroad Administration website. Accessed Jan. 2020.

Year	Trespasser Fatalities	Trespasser Injuries	Total Trespassing Incidents
2012	405	410	815
2013	427	432	859
2014	469	423	892
2015	450	412	862
2016	467	479	946
2017	505	509	1,014
2018	531	483	1,014
2019 †	535	462	997

''Trespass and Suicide Dashboard,'' Federal Railroad Administration, Accessed January 2020.
†2019 numbers represent partial year, through October 2019

California, Texas, Illinois, and New York generally have the most trespassing deaths.[37] The state of Florida exemplifies the national trend of increasing rates of trespassing incidents (both fatalities and injuries), rising from 33 in 2012 to 63 in 2019.[38] Most trespassers across the country are killed between the hours of 4:00pm to 9:00pm.[39]

The FRA has been trying to tackle this problem on several fronts. One of the FRA's sponsored programs, the Highway-Rail Grade Crossing Safety and Trespass Prevention Research Program, is housed at the Volpe Center. The program developed a National Strategy to prevent trespassing, which focuses on four strategic areas: data analysis, community site visits, funding, and stakeholder partnerships.[40] The National Transportation Safety Board (NTSB) has also discussed various ways to educate the public about rail trespasser safety. At a 2015 forum on trespassing, the NTSB highlighted a three-pronged ("the 3 E's") approach that includes engineering (such as warning signs, surveillance, and fencing), education (for the general public, law enforcement, and private railroads), and enforcement (policing and fines).[41] It was noted that FRA collects data only on trespassing activity resulting in a fatality or injury, while private railroads could have much larger data sets of trespassing instances that may produce more actionable solutions.[42] Using data from a Class I railroad, FRA found that the railroad's reported number of close calls was much larger than the number of casualties over the same timeframe (the data excluded suicides), indicating that the potential for additional trespassing casualties is significant.[43]

IV. Suicides

Grade crossings and railroad rights-of-way have been used for suicide attempts. Prior to June 2011, the FRA did not collect any information about suicide incidents, so information is recent. Medical examiners (ME) and coroners are responsible for determining whether the cause of a death is suicide. When a ME or a coroner reports that the cause of a rail fatality is undetermined, it is recorded as a trespassing death rather than a suicide. No explicit criteria exists to aid in determining whether a death is a suicide, so metrics can vary by county.[44] Additionally, the FRA warns that any statistics likely underrepresent rail suicides and determinations may take months or even years.[45] For this reason, while data for 2018 and 2019 is listed in the figure below, the FRA warns that suicide figures are vastly underrepresented and totals may continue to fluctuate.[46]

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[37] "Trespass and Suicide Dashboard," Federal Railroad Administration website. Accessed Jan. 2020.
[38] Id.
[39] Accessible at: https://explore.dot.gov/t/FRA/views/TrespassandSuicideDashboard/TrespassOverview?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display__count=no&:showVizHome=no.
[40] Id.
[41] "Trains and Trespassing: Ending Tragic Encounters," Events, National Transportation Safety Board. March 24, 2015. Accessible at: https://www.ntsb.gov/news/events/Pages/2015__trespassing__FRM__Agenda.aspx.
[42] Id.
[43] Id.
[44] "Current Trends Operational Criteria for Determining Suicide," Centers for Disease Control Prevention Guidelines Database. Accessible at: https://wonder.cdc.gov/wonder/prevguid/p0000164/p0000164.asp.
[45] Accessible at: https://explore.dot.gov/t/FRA/views/TrespassandSuicideDashboard/TrespassOverview?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display__count=no&:showVizHome=no.
[46] Id.

Year	Suicide Fatalities	Suicide Injuries	Total Suicide Incidents
2012	270	43	313
2013	307	26	333
2014	274	34	308
2015	317	29	346
2016	268	32	300
2017	270	41	311
2018	256	35	291
2019 †	113	17	130

''Trespass and Suicide Dashboard,'' Federal Railroad Administration, Accessed January 2020.
†2019 numbers represent partial year, through October 2019

In an effort to better understand and reduce rail suicide rates, the FRA partners with the Volpe Center (Volpe) to identify, implement, and evaluate appropriate mitigation strategies. To achieve these goals, Volpe and FRA focus on six rail suicide prevention areas: suicide countermeasure pilot projects, such as surveillance, advertising of help services, and automated texts or calls sent when entering dangerous areas; media reporting of trespassing and suicide incidents, including recommendations for responsible reporting; the Global Railway Alliance for Suicide Prevention, an international working group; trespasser intent determination, meaning assistance to MEs and coroners in how best to determine probable cause of death; GIS mapping of suicide locations, to proactively determine potential at-risk areas; and lastly, demographic and environmental characteristics, to provide an overview of common patterns.[47]

When determining characteristics of rail suicides in the U.S., Volpe found a series of trends. First, consistent with national suicide patterns, rail suicide fatalities more often involve men than women.[48] Second, while Centers for Disease Control data shows that overall suicide victims are typically over the age of 45, rail suicide victims tend to be younger, under the age of 45.[49] Incidents of rail suicide peak in the springtime, similar to national trends, and involve freight trains more often than passenger trains.[50] Using data from 2012 to 2018, California consistently has the highest number of total suicide incidents, followed by Illinois and New York.[51] In separate research sponsored by the FRA and published in 2014, the agency concluded that 96% of suicide incidents occurred on areas of track that did not have a barrier to restrict access to the right-of-way: 55% of incidents occurred in suburban areas, 25% in downtown or urban areas, and 20% in rural areas.[52]

V. Operation Lifesaver

Established in 1972, Operation Lifesaver, Inc. (OLI) is a non-profit organization dedicated to improving rail safety by providing public education and awareness programs to help prevent and reduce collisions, injuries, and fatalities, including trespassing and suicide events, occurring on and around railroad tracks and grade crossings.[53] OLI operates in states and localities across the country through its network of authorized volunteer speakers and trained instructors who provide rail safety education to diverse groups, such as schools, driver education students, professional drivers, emergency responders, and law enforcement. The organization is supported by federal, state, and local government agencies, highway safety organizations, and the railroads. Congress appropriates approximately $1 million per year

[47] "Rail Suicide Prevention webpage." Accessible at: https://www.volpe.dot.gov/rail-suicide-prevention.

[48] Chase, Stephanie G.; Hiltunen, Danielle; & Gabree, Scott H., *Characteristics of Trespassing Incidents in the United States (2012–2014)*, Report No. DOT/FRA/ORD–18/24 (July 2018).

[49] Id.

[50] Id.

[51] Accessible at: https://explore.dot.gov/t/FRA/views/TrespassandSuicideDashboard/TrespassOverview?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display_count=no&:showVizHome=no.

[52] Berman, Alan; Sundararaman, Ramya; Price, Andrea; Au, Josephine. "Suicide on Railroad Rights-of-Way: A Psychological Autopsy Study." *Suicide and Life-Threatening Behavior 44(6)*, The American Association of Suicidology. Dec. 2014. Accessible at https://onlinelibrary.wiley.com/doi/pdf/10.1111/sltb.12107.

[53] Accessible at: https://oli.org/about-us.

to OLI, while the non-profit also receives funding from donations, private organizations, and the Federal Highway Administration.[54]

VI. SECTION 130 GRADE CROSSING PROGRAM

In 1987, Congress created the Section 130 program, which the FHWA administers to provide funding for safety improvements that reduce the number of fatalities, injuries, and crashes at grade crossings.[55] Funded through annual set-asides from the Highway Safety Improvement Program, Section 130 is apportioned to states according to a formula that is based half on the number of public grade crossings located in the state compared to the national total and half on the statutory formula under 49 U.S.C. 104(b)(3)(A) as in effect on the day before the date of enactment of MAP–21. Each state is guaranteed to receive at minimum 0.5 percent of apportioned funds. The federal share of projects funded through this set-aside is 90 percent.

At least half of the set-aside funds for each fiscal year must be available for the installation of protective devices; the remaining half can be used for any hazard elimination project, including the installation of protective devices. The FAST Act also made eligible projects that eliminate hazards caused by blocked crossings due to idling trains. In addition, states may use section 130 funding to make incentive payments to local governments for the closure of grade crossings so long as the railroad that owns the tracks makes an incentive payment as well. For projects that eliminate grade crossings at which active warning devices are in place or ordered to be installed by a state regulatory agency, railroads must contribute 5 percent of the project cost.[56]

States must survey all highways to identify grade crossings that may require separation, relocation, or protective devices, and implement a schedule of projects for this purpose.[57] States adhere to this requirement by prioritizing crossings that cause the greatest hazard to the traveling public. Each year, states report to FHWA on the progress they have made on implementing Section 130 and the effectiveness of the projects' improvements; every two years, FHWA reports to Congress on the program.

The obligation period for these funds include the fiscal year that they are apportioned plus three fiscal years. At the end of that period, the funds lapse and cannot be obligated. States may 'pool' their apportionments over multiple fiscal years in order to fund expensive projects that cost more than a state is provided in any one fiscal year. The FAST Act reauthorized the Section 130 program at $225 million for fiscal year 2016; $230 million for fiscal year 2017; $235 million for fiscal year 2018; $240 million for fiscal year 2019; and $245 million for fiscal year 2020.[58] At the end of fiscal year 2019, the balance of all available unobligated funds totaled $649 million, of which $321 million was available for the installation of protective devices and $328 million for the elimination of hazards.

In addition to Section 130 program funding, grade crossing improvement projects are eligible for several federal discretionary funding opportunities, such as the Nationally Significant Freight and Highway Projects program (created by the FAST Act and referred to as INFRA by this Administration and FASTLANE by the previous Administration), as well as the Better Utilizing Investments to Leverage Development (referred to as BUILD by this Administration and TIGER by the previous Administration).[59] The Consolidated Rail Infrastructure and Safety Improvements (CRISI) grant program, created by the FAST Act and administered by the FRA, provides discretionary grants for projects that improve the safety, efficiency, or reliability of rail transportation systems, including grade crossing improvement projects.[60]

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[54] Frittelli, John. *Trespassing: The Leading Cause of Rail-Related Fatalities*, Congressional Research Service. Report IN10753. Feb. 2, 2018, Accessible at https://fas.org/sgp/crs/misc/IN10753.pdf.

[55] 23 U.S.C. Sec. 130 was enacted by Public Law 100–17, the Surface Transportation and Uniform Relocation Assistance Act of 1987.

[56] 23 CFR § 646.210.

[57] 23 U.S.C. Sec. 130(d).

[58] Public Law 114–94 Sec. 1108.

[59] Public Law 114–94 Sec. 1109, 23 U.S.C. 133.

[60] Public Law 114–94 Sec. 11301, 49 U.S.C. 22907.

WITNESS LIST

- Mr. Karl Alexy, Associate Administrator for Railroad Safety & Chief Safety Officer, Federal Railroad Administration
- Mr. Brian Vercruysse, Rail Safety Program Administrator, Illinois Commerce Commission
- Mr. Mark Christoffels, Chief Engineer, San Gabriel Valley Council of Governments/Alameda Corridor-East Project
- Ms. Rachel Maleh, Executive Director, Operation Lifesaver, Inc.
- The Honorable Matthew O'Shea, Alderman, 19th Ward of Chicago, Chicago City Council
- Mr. Jason Morris, Assistant Vice President, Safety & Environment, Norfolk Southern Corporation

TRACKING TOWARD ZERO: IMPROVING GRADE CROSSING SAFETY AND ADDRESSING COMMUNITY CONCERNS

WEDNESDAY, FEBRUARY 5, 2020

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2167, Rayburn House Office Building, Hon. Daniel Lipinski (Chairman of the subcommittee) presiding.

Mr. LIPINSKI. The subcommittee will come to order.

I ask unanimous consent that the chair be authorized to declare recess during today's hearing. Without objection, so ordered.

I will now recognize myself for an opening statement.

Good morning. Today's hearing is part of this subcommittee's continued work on the surface transportation reauthorization. With the recent rollout of House Democrats' infrastructure principles, which include a robust $55 billion investment for rail infrastructure, today's discussion around how to address grade crossing safety and associated community concerns is a timely one.

Addressing the issues we will hear about today is one of my top priorities for the rail portion of the FAST Act reauthorization, particularly providing more funding for grade separations, quiet zones, and other infrastructure that improves safety and the quality of life.

I grew up 100 yards from railroad tracks, so I know firsthand the impact of living near a railroad. Chicagoland is the rail hub of North America. And my congressional district has the most grade crossings of any in the country, so my constituents experience the issues we will hear about today on a regular basis.

Some of those issues include blocked crossings, train horn noise, idling trains, deaths and injuries at grade crossings and along rail rights-of-way, and railroad property upkeep.

I am pleased that we have Alderman Matt O'Shea from Chicago's 19th Ward here today to talk about the problems faced by his constituents.

The launch in December of FRA's blocked grade crossing reporting system is a step in the right direction. But let me be clear: the notion that the way a community experiencing blocked grade crossings should try to solve the problem is to fill out a report and sub-

mit it to FRA or call the railroad and hope the railroad will unblock the crossing is not a solution.

More and stronger tools are needed, and I look forward to hearing from Alderman O'Shea, Mr. Vercruysse, and others on options they recommend Congress look at.

Another issue I want to touch upon is grade crossing separations. I was pleased last year to work with my colleagues in the State of Illinois to secure funding for a critical grade separation at 63rd and/or 65th and Harlem in Chicago. The CREATE rail modernization program, which has made significant progress in making the Chicagoland rail network more efficient, was actually launched from that site, and that grade separation is labeled GS1 in the CREATE program project list. While I am pleased we now have the money to get the grade separation constructed, there are numerous other crossings I would like to see separated. The current amount authorized for the section 130 grade crossing program is nowhere near enough to fund one grade separation in my district, let alone the many that need to be done across the country.

I look forward to hearing from Mr. Christoffels of the Alameda Corridor-East Project, and other witnesses, on how a dedicated Federal program for grade separations can help speed up these vital grade separations.

We also need to find more funding for quiet zones and streamline the process for communities to become a quiet zone.

I understand the role that the sounding of the train horn plays in notifying people a train is approaching in maintaining safety near a crossing. However, there has to be a way we can institute more quiet zones in a timely manner and make improvements that provide an equivalent level of safety to train horns. The current process to obtain a quiet zone is just too arduous.

I look forward to hearing from Karl Alexy from FRA, and other panelists, on ways we can do this.

Finally, over the years I have repeatedly heard from numerous communities I represent about poorly maintained railroad property, especially unpainted bridges. Railroads are just like any property owners in the community and need to maintain their property in a way that is reflective of the care and values other residents put in the community. It is time the railroads do better in maintaining their property.

America has a freight rail network that is the envy of the world, and that network helps make American businesses more efficient, helping to create jobs. But there are also downsides to the expansive network. Some of these downsides can be mitigated with appropriate action, and I look forward to hearing from our witnesses about their recommendations.

[Mr. Lipinski's prepared statement follows:]

Prepared Statement of Hon. Daniel Lipinski, a Representative in Congress from the State of Illinois, and Chairman, Subcommittee on Railroads, Pipelines, and Hazardous Materials

Good morning. Today's hearing is part of this Subcommittee's continued work on the surface transportation reauthorization. With the recent rollout of House Democrats' infrastructure principles which include a robust $55 billion investment for rail infrastructure, today's discussion around how to address grade crossing safety and

associated community concerns is a timely one. Addressing the issues we will hear about today is one of my top priorities for the rail portion of the FAST Act reauthorization, particularly providing more funding for grade separations, quiet zones, and other infrastructure that improves safety and quality of life.

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With that, I recognize Ranking Member Crawford for his opening statement.

Mr. LIPINSKI. With that, I yield back, and I recognize Ranking Member Crawford for his opening statement.

Mr. CRAWFORD. Thank you, Chairman, for holding the hearing today. I also want to thank our witnesses for being here today.

Railroad grade crossing safety, blocked crossings, railroad trespassing, and rail suicides are serious issues that affect the rail industry in many communities across America. According to the Federal Railroad Administration, FRA, in the last 8 years, my home State of Arkansas experienced 76 total incidents due to railroad trespassing, 28 of which were fatalities.

I know that complaints of blocked grade crossings have amplified recently as well. I commend the FRA and Administrator Batory for recognizing this problem and taking steps to fix it.

The rail industry has invested substantially in grade crossing safety, including through the use of new technologies, community education, and other deterrents to stop trespassers and suicides on the tracks. Today we will hear about the FRA's recent work to better monitor blocked crossings and to improve rail crossing safety.

We will also hear from railroads, State and local leaders, and other stakeholders about the problems they face with these issues, their efforts to combat them, and future needs to continue making improvements.

Finally, I would note the importance of Federal grants and Federal funding opportunities through the section 130 program and other grant programs that assist railroads, States, and communities with grade crossing upgrades and improvements.

Thank you, once again, to all of our witnesses for being here today. I look forward to hearing your testimony and responses to questions.

[Mr. Crawford's prepared statement follows:]

Prepared Statement of Hon. Eric A. "Rick" Crawford, a Representative in Congress from the State of Arkansas, and Ranking Member, Subcommittee on Railroads, Pipelines, and Hazardous Materials

Railroad grade crossing safety, blocked crossings, railroad trespassing, and rail suicides are serious issues that affect the rail industry and many communities across America.

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Finally, I note the importance of federal grants and federal funding opportunities through the Section 130 program and other grant programs that assist railroads, states and communities with grade crossing upgrades and improvements.

Mr. CRAWFORD. And with that, I yield back the balance of my time.

Mr. LIPINSKI. Thank you, Ranking Member Crawford.

Let me call on Representative Napolitano to introduce Mr. Mark Christoffels.

Mrs. NAPOLITANO. Thank you, Mr. Chairman, Ranking Members Crawford and Graves, for inviting Mark Christoffels. I believe Mark and his organization, the Alameda Corridor-East, are the perfect witnesses for this very important hearing today regarding grade crossing safety. ACE was formed 22 years ago by 30 cities in my district and surrounding region for the sole purpose of improving grade crossing safety with grade separation projects, and safety improvement projects.

Thirty cities banded together and they have found the most important crossings to improve. They found the local, State, and Federal funding that was needed and created their own construction authority to build these projects. They are only a few years away from being fully completed, and this is truly an incredible achievement that has dramatically improved the commute times and safety of our community, most of them on time and under budget.

I want to thank the ACE board of directors and the staff of Mark Christoffels, Paul Hubler, and all the team members who work on this very important project. And thank you, Mark, for being here today, and welcome.

Thank you, Mr. Chair.

Mr. LIPINSKI. Thank you. And I would like to hear from our panel of witnesses. I would like to introduce Alderman Matt O'Shea. Matt O'Shea has been an alderman of Chicago's 19th Ward since 2011. He represents the communities of Beverly, Morgan Park, and Mount Greenwood, in the Chicago City Council.

Like many communities I represent, the 19th Ward has multiple sets of railroad tracks running through the community. He knows firsthand the positives and negatives of railroads.

During his time as alderman, Matt has focused on improving local public schools, stimulating economic development, and enhancing public safety. He has been a strong advocate for the 19th Ward in dealing with some issues that have come up with respect to railroads.

He is also the chair of the Aviation Committee in the Chicago City Council.

Matt is a lifelong resident of the Beverly/Morgan Park community and currently lives there with his wife Cara and three children, Brigid, Patrick, and Eileen.

And I would like to welcome our entire panel of witnesses now. Mr. Karl Alexy, Associate Administrator for Railroad Safety and Chief Safety Officer, the Federal Railroad Administration; Mr. Brian Vercruysse, rail safety program administrator, Illinois Commerce Commission; Mr. Mark Christoffels, chief engineer, San Gabriel Valley Council of Governments/Alameda Corridor-East Project; Ms. Rachel Maleh, executive director, Operation Lifesaver, Inc.; the Honorable Matthew O'Shea, alderman, 19th Ward of Chicago, Chicago City Council; and Mr. Jason Morris, assistant vice president, safety and environmental, Norfolk Southern Corporation.

Thank you all for being here today. I look forward to your testimony.

Without objection, our witnesses' full statements will be included in the record. Since your written testimony has been made part of the record, the subcommittee requests that you limit your oral testimony to 5 minutes.

I will begin by recognizing Mr. Alexy for 5 minutes.

TESTIMONY OF KARL ALEXY, ASSOCIATE ADMINISTRATOR FOR RAILROAD SAFETY AND CHIEF SAFETY OFFICER, FEDERAL RAILROAD ADMINISTRATION; BRIAN VERCRUYSSE, P.E., RAIL SAFETY PROGRAM ADMINISTRATOR, ILLINOIS COMMERCE COMMISSION; MARK CHRISTOFFELS, CHIEF ENGINEER, SAN GABRIEL VALLEY COUNCIL OF GOVERNMENTS; RACHEL MALEH, EXECUTIVE DIRECTOR, OPERATION LIFESAVER, INC.; HON. MATTHEW O'SHEA, ALDERMAN, 19TH WARD OF CHICAGO, CHICAGO CITY COUNCIL; AND JASON M. MORRIS, ASSISTANT VICE PRESIDENT, SAFETY AND ENVIRONMENTAL, NORFOLK SOUTHERN CORPORATION

Mr. ALEXY. Chairman Lipinski, Ranking Member Crawford, and members of the subcommittee, good morning, and thank you for the opportunity to speak with you today regarding highway-rail grade crossing safety.

The mission of FRA is to enable the safe, reliable, and efficient movement of people and goods for a strong America, now and in the future. As such, safety is our top priority. Railroads are a vital transportation link in our Nation's economy, transporting freight and passengers in a manner not achievable by other modes of transportation.

The safety of rail operations over highway-rail grade crossings and trespassing on railroad rights-of-way are two critical issues that FRA recognizes continue to impact and concern communities. Trespassing on railroad property is the leading cause of rail-related deaths in the United States. Grade crossing incidents are the second.

Together these types of accidents account for 97 percent of all fatalities along the Nation's rights-of-way. FRA believes these accidents and resulting injuries and fatalities are preventable. Grade crossing safety and trespassing prevention are separate and distinct issues, yet they share two common factors.

First, both are, with very few exceptions, a function of human behavior, including decisionmaking. Motorists may decide to disregard active grade crossing warning devices and maneuver around lowered gates, or pedestrians seeking a shortcut may cut across tracks.

Second, of the stakeholders—railroads, communities, individuals, and regulators—none can solve this issue on its own. We need all of the stakeholders to prioritize and address these issues.

FRA is underway with implementing its National Strategy to Prevent Trespassing on Railroad Property developed in 2018. More recently, in November 2019, FRA developed and began implementation of a business plan to advance grade crossing safety.

These efforts are complementary and focus on five strategic areas: enhancing our collaboration with and outreach to all affected stakeholders; leveraging data to allocate our resources most effectively; oversight and enforcement of the rail industry, and engagement of State and local governments and law enforcement; supporting research designed to improve rail safety; and funding to support implementation of proven strategies and testing of new approaches and technologies.

FRA has worked to enhance the agency's collaboration and outreach with stakeholders on both grade crossing safety and trespass prevention issues through a series of listening sessions, summits, symposiums, targeted social media campaigns, and community site visits.

FRA works with the railroads, State and local government, law enforcement officials, signal equipment manufacturers and technology companies, trade and advocacy groups, as well as DOT experts outside of the FRA, to identify the most effective methods of improving grade crossing safety and preventing trespassing on railroad property.

To complement FRA's safety oversight and research initiatives, Secretary Chao and Administrator Batory have prioritized investment in grade crossing improvements through the Department's various grant programs. For example, under this administration, over 500 individual grade crossings have been made safer through FRA's grant selections, most of this through the Consolidated Rail Infrastructure and Safety Improvements grant program.

Additionally, the Risk Reduction and System Safety program rules will require railroads to analyze how trespasser prevention and highway-rail grade crossing technology may help mitigate risk. Once these rules are published and implemented, FRA anticipates that the required analysis will provide railroads a framework for utilizing technology to combat risk associated with grade crossing and trespassers.

In addition to the grade crossing safety and trespass prevention, FRA is engaged with the railroads and State and local officials to address the impactful effects of railroad operations in communities. In May of 2019, Administrator Batory wrote the chief executive officers of the Class I railroads and major railroad holding companies regarding the impacts of quality of life associated with blocked crossings. Administrator Batory specifically requested that each railroad act to minimize the occurrence of blocked crossings.

On December 20, 2019, FRA launched a new online portal to collect data regarding the scope of the blocked crossing issue. The portal allows the public and public safety officials to report information on the location, time, duration, and impacts of the blocked crossings. This information will provide FRA with needed insights to the extent and consequences of these events.

In conclusion, FRA remains committed to continuing to lead, promote, and strengthen efforts among stakeholders to increase awareness of grade crossing safety issues, the potential consequences of trespassing on railroad rights-of-way, and existing and potential trespass prevention strategies.

Thank you again for this opportunity, and I look forward to taking your questions.

[Mr. Alexy's prepared statement follows:]

Prepared Statement of Karl Alexy, Associate Administrator for Railroad Safety and Chief Safety Officer, Federal Railroad Administration

Chairman Lipinski, Ranking Member Crawford, and Members of the Committee,

Thank you for the opportunity to speak with you today regarding highway-rail grade crossing safety. The mission of FRA is to enable the safe, reliable, and effi-

cient movement of people and goods for a strong America, now and in the future. As such, safety is FRA's top priority.

Railroads are a vital transportation link in our Nation's economy—transporting freight and passengers in a manner not achievable by other modes of transportation.

The safety of rail operations over highway-rail grade crossings and trespassing on railroad rights-of-way are two critical issues that FRA recognizes continue to impact and concern communities. As FRA Administrator Ronald Batory has previously discussed with this Committee, trespassing on railroad property is the leading cause of all rail-related deaths in the United States. Grade crossing incidents are the second. Together these types of accidents account for 97 percent of all fatalities along the nation's railroad rights-of-way. Over the past thirty years grade crossing fatalities have decreased by over sixty percent, but it is not enough. FRA believes these accidents, and resulting injuries and fatalities are preventable. Thus, improving grade crossing safety and preventing trespassing on railroad rights-of-way are top priorities for FRA.

Grade crossing safety and trespassing prevention are separate and distinct issues, yet they share two common factors. First, both are singularly a function of human behavior. A motorist may decide to disregard active grade crossing warning devices at a highway-rail grade crossing and maneuver around lowered gates or past flashing lights and enter a crossing, or a pedestrian seeking a shortcut to a destination on the opposite side of a set of railroad tracks may cut across those tracks. In other cases, individuals are not sufficiently careful or may make poor judgements, or motorists may experience mechanical breakdowns or encounter physical obstructions when attempting to cross railroad tracks. Second, of the stakeholders—railroads, communities, individuals, and regulators—none can solve these issues on its own. We need all stakeholders to take action to prioritize, prevent, and address these issues. Railroads need to be cognizant of how their operations affect the communities through which they operate. Local law enforcement officials need to prioritize, to the extent possible, enforcement of vehicle traffic signals at highway-rail grade crossings and trespassing laws, and strict prosecution of resulting citations. Individual community members need to be aware of the consequences of not complying with grade crossing warning signals or of trespassing on railroad rights-of-way.

As Administrator Batory shared in his June 2019 testimony to this Committee, FRA is focused on leading, promoting, and strengthening efforts among all stakeholders to increase awareness of grade crossing safety issues, the dangers of trespassing on railroad rights-of-way, and existing and potential trespassing prevention strategies. With our current focus, we are well underway with implementing FRA's *National Strategy to Prevent Trespassing on Railroad Property* which FRA developed in 2018. More recently, in November 2019, FRA developed and began implementation of a Highway-Rail Grade Crossing Safety Business Plan. These efforts are complementary and focus generally on five strategic areas:

(1) Enhancing our collaborations with and outreach to all affected stakeholders;
(2) Leveraging data to apply our resources most effectively;
(3) Oversight and enforcement of the rail industry, and engagement of state and local governments, and law enforcement, particularly in trespass "hot-spots" or near accident-prone areas;
(4) Supporting research designed to improve rail safety; and
(5) Existing funding opportunities to support implementation of proven strategies and testing of new approaches and technologies.

FRA has worked to enhance the agency's collaborations with and outreach to stakeholders on both grade crossing safety and trespass prevention issues through a series of listening sessions, summits, symposiums, targeted social media campaigns, and community site visits. FRA works with railroads, state and local governments, law enforcement officials, signal equipment manufacturers and technology companies, trade and advocacy groups, as well as DOT experts outside of FRA, to identify the most effective methods of improving grade crossing safety and preventing trespassing on railroad property.

FRA's safety program has historically been and continues to be data-driven. Highway-rail grade crossing safety and trespassing prevention are no exceptions, but as I noted earlier, both issues are highly dependent not only on FRA data and actions, but on the involvement of all affected stakeholders. Accordingly, FRA has amplified its efforts to improve the quality of its data and to ensure data related to grade crossing safety and trespassing incidents is available and accessible to all stakeholders. For example, FRA has created and maintains numerous data visualization tools (e.g., dashboards, maps) which enable the agency and our stakeholders to better monitor and analyze key safety metrics over time. Meanwhile, FRA is using analytical tools to gain a better understanding of factors affecting grade crossing safety and trespassing issues (e.g., from system-level overviews to localized detail). FRA

is also seeking new and unconventional data sources and voluntary methods of sharing data among stakeholders to identify leading indicators of both grade crossing and trespassing risk factors.

Utilizing available data, FRA is identifying accident-prone areas and trespass "hot-spots" and engaging railroads operating in those areas, as well as the relevant state and local government and law enforcement officials, to seek potential local solutions to the risks.

The Grade Crossing Safety and Trespass Prevention research program conducts research to improve safety at highway-rail grade crossings and along the railroad rights-of-way. The program develops, tests, and evaluates technologies and engineering solutions, and collects and analyzes data to measure the effectiveness in improving grade crossing safety. FRA is currently supporting research in several technologies that have the potential to reduce grade crossing accidents, including GIS mapping, use of drones, in-vehicle auditory alerts, intelligent crossing assessment, and first responder blocked crossing notifications. The research outcomes, reports, and best practices will continue to be published on the FRA website and presented at industry related conferences and workshops. FRA currently uses an online research repository to store and maintain research reports and will introduce a search engine to facilitate access to these reports.

To complement FRA's safety oversight and research initiatives, Secretary Elaine L. Chao and Administrator Batory have prioritized investment in grade crossing improvements through the Department's various grant programs. Under this Administration, in addition to grade crossing formula funding administered by the Federal Highway Administration's Section 130 program, over 500 individual grade crossings have been made safer through FRA grant selections, most of this through the Consolidated Rail Infrastructure and Safety Improvements (CRISI) grant program. The Department's Better Utilizing Investments to Leverage Development (BUILD) and Infrastructure for Rebuilding America (INFRA) grant programs have also provided significant investment in grade crossing safety nationwide.

Regarding trespassing, FRA issued two Notices of Funding Opportunities (NOFO) for law enforcement agencies to address railroad trespassing enforcement. In response to the first NOFO, FRA awarded almost $200,000 to four law enforcement agencies. Preliminary findings demonstrate a significant reduction in trespassing incidents in these four local jurisdictions. Applications in response to the second NOFO are currently under review. Looking forward, FRA expects to make its fiscal year 2020 grant funding available to prospective applicants in the near future. We encourage your states and communities to apply for these forthcoming funding opportunities so they can work with FRA and continue to make grade crossings safer and reduce trespasser incidents.

TRESPASSING PREVENTION

Trespassing on railroad property can be defined as accessing private railroad property anywhere other than at a designated pedestrian or roadway crossing. Trespassing on private railroad property is illegal and poses a grave threat to the individual trespasser's safety and to the safety of railroad employees. Although this is a matter of common sense, each year, more than 500 people are killed and nearly as many injured, while trespassing on railroad property.

Implementation of FRA's *National Trespassing Prevention Strategy* is well underway. To date, FRA has consistently achieved the milestones set forth in the *Strategy* and the agency will provide a specific update on its progress implementing the *Strategy* later this year. To highlight some of the successes of the *Strategy* to date, I note:

- FRA field teams have conducted 171 trespassing site visits and outreach presentations since October of 2018.
- FRA developed a *Trespass and Suicide Dashboard* that allows users to visually interact with trespass and suicide data collected by FRA. The Dashboard is designed to provide key information to enable analysis of the data, including where trespassing incidents have occurred both nationally and locally, what railroads are involved in the trespassing incidents, and key factual details surrounding the trespassing incidents (e.g., trespasser age, day of week, time of day, physical act before casualty, and the event that caused the casualty). Although FRA's field teams use this information to evaluate local conditions and track overall trends, the dashboard is available online for all stakeholders to use.
- Regional FRA teams are working with individual communities identified as "hot-spots" for trespassing incidents to understand the root causes of the incidents and assist in the development of local solutions.

- FRA issued an approximately $160,000 Consolidated Rail Infrastructure and Safety Improvements (CRISI) grant to the Florida Department of Transportation to pilot drone technology, closed circuit television with remote monitoring, and a geographic information system spatial analysis to aid and leverage local law enforcement trespassing enforcement efforts.
- FRA has worked with the leaders of the 10-counties in the United States with the most trespassing incidents to participate in Railroad Trespassing and Grade Crossing Technology Summits throughout the country in 2020.

GRADE CROSSING

Similar to trespassing, human behavior plays a primary role in grade crossing accidents. For example, a driver may choose to maneuver around lowered gates at an active crossing, or a driver may fail to look both ways to ensure the track is clear before attempting to cross a passive crossing (a passive crossing is a crossing with no train-activated warning devices).

Throughout the past year, FRA held a series of six grade crossing technology listening sessions. Those listening sessions involved a diverse range of stakeholders, including rail industry members, state and local governments (including law enforcement officials), trade and advocacy groups, as well as signal equipment and automobile manufacturers and technology companies, and culminated in a Grade Crossing Symposium in November, 2019. The Symposium provided a forum for all stakeholders to share what they learned during the listening sessions and collaborate on issues and experiences in implementing both low-tech and high-tech grade crossing solutions and best practices that have been successful on a local level to reduce grade crossing accidents as well as strategies for overcoming barrier to implementation and funding sources. FRA plans to continue this collaboration and outreach with stakeholders by holding additional grade crossing summits during 2020 to engage locally with stakeholders.

As I noted earlier, in November 2019, FRA issued its *Highway-Rail Grade Crossing Business Plan* as a complement to FRA's *Trespassing Prevention Strategy*. This *Business Plan* describes the actions FRA will take over the next three years to support the implementation of technology to improve grade crossing safety. The *Business Plan* outlines FRA's technological approach to grade crossing safety and emphasizes FRA's continued desire to FRA to work with all stakeholders to discover new and innovative ways to use technology to mitigate and eliminate grade crossing collisions. FRA recognizes the costs to communities to implement technologies at grade crossings, and accordingly, one focus of the *Business Plan* is identifying available funding opportunities through existing programs at FRA and other DOT modes (e.g., the Federal Highway Administration).

In addition to developing the *Business Plan*, since Administrator Batory last testified before this Committee in June 2019, FRA has taken several additional actions to address and engage stakeholders in grade crossing safety issues, including actions to ensure the safety of railroad operations in quiet zones. Examples of these actions include:

- In November 2019, FRA published a notice of proposed rulemaking (NPRM) responding to the FAST Act's mandate to require 40 States and the District of Columbia to develop and implement highway-rail grade crossing action plans. Consistent with the statutory mandate, the NPRM also proposed to require the ten States previously required to develop highway-rail grade crossing actions plans to update their plans and submit reports to FRA describing the actions they have taken to implement them. FRA is currently reviewing comments received in response to the NPRM and anticipates publication of a Final Rule in the summer.
- Observing an increase in accidents at grade crossings within quiet zones, in December 2019, FRA wrote to all public authorities with quiet zones in which multiple accidents occurred in 2018 to remind those entities of the importance of ensuring their quiet zones comply with the conditions of approval. To ensure future compliance, FRA implemented a standard operating procedure to inspect all established quiet zones (currently 907) on a three-year or less interval and to inspect newly established quiet zones within the first 60 days.

Additionally, the Risk Reduction and System Safety Program rules will require railroads to analyze how trespasser prevention technology and highway-rail grade crossing technology may help mitigate identified risks. Once these rules are published and implemented, FRA anticipates that the required analysis will provide railroads a framework for utilizing technology to combat risks associated with grade crossings and trespassers.

In addition to grade crossing safety and trespassing prevention, the FRA is engaged with the railroads and state and local officials to address the sometimes impactful effects of railroad operations on communities.

In May, noting an increase in the number of blocked crossing complaints FRA was receiving, Administrator Batory wrote to the Chief Executive Officers and senior leadership of the Class I railroads and major railroad holding companies regarding the impacts to quality of life associated with blocked crossings. Administrator Batory specifically requested that each railroad take action to minimize the occurrence of blocked crossings and redouble their efforts to work with states and local communities to advance the safety and efficiency of both railroad and highway transportation. In December, I wrote to all 736 railroads operating in the United States, reiterating Administrator Batory's requests.

On December 20, 2019 FRA launched a new online portal to collect data regarding the scope of blocked crossings issues across the country. The portal allows the public and public safety officials to submit reports of blocked crossings and specifically requests information on the location of the blocked crossing, and the time, duration, and impacts of the blocked crossing. This information will provide FRA with more standardized data on instances of blocked crossings throughout the United States and FRA will analyze the data and publicly share it with all affected stakeholders to help inform the development of local solutions to reduce and prevent incidents of trains blocking crossings.

CONCLUSION

FRA will continue to effectively implement its *National Strategy to Prevent Trespassing on Railroad Property* and carry out its *Highway-Rail Grade Crossing Safety Business Plan*. The agency remains committed to continuing to lead, promote, and strengthen efforts among all stakeholders to increase awareness of grade crossing safety issues, the potential consequences of trespassing on railroad rights-of-way, and existing and potential trespassing prevention strategies.

Mr. LIPINSKI. Thank you, Mr. Alexy.

I now recognize Mr. Vercruysse for 5 minutes.

Mr. VERCRUYSSE. Good morning, Chairman Lipinski, Ranking Member Crawford, Chairman DeFazio, and all of the honorable members of this subcommittee. I am here on behalf of the Illinois Commerce Commission to share challenges facing us with our rail safety efforts at public highway-rail crossings. We are very grateful for this opportunity.

Illinois has nearly 7,600 at-grade crossings and over 2,600 highway-rail bridges. Nationally, Illinois is only second to Texas in the number of crossings. With over 60 railroad companies operating on approximately 7,400 miles of track, our rail system is the country's second largest, including the largest rail freight hub in the city of Chicago with 1,200 trains per day.

In 1955, Illinois created the Grade Crossing Protection Fund to assist in paying for safety improvements at public highway-rail crossings. To date, $991 million has been authorized under the direction of the Illinois Commerce Commission towards warning device upgrades, bridges, and many other safety projects.

We have seen significant accident reduction over the long term with all of our partners from the communities and railroads. However, in the last 10 years, we have seen accident rates plateau, and even in certain instances creep a little higher. Our State funding, along with Federal funding sources, provide an opportunity to complete many more projects as well as address safety concerns that have demanded our attention but have lacked solutions for a variety of reasons.

As I highlight three main areas of concern today, there is no doubt that funding is needed, but it alone will not suffice. Loss of shunt is a primary concern for the State of Illinois, where the

crossing signal and warning devices have failed to properly detect certain trains. With advances in diagnostic tools, it was determined that this problem, which is infrequent and difficult to isolate, is not unique to Illinois.

In response, extensive testing is ongoing, with adjustments made to warning devices, signal systems, and train speeds. Further work is planned. Ultimately, though, we believe there is a need to push towards and fund the next generation of Positive Train Control that activates warning devices and provides for more functionality in train signaling.

Blocked crossings present another significant public safety concern that creates serious access problems for communities and help to create unsafe behavior at crossings. We have seen pedestrians crawl through trains and motorists drive around lowered gates to avoid long delays, as well as other concerns.

We have also received complaints from our citizens and first responders. This has increased with the rollout of the FRA's blocked crossing reporting website.

We have found changes in rail operations that have aggravated existing conditions or create new impacts where crossings are blocked consistently for 10 minutes to multiple hours, and in rare, infrequent cases, we have had days. Railroad personnel inexperience, unfamiliarity with an area, insufficient rail infrastructure, mechanical breakdown, regulatory requirements, and train length are the reasons typically found in our inspections.

Blocked crossings in Illinois have also been well documented in the cases before the Surface Transportation Board when approval is requested for a railroad's sale, lease, or other transaction. We believe the reports required from railroads and STB dockets provide the most valuable information relative to operations, length of train, blocked crossings, and the status of warning devices.

In 2008, the Illinois Supreme Court ruled that an Illinois statute prohibiting the blocking of a crossing was unconstitutional and preempted by Federal law. The Illinois statute provided requirements for interactions within emergency vehicles and included increasing fines based upon time intervals for obstructions over 10 minutes.

With similar findings in other States, we believe that Federal legislation is necessary to bridge the gap between preemptive State laws and the STB's authority on blocked crossings, instead of waiting for case-by-case issues that arise that create immediate negative impacts.

Trespassing and suicide along rail lines in Illinois are also significant issues. It is a problem that has been present for the past 30 years and accounts for approximately 30 fatalities and 25 injuries per year each. That is for trespassing and suicide. Each sees approximately 30 fatalities.

Recent studies by the FRA identified that 75 percent of trespassing incidents happened within 1,000 feet of a grade crossing. To address this and other hotspots, we are working with our State lawmakers to expand funding to allow for assistance with trespass mitigation.

There are other areas to address and improve that I have included in my written testimony. We believe that the section of warning devices and other improvements at a grade crossing

should be based upon the best available technology and based upon corridor reviews.

The use of four-quadrant gates provides an example as it addresses 25 percent of all crashes we see in Illinois where motorists drive around the gates. Also, for project development, we see challenges for communities in meeting funding match requirements, and we have experienced what appears to be a pullback by many railroads in providing resources to address public works projects.

Further, some railroad requirements regarding project scope, cost, design, agreements, and operations during construction have led to requests that may not coincide with the needs of a specific location.

Thank you again for providing me this opportunity to highlight the activities and concerns in Illinois. While I represent the Illinois Commerce Commission, I am also a member of the Association of State Rail Safety Managers, which includes 30 States plus the District of Columbia.

While Illinois has many unique operating considerations, the concerns I have discussed today are common across much of the country.

Thank you.

[Mr. Vercruysse's prepared statement follows:]

Prepared Statement of Brian Vercruysse, P.E., Rail Safety Program Administrator, Illinois Commerce Commission

Good morning Chairman Lipinski, Ranking Member Crawford, Chairman DeFazio, Representative Davis, and all the honorable members of this subcommittee. I am here on behalf of the Illinois Commerce Commission and the State of Illinois to share our history, recent experience, and the challenges facing us with our safety efforts at public highway-rail crossings. We are very grateful for this opportunity.

ILLINOIS TRANSPORTATION NETWORK—PUBLIC HIGHWAY-RAIL CROSSINGS

Illinois has 7,595 public highway-rail grade crossings and 2,667 highway-rail bridges. There are also 323 pedestrian grade crossings and 104 pedestrian bridges. Nationally, Illinois is second only to Texas in the total number of highway-rail crossings. With over 60 railroad companies operating on approximately 7,400 miles of railroad track, our rail system is the country's second largest, including the nation's largest rail freight hub in Chicago with approximately 1,200 trains per day.

HISTORY—ILLINOIS COMMERCE COMMISSION

Next year the Illinois Commerce Commission celebrates its 100th anniversary in its current format from 1921, and for Illinois it also marks the 150th anniversary of addressing rail safety concerns that started with our predecessors—the Railroad and Warehouse Commission of 1871. The Illinois Commerce Commission was one of, if not the first entity, to fund the installation of warning devices at crossings on a corridor basis; and in 1955, the State of Illinois passed legislation creating the Grade Crossing Protection Fund to assist public agencies in paying for safety improvements at highway-rail crossings on local roads and streets. Funding levels have increased since 1955, and today $42 million is provided annually towards crossing safety improvements at public highway-rail crossings. The array of projects completed include warning device upgrades, bridges, traffic signal interconnects, highway approaches, crossing closures, surface renewals, and the development of newer technologies at public highway-rail crossings.

The State of Illinois has authorized $991M towards these types of safety projects through the Grade Crossing Protection Fund. With this state funding, and the federal funding provided through the Section 130 fund (approximately $11M per year), the State of Illinois and its community and railroad partners have seen significant long term returns in the way of accident reduction—though recent returns have di-

minished as we have seen accident rates plateau and even creep back higher in the last ten years. But I am happy to report that many further safety improvements are planned. The State of Illinois Capital Plan passed in 2019 will provide an additional $78M towards highway-rail crossing safety over the next 5 years. This funding provides an opportunity to continue with the types of projects mentioned previously but could also help address safety concerns that have demanded our attention but have lacked solutions for a variety of reasons. Specifically, these concerns involve 1) conventional track circuits with loss of shunt; 2) blocked crossings; 3) trespassing; 4) best available technology; and 5) project development and coordination. As I describe each of these in more detail, there is no doubt that funding is needed—but it alone will not suffice. Legislative changes at the state and federal levels are required, as well as a push towards the best available or next generation of crossing warning systems.

1. LOSS OF SHUNT

Loss of Shunt is a primary concern for the State of Illinois. The Illinois Commerce Commission first became aware of this issue 15 years ago where the crossing signal and warning device systems failed to properly detect some approaching passenger trains. This has led to Activation Failures where the warning devices or gates failed to provide adequate warning to motorists, or in the worst case, the gates never come down as a train goes through a grade crossing. With advances in diagnostic tools, it was determined in recent years that this problem, which is infrequent and difficult to isolate, is not unique only to Illinois but is widespread. In response, extensive testing and investigation is ongoing with adjustments being made to warning devices, train signal systems, train speeds, and other modifications. The changes have helped alleviate the issues, but the problem persists. The Illinois Commerce Commission is working with various railroads, the Illinois Department of Transportation, Amtrak, and FRA to fund a demonstration project in 2020 and 2021 to test a product new to the United States. We believe there is a need to push towards and fund the next generation of Positive Train Control that activates warning devices at highway-rail crossings and provides more functionality in train signaling and that does not predominately rely on conventional track circuits first used in the late 1800's. This will provide the additional safe method of train detection needed for those Loss of Shunt conditions that occur with light/fast commuter operations and freight train movements that are caused by rail contamination. We also believe that changes should be made in 49 CFR 234.9 requiring the reporting of Activation Failures within 24 hours, which is consistent with reporting accidents involving grade crossing signal failure (49 CFR 234.7).

2. BLOCKED CROSSINGS

Blocked Crossings present another significant public safety concern in Illinois. They create serious access problems for emergency responders, affect school bus routings, and disrupt the general flow of vehicular traffic throughout a community. We have seen pedestrians crawl through trains, parents pass children through trains, motorists drive around lowered gates to avoid long delays, and even lift roadway gates where a train was stopped clear of the road but still activating the warning devices. We have also heard from our citizens and Emergency Services agencies on their concerns for overall public safety, access, and response. This has been heightened with the December 15th rollout of FRA's Blocked Crossing Reporting Portal. As of January 30th, there were over 500 submissions from Illinois alone (60% of all reports).

The larger industrial areas of our state (Chicagoland, Illinois portion of the St. Louis Metro area, Decatur, for example) are the locations that have historically heavy volumes for both train and auto traffic. For these locations, bridges, connecting roads, or other infrastructure improvements have been built to help alleviate the highway/rail transportation conflict. In certain areas, communication and emergency plans have been prepared. These actions must continue, and we plan to do so. But we have also found changes in rail operations that have aggravated conditions or create impacts new to communities that may now see their highway-rail crossings blocked consistently for 10 minutes to multiple hours; and in the extreme but infrequent cases, days. Railroad personnel inexperience or unfamiliarity with an area, insufficient siding length, timing of train meets, lack of yard capacity, lining switches, mechanical breakdown, crew hours of service, and increased train length are the reasons typically found or stated for obstruction of crossings.

While there is no specific public data available on train length, the Illinois Commerce Commission reviewed 40 years of FRA data on freight train and vehicle collisions at mainline grade crossings. The FRA reports include the number of cars and

locomotives in use at the time of the crash. The analysis shows increases in average train length since 1980, with an approximately 25% increase in the last ten years alone to an average length over a mile long. This is consistent with the May 2019 GAO study on train length with data provided by two Class I railroads. The GAO noted that train accidents have declined according to the Federal Railroad Administration's data, with train accidents per million-train-miles decreasing by about 14 percent between 2008 and 2017. However, we have reviewed 2010 to 2019 FRA data, and have found the accident rate has increased 10.4% for grade crossing incidents and 51% for trespasser incidents. Further, when the GAO study was published, we reviewed the FRA's Train Accident/Incident file to look at crashes involving locomotives used as Distributed Power Units (DPUs). These units, utilized at the mid and/or rear of a train are used for the additional power necessary to run trains up to 3 miles or more in length. From 2008 to 2018, approximately 12% of incidents involved DPU-equipped trains. In Illinois, we regularly see trains approaching 2 miles long, with less frequent trains closer to 3 miles in length. Other than our observations and inspections, the use of longer trains in Illinois has been well documented in cases before the Surface Transportation Board (STB) when approval is requested for a railroad sale, lease, or other transaction.

We have found that the reports required from railroads in STB dockets provide the most valuable information relative to operations, length of train, blocked crossings, and the status of warning devices. This is the only area within federal or state law where reporting, assessment of impacts, and development of mitigation measures associated with blocked crossings are formally addressed.

State Laws on blocked crossing, while still in place, have been preempted. In 2008, the Illinois Supreme Court ruled that an Illinois statute prohibiting the blocking of a highway-rail crossing and allowing a community to issue tickets to rail carriers was unconstitutional and preempted by the Federal Railroad Safety Act of 1994 and the Interstate Commerce Commission Termination Act of 1995. The Illinois statute structure provided and included requirements for interactions with emergency vehicles, and included increasing fines based upon time intervals for obstructions over ten minutes. At the lower end with an obstruction under 15 minutes, the fine is $200 to $500; at the higher end for over 35 minutes the fine is $1000 as well as $500 for each additional 5 minutes of obstruction. From 2009 to 2018, similar laws from other states were met with federal preemption findings, and a 2019 Oklahoma law is currently under a Federal Injunction.

With little federal oversight and no state authority, there are no tools to incentivize or deter railroads from blocking crossings. When blocked crossing issues do appear or are heightened, coordination with railroads, communities, the FRA, and other stakeholders has helped in certain instances, but the solutions are not always collaborative or equitable to all parties. Moreover, where a problem area was addressed, a new challenge may be created at crossings elsewhere on the line, or reappear with new personnel, customers, or other operational changes. We believe that federal legislation is necessary to bridge the gap between preempted state laws and the STB's authority on blocked crossings, and to provide consistent direction instead of waiting for case-by-case issues to arise that create immediate negative impacts to public safety and convenience. Ultimately, our desire is to work collaboratively with communities, railroads, and the FRA to provide infrastructure improvements that allow for safe and enhanced rail and highway operations.

3. TRESPASSING AND SUICIDE

Trespassing and suicide along rail lines in Illinois are also significant concerns. It is a problem that has been present for the past 30 plus years and accounts for approximately 30 fatalities and 25 injuries per year, leaving so many people impacted. Recent studies by the FRA identified that 75% of trespassing incidents happen within 500 to 1000 feet of a grade crossing. To address this and other hot spots, we have been working with our state lawmakers to expand funding from our Grade Crossing Protection Fund to allow for assistance with trespassing mitigation, as well as the construction of more bridges to meet community demand for safer pedestrian and commuter accommodations. The bill was just introduced last week as IL House Bill 4248.

4. USE OF BEST AVAILABLE TECHNOLOGY AND CORRIDOR REVIEWS

While we pursue the next generation of Positive Train Control and integration with grade crossings, we have current equipment that is proven and provides the best available technology. For Illinois, the use of four quadrant gates with vehicle detection provides an example. There are 178 four quadrant gate locations in the State of Illinois that seal the entire crossing and use vehicle detection to avoid en-

trapment of a motorist on a crossing. The first installations were completed in 2001, and the latest location completed in 2018. Commission Staff believes that the installation of four quadrant gates should be the goal when installing, renewing, or making significant changes to crossings within mixed commuter and freight corridors in the Chicago region, or other complex areas in the country. In Illinois where nearly 25% of crashes stem from motorists driving around gates, we believe four quadrant gates provide the best available technology. Staff believes that any additional cost concerns are outweighed by the greater safety benefit with four quadrant gates compared to just upgrading or renewing a crossing to two quadrant gates. Along with the use of best available technology, we also believe corridor reviews should be conducted in the overall analysis when determining improvements for grade crossings.

5. PROJECT COORDINATION & CHALLENGES

In Illinois we have seen challenges for communities in meeting funding match requirements. In response, the Commission has increased assistance for signal projects, and we are currently reviewing reducing the match for other types of projects. We are also aware of Section 130 match concerns, and the desire for more funding for bridge projects.

In addition, we have experienced what appears to be a pullback by many railroads in providing resources to address public works projects. This has led to delay in finalizing plans, estimates, reviews, and agreements. Further, some railroad requirements regarding project scope, cost, design, and operations during construction have led to unreasonable requests that do not coincide with the needs of a specific location. Again, this contributes to project delays, wasted resources, increased costs, and in some cases, projects may not be pursued.

Thank you again for providing me this opportunity to highlight the activities and concerns in Illinois. While I represent the Illinois Commerce Commission, I am also a member of the Association of State Rail Safety Managers that includes 30 States and the District of Columbia. While Illinois has many unique operating considerations, the concerns I've discussed today are common across much of the country.

EXHIBIT LIST

A. Illinois System Facts
B. Illinois Crash & Incident Trends
C. Illinois Grade Crossing Crash Statistics
D. Nationwide Incident Rates
E. Estimating Increase in Average Train Length: 1980–2019
F. Illinois House Bill 4248—Trespass Mitigation Measures
G. STB Reporting Requirements (Example)

Illinois System Facts

7,376 (#2 : TX #1)
Route Miles of Track

146,958 (#3 : TX & CA #1 & 2)
Centerline Miles of Highway

7,595 (#2 : TX #1)
Public Level Crossings

2,667 (#2 : PA #1)
Public Grade Separations

60+ (#1)
Railroad Companies

483.2 Million (#1)
Total Tons @ 2017

12,741,800 (#1)
Total Carloads @ 2017

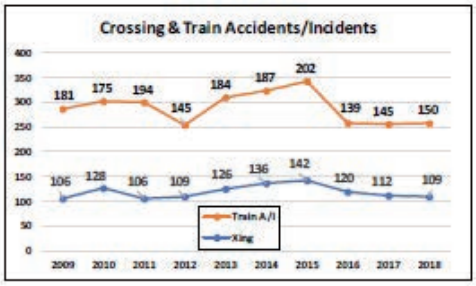
Illinois Relatively

UP = 20%	CSX = 6%
CN = 17%	NIRC = 5%
BNSF = 14%	CP = 2%
NS = 12%	KCS = 2%

Illinois Crash & Incident Trends

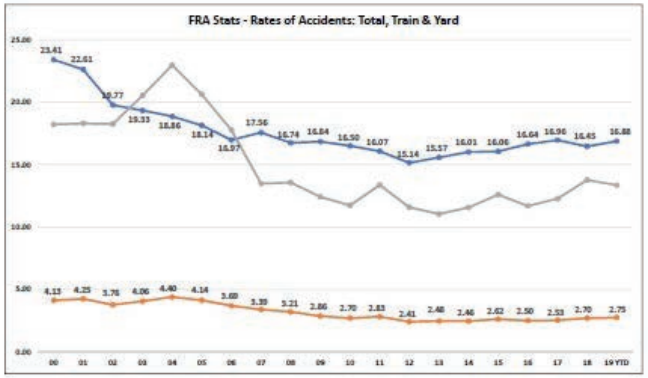
	Illinois (10 Years)					
Year	Crash All Xings	Crash Killed	Crash Injured	Tpass Killed	Tpass Injured	Tpass Total Incident
90	303	5	110	1	4	74
91	313	4	110	4	24	72
92	218	4	123	3	24	66
93	204	5	118	2	23	63
94	211	5	100	4	23	72
95	299	6	139	1	23	63
96	232	3	89	1	23	58
97	214	2	80	4	23	64
98	198	3	83	4	23	58
99	204	5	110	3	23	66
00	213	3	90	3	23	58
01	211	3	89	3	23	64
02	172	2	83	2	23	58
03	166	3	71	2	23	53
04	178	2	75	2	23	61
05	180	3	83	2	23	60
06	174	2	78	2	23	63
07	166	2	68	2	23	60
08	153	2	78	2	23	64
09	106	3	58	2	23	56
10	128	2	65	3	23	54
11	106	2	57	2	23	53
12	109	3	63	2	23	53
13	126	3	63	2	23	63
14	136	2	58	2	23	63
15	142	2	69	3	23	2
16	120	3	58	3	23	63
17	112	2	63	3	23	63
18	110	3	66	2	23	63
19 YTD	94	3	58	2	1	66
Total	5,670	92	2,396	85	818	5,611
Avg	189.0	30.4	80.0	28.3	27.3	53.7

2009 to 2018



Six Key FRA Performance Measures - Rates of Incidents Between 2000 and 2019 & 2020 & 2019. Good over 20-years, not so good last 10-years.
Rates are incidents per million train miles except for yard switching which is rate per million miles of yard switching.

Year	Total Accidents	Train Accidents	Yard Accidents
00	23.41	4.13	18.23
01	22.61	4.25	18.30
02	19.77	3.76	18.25
03	19.33	4.06	20.53
04	18.86	4.40	22.97
05	18.14	4.14	20.81
06	16.97	3.60	17.77
07	17.56	3.39	13.45
08	16.74	3.21	13.57
09	16.84	2.86	12.41
10	16.50	2.70	11.73
11	16.07	2.83	13.36
12	15.14	2.41	11.58
13	15.57	2.48	11.04
14	16.01	2.46	11.56
15	16.06	2.62	12.60
16	16.64	2.50	11.68
17	16.96	2.53	12.27
18	16.45	2.70	13.75
19 YTD	16.88	2.75	13.34
Change 2000 to 2019	-27.9%	-33.4%	-26.7%
Change 2010 to 2019	1.7%	1.2%	8.8%



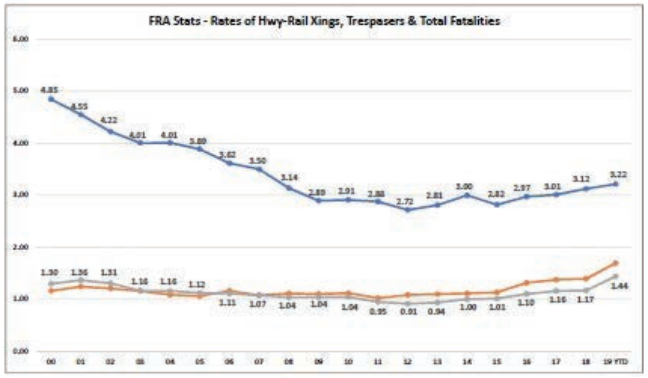
Type of Incident	% Change 2000 to 2019 YTD	% Change 2010 to 2019 YTD
Total Accidents	-27.9%	1.7%
Train Accidents	-33.4%	1.2%
Yard Switching	-26.7%	8.8%

Total & train accidents are by million total train miles
Yard rate is yard incidents by yard miles

Year	--- Total train miles
00	722,876,632
01	711,549,906
02	728,674,146
03	743,330,718
04	770,152,268
05	789,033,596
06	813,580,252
07	793,617,148
08	773,996,067
09	667,934,079
10	704,814,251
11	717,632,844
12	731,570,122
13	748,455,721
14	765,816,205
15	738,450,527
16	689,635,211
17	705,744,896
18	715,423,619
19 YTD	569,213,968

Type of Incident	Change 2010 to 2019 YTD
Total Accidents	> by 1.7%
Train Accidents	> by 1.2%
Yard Switching	> by 8.8%
Hwy-Rail Xing Incident	> by 10.4%
Trespasser Incident	> by 51.6%
Total Fatalities	> by 38.1%

Year	Hwy-Rail Xing Incidents	Trespasser Incidents	Total Fatalities
00	4.85	1.16	1.30
01	4.55	1.24	1.36
02	4.22	1.21	1.31
03	4.01	1.16	1.16
04	4.01	1.09	1.16
05	3.89	1.06	1.12
06	3.62	1.16	1.11
07	3.50	1.08	1.07
08	3.14	1.11	1.04
09	2.89	1.10	1.04
10	2.91	1.12	1.04
11	2.88	1.02	0.95
12	2.72	1.08	0.91
13	2.81	1.10	0.94
14	3.00	1.11	1.00
15	2.82	1.13	1.01
16	2.97	1.32	1.10
17	3.01	1.38	1.16
18	3.12	1.39	1.17
19 YTD	3.22	1.70	1.44
Change 2000 to 2019	-33.6%	45.9%	11.1%
Change 2010 to 2019	10.4%	51.6%	38.1%



Type of Incident	% Change 2000 to 2019 YTD	% Change 2010 to 2019 YTD
Hwy-Rail Xing Incident	-33.6%	10.4%
Trespasser Incident	45.9%	51.6%
Total Fatalities	11.1%	38.1%

Rates are by million train miles

Estimating Average Train Length Between 1980 and October 2019 Using Highway-Rail Crossing Collision Data

Collisions: 1/1/1980 thru 10/31/2019 at All Types of Crossings & All Types of Trains	Total of All Collisions: 1980 thru Oct of 2019	Total of all Deaths 1980 thru Oct 2019	Total of all Injuries 1980 thru Oct 2019	Collisions @ Main Track Freight Train (Pulling)	Deaths Main Track Freight Reports	Injuries Main Track Freight Reports	Total # of Locos in Reports	Total # of Cars in Reports	Avg # of Locos	Avg # of Cars		ALTERNATE MOVING AVERAGE: Estimate of Average Car Length	ALTERNATE: Avg Length of Train @ Estimated Length
1980	10,796	833	3,890	6,475	632	2,613	16,401	363,661	2.5	56.2		50	2,993
1981	9,461	728	3,293	5,710	554	2,284	14,677	322,464	2.6	56.5		50	3,011
1982	7,933	607	2,637	4,867	465	1,834	12,775	281,799	2.6	57.9		51	3,145
1983	7,304	575	2,623	4,556	461	1,812	11,935	261,520	2.6	57.4		51	3,119
1984	7,456	649	2,910	4,745	529	2,090	12,649	272,478	2.7	57.4		52	3,181
1985	7,073	582	2,687	4,475	444	1,957	11,900	259,120	2.7	57.9		52	3,266
1986	6,513	616	2,458	4,258	497	1,714	11,290	245,356	2.7	57.8		53	3,255
1987	6,426	624	2,429	4,340	513	1,846	11,625	255,805	2.7	58.9		53	3,319
1988	6,817	689	2,589	4,426	568	1,852	11,851	252,733	2.7	57.1		54	3,279
1989	6,526	801	2,868	4,426	654	1,998	11,748	255,348	2.7	57.7		54	3,309
1990	5,718	698	2,407	3,913	561	1,816	10,412	229,889	2.7	58.8		55	3,425
1991	5,389	608	2,094	3,732	489	1,502	9,658	210,808	2.6	56.5		55	3,296
1992	4,928	579	1,975	3,351	463	1,370	8,733	198,995	2.6	57.9		56	3,432
1993	4,935	626	1,837	3,412	493	1,318	8,859	194,233	2.6	56.9		56	3,377
1994	4,999	615	1,961	3,464	500	1,445	8,860	190,106	2.6	54.9		57	3,315
1995	4,849	579	1,894	3,163	458	1,322	7,941	176,078	2.5	55.7		57	3,356
1996	4,268	488	1,610	2,949	396	1,170	7,297	160,168	2.5	54.9		58	3,331
1997	3,867	461	1,540	2,638	345	1,077	6,313	146,233	2.4	55.4		58	3,390
1998	3,521	431	1,303	2,361	332	915	5,786	137,238	2.5	58.1		59	3,408
1999	3,512	402	1,400	2,352	294	991	5,823	141,778	2.5	60.3		59	3,737
2000	3,589	425	1,219	2,451	323	839	6,241	151,336	2.5	61.7		60	3,891
2001	3,237	421	1,157	2,168	298	819	5,518	136,850	2.5	63.1		60	3,973
2002	3,081	357	999	2,049	270	680	5,152	128,063	2.5	62.5		61	3,996
2003	2,977	334	1,035	1,987	240	672	4,834	121,992	2.4	61.4		61	3,923
2004	3,085	371	1,094	2,076	262	744	5,074	129,962	2.4	62.6		62	4,060
2005	3,066	359	1,055	2,041	272	702	5,072	125,577	2.5	61.5		62	3,996
2006	2,942	369	1,072	1,928	264	698	4,827	123,517	2.5	64.1		63	4,219
2007	2,778	339	1,063	1,827	225	683	4,648	116,996	2.5	64.0		63	4,220
2008	2,429	290	993	1,563	201	610	4,022	99,995	2.6	64.0		64	4,282
2009	1,953	248	744	1,214	144	455	3,042	79,172	2.5	65.2		64	4,357
2010	2,052	261	888	1,306	172	500	3,261	84,350	2.5	64.6		65	4,380
2011	2,064	246	1,048	1,356	171	542	3,437	91,720	2.5	67.0		65	4,582
2012	1,988	231	974	1,353	161	555	3,495	87,504	2.6	64.7		66	4,457
2013	2,104	232	977	1,374	133	593	3,456	89,359	2.5	65.0		66	4,476
2014	2,296	262	871	1,486	188	536	3,731	99,655	2.5	67.1		67	4,676
2015	2,080	237	1,048	1,349	145	570	3,500	93,055	2.6	69.0		67	4,811
2016	2,050	255	853	1,297	154	488	3,333	87,414	2.6	67.4		68	4,771
2017	2,124	271	845	1,324	161	537	3,490	95,164	2.6	71.9		68	5,080
2018	2,220	263	842	1,353	160	477	3,570	98,708	2.6	73.0		69	5,226
2019 YTD Thru Oct	1,830	259	642	1,144	142	364	3,533	84,456	2.9	73.8		69	5,307
Grand Total	171,818	18,221	65,824	112,259	15,794	44,988	289,569	6,676,246	2.6	59.5			

If you start with an average car length of 50' in 1980 and then assume that the average length increases by 1' every other year you end up with an average length of 69' in 2019

Consistent with Findings of GAO 2019 Report with Increase in Average Train Length to over 1 mile.
"Freight Trains Are Getting Longer, and Additional Information Is Needed to Assess Their Impact"
GAO-19-443: https://www.gao.gov/products/GAO-19-443

1980-2019

65' Length	Moving Length	
3,651	2,993	Begin
4,799	5,307	End
1,148	2,314	Change
31.4%	77.3%	Increase

2008-2017

65' L	Moving Length		
3,651	4,220	Begin	
4,799	5,080	End	
1,148	860	Change	GAO
31.4%	20.4%	Increase	25%

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Full Text of HB4248 *101st General Assembly*

Introduced
Printer-Friendly Version PDF Bill Status

101ST GENERAL ASSEMBLY
State of Illinois
2019 and 2020
HB4248

Introduced , by Rep. Robyn Gabel

SYNOPSIS AS INTRODUCED:

35 ILCS 505/8 from Ch. 120, par. 424
625 ILCS 5/18c-7401 from Ch. 95 1/2, par. 18c-7401

Amends the Motor Fuel Tax Law. Provides that the funds transferred each month to the Grade Crossing Protection Fund may go to the maintenance of safety treatments to deter trespassing. Deletes language providing that the Illinois Commerce Commission shall not order more than $2,000,000 per year in Grade Crossing Protection Fund moneys for pedestrian walkways. Amends the Illinois Vehicle Code. Allows the Illinois Commerce Commission, after a hearing or by stipulated agreement, to authorize and order the terms of installation, operation, maintenance, and use of safety treatments requested by a public authority or rail carrier to deter trespassing on railroad property at a place other than a public crossing.

LRB101 15832 LNS 65187 b

A BILL FOR

HB4248 LRB101 15832 LNS 65187 b

1 AN ACT concerning transportation.

STB – Reporting Requirements from Past Dockets

Provide the greatest detail and should be used as the template. Example:

Docket No. FD 35522
CSX TRANSPORTATION, INC.—ACQUISITION OF OPERATING EASEMENT—
GRAND TRUNK WESTERN RAILROAD COMPANY

Specifically, CSXT's monthly reports shall be filed for a period of one year, and shall include the following information:

1. With respect to each at-grade crossing on the Elsdon Line:
- Identify the level of crossing protection (i.e., gates, lights, etc.);
- Disclose each crossing equipped with gates and whether the gate is working properly.
  - If the gate is not working properly, indicate the steps being taken to repair it and when that repair will occur.
  - If a repair has already been made, indicate when it was discovered and when it was fixed.

2. For each at-grade crossing blockage of more than 10 minutes:
- Provide the location, date, time, and duration;
- Identify the cause of the blockage (e.g., stopped train, slow-moving train, gate malfunction, etc.);
- Indicate whether a train was cut for each blockage caused by a stopped train; and if it was not cut, indicate why.

3. Provide the status of operating protocols with Norfolk Southern Railway Company, METRA, Indiana Harbor Belt Railroad, and any other rail carriers whose operations could cause interference with CSXT's operations on the Elsdon Line.

Mr. LIPINSKI. Thank you, Mr. Vercruysse.

I now recognize Mr. Christoffels for 5 minutes.

Mr. CHRISTOFFELS. Good morning, subcommittee Chairman Lipinski and subcommittee Ranking Member Crawford and distinguished Members. We appreciate the opportunity to share almost two decades of working towards essentially zero tracking on railroad crossing improvements.

I have an exhibit up there. What I am going to do is quickly go through the what, the why, the status of our project, and of course the funding. This map identifies where we are located. We are the San Gabriel Valley Council of Governments, a joint powers authority of 30 cities located in the eastern part of L.A. County, representing almost 2 million residents.

[Slide shown.]

It is the green area shaded on the map that is before you. As you can see, you have the two ports of L.A. and Long Beach, a major port destination for the entire Nation. Forty percent of anything imported by water into the United States comes through those two ports, as well as 25 percent of anything exported from the United States exits through those ports.

Most of those cargo containers are put on rail, and as you can see will travel up towards Los Angeles and then head due east through the San Gabriel Valley. We typically see anywhere between 100 and 180 trains coming through. This is an economic engine for the United States, and it is important. As was stated earlier in the intro statement, goods movement and what we do here is essential to our competitiveness, but we also have to realize that these rail activities have consequences for the local communities.

Could I have the second exhibit, please?

[Slide shown.]

This is what happens when you combine an intense rail traffic activity in a very heavily urbanized environment. And as you can see in the upper left, we get rail stacking, maybe not full blocking, but it doesn't take much for a 1- or a 1½-mile-long freight train

to come through, combined with arterial streets that may have up to 40,000 cars a day, to cause stacking.

We typically see up to 2,000 vehicle-hour delays, meaning it is the equivalent of 2,000 vehicles idling for an hour. In a nonattainment area like southern California, in addition to the inconvenience to the motorists, this is causing an environmental impact as well.

And then, what was stated earlier from the gentleman to the right of me, you get a motorist's frustration. We have all experienced sitting at an impacted traffic signal where you have gone through one traffic signal and then it turns red and you still haven't gotten through it. And then it goes an inch up again, and you get that second shot, and then you get—and what you see after a while is that motorists are so frustrated they are running the red lights.

What we were experiencing in the San Gabriel Valley is people so frustrated they were driving around the gates. They weren't going to wait any longer for that rail, and, obviously, resulting in accidents.

On the lower right, we have the issue of pedestrians. A lot of these railroads cross areas where schoolchildren have to get back and forth between their schools. That, in itself, causes an issue as the children are desperate to get to class on time. And then, on the lower left is something that is not spoken of much, and that would be your vehicle response.

Lives are lost due to accidents on these crossings, but lives are also lost to the inability of our first responders to get to a response call in a timely manner. Here you see a paramedic unit waiting for a slow-moving train. I will share in this particular instance this had to call for a backup unit for an emergency response on the other side in a different city. Fortunately, the individual that had called for service was responded to in a timely manner.

Could I have the next slide, please?

[Slide shown.]

This is a blowup of our area. We have 55 crossings located within the San Gabriel Valley. What we have been doing for the last 20 years is improving these crossings. For those that have minimum vehicle counts and can't justify spending upwards of $100 million to do a physical grade separation, we have been doing the improvements that you have heard earlier—testimony from the gentleman to the right—we have been installing four-quadrant gates, pedestrian gates, warning lights, signal interconnects, any ability to make sure that the motorists can't drive around and stops adequately for the crossings.

Nineteen of these, due to heavy vehicle volume, justified physical grade separation. Right now, we have completed 14 of those 19. I have three in construction, and the remaining two in design. The total cost for this has been $1.8 billion in funding.

And we are well on our way, as stated by Grace Napolitano, on completing this ambitious program. I have to credit the 30 member agencies to start this program 20 years ago, to realize that rail traffic was going to increase substantially, and everything that they had been witnessing was going to increase dramatically. They

had a lot of foresight to go and start this very ambitious program to increase rail safety.

We do get calls from all the way across the Nation, as they are now experiencing something similar, especially in Chicago, and asking, "How did you guys do it? Where did you get the funding? How did you get all of this organized?" And we are proud to share those experiences with you.

What I would like to talk a little bit is about the funding. Obviously, to implement a program this ambitious requires a lot of funding. When we first started, we were getting Federal funding up to 80 percent of the cost of these grade separations. I can tell you today the Federal contribution to our grade separations is down near 15 percent.

The Federal funding allocated to this type of program activity has diminished and can't keep up with demand. During the last INFRA call for projects, DOT will tell you that there was upwards of $12 in applications for every $1 that was available. That tells you what kind of increasing demand we are having out there to physically separate our rail activity, our commerce activity, from the individual cities that are being impacted.

And I want to emphasize that. We look at a lot of our infrastructure funding on increasing the ability to move goods from point A to point B. But sometimes we have to take a step back and say, "At what price are we doing that? Are we mitigating the impacts of what we are doing?"

I can increase the rail activity. I can put my throughput in there. But these cities that are being impacted by the delays caused by the increased rail activity, we need to make aware that we have to mitigate that. We have to go back and grade separate these crossings, so that those individual communities won't experience what I showed you earlier in those photographs.

The problem that we see—and we have experienced in the L.A. area—as the greatest impacts on these communities is in the most heavily urbanized environment. And if you think about an area like L.A., one-third of my project cost is land acquisition. You are in a heavily urbanized area that is fully developed with skyrocketing land costs.

On a $100 million project, I could spend one-third of that money on land acquisition. When you look at the benefit-cost ratio of us competing nationally for funding in a program that will fund grade separations, we don't rank very well because our costs are so extraordinarily high compared to the normal measure of benefit, which would be vehicle prevention of accidents and that sort of thing.

And one of the things that I would ask that this subcommittee——

Mr. LIPINSKI. Mr. Christoffels, if you can wrap up, we can come back to some questions.

Mr. CHRISTOFFELS. Sure. Would be to look at the funding opportunities and to increase them.

With that, thank you.

[Mr. Christoffels' prepared statement follows:]

Prepared Statement of Mark Christoffels, Chief Engineer, San Gabriel Valley Council of Governments

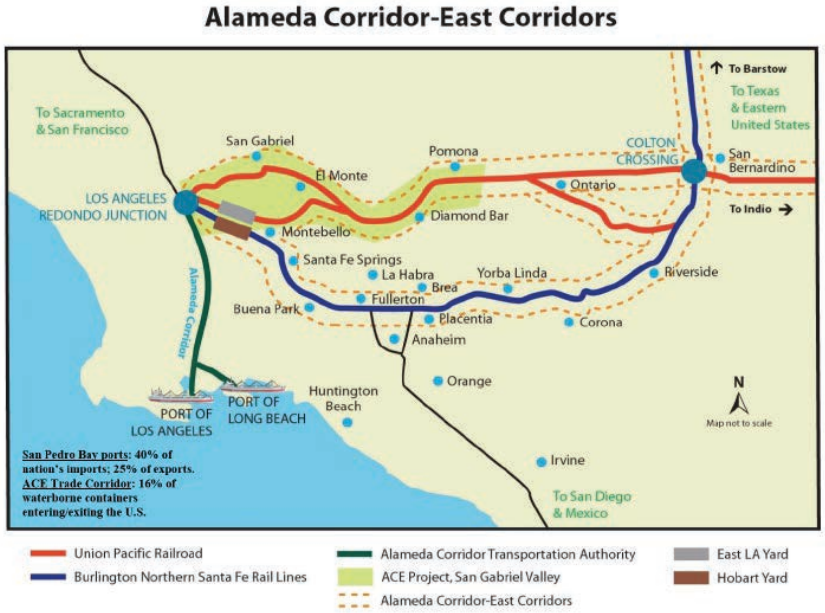
Chairman DeFazio, Ranking Member Graves, Subcommittee Chairman Lipinski, Subcommittee Ranking Member Crawford and Distinguished Members of the Subcommittee:

I am Mark Christoffels, Chief Engineer for the San Gabriel Valley Council of Governments (SGVCOG), a California joint powers authority made up of representatives from 30 cities, three Los Angeles County Supervisorial Districts and three municipal water districts located in the San Gabriel Valley, a region of 2 million residents in eastern Los Angeles County.

In response to a grade crossing study of the Alameda Corridor-East (ACE) Trade Corridor in Southern California, the SGVCOG established the ACE Construction Authority in 1998. This single-purpose construction authority was charged with implementing a rail crossing improvement program intended to mitigate vehicle delays, collisions and other community impacts at 55 at-grade rail-roadway crossings in anticipation of growing freight rail traffic in the San Gabriel Valley. This initiative has developed into a comprehensive $1.8 billion program of rail-highway grade separations and crossing safety improvements along the ACE Trade Corridor, which is among California's and the Nation's busiest rail corridors.

The transcontinental rail lines that comprise the ACE Trade Corridor accommodate significant, and growing, freight carried between the American heartland and our nation's busiest port complex in the San Pedro Bay. Together, the ports of Los Angeles and Long Beach handle more than 40 percent of all shipping containers arriving by ocean vessel on our shores and 25 percent of America's exports. These cargo volumes result in more than 180 Union Pacific Railroad and BNSF trains per day traversing the ACE Trade Corridor, carrying 16% of all the Nation's waterborne containerized freight (See Exhibit 1). In addition, dozens of daily Metrolink regional commuter trains operate on the freight rail mainlines under shared-use agreements.

EXHIBIT 1



The ever-increasing freight train traffic along the ACE Trade Corridor has resulted in traffic queueing and delays at at-grade crossings as well as deaths and injuries from crossing collisions. Twenty years ago, the ACE Trade Corridor crossing improvement plan evaluated all at-grade crossings in the San Gabriel Valley and proposed building grade separations, where the road goes under or over the railroad, at the most congested and hazardous crossings. These improvements would enhance

crossing safety, eliminate vehicle delay throughout the local roadway network and locomotive horn noise, and reduce vehicle emissions in Southern California, a Federal air quality nonattainment area (see Exhibit 2). In response, the ACE Construction Authority created a comprehensive strategy to fund and implement the study's recommendations.

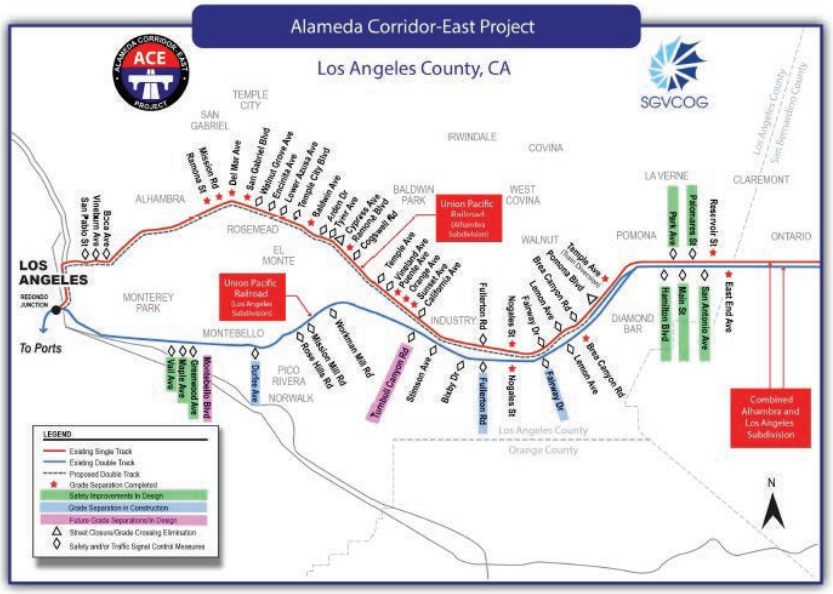
EXHIBIT 2

Clockwise from top left, traffic queuing at the Montebello Boulevard crossing; collision at Nogales Street crossing; pedestrians in Pomona; paramedics blocked by train at Turnbull Canyon Road crossing.

Armed with this plan of action, the SGVCOG and the ACE Construction Authority came to Capitol Hill in 1998 during consideration of the Transportation Efficiency Act for the 21st Century (TEA–21) legislation to request Federal funding for the implementation of the ACE Program. In the context of the recently ratified North American Free Trade Agreement and the resulting need to improve our Nation's goods movement infrastructure, Congress recognized the importance of the ACE Program to this effort by designating the ACE Trade Corridor as a National High Priority Corridor and awarding approximately $133 million for the proposed rail-roadway improvements.

In 2005, Congress continued its strong support for the ACE Program in the next transportation reauthorization (SAFETEA–LU) by designating the ACE Trade Corridor as one of only 25 Projects of National and Regional Significance and providing $67 million in funding. In addition, $17 million in funding was allocated to ACE projects during the annual appropriations process between 2000 to 2010, as well as an additional $28 million in other Federal funding.

EXHIBIT 3



Alameda Corridor-East Project Area

This Federal recognition and funding served as an important catalyst for the substantial subsequent investment of more than $1.5 billion in California state and local funding which has made the full funding of the $1.8 billion ACE Program achievable in the near term, if we are able to secure approximately $70 million to complete a programmatic funding shortfall.

Chairman DeFazio may recall touring the ACE Trade Corridor by helicopter in early 2009, along with representatives of the SGVCOG, the Ports of Los Angeles and Long Beach and the Alameda Corridor Transportation Authority, during a visit to the Los Angeles region for a joint field hearing hosted by this Subcommittee and the Highways and Transit Subcommittee. That hearing was titled "Confronting Freight Challenges in Southern California."

EXHIBIT 4

Active ACE Projects

Project	City	Cost ($m)	Jobs	Daily V/H Delay (2025)	Daily Trains (2009)	Collisions (10 yrs./ Total)	Total Deaths	Total Injuries	Current Phase	Construction Schedule
Montebello Bl	Montebello	$180.0	2,340	43.5	49	2/5	3	1	Final Eng.	2021-2023.
Crssgs. Imprvmt.	Montebello	$3.0	39	N/A	49	2/3	0	1	Final Eng.	2020-2021.
Maple Av Bridge	Montebello	$25.5	332	N/A	49	0/2	0	0	Final Eng.	2020-2021.
Durfee Av	Pico Rivera	$107.8	1,401	34.0	49	2/9	4	0	Construction	2019-2022.
Turnbull Cyn Rd	Industry/LA Cty	$99.1	1,288	38.9	49	4/14	3	3	Final Eng.	2021-2023.
Fullerton Rd	Industry/LA Cty	$159.5	2,074	115.4	49	1/4	0	3	Construction	2016-2022.
Fairway Dr	Industry/LA Cty	$224.8	2,922	62.5	49	7/17	3	11	Construction	2015-2023.
Crssgs. Imprvmt.	Pomona	$24.2	315	N/A	81	5/32	19	9	Final Eng.	2020-2021.

We are pleased to report significant progress since the Chairman's visit. As of today, we have completed and opened to traffic 14 grade separations, are currently under construction on another three grade separations and are preparing to award construction contracts for our final two grade separations this year or next year (see Exhibits 3 and 4). We have also closed or eliminated three grade crossings and installed safety measures at the remaining crossings, such as four-quadrant gates or center medians to deter motorists from driving around lowered crossing gates.

There have been 128 collisions at the 19 crossings which already are or will be grade separated in eastern Los Angeles County, according to our review of Federal Railroad Administration (FRA) crossing collision records. These collisions resulted in at least 26 fatalities and 46 injuries. Grade separations will eliminate crossing collisions at these busy streets as well as a total of more than 2,000 vehicle-hours of daily delay at the San Gabriel Valley's blocked crossings, including for emergency responders.

We are grateful for the strong support of Congress and the Federal Government for our ambitious plan to mitigate the substantial and negative impacts of ever-increasing freight rail traffic through the San Gabriel Valley. While this support has been instrumental in initiating the ACE Program, as the state of California and the County of Los Angeles have subsequently provided robust freight project funds, the share of our Federal contribution has declined to less than 15 percent, or $244 million of the $1.8 billion secured. This stands in stark contrast to the traditional 80 percent Federal to 20 percent State or local funding ratio for such infrastructure improvements. The substantial national economic benefits of an efficient goods movement network and the resulting negative impact on our local communities warrant a much higher level of Federal assistance for programs like the ACE Program.

In this context, we helped establish the Coalition for America's Gateways and Trade Corridors (CAGTC) nearly 20 years ago to advocate for sufficient funding in Federal legislation for trade corridors, gateways, intermodal connectors and freight facilities. We were pleased that Congress established a national freight program and authorized the expenditure of substantial funding to support freight infrastructure improvements in the Moving Ahead for Progress in the 21st Century (MAP–21) Act of 2012 and the Fixing America's Surface Transportation (FAST) Act of 2015.

Concurrent with this decades-long effort, the ACE Program has annually sought to secure Department of Transportation (DOT) discretionary grant funding for our grade separation projects without any success, including multiple applications for BUILD (Better Utilizing Investments to Leverage Development—formerly known as TIGER) and INFRA (Infrastructure for Rebuilding America—formerly known as FASTLANE) grants. I believe there are a number of reasons for our lack of success, including the substantial cost of real estate in urban areas which adds significant additional cost and adversely affects the benefit-cost ratios for our projects.

This lack of success in securing Federal discretionary funding over the last decade has been frustrating, especially given that our Program has long been considered a top Federal priority. Consequently, we have had to disproportionately rely on state and local funding to support our construction projects that address Federal, state and regional transportation priorities.

In the context of reauthorization and other transportation infrastructure-related legislation, we respectfully request that the Subcommittee consider the following policy recommendations that would increase the availability of much needed funding for freight and grade separation and crossing safety projects.

SUPPORT THE ENACTMENT OF ROBUSTLY FUNDED TRANSPORTATION INFRASTRUCTURE LEGISLATION

I am excited that both the Majority and Minority Members of the full Committee have recently recommended transportation and other infrastructure principles. This is an important first step toward the enactment of a robustly funded transportation authorization bill that will seek to address our Nation's substantial transportation infrastructure needs. It is my hope that any such legislation will prioritize safety improvements, nationally and regionally significant highway and multi-modal projects, and freight infrastructure. The Majority's infrastructure framework in our view importantly prioritizes funding freight projects of national and regional significance with focused eligibility criteria to guide final discretion over project selection and seeks to ensure that freight projects across all modes are eligible for Federal investment.

PROVIDE $12 BILLION A YEAR FOR A DISCRETIONARY FREIGHT GRANT PROGRAM AND PRIORITIZE SAFETY

We stand with the more than 60 agencies and organizations across the nation who are members of the Coalition for America's Gateways and Trade Corridors in advocating for $12 billion annually in Federal funding to be provided to all modes of freight projects via a merit-based discretionary grant program. Our experience has shown that the Infrastructure for Rebuilding America or INFRA program authorized in the FAST Act has tremendous potential to help build a strong national multimodal freight network, but the $800 million to $900 million in annual funding

made available is inadequate. In fact, DOT reports receiving $12 in unique requests nationwide for every $1 available made available through the INFRA program.

We also recommend Congress require greater transparency for the project discretionary selection process and provide additional direction and guidance for this process. For instance, Congress should direct that project evaluation through the discretionary grant process prioritize safety as an outcome. Members of this panel with crossings in their districts know well the devastating human toll that results from crossing collisions. Yet, in benefit-cost analyses we have prepared for grade separation projects submitted for Federal grant funding, the quantification of reduced deaths and injuries yield relatively minor benefits when compared to project costs, especially in built-out urban areas with high real estate costs. Congress should direct that projects that enhance safety are made commensurate to, or at least competitive with, projects that improve efficiency, capacity or throughput.

CREATE A DISCRETIONARY GRANT PROGRAM FOR RAIL-ROADWAY CROSSING IMPROVEMENTS

The Federal Highway Administration (FHWA) and FRA are the primary Federal agencies responsible for grade crossing safety across the country, with FHWA administering the Section 130 formula program and FRA providing safety oversight of both freight and passenger rail. We applaud Congress for continuously authorizing the Section 130 program for almost three decades. It is the primary program intended to provide Federal assistance to localities seeking to implement at-grade improvements to reduce the number, severity and potential of hazards to motorists, bicyclists, and pedestrians at crossings. The Section 130 program is authorized at between $200 million and $350 million annually with these funds apportioned to the States by formula.

In California, the Section 130 program is administered by the California Public Utility Commission, which regulates rail crossings, and the California Department of Transportation (Caltrans). We are currently working with both state agencies to secure an award of Section 130 funds for a project to install railroad right-of-way fencing and pedestrian crossing gates in the City of Pomona, where upwards of 80 freight trains a day traveling on multiple main line tracks have resulted in alarming rates of pedestrian deaths and injuries. Approximately $1 million to $3 million will be made available in Section 130 funds for our project which has a total cost of $24 million, or a Federal contribution of less than 13 percent.

It is clear to us that the Section 130 funds made available to California are insufficient, a situation likely experienced by other states with ambitious crossing safety programs, while we are informed that some states may not make full use of their annual allotments. Congress should consider establishing a new, nationally competitive discretionary grant program that is dedicated to providing funding to the most nationally and regionally significant rail-roadway improvement projects in the Nation. Unused annual Section 130 state allotments could supplement this program or could be used directed to a separate "pool" for distribution to meritorious projects through a nationally competitive process.

BOLSTER THE CRISI PROGRAM AND BETTER DEFINE APPLICANT ELIGIBILITY

We applaud Congress for authorizing the Consolidated Rail Infrastructure and Safety Improvements (CRISI) program funded at about $240 million per year to improve the safety, efficiency, and reliability of passenger and freight rail. We support the Majority proposal to direct $55 billion over five years toward freight and passenger rail infrastructure, and respectfully recommend that a significant portion be dedicated to grade separations. With grade separations in urban areas in our experience costing an estimated $100 million each, additional CRISI funding is warranted.

In addition, we contend the definition of eligible applicants in the CRISI authorizing statute is problematic and respectfully request that it be amended. The statute defines eligible applicants as "political subdivisions of a State," a term not clearly defined in Federal law and a category without clearly enumerated eligible entities. As an example of the negative impact of this lack of clarity, consider that when ACE Construction Authority applied for funds from the similarly structured Rail Line Relocation and Improvement Capital Grant Program, FRA legal counsel opined that we were ineligible to apply. This was despite the fact that ACE Construction Authority was a California joint powers authority comprised of 30 cities and Los Angeles County, and had been delegated all powers, such as eminent domain and others, necessary to implement a $1.8 billion grade crossing safety program. FRA counsel said that ACE Construction Authority lacked two attributes common to a political subdivision of a State: first, a police force and, second, taxing authority. However, neither attribute is necessary to implement a program of crossing improvements, as

we have been doing for nearly 20 years. We urge Congress to expand the definition of eligible applicants in this program, preferably modeled after the more expansive definition used in the statute authorizing the INFRA program.

CONSIDER EFFECTS OF RAILROAD CONTRIBUTION TO GRADE SEPARATION PROJECTS

As you know, Federal law limits the railroad contribution to a grade separation project to no more than 5 percent of cost, with a further restriction that the contribution level be based on a project's theoretical, as opposed to actual, cost. Railroad contributions have averaged about $3 million per each ACE Trade Corridor grade separation, which typically cost more than $100 million.

Congresswoman Grace Napolitano represents the San Gabriel Valley and has long been a leading champion of the ACE Program in Congress. She has strenuously urged the railroads to increase their grade separation contribution to be commensurate to the benefits realized. Although we truly appreciate Congresswoman Napolitano's advocacy, we have not taken a position on this matter, and instead have focused on ensuring our working relationship with Union Pacific Railroad remains cooperative and cost-effective in implementing the ACE Program. If Congress decides to revisit the issue of the railroad contribution, we do offer the observation that the Federal contribution limit creates a disincentive to use minor Federal funding on a grade separation in a state like California where the railroad contribution is set at 10 percent if the project is solely funded from state or local sources. We have, in fact, deprogrammed Federal funds from two of our grade separation projects that are currently under construction because the presence of those funds would have had the effect of halving the railroad contribution.

In closing, I thank the Chairman and Members of the panel for this opportunity to offer testimony regarding the ACE Program and our recommendations for improvements to Federal funding programs. I would like to express my appreciation to Congresswoman Grace Napolitano for her advocacy for the ACE Program for more than two decades. She is a strong champion of improving grade crossing safety on behalf of our communities and I thank her for her service.

Mr. LIPINSKI. Thank you.

I now recognize Ms. Maleh for 5 minutes.

Ms. MALEH. Chairman Lipinski, Ranking Member Crawford, and members of the subcommittee——

Mr. LIPINSKI. Can you pull the microphone closer?

Ms. MALEH. Thank you for inviting me to testify about Operation Lifesaver, Inc.'s ongoing work to save lives at grade crossings and along rights-of-way. My name is Rachel Maleh, and I have been executive director since November of 2018.

Operation Lifesaver started in 1972 in Idaho and quickly expanded to other States around the U.S. The national office was established in 1986. OLI is the only nationally recognized nonprofit leader of rail safety education.

Our mission is to save lives by empowering the public to make safer choices near tracks and trains. We do this through a network of active programs across the country in each State and through public education and awareness campaigns.

Our safety partners include Federal, State, and local government agencies, highway safety education, America's railroads, and railway suppliers. Together we promote the three E's—education, engineering, and enforcement.

OLI's funding comes from Federal partners, private sector contributors, including Class I railroads and railway suppliers and foundation grants. About 64 percent of our funding is from Federal resources. Private partners account for 31 percent, and foundation grants contribute 5 percent.

The heart of OLI is its grassroots network of State program directors and volunteers in 45 States and the District of Columbia. Our volunteers are out in their communities every day. We educate

people about how to safely navigate grade crossings and to never use train tracks as a shortcut pathway.

Our 2018 annual report shows that 1.6 million people were reached directly across the United States in over 20,000 Operation Lifesaver presentations, training classes, and events. All of these efforts are free of charge and given in the interest of safety.

Our primary Federal partners are the Federal Railroad Administration, the Federal Highway Administration, and the Federal Transit Administration. One of the most visible results of our Federal partnerships are the competitive rail safety grants that OLI awards to State Operation Lifesaver programs, commuter railroads, and rail transit agencies.

In 2019, OLI used FRA funding to award rail safety grants through a competitive process to 13 State programs, including States that rank among the top 15 for grade crossing and trespass incidents. Last year, OLI used FTA funding to award competitive rail transit safety grants to 10 agencies in 8 States. This Federal funding truly is making a difference in communities across the Nation.

Funding from the Posner Foundation of Pittsburgh allowed us to extend the reach of these federally funded projects. While we are making great strides in reducing crossing collisions, which have fallen by 82 percent since 1972, it is still a startling fact that every 3 hours in the U.S. a person or a vehicle is hit by a train. That is why rail safety education is so important still today.

One example of how OLI's awareness is making a difference is through our Rail Safety Week held each year, the last week in September. This year, Rail Safety Week will take place Monday, September 21, through Sunday, September 27, in the U.S., Canada, and Mexico, making it truly a North American effort.

OLI's efforts act as a force multiplier, leveraging Federal funds for greater impact. Since 2017, we have awarded a total of 29 Federal FRA competitive State grant funds for more than $400,000, with the return of more than $1.4 million to States and communities.

In the Chicago area, OLI is partnering with FRA on a trespass prevention education project to see how our Near Miss—Headphones PSA affects the behavior of the young male demographic. Illinois Operation Lifesaver also works closely with Metra commuter rail on education outreach.

Our Find the Blue and White Emergency Notification System Sign PSA campaign shows drivers what to do if they get stuck on tracks. This PSA is being distributed nationally through a digital and broadcast campaign.

Each time a potentially catastrophic incident at a crossing is prevented, lives are saved, injuries are avoided, and communities are safer. This is our impact. If Operation Lifesaver were fortunate enough to receive additional funds from Federal sources, we could expand the successful Federal-State grants and develop additional programs and resources for our State programs.

On behalf of Operation Lifesaver, I am grateful to our Federal, State, and local government safety partners, as well as our private contributors for their continued support. We hope you will learn

more about Operation Lifesaver and join us in our safety efforts by visiting us at OLI.org.

Thank you very much.

[Ms. Maleh's prepared statement follows:]

Prepared Statement of Rachel Maleh, Executive Director, Operation Lifesaver, Inc.

INTRODUCTION

Chairman Lipinski, Ranking Member Crawford, and Members of the Subcommittee, thank you for inviting me to testify in today's hearing to talk about Operation Lifesaver, Inc.'s ongoing work to save lives at grade crossings and along rights of way.

My name is Rachel Maleh, and I have been Executive Director of this organization since November of 2018. With a background in nonprofit management and a passion for working with mission-driven organizations, I am energized and excited to see this organization grow and succeed.

OLI is the only nationally recognized nonprofit leader of rail safety education. Our mission is to save lives by empowering the public to make safer choices near tracks and trains. We do this through a network of active state programs across the country and through public education and awareness campaigns. These rail safety awareness campaigns use innovative marketing and digital communications to educate people about staying safe near tracks and trains. The state programs are partners of the national Operation Lifesaver organization.

Our safety partners include federal, state and local government agencies, highway safety organizations, America's railroads and railway suppliers. Together, we promote the three E's—Education, Enforcement and Engineering—to keep people safe around tracks and railway crossings across the country.

The heart of Operation Lifesaver is its grassroots network of state program directors and volunteers in 45 states and the District of Columbia. Our volunteers are out in their communities every day spreading our lifesaving messages with safety presentations tailored for a range of audiences. We speak to law enforcement and first responders, community groups, local businesses, K–12 students and college students, new drivers, professional truck drivers and school bus drivers. We educate people about how to safely navigate grade crossings, and to never use train tracks as a short cut or pathway.

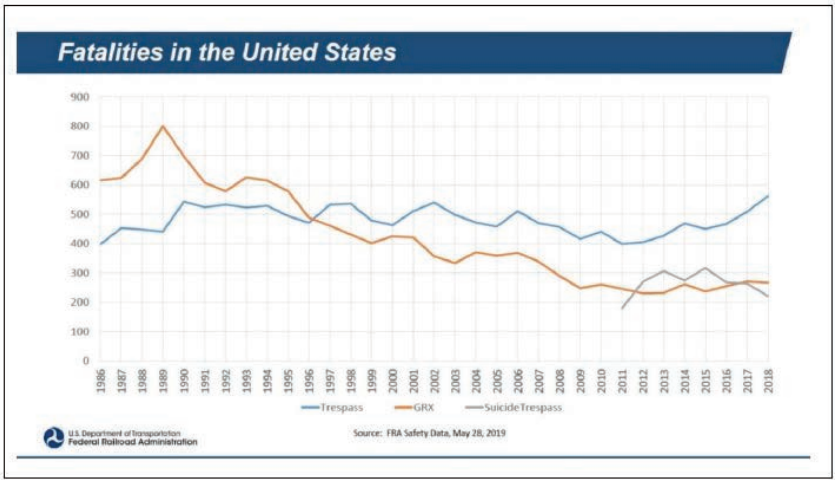
All these outreach efforts are free of charge and given in the interest of safety. Our passionate volunteers are one of Operation Lifesaver's greatest strengths. Our volunteers are community leaders, active and retired train crew members, law enforcement officers and trucking industry representatives, as well as people who have been personally touched by track tragedies who want to help keep people safe in their communities.

HISTORY

Operation Lifesaver got its start in 1972 in Idaho as a six-week public awareness educational campaign to promote highway-rail grade crossing safety. At the time, there were approximately 12,000 annual vehicle-train crossing collisions in the United States. The program was a success and quickly expanded to other states. Within a decade there were state OL programs around the U.S. The National Office of Operation Lifesaver, Inc. was established in 1986.

By 2018, the number of crossing collisions had dropped by 82 percent to approximately 2,200. This significant improvement is the result of a concerted safety partnership among states, the federal government, law enforcement agencies and railroads that included crossing closures, federal funding for grade crossing engineering improvements and enforcement of crossing safety laws. Operation Lifesaver's consistent education efforts also have contributed to these safety gains.

The chart below shows trends in railroad grade trespass incidents, grade crossing incidents, and suicide-related trespass incidents from FRA.



The effectiveness of the U.S. Operation Lifesaver program has spurred other efforts in North America and across the globe. Canada adopted the Operation Lifesaver program in 1980, and Estonia followed in 2004. In 2014, the Association of Mexican Railroads signed a cooperative agreement with OLI to work together on rail safety issues. South Africa's Rail Safety Regulator also signed a cooperative agreement with OLI in 2017.

Operation Lifesaver Efforts and Partners

The National Office of Operation Lifesaver, Inc., with four full time positions including mine, works with the state programs and develop materials and programs with a consistent message to distribute to the states. Across the U.S., Operation Lifesaver has 1,024 active volunteers, and we are adding several hundred trained volunteers each year.

Operation Lifesaver has been able to sustain our educational outreach efforts at the state and national levels thanks to the support of a wide variety of partners. We work closely with public and private organizations at the federal, state, and local level.

OLI's funding comes from federal partners, private sector contributors, including Class I railroads and railway suppliers, and foundation grants. About 64% of our funding is from federal resources, private partners account for 31%, and foundation grants contribute 5%.

Our primary federal partners are the Federal Railroad Administration (FRA), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA). FRA has supported Operation Lifesaver since 1988. Our FRA grants are funded on an annual basis. We also recently entered into a new five-year cooperative agreement with FHWA. These federal partnerships are critically important for OLI's ongoing rail safety education efforts.[1]

One of the most visible results of our partnerships with FRA, FHWA and FTA are the competitive rail safety grants that OLI awards to state Operation Lifesaver programs, commuter railroads and rail transit agencies around the U.S. For example, in 2019 OLI used FRA funding to award rail safety grants to 13 state programs through a competitive process. Included were states that rank among the top 15 for grade crossing and trespass incidents. OLI last year also used FTA funding to award competitive rail transit safety grants to 10 transit agencies in eight states. This federal funding truly is making a difference in communities across the nation.

Private Foundation Grants Extend the Reach of Federal Grants

Our private grant funding from the Posner Foundation of Pittsburgh allows us to extend the reach of these federally funded projects. OLI received its first private

[1] See Appendix 1, pages 9–10 [page nos. correspond to the statement in its original format and not as it appears here—Ed.]

grant funding in late 2018 from the Posner Foundation of Pittsburgh for projects in 2019 and again this year.

The Posner Grant enabled OLI in 2019 to award rail safety awareness campaign funding to five states who had submitted applications for the FRA competitive state rail safety grants, bringing the total number of states receiving grants to 18.

PUBLIC AWARENESS SAFETY CAMPAIGNS

Operation Lifesaver, Inc. for decades has worked to create and distribute rail safety awareness campaigns with the help of our safety partners. For example, in 2014 we launched the "See Tracks? Think Train!" campaign, partnering with the Association of American Railroads to develop and distribute public service announcements (PSAs), graphics and safety tips to communities nationwide. The campaign continues through our state programs, as well as on the seetracksthinktrain.org microsite, where drivers and pedestrians can view the PSAs and download safety tips and graphics to help share lifesaving information. Our federal partners also helped with that campaign and continue to assist us with developing new information and materials that will resonate with today's busy, distracted public.

As I mentioned, one of the most effective and longstanding partnerships for Operation Lifesaver is our relationship with the Federal Railroad Administration. For years, FRA grant funding has been used to offer competitive state rail safety grants to state programs that allow those programs a broader reach with lifesaving messages.

Examples of 2019 State OL Safety Efforts, Partnerships and FRA Grant Projects

- *Missouri Operation Lifesaver* was awarded a competitive FRA grant for a targeted rail safety campaign that included: Radio and Video PSA distribution statewide, Digital Media ads during Rail Safety Week, a poster contest promoted through the Missouri State High School Activities Association and fall sporting events, plus Officer on the Train Events during Rail Safety Week. In the wake of these efforts, preliminary Missouri numbers for crossing crashes for 2019 appear to be down 23% compared to 2018. Fatalities are also down 62% at three and injuries are also down 7% at 13 in 2019 compared to the same time period in 2018.[2]
- *Oregon Operation Lifesaver* boosted social media posts during key months to reach people where an increase in incidents occurred, reaching 73,979 people through social media. Oregon Lifesaver worked with Oregon Department of Transportation (ODOT) Rail and placed Geo-Fencing digital ads around Portland in summer months, in areas where ODOT saw an increase in trespassing and crossing incidents. The ad reached 167,717 people in one month. Also, in 2018 Oregon participated in the new Crossing Action Plan with ODOT, building a partnership for funding and awareness in the state.[3]
- *South Carolina Operation Lifesaver* partnered with the South Carolina Transport Police to educate professional truck drivers about the ENS sign using the "Find the Blue and White to Save Your Life" PSA in social media posts, presentations and materials. High school students were also targeted. In addition, through an FRA Grant received to promote "Find the Blue and White to Save your Life," truck drivers were targeted with Geo-Fencing digital and radio PSAs, yielding millions of impressions and reaching hundreds of thousands.[4]

2019 FTA Competitive Grants Project Examples[5]

- The Metropolitan Transit Authority of Harris County's (METRO) project provided education to the Houston community about rail transit safety by distributing approved OLI materials, displaying transit safety messages on portable billboards and promoting rail safety education on social media.
- Caltrain conducted a safety awareness campaign, "You Are Not Faster Than A Train," with a short rail safety video featuring MythBusters' Kari Byron, direct outreach, social media campaigns, brochures, and a podcast.
- Metrolink's awareness campaign included geo fencing display advertising and English and Spanish radio commercials targeted at males ages 18–39 in Los Angeles, Orange, Riverside, San Bernardino and Ventura counties.

[Page nos. for the appendixes listed below correspond to the statement in its original format and not as it appears here—Ed.]

[2] See Appendix 2, pages 10–11

[3] See Appendix 3, pages 11–12

[4] See Appendix 4, pages 12–13

[5] See Appendix 5, page 13

WHY OPERATION LIFESAVER IS STILL NEEDED

While the number of highway-rail crossing collisions, deaths and injuries has dropped considerably over the past five decades, it's still a startling fact that about every three hours in the U.S., a person or vehicle is hit by a train.

Clearly, too many people don't believe they must "always expect a train." Too many drivers fail to understand that a train cannot stop quickly; they don't know that an average freight train takes a mile and a half to come to a stop.

It's for these reasons, and more, that Operation Lifesaver's rail safety education mission is still important today, as we start our 48th year of existence. The information below indicates the extent of the issue.

- Today, more than 50 percent of vehicle/train crashes occur at public grade crossings that are equipped with active warning devices.
- Impatient drivers, perhaps distracted by mobile devices and smartphones, too often think they can beat a train at a crossing.
- A motorist is almost 20 times more likely to die in a crash involving a train than in a collision with another motor vehicle.
- The impact of a train striking a car or truck is comparable to a soda can being run over by a car.

Another challenge is the increase in trespass fatalities—people who either don't realize it's illegal and dangerous to walk on railroad tracks or are intentionally putting themselves in harm's way. Some of our recent projects, funded by our federal partners and new private grants, are targeted to the trespass problem.

WHAT'S WORKING

One example of how Operation Lifesaver's public awareness efforts are making a difference is *Rail Safety Week (RSW)*, OLI's largest communications and marketing effort each year. RSW is a week-long focused campaign stressing the importance of rail safety with the general public. OLI has used funding from our federal partners to help us develop Rail Safety Week materials and messaging for public education; in addition, we encourage state programs applying for competitive safety grants to concentrate their campaigns during Rail Safety Week for greater total impact.

The 2019 observance was the third annual U.S. event and second joint observance with Operation Lifesaver Canada. "Operation Clear Track," an enforcement effort held on the Tuesday of RSW, was led by Amtrak.

This year, Rail Safety Week will take place Monday, September 21 through Sunday, September 27. For the first time, Mexico will join in the observance of Rail Safety Week this year, making it truly a North American effort.

Another part of Rail Safety Week is our "Stop Track Tragedies" video campaign, which highlights the stories of real people whose lives have been forever changed by trespass and crossing incidents. These human stories resonate more than reams of data.

Last year, the Stop Track Tragedies videos included the story of Ashley Igo. In 1999, Ashley, then just a child, survived a semi-truck and train collision at a crossing in Bourbonnais, Illinois. Ashley's mother, another relative, and two friends were among those killed in that horrific crash, which killed several others and caused injuries to many more passengers. Ashley survived but lost part of her leg and now wears a prosthesis. We were so grateful to Ashley for being a part of our campaign, and for speaking out about the importance of safe driving at every grade crossing.

We've seen great results from Rail Safety Week efforts across the U.S.[6] Preliminary 2019 Rail Safety Week results show the impact of Rail Safety Week continues to grow, with increases in the number of local broadcast news stories, social media engagement, and pageviews of the OLI website. In 2019, participation in Operation Clear Track from law enforcement agencies and others rose, with events at more than 1,600 locations in 47 states nationwide. During Operation Clear Track, safety partners distribute safety tips cards to motorists and pedestrians. The Operation Clear Track enforcement efforts drive much of the news coverage during Rail Safety Week.

INNOVATIVE SAFETY EDUCATION PROGRAMS

Our national office develops innovative safety education programs that are specifically geared for the audiences for whom a crossing collision poses the greatest risk. We work with subject matter experts to produce accurate, engaging products that can save lives.

Our eLearning programs—offering free online, interactive programs—for Professional Drivers, School Bus Drivers, and First Responders prepare these drivers for situations they may encounter near railroad tracks and crossings. Thousands of drivers have been exposed to these eLearning programs since they started a few years ago.

For law enforcement personnel, OLI has a special Grade Crossing Collision Investigation (GCCI) course that teaches law enforcement officers how to ensure their personal safety, both while responding to rail collision incidents and throughout their investigation of rail-related collisions and incidents. A completely revamped version of this course, now expanded for all first responders and renamed Railroad

[6] See Appendix 6, page 13 [page no. corresponds to the statement in its original format and not as it appears here—Ed.]

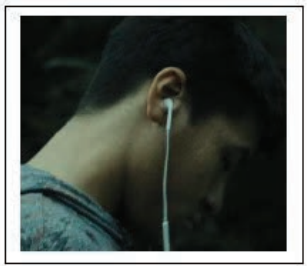
Investigation and Safety Course, or RISC, is being rolled out this year. We have started training the facilitators who will be involved in presenting this in-person program across the U.S.

A FORCE MULTIPLIER

We recently did an ROI analysis for Operation Lifesaver's Federal Railroad Administration grant funding. Here's what we found. Since 2017, OLI awarded a total of 29 FRA Competitive State Grants for a total of approximately $406,000. Those grant projects had overall return of morethan $1.4 million to the states and communities, in terms of campaign value and other metrics.

The federal investment in Operation Lifesaver, Inc. yields benefits from more than just our state competitive grant programs—our PSA campaigns, website, and social media activity further extend the reach for our lifesaving messages. This federal partnership is a key component of OLI's project activity.

In the Chicago area, OLI is partnering with the FRA on a trespass prevention education project in Cook County to see how a targeted campaign with our "Near Miss—Headphones" PSA affects the behavior of a young male demographic.



Our "Find the Blue and White" Emergency Notification Sign PSA campaign has been available nationally for over a year, with a broadcast, cable and social media placement campaign. The six-month broadcast and cable results alone for the ENS PSA include more than 13,600 airings confirmed by Nielsen Media Research, with a total audience of more than 156 million gross impressions, and estimated ad equivalency topping $3.5 million.

In 2019, with funds from our federal safety partners, OLI revamped the oli.org website to be completely mobile-friendly, conform to web design best practices and improve navigation. The new site launched in November 2019. The oli.org website had more than 600,000 visitors last year. New visitors to the site also rose in 2019; mobile users of the site were up more than 18% from 2018, showing the ROI of the mobile-friendly redesign.

In social media, total followers for OLI's social channels (Facebook, Instagram, Pinterest and Twitter) continues to grow. We're nearing 42,000 total followers across those accounts, with total social media impressions up 55 percent between 2018 and 2019, to 23.5 million.

Our 2018 annual report[7] is just out, and it shows that 1.6 million people were reached directly across the U.S. in over 20,000 Operation Lifesaver presentations, training classes and events.

[7] See Appendix 7, page 13 [page no. corresponds to the statement in its original format and not as it appears here—Ed.]

There are intangible benefits from Operation Lifesaver's efforts across the U.S., as well. Collisions between trains and vehicles often result in loss of life or catastrophic injury. These incidents can tie up crossings for hours, wreaking havoc on traffic in communities and impeding the flow of commerce. Each time a potentially catastrophic incident at a crossing is prevented, lives are saved, injuries are avoided, and communities are safer—this is Operation Lifesaver's impact. Also, these national results do not include the trickle-down ROI that occurs at the state and local level thanks to our active and successful state programs.

ADDITIONAL OPPORTUNITIES

If Operation Lifesaver were to be fortunate enough to receive additional funds from federal sources, we would have the opportunity to do more of our grassroots work. Our first use of additional funding would be to expand the successful state grant programs. For example, in 2019 we received 26 applications for FRA competitive state grants. The funding only allowed us to approve 13 applications. Private Posner Foundation of Pittsburgh funding provided an additional five, allowing us to fund 18 out of 26 applications. We would welcome additional federal grant funds to fund crossing safety and trespass prevention campaigns and efforts in more states.

It's important to note that these competitive grant programs leverage local rail safety education funding with federal grant funding. Operation Lifesaver competitive grant programs from FHWA, FRA and FTA all require a local dollar match in order to receive federal funds for safety activities and campaigns, underscoring the shared responsibility for safety efforts in communities. Our state programs are managed by dedicated individuals who know best the rail safety education needs of their states/communities and how best to engage their local stakeholders to receive match dollars and in-kind services that amplify the federal investment.

Other increased federal funds would be put to good use developing additional tools and resources to distribute to our state programs so that they can make an even bigger impact in their communities. For example, this year we are using federal grant funds to update OLI's most-used safety brochures with key safety tips for drivers, pedestrians, first responders, and others. These materials are distributed across the U.S. at state and local events. It has been almost ten years since we had the funding to update these vital resources, which will also be available on our website. In addition, as we work to tackle the more difficult problem of pedestrian trespassing, additional resources would help us reach more people in vulnerable demographics.

CONCLUSION

Operation Lifesaver will celebrate 50 years of saving lives in 2022. On behalf of Operation Lifesaver, I thank our federal, state and local government safety partners, as well as our private contributors, for your continued support. This small nonprofit has yielded big gains in reducing crossing incidents, deaths and injuries. Strong support for our rail safety efforts here also encourages international partnerships and the sharing of best practices.

The organization's future is solid, and new opportunities are ahead for expanding partnerships with both the national office and our state programs. Every day, Operation Lifesaver is saving lives by spreading our safety message. The more individuals and organizations become part of our efforts, the stronger and more effective our message becomes. If you are already part of the OLI family, thank you! If not, we hope you will learn more, and join our safety effort, at oli.org.

APPENDIX 1: FURTHER EXAMPLES OF FEDERALLY FUNDED OLI PROJECTS

2019 OLI Grant Funded Projects

- "Drive Safe Near Trains" video for new drivers and driver ed teachers
- Interactive eLearning program for first responders
- Find the Blue and White Emergency Notification System sign PSA—national distribution to broadcast and cable outlets and digital marketing
- A 3½ minute video, Rail Safety for Cement, Dump and Garbage Truck Drivers—A video to help drivers avoid tragic incidents like the January 31, 2018 incident where an Amtrak train carrying a group of politicians and lawmakers collided with a garbage truck at a crossing in Crozet, Virginia
- Near miss/headphones PSA targeted at younger male demographic—digital and other outreach
- A new resource for news media covering suicide-related rail incidents called Safe and Effective Messaging On Rail Incidents as well as a video with tips for news media covering rail-related stories

2020 Grants for State Operation Lifesaver Programs
- Highway-Rail Grade Crossing Competitive State Grants (FHWA)
- Competitive State Grants for Trespass or Highway-Rail Grade Crossing (FRA)
- Innovative Educational Operation Lifesaver State OL Grant (FRA)
- Public Awareness Grants (FRA)
- Administration Grants (FRA)

Federal Highway Administration (FHWA) Funding will allow OLI to carry out new projects this year, including:
- Competitive State Grants to state Operation Lifesaver programs to develop and carry out activities, such as Public Safety Announcements (PSA), community events, etc. to disseminate highway-rail grade crossings safety messages.
- Conduct Regional Meetings for state Operation Lifesaver programs.
- Provide technical assistance, training opportunities, and updated educational materials
- A new Public Service Announcement (PSA) which will focus on low clearance vehicles safely crossing the tracks at highway-rail grade crossings, and choosing safe routes that do not include humped crossings

Federal Railroad Administration funding will allow OLI to carry out additional projects this year, including:
- Update and distribute "Key Safety Tips" brochures for various audiences, including professional drivers of trucks, commercial buses, school buses; law enforcement and first responders; pedestrians; sports enthusiasts, snowmobile and ATV drivers
- Outreach to homeless populations
- Training and other Events for Operation Lifesaver State Program leaders and others

APPENDIX 2: MISSOURI OPERATION LIFESAVER SUCCESS STORY

Tim Hull, Executive Director, MO OL

Preliminary end of the year numbers for crossing crashes in Missouri for 2019 appear to be down 23% compared to 2018. Fatalities are also down 62% at three and injuries are also down 7% at 13 in 2019 compared to the same time period in 2018.

In 2018 Missouri experienced 8 fatalities at public rail crossings, which was a 62% increase for the year compared to 2017.

Missouri Pedestrian/trespass incidents appear to be following the nationwide trend, as our current numbers indicate an increase compared to the same time period in 2018. Missouri experienced 17 trespass incidents resulting in 12 fatalities and four injuries. Missouri trespass incidents are up one or 5%, and trespass fatalities are currently up slightly by 25% or an increase of three for 2019. (A couple of the trespass incidents are still under investigation and there is a good possibility that they will be reclassified at a suicide in one case and a homicide in the other as the individual in the last case died of gunshot wounds and was not struck by a train.) So, we may be even with 2018 numbers if those are changed.

What helped drive the success?

We conducted 5 Officer on the Train (OOT) events around the state, resulting in 120 traffic violations focusing primarily in and near our targets counties. These OOTs are performed with law enforcement officers in the engine of the train and multiple officers on the ground to chase violators. Media releases were issued primarily through the MO State Highway Patrol or railroads for these OOT events. Radio, TV and newspaper interviews were conducted during most of these events. (Four of the OOT operations were held during National Rail Safety Week Sept. 22–28, 2019). Seven Grade Crossing Collision Investigation Classes (GCCI) were given to 140 law enforcement officers primarily in our target counties. An additional 22 Positive Enforcement Programs, PEPs, were conducted at various rail crossing locations around the state primarily in those target counties in which a total of 5,667, people were contacted with a safety message and in some cases a brochure. (6 of those PEPs were conducted during National Rail Safety Week.)

Missouri Operation Lifesaver conducted a statewide radio ad and social media program for the months of July through September 2019. The cost of the project was $45,000.00. Funding was as follows:
- OLI/FRA—$20,000.00 (Competitive State Grant)
- Hwy Safety Grant—$10,000.00 (State match)
- Learfield Communication—$15,000.00 (Donated/in kind airtime)

The Campaign began July 15 and ran through Missouri Rail Safety Week September 22–28, 2019 to the end of September and Missouri Farm Safety Month. It included social media ads on Facebook and Instagram, and radio PSAs.

Results of Targeting Counties—Decline in the Target County Number of Crashes, As Well As Statewide Incidents.

Eight counties were targeted in 2019 using crash data from 2017–2018 and unsafe motorists reports from UP and BNSF Railroads. A total of 20 crashes with five fatalities and seven injuries occurred in those 8 target counties during the years 2017 and 2018. In those specific counties the preliminary numbers for crash data in 2019 are 15 crashes, three fatalities and five injuries. We have experienced a substantial decrease to date in crossing collisions statewide compared to the same time period as last year, and trespassing incidents thus far appear to be slightly higher compared to that same time period, encouraging us to conduct even more of these enforcement events in 2020 and continue to target our highest incident locations.

And let's not forget our OLAVs who worked very hard in getting our safety message out. The number of OL presentations was also up in 2019 compared to 2018 as follows:

In 2018 Missouri OLAVs reported 485 presentations to 10,868 attendees.

In 2019 Missouri OLAVs reported 643 presentations to 9,397 attendees.

APPENDIX 3: OREGON OPERATION LIFESAVER SUCCESS STORY

Steven Kreins, Executive Director, OR OL

2019 was a very busy year for Oregon Operation Lifesaver. We exceeded all our 2019 goals. As of December 26, 2019, there has been 209 presentations and 31 special events in our state reaching 24,735 people. We still have a few events to report by the end of the calendar year and hope to reach a little over 25,000 people for the year. This is an increase from 18,779 people in 2018, which means we exceeded our 10% increase for 2019. Currently we sit around 2,400 volunteer hours in 2019 that helped us exceed our goal in Oregon. We continue to recruit new and active volunteers in our state and added 4 new volunteers to our program in 2019.

Oregon is lucky to have Special Agent in charge Vince Hoffarth, who teaches at the Oregon State Police Academy to all new cadets. Vince Hoffarth who also holds a board position for Oregon Operation Lifesaver has instructed 6 classes this year to new cadets reaching 240 new police officers in our state. This is big for Oregon as we try and push more enforcement from agencies going forward.

In 2019 Oregon increased its social media platform by adding Twitter and continuing Facebook. Our Facebook has 959 followers with 25% of that being women and 75% being men. Most of our followers are between 35–65 years old. Oregon added Twitter to our profile in 2018 with a following of 1,098 followers. Oregon will continue to push our social media platforms in 2020 to reach all age groups. Oregon Lifesaver boosted ads this year during key months to reach people where we were seeing an increase in incidents. Oregon boosted multiple ads costing around the 500-dollar mark reaching 73,979 people through social media.

Oregon Lifesaver worked with ODOT Rail and a group that does Geo Fencing to place a Geo Fence ad around Portland. This ad stretched as far as Woodburn and east of Troutdale. The ad was placed in the summer where ODOT saw an increase in trespassing and crossing incidents. The ad cost 2,000.00 dollars for one month and we reached 167,717 people.

In 2018 we participated in the new Crossing Action Plan with ODOT. We built a partnership in 2019 to receive funding and help increase awareness around Oregon with advertisement and PSA ads. We hope to continue our efforts in 2020. Area coordinators, volunteers and state partners continued to identify locations throughout the state that would be effective in new partnerships and furthering the mission of Oregon Operation Lifesaver.

Oregon Lifesaver has started to work with ODOT and Western University to help push out more information in the new Drivers-Ed manual scheduled to come out in 2020. We will continue to work with this group going forward as over 13,000 students go through Drivers-Ed every year. Oregon made every effort in 2019 to increase our driver education efforts by increasing our presentations and people reached. Currently we have participated in 21 driver education presentations reaching 3,609 people in 2019. We hope to see an increase in this field with our new partnership with Western University and the Drivers-Ed program.

Enforcement efforts have been a big part of our mission in 2019 and will continue in 2020. Union Pacific participated in 6 "Officer-On-A-Train" enforcement events. Multiple city agencies have participated in these events as well as rail safety week. Oregon Operation Lifesaver sent out three letters to photographers and two schools

who posted photos on the tracks in Oregon. We have also been in contact with one PUD electric company and a newspaper who held a photo contest in our state where railroad trespassing photos won a prize. We will continue in 2020 to send more letters to media and groups who participate in this type of behavior.

APPENDIX 4: SOUTH CAROLINA OPERATION LIFESAVER SUCCESS STORY

Janice Cowen, State Coordinator, SC OL

We partnered with the South Carolina Transport Police to educate professional truck drivers about the ENS sign using the "Find the Blue and White to Save Your Life" PSA in social media posts, presentations and support postcards and posters. See the steps below that our STP took to spread this message to companies with commercial motor vehicle fleets reaching thousands of truck drivers in multiple ways.

Truck Driver Outreach Results:

- Six Regional Sergeants within SC State Transport Police (STP) were identified and assigned the duty of distribution of "Find the Blue and White to Save Your Life" Presentations, Posters, Postcards, Key Chains and PSAs to 33 companies with commercial motor vehicle fleets
- STP distributed materials to 20 companies at Michelin Fleet Safety Solutions Conference asking companies to pledge to railroad safety in Spartanburg
- 7 Crossings and Scale Houses highly used by truck drivers were targeted for material distribution by STP staff
- 7 Gas Stations and Trucks stops highly used by truck drivers were targeted for material distribution by STP staff
- STP DRIVE to Zero team distributed information, cards and key chains to students and faculty at Westwood, Greenwood, and Lexington High Schools
- STP Twitter disseminated the "Find the Blue and White" PSA and related information as well as sharing Rail Safety Week Daily Focus messages

In addition, through an FRA Grant received to promote "Find the Blue and White to Save your Life," we targeted Truck Drivers with Geo-Fencing Digital and Radio PSAs with millions of impressions and hundreds of thousands net reached.

Geo-Fencing and Radio Results:

- 25 paid matched by 75 FREE radio PSAs reaching 3,825,000 gross impressions with the net reach being 580,900 Adults 18+
- Digital PSAs reaching 501,050 impressions distributed in concern areas for railroad incidents: Charleston with 119,460, Greer with 55,686, Greenville with 44,655, Florence with 35,630 and Spartanburg with 28,167

APPENDIX 5: 2019 FTA GRANT PROJECTS

https://s3.us-east-2.amazonaws.com/downloads.oli.org/NAC/MRC+Materials/2019-FTA-Transit-Grants-Materials-Update-November-2019.pdf

APPENDIX 6: 2018 RAIL SAFETY WEEK RESULTS REPORT

https://oli.org/sites/default/files/2019-08/2018__OLI__Rail__Safety__Week__Report.pdf

APPENDIX 7: 2018 OPERATION LIFESAVER ANNUAL REPORT

https://yearly.report/from/#/oli/2018-annual-report

Mr. LIPINSKI. Thank you, Ms. Maleh.

I now recognize Mr. O'Shea for 5 minutes.

Mr. O'SHEA. Thank you, Chairman Lipinski and ranking members of the subcommittee. My name is Matthew O'Shea, and I serve as alderman of Chicago's 19th Ward.

Blocked at-grade rail crossings represent a serious threat to the safety of my community and congressional action is needed. The 19th Ward includes 10 at-grade rail crossings along the Elsdon and Blue Island Lines. It is not uncommon for any of these crossings to be blocked for extended periods of time.

While historically we have lived with the inconvenience, our problems were amplified exponentially in 2013 when CSX Railroad

acquired the Elsdon Line. Since then, blocked crossings have become commonplace, at times lasting for hours.

In 2013, when the Surface Transportation Board granted CSX the authority to operate on the Elsdon Line, they contemplated the impact of blocked at-grade crossings on our neighborhood. In response, CSX agreed to conditions that required them to cut any train that blocks any crossing for longer than 10 minutes.

In 2015, we petitioned the STB to enforce these conditions and provided them with several hundred unique letters from residents regarding blocked crossings. I will share with you some of those highlights: multiple reports of children climbing through stopped trains; disruption to personal lives, including late arrivals at school or daycare; missed medical appointments or flights; lost wages as a result of blocked crossings.

We even heard from a pair of newlyweds who missed the first hour of their own wedding reception after being stopped by a train. A resident who missed saying her final goodbyes to her grandfather because a stopped train prevented her from getting to Little Company of Mary Hospital. She arrived 15 minutes too late.

But most disturbing are the comments from first responders who could not properly address an emergency or secure adequate backup because of a blocked at-grade rail crossing. A firefighter wrote, and I quote, "Every minute a cardiac arrest victim goes without CPR means a 10-percent decrease in survival rate."

A doctor at Advocate Christ Medical Center described times she has been stuck by blocked crossings and noted that 15 minutes can determine the success or failure in saving a fetus in distress.

Four years later, in 2019, now in 2020, a final decision from the STB is still pending. But CSX has successfully argued that it is operationally very difficult, if not impossible, to cut a train in most circumstances. The STB agreed and released them of that requirement.

Now think about that timeline for a second. In 2013, CSX tells the STB that in exchange for the right to operate on the Elsdon Line and substantially increase the volume of traffic in the area, it will cut any train that is stopped for longer than 10 minutes. Now they don't actually cut the trains. And when questioned, they argued that effectively doing so is operationally extremely difficult, near impossible.

Is anyone else wondering why CSX offered to cut the trains in the first place, or why they obligated themselves to cut trains if doing so was so difficult? That original operating order included several other provisions that have not yet been stricken by the STB, the most important of which is to install a closed-circuit video system at both Advocate Christ Medical Center, so staff would know when a crossing was blocked and could better coordinate with emergency vehicles.

Advocate Christ is the only level 1 trauma center that serves the Southwest Side of Chicago. It is also the busiest trauma center in the entire State of Illinois. Here we are in 2020, and yet no system has been installed. The lack of accountability is troubling.

The conditions imposed by the STB in the original order authorizing CSX to operate on the Elsdon Line show an underlying belief that railroads must cause no harm to the communities in which

they operate. Who will step in and respond when railroads aren't good neighbors? Why hasn't the STB levied fines or revoked CSX's operating agreement?

Federal regulation is pervasive in the railroad industry, but it is silent on the issue of at-grade crossings. That must change. Without action by Congress, this situation, both in my community and all across our country, will only get worse. Local communities are not equipped to police these matters; Congress is.

I traveled today from Chicago here to Washington, DC, seeking your support. Help me address the problems on the Elsdon Line by signing on to a letter asking the STB to mandate a video system at Advocate Christ Medical Center.

Second, enact simple, commonsense regulations, requiring all trains to clear at-grade crossings in 3 minutes or less, and establishing a penalty system for any at-grade crossings blocked for 10 minutes or more.

I appreciate your time. Thank you.

[Mr. O'Shea's prepared statement follows:]

Prepared Statement of Hon. Matthew O'Shea, Alderman, 19th Ward of Chicago, Chicago City Council

Thank you, Chairman Lipinski and members of the Subcommittee. I am Matthew O'Shea, and I have had the honor to serve as the Alderman for Chicago's 19th Ward since 2011. I'll be speaking today about the severe impact that blocked at-grade crossings have had on my largely residential community on Chicago's far southwest side.

The current federal framework to regulate railroad operations has failed to protect our community from wide-ranging and potentially life-threatening effects directly caused by the manner in which CSX operates one line in particular, the Elsdon Line, which runs through densely populated communities in the City of Chicago and surrounding municipalities.

Railroads are entirely capable of mitigating the effects of their operations on the communities where they operate, but will not do so voluntarily—our experience is, unfortunately, ample proof of that. Stronger measures are clearly necessary to ensure that railroads are not a threat to their neighbors. Because of the broad reach of federal law in the rail industry, only Congress can impose those necessary measures. I will include some simple but potentially effective proposals at the end of this statement.

I. Description of 19th Ward

A. Chicago's 19th Ward is comprised of the neighborhoods of Beverly, Mount Greenwood, and Morgan Park.

B. Our total population is over 50,000, a good-sized small city in itself, and is ⅔ white, a quarter African-American, five percent Hispanic, and about one percent Asian-American. We are a tight-knit community of predominantly single-family homes built in the early to mid-20th Century, with local businesses along 95th Street, 103rd Street, 111th Street, Western Avenue, Kedzie Avenue and Pulaski Road.

C. Several rail lines run through or border our Ward, including CSX's Blue Island Subdivision and the Elsdon Line, which run north-south through our Ward. I will be speaking today about the impact of the Elsdon Line, which runs through the heart of our community, parallel to Sacramento Avenue.

II. Impacts of CSX Operations 2013–2016

A. CSX was authorized to operate on the Elsdon Line in 2012 when it received approval from the Surface Transportation Board, or STB, after an extensive public comment process. Because the STB recognized that the communities surrounding the Elsdon Line are densely populated and the line has many at-grade crossings, including five in the 19th Ward, it imposed a number of conditions on the railroad to try to reduce the impacts of its planned increased operations. These conditions may have constituted a well-meaning attempt to re-

duce harm, but the community saw an immediate, dramatic and harmful impact once CSX started running on the Elsdon Line.

1. Virtually all of my comments reflect material that is already in the public record in the STB's docket, Finance Docket Number 35522.
2. The line existed but had been little-used previously, and CSX indicated that it expected traffic on the Elsdon Line to increase from 3–4 trains per day to over 20.
3. CSX promised to abide by a number of conditions as part of its operating approval, and noted that it expected to clear at-grade crossings in three minutes or less.
4. Here are some of the extremely detailed and specific conditions CSX voluntarily accepted in order to have permission to operate on the Elsdon Line. These conditions are listed in the STB's February 8, 2013 Decision [1] granting CSX permission to operate:
   a) Cut any train that blocked an at-grade crossing for more than 10 minutes. CSX cut trains on only a handful of the hundreds of occasions on which this occurred, and the STB eventually removed the requirement at CSX's request because it was effectively useless. Our railroads should be held to basic standards of good faith, which CSX's consistent failure to cut trains completely negated. If CSX found that it was just too hard to comply with the condition, that is a significant indication that it is unable to operate effectively on the line.
   b) Cooperate with school and park districts to identify at-grade crossings where additional pedestrian warning devices may be warranted, and provide informational materials concerning railroad safety to elementary, middle and high schools within 0.5 miles of the Elsdon Line.
   c) Notify Emergency Service Dispatching Centers for communities along the affected segments of all crossings blocked by trains that are stopped and may be unable to move for a significant period of time.
   d) Work with affected communities to minimize emergency vehicle delay by maintaining facilities for emergency communication with local Emergency Response Centers through a dedicated toll-free telephone number.
   e) To further assist with the timely response of emergency service providers for the Advocate Christ Medical Center and the Little Company of Mary Hospital, CSX shall consult with all appropriate agencies and hospitals to install a closed-circuit television system (CCTV) with video cameras (or another comparable system or acceptable option) so that the movement of trains can be predicted at the 95th Street highway/rail at-grade crossing.
5. This last point is extremely important. Advocate Christ Medical Center, just across the border in Oak Lawn, lies just to the west of the Elsdon Line, and the Little Company of Mary Hospital in Evergreen Park, just to the east of the line, are the primary health care facilities serving the 19th Ward. In fact, Advocate Christ serves the entire South Side of Chicago as a Level 1 Trauma Center and describes itself as the busiest Level 1 Trauma Center in Illinois. One of the first indications that all was not right on the Elsdon Line beginning in 2013 was the emergence of reports that emergency response vehicles were being blocked by slow or stopped trains, or by malfunctioning gates. When severely injured patients cannot get to the hospital, lives are literally at risk.

B. By late 2015, local Aldermen and state representatives were hearing every day from constituents with complaints about blocked at-grade crossings. Together with the Village of Evergreen Park, the City of Chicago petitioned the STB to make CSX abide by the conditions it had agreed to. We presented detailed evidence compiled over the course of CSX's operations on the Elsdon Line to prove that the railroad was consistently failing to comply with the conditions in its operating license.

C. Community letters: I will shortly share with you various comments from the community about the impact of blocked at-grade crossings. As you can imagine, in a dense urban area it does not take long for significant traffic backups to form, so that even if motorists want to seek a way around a blocked at-grade crossing, they can't. However, pedestrian safety is perhaps an even more urgent concern, as I'll describe. On two occasions, in 2016 and 2018, my office solicited letters for the record of the STB proceeding and got well over 200 unique responses. Here are the most pressing themes I heard from my community:

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[1] *CSX Transportation, Inc.—Acquisition of Operating Easement—Grand Trunk Western R.R. Co.*, STB Docket No. 35522 (Service Date Feb. 8, 2013).

1. Multiple instances of schoolchildren walking to school and climbing through a stopped train—as related by a number of commenters. I hope I do not need to highlight how incredibly dangerous this is.
2. Multiple accounts of parents unable to get their kids to or from school or daycare, missed medical appointments, missed flights, and residents being docked pay because they were late to work. One pair of newlyweds missed the first hour of their own wedding reception.
3. Most poignantly, one commenter could not reach the Little Company of Mary Hospital when her grandfather was dying and missed saying her goodbyes to him by 15 minutes because of a train blocking an at-grade crossing.
4. Most alarmingly from a public safety perspective, there are multiple accounts from physicians, police officers and fire/rescue/EMT personnel describing instances when they could not respond to an emergency or could not secure adequate backup because of a train blocking an at-grade crossing. As one career fire fighter explained, "every minute a cardiac arrest victim goes without CPR means a 10% decrease in survival rate. 10 minutes in those cases means zero chance to save a life." A doctor at Advocate Christ noted that 15 minutes can determine success or failure in saving a fetus in distress.

III. Current conditions

A. Conditions have improved since we began our regulatory effort with the STB in 2016, but the problem is not completely solved: we still experience several blocked at-grade crossings each month. In addition, the STB has taken the very unusual position of holding off on specific action,[2] leaving the community in a wait-and-see stance.

B. I note that rail traffic across the country has been decreasing in the time that CSX has operated the Elsdon Line, and that alone may account for any decrease in blocked at-grade crossings. We cannot be at the mercy of the commodity markets to know if our community will remain safe.

IV. Federal Regulation has failed to protect the 19th Ward from the effects of CSX's operations:

A. The bottom line here is that the federal government has largely failed us. CSX is essentially unregulated from our standpoint. When acquiring the line, the railroad had to make promises to the STB, the most substantial of which were cutting the trains and installing closed circuit TVs to hospitals.

B. I emphasize that the conditions the STB imposed indicate a clear recognition that railroads must be responsible to the communities in which they operate, and that, rather than acting with impunity, railroads must not be permitted to cause harm to the public, as has happened in the 19th Ward and surrounding communities.

C. Several years later we brought to the STB that CSX didn't do these things—there is no follow up or mechanism to ensure they are doing what they say. Advocate Christ Hospital to this day doesn't have the TV equipment (we assume Little Company of Mary also doesn't but they did not respond to our inquiry in time for this hearing).

D. But here's the biggest question—why doesn't anyone from the STB confirm whether CSX is abiding by its promises? The STB is the federal agency responsible for setting conditions on railroads, granting them permission to operate, and revoking that permission when the railroad fails to live up to its promises. Here, the STB initially imposed very specific requirements on the railroad in order to prevent the very situation we are living with today.

E. Why didn't STB fine CSX or impose other penalties when the agency learned CSX was out of compliance with its operating conditions on the Elsdon Line? Why do we allow this huge company to just tell us they did something and take their word for it? How can local communities rely on the promises of the railroads or the enforcement powers of the federal government if nobody will do anything—even when there have been repeated, consistent, and demonstrated violations? THIS is why action by Congress is necessary.

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[2] *CSX Transportation, Inc.—Acquisition of Operating Easement—Grand Trunk Western R.R. Co.*, STB Docket No. 35522 (Service Date Dec. 10, 2018).

V. Now I'll focus on how this Subcommittee and the Congress as a whole can help. Existing federal regulation does not adequately protect communities from the effects of blocked at-grade crossings and malfunctioning crossing gates.

A. Federal regulation is pervasive in the railroad industry except when it comes to at-grade crossings.
B. The current regulatory approach, which treats at-grade crossings primarily as a road safety issue regulated by individual states, is ineffective.

VI. Without action by Congress, the situation is only likely to get worse.

A. The Federal government recognizes that at-grade crossings are a significant safety concern:
1. In May 2019, in response to concerns from members of Congress, the Governmental Accounting Office issued a report urging Congress to direct the Federal Railroad Administration (FRA) to address the significant impacts of ever-longer freight trains, which today are frequently 2 miles, and in some cases 3 miles, long.[3]
a) This report specifically recommended that FRA engage with railroads, state and local governments, to (a) identify community-specific impacts of train operations, including longer trains, where streets and highways cross railroad rights-of-way and (b) develop potential solutions to reduce those impacts.[4]
2. In December 2019, the FRA set up a web portal where members of the public and law enforcement can report blocked at-grade crossings: https://www.fra.dot.gov/blockedcrossings/.
a) In announcing the effort, FRA pointed out that "there are no federal laws or regulations pertaining to blocked crossings."
b) Creation of the website is an indication that FRA recognizes that at-grade crossing safety is a significant issue for communities.
3. I emphasize that the 19th Ward and Evergreen Park have been successful in securing improvements in CSX's performance on the Elsdon Line only because of the specific conditions placed on the railroad by the STB. Communities should not have the burden to protect themselves on a case- by-case basis to make sure railroads do not have a seriously harmful impact. Where railroad operations already exist, there is no opportunity to force railroads to operate without harm to the surrounding community.

VII. As the representative of a heavily-impacted community, I propose today some straightforward measures Congress can enact that will simply and effectively improve at-grade crossing safety without burdening railroad operations:

A. Require moving trains to clear at-grade crossings in three minutes or less.
B. If a train blocks an at-grade crossing for 10 minutes or more—whether the train is stopped or in motion—impose fines for every minute a blockage persists at each crossing.
C. These straightforward performance-focused measures give railroads full discretion and flexibility to take whatever measures they require to achieve compliance.

It's that simple.

I thank the Subcommittee for your time today and would be happy to answer any questions.

Mr. LIPINSKI. Thank you, Alderman O'Shea.

I will now recognize Mr. Morris for 5 minutes.

Mr. MORRIS. Mr. Chairman, members of the subcommittee, good morning and thank you. My name is Jason Morris. I lead the Safety and Environmental Department at Norfolk Southern Corporation, and I appreciate the opportunity to provide the subcommittee with NS's perspective on the importance of grade crossing safety and addressing community concerns.

Our industry has been around a long time. NS's earliest predecessor began operations in 1830. While our industry expanded through most of the 19th century, the rail system in the U.S. was

[3] U.S. GOV'T ACCOUNTABILITY OFFICE, GAO–19–443, RAIL SAFETY: FREIGHT TRAINS ARE GETTING LONGER, AND ADDITIONAL INFORMATION IS NEEDED TO ASSESS THEIR IMPACT (2019), at 1.
[4] *Id.* at 28.

fully built out in about 1916 when railroad route-miles began to shrink.

Since that time, the communities we serve have continued to grow up around us. Population increases around rail corridors, combined with explosive growth in route-miles and vehicular traffic, have created a network of grade crossings that present challenges.

There are over 200,000 grade crossings in our country, and collisions at these crossings, along with trespasser incidents that are often nearby, account for over 90 percent of rail-related fatalities. Although crossing accidents per million train-miles have declined by more than 75 percent over the last 40 years, and the accident rate adjusted for both train-miles and vehicle-miles traveled has actually improved 17 percent since 2007, we should not become complacent. Behind these statistics are human beings, and we are committed to continuing a push to zero incidents.

We also recognize that as we conduct our operations through grade crossings, those operations can have community impacts, especially in higher growth communities and those where land-use planning has not accounted for the presence of rail corridors. Grade crossing elimination and consolidation projects are the surest means of avoiding crossing accidents and occupied crossings.

Finally, trespassing on railroad property is also of great concern. Enforcement and education are key to reducing the rate of trespasser deaths and injuries. Addressing these issues will take all levels of Government, industry, labor, and nongovernmental organizations. I would like to give you a few examples of initiatives that NS has undertaken in these areas with partners.

Last year, we began utilizing Waze technology and its unique advertising platform to test a novel approach to increasing crossing safety awareness. We were able to target audiences with crossing awareness messages where they need them most—in their vehicles. We were also able to avoid distractions by guaranteeing that these notifications would only go to stopped vehicles.

Since the project commenced, the technology has reached more than 3 million drivers. More importantly, there have been no collisions in the targeted locations.

We also have been enthusiastic partners with the Indiana DOT's Local Trax Program. This program provided $125 million for grant opportunities to Indiana localities interested in pursuing high-priority rail safety projects. Local Trax has encouraged partnership among the governments, private business, and railroads, to increase safety, improve mobility, and enhance quality of life.

NS and local communities were successful in identifying more than 20 crossings that could benefit from separation projects and are moving toward completing construction by the end of 2024 and this is a great example of industry and Government working together.

As for trespassing, NS police warned and removed about 12,000 trespassers from our tracks and property last year. While enforcement efforts are essential, NS plays an active role in promoting rail safety in our communities through education.

Through the Trespasser Abatement Program, or TAP, NS police hold events across our system to educate people about the dangers

of trespassing. In addition to TAP, NS police will teach a course in 2020 for local law enforcement officers that focuses on safety and techniques for investigating collisions involving trains and vehicles.

Finally, we will continue to provide safety training to first responders through our Operation Awareness and Response Program, or OAR. OAR safety training will conduct an 18-stop tour across our system in 2020.

Congress can be of great help as we work toward further improvements in grade crossing and trespasser safety and minimizing the impact of avoidable grade crossing occupations. I have set forth several recommendations in my written testimony regarding the importance of section 130 program funding levels and sources, the use of technology, and the essential role public education plays, including the work of Operation Lifesaver.

NS is committed to operating the safest, most customer-focused, and successful transportation company in the world, and that includes tracking towards zero accidents and incidents. We will continue to work cooperatively with all stakeholders to achieve these aims and to ensure that North American railroads remain the envy of the world.

Thank you.

[Mr. Morris' prepared statement follows:]

Prepared Statement of Jason M. Morris, Assistant Vice President, Safety and Environmental, Norfolk Southern Corporation

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to provide the Subcommittee with Norfolk Southern's perspective on the importance of improving grade crossing safety and addressing community concerns. We think these issues can be addressed most effectively in partnership with federal, state, and local government, industry, labor, and non-governmental organizations. Collisions at grade crossings, along with incidents involving trespassers on railroad rights of way, are critical safety issues. They account for well over 90 percent of rail-related fatalities. Although these incidents usually arise from factors that are outside of railroad control, Norfolk Southern and other railroads are committed to working with other stakeholders to reduce their frequency.

Norfolk Southern believes that industry and government should continue to work together to improve grade crossing safety and to minimize avoidable occupations of crossings. To that end, we would like to offer several policy recommendations to this Subcommittee:

- First, funding for the federal Section 130 program, which provides funds to eliminate hazards at highway-rail grade crossings, should be maintained to at least current levels ($245 million in fiscal year 2020) or increased.
- Second, the Section 130 program should continue to receive dedicated formula funding out of the Highway Safety Improvement Program.
- Third, Section 130 incentive payments for grade crossing closures should be increased from the current cap of $7,500 to $100,000.
- Fourth, federal policy should incentivize states to bundle grade crossing projects into a single grant application under applicable programs, such as BUILD, INFRA, or CRISI.
- Fifth, federal policy should require or incentivize the accelerated deployment of navigational warnings (through means such as smart phone applications) for motorists approaching grade crossings.
- Sixth, federal policy should require future fleets of automated vehicles to provide grade crossing warnings and/or prevent driving over grade crossings when a train is approaching.
- Seventh, Congress should authorize at least $3 million per year for Operation Lifesaver through FHWA, FRA, and FTA.
- Finally, Congress should encourage FMCSA to evaluate the effectiveness of its grade crossing safety training in driver education programs administered by the agency for commercial drivers, and, federal policy, through NHTSA, should en-

courage states to incorporate grade crossing safety training into their driver education programs.

BACKGROUND

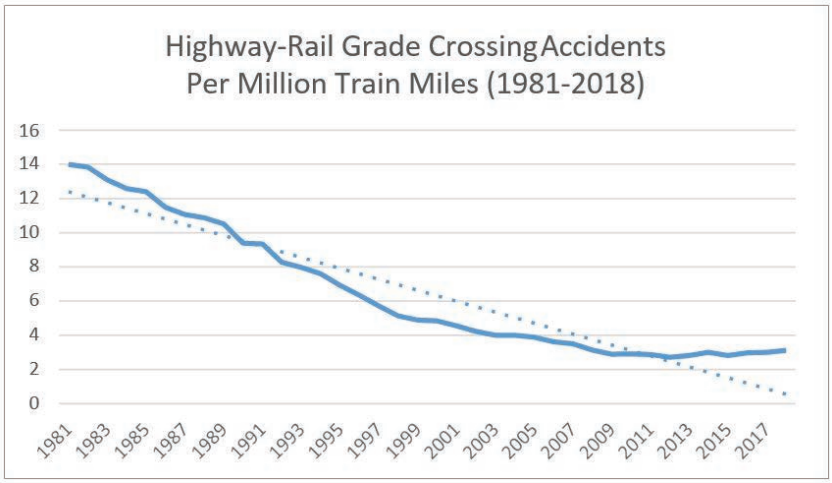
Norfolk Southern is a leading North American transportation provider. Its Norfolk Southern Railway Company subsidiary operates approximately 19,500 route miles in 22 states and the District of Columbia, serves every major container port in the eastern United States, and provides efficient connections to other rail carriers. Norfolk Southern is a major transporter of industrial products, including chemicals, agriculture, and metals and construction materials. In addition, the railroad operates the most extensive intermodal network in the East and is a principal carrier of coal, automobiles, and automotive parts.

Norfolk Southern's predecessors were at the forefront of the railroad industry's development. The South Carolina Canal and Railroad was chartered in 1827 and placed its first locomotive into service in 1830. Soon other companies built rail lines to connect markets in the eastern United States, and within 40 years railroads had crossed the North American continent.

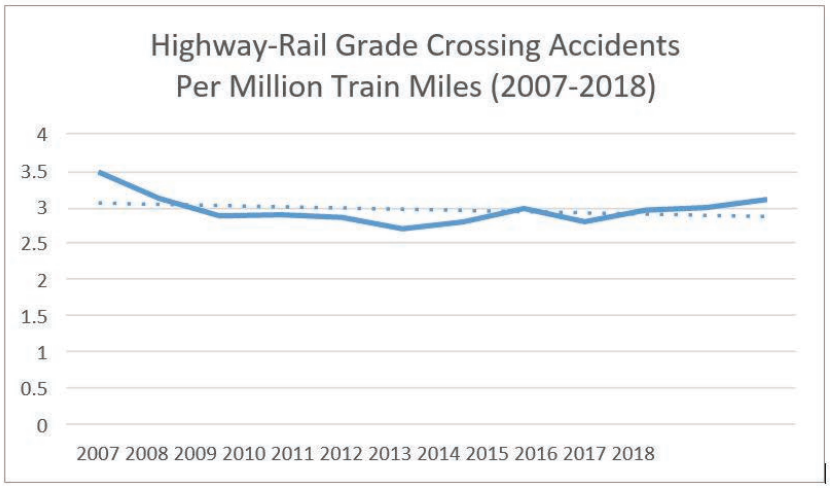
As the railroad industry expanded, the communities we serve grew up around us. With increasing population and the advent of the automobile, states and localities embarked on extensive street and road-building programs, an effort the federal government joined early in the 20th Century. By 1916, railroad system mileage in the United States had peaked at about 254,000 route-miles, declining to approximately 138,000 route-miles today. But as the footprint of the railroad system began to shrink, the automobile revolution was just getting started. There were about 2.8 million miles of public roads in 1916, and that number had grown to 4.2 million miles by 2018. Automotive traffic volume increased even more dramatically over that 102-year period. There were 25.8 billion vehicle miles traveled (VMT) in 1916 compared to 3.2 trillion in 2018, a 124-fold increase. Meanwhile, the number of trains operating over the rail network declined. Combined passenger and Class I freight train-miles stood at 1.2 billion in 1929, the earliest year for which data is available. By 2018, that total had been reduced to around 591 million, or cut by almost half.

The growth in population and vehicular traffic in proximity to the rail system, combined with local land use planning that rarely accounts for the presence of rail corridors through communities, has made interactions between trains and vehicles at grade crossings a challenge. According to the Federal Railroad Administration (FRA), there are over 130,000 public grade crossings in the United States today, with another nearly 80,000 private crossings. By law, automobiles are required to yield to trains and other on-track equipment at each of these grade crossings to prevent accidents. Trains are almost always unable to stop for vehicles that occupy crossings, so driver behavior is the critical factor in grade crossing safety. In fact, a U.S. Department of Transportation Office of Inspector General report attributed 94 percent of grade crossing accidents to risky driver behavior or poor judgment.

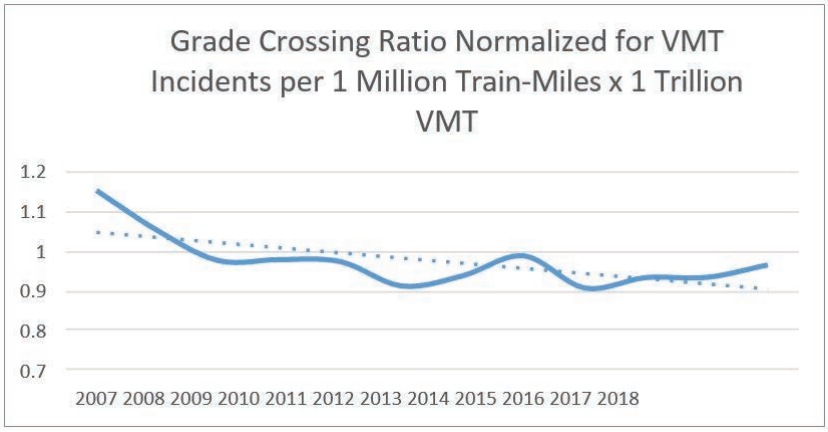
In 1975, the earliest year for which the FRA has data, there were more than 12,000 grade crossing accidents in which nearly 1,000 people lost their lives. Since then, the number of highway-rail grade crossing accidents has dropped more than 80% to approximately 2,200 accidents per year, involving 250 fatalities. The FRA maintains a statistic of highway-rail grade crossing accidents per million train miles to express how many highway-rail grade crossing accidents occur per million miles that trains operate. By that measure, the accident rate has declined more than 75% since the early 1980s.



While long and mid-term progress have been impressive—a more than 35% reduction in highway-rail grade crossing accidents since 2000—the rate of grade crossing accidents has been relatively flat since 2007.



While some may view this recent performance as unimpressive, we must keep in mind that it took place over a period in which VMT increased by approximately 200 billion miles (from approximately 3 trillion miles in 2007 to 3.2 trillion miles in 2018), an increase of nearly 7%. Only using train miles to normalize grade crossing accident statistics omits the major role of vehicular traffic volume on grade crossing accident rates. By introducing VMT into the statistical evaluation and accounting for both train and vehicular activity, we get a better sense of the rate of grade crossing accidents. When we compare grade crossing accident numbers in this manner, we actually see a 17% improvement during this most recent period. It is important to note that this improvement has occurred in a period during which hand-held electronic devices (and their attendant driver distraction issues) have become commonplace, suggesting that the impact of grade crossing safety efforts is actually understated.



I want to emphasize that in any discussion of statistical trends we should not forget that behind these numbers are human beings. Grade crossing accidents have a lasting impact, not only to the occupants of the vehicles but also to the train crews who sometimes witness the last moments of a fellow human being's life. Despite the progress that has been made in reducing grade crossing accidents, the rail industry is not satisfied. At Norfolk Southern, we are engaged in a variety of innovative and proactive efforts utilizing the timeless "3 Es" of grade crossing safety (Engineering, Education and Enforcement) in partnership with government and others as we work toward the goal of zero accidents.

THE SECTION 130 PROGRAM AND OTHER FORMS OF GOVERNMENTAL SUPPORT ARE CRITICAL TO CONTINUED PROGRESS IN GRADE CROSSING SAFETY AND MINIMIZING COMMUNITY IMPACTS.

Grade Crossing Consolidation and Grade Separation Projects

Removing redundant and unnecessary crossings is a critical factor in improving safety. Combining consolidation efforts with grade separation projects eliminates the interaction of trains and vehicles at remaining crossings and can permanently address local concerns with trains occupying crossings when demands on the roadways are high (such as during rush hour or when emergency services vehicles need to traverse railroad tracks).

Grade separation projects are expensive, and the federal Section 130 program is a cornerstone of many grade crossing elimination efforts with states and localities. In light of its importance to grade crossing safety and the prevention of occupied crossings, funding for the Section 130 program should be increased or at least remain at currently authorized levels ($245 million in fiscal year 2020). In addition, the dependability of funding sources remains essential to facilitating the ongoing planning efforts that are important to long-term project development. To that end, the Section 130 program should continue to receive dedicated formula funding out of the Highway Safety Improvement Program.

The rail industry will continue to do its part. The railroads themselves spend hundreds of millions of dollars each year on grade crossing improvements and maintenance. And several railroads, including Norfolk Southern, have been active partners in the CREATE program, a first of its kind project that funds infrastructure programs to address community impacts in the Chicago area, including separations or improvements at 47 different grade crossings.

Not only should the Section 130 program be preserved, we think adjusting the crossing closure incentive cap from $7,500 to $100,000 would make it even more effective. The hundreds of meetings Norfolk Southern has had with localities over the last several years have revealed the continued importance of incentive payments to closing grade crossings. Although all involved parties can appreciate the importance of grade crossing safety, crossing closures have real costs that need to be addressed. Increasing the current Section 130 incentive payment cap of $7,500 would allow for the benefits of these projects to be more evenly spread across communities that need the additional assistance and allow for partnerships to take place that might not otherwise be possible due to a lack of resources.

Incentivizing Partnerships such as the Indiana Local Trax program

Norfolk Southern operates approximately 1,440 miles of track in Indiana, transporting finished vehicles, agricultural products, and construction materials throughout the Hoosier State. In serving our customers, our railroad operates over 2,670 public and private grade crossings. In April 2018, the Indiana Department of Transportation announced $125 million in available funds through the agency's "Local Trax" Rail Overpass program, which provides a one-time grant opportunity to Indiana cities, towns, and counties interested in pursuing high-priority railroad safety projects such as grade separations, crossing closures, and other safety enhancements at railroad intersections with local roads. The criteria for evaluating projects include: project viability, financial match, hazard index at the crossing, average daily automobile traffic, freight train traffic, number of crossing closures, and community population.

At its core, the impact of the innovative Local Trax program has been to encourage partnership among the State, local governments, private businesses, and railroads to increase safety, improve mobility, and enhance the quality of life for Hoosiers. As Indiana is consistently ranked in the top 5 states for collisions between trains and cars, Norfolk Southern is pleased to be a partner in the Local Trax program and strongly supports its mission to improve safety for Hoosiers throughout the State. Norfolk Southern and local communities have identified more than 20 crossings that could benefit from separation projects, with a goal of completing construction by the end of 2024.

Innovative programs like Local Trax help fuel continued improvement in grade crossing safety and serve as templates for similar programs in other states. Even without a Local Trax-type program, states and communities can benefit from a coordinated approach to grouping projects to maximize impact. To further encourage this type of thoughtful planning, federal policy should incentivize states to bundle grade crossing projects into a single grant application under applicable programs, such as BUILD, INFRA, or CRISI. A lack of public transportation planning at the corridor level, focused on eliminating train/vehicle interaction, is a significant hurdle to grade separation bundling coming together. Planning could be encouraged with an increased Section 130 allotment so that communities can adequately prepare corridor programs of multiple grade separations in advance of grant opportunities.

Beyond Crossing Consolidation and Grade Separation

Norfolk Southern realizes that the immediate elimination of every grade crossing is not practical or possible. Therefore, our efforts extend into other areas to improve highway rail grade crossing safety and reduce avoidable occupied crossing issues.

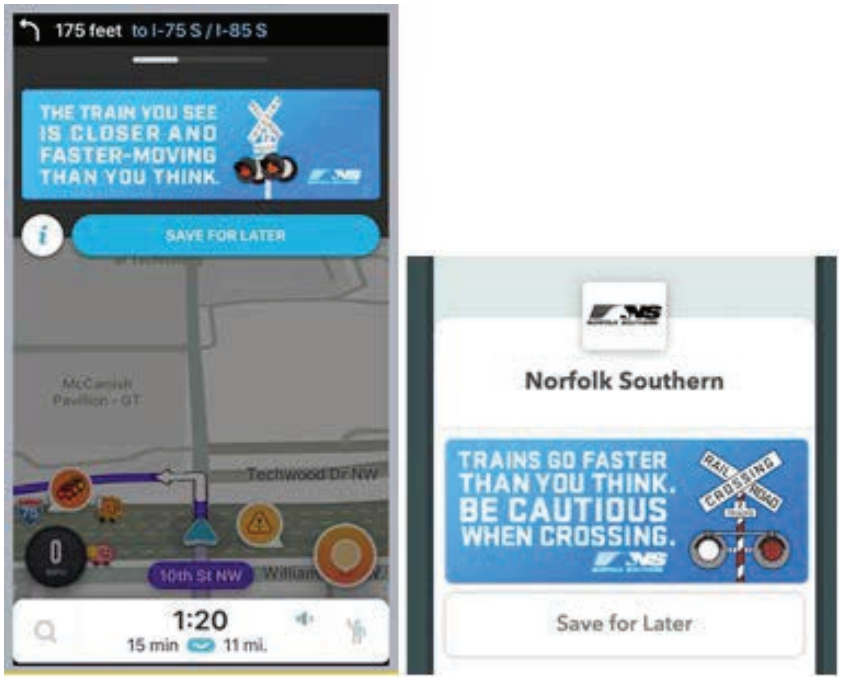
Norfolk Southern maintains a robust vegetation management program to clear our right of way of potential obstructions and ensure compliance with applicable laws and regulations. This program is an important part of Norfolk Southern's efforts to remove potential sight obstructions at highway-rail grade crossings and to ensure that train crews can see railway signals. The program includes mowing, brush cutting, tree removal, and selective herbicide application by qualified and licensed professionals within the railroad's rights of way with careful consideration of the environment.

Norfolk Southern is also involved in numerous efforts with local communities and with customers to minimize the impact of operations on local roadway traffic by investing in innovative projects. For example, in Leighton, AL, we are involved in a safety corridor project that includes crossing profile improvements, the installation and upgrade of active warning devices, and a grade crossing closure. With a combination of willpower and creativity, the railroad and the community have come together to achieve a lasting solution.

Finally, we have undertaken operating changes that have safely increased both the fluidity of our network and average train speed. While these changes have been made to improve efficiency and service, the Government Accountability Office noted in a 2016 report that train speed is a relevant factor in the amount of time a train occupies a crossing. Norfolk Southern's average train speed has increased from 19.1 miles per hour in 2018 to 22.3 miles per hour in 2019 (a 17% improvement). These operating changes have had the additional benefit of reducing terminal dwell and creating additional capacity on our network, which further reduces community impacts at grade crossings.

EDUCATION AND TECHNOLOGY ARE KEY TO GRADE CROSSING SAFETY.

Leveraging WAZE Technology



In 2019, Norfolk Southern began using WAZE technology to test a novel approach to increasing grade crossing safety awareness. By utilizing WAZE's unique advertising platform, Norfolk Southern was able to target audiences in key locations to receive crossing awareness messages while in the very place they often need it most—their vehicles. By using a geo-fence around specially selected locations, Norfolk Southern was able to target messages to WAZE users to receive safety notifications in the vicinity of these areas and increase awareness even on trips where they may not drive across crossings. The notifications (as pictured above) include a cross buck graphic and a grade crossing safety message, along with a link to a website with more railroad safety information. By placing limitations on the messaging, we were also able to guarantee that the notifications would only be delivered once the user's vehicle is stopped to prevent any distractions.

Thus far, the pilot project targeted 44 grade crossings in the following areas where 135 incidents have occurred in the past:

- Seven crossings in the Southwest Birmingham, Alabama area
- Nine crossings in the Gary, Indiana area
- Four crossings in the Atlanta/DeKalb County, Georgia area
- Seven crossings in the Toledo, Ohio area
- Five crossings in the Allegheny County, Pennsylvania area
- Twelve crossings in the East Louisville, Kentucky area

Since the project commenced, the technology has reached more than 3 million drivers. More importantly, there have been no collisions at any of the crossings in the targeted locations.

The initial phase of the project ran through the end of 2019. In 2020, the goal is to expand the program locations, include enhanced WAZE content, and link it to a more targeted safety message that will be housed on the Norfolk Southern www.pulling-together.com website.

The Norfolk Southern WAZE initiative has just scratched the surface of the potential for developing the safety benefits of navigational guidance, automated vehicle operations and other technology. Federal policy can and should continue to support the accelerated deployment of navigational warnings (through means such as smart

phone applications) for motorists approaching grade crossings. Furthermore, as we move into a future with automated vehicles, federal policy should require that such technologies include the capability to provide grade crossing warnings and prevent drivers from entering over grade crossings when trains are approaching. This capability should also be independent of any railroad systems, such as Positive Train Control, which are not designed to communicate with automobiles.

Expanding Operating Awareness and Response Training

In addition, Norfolk Southern is expanding our use of the Operation Awareness and Response (OAR) Safety Training to include grade crossing safety material in the programs that it provides. This effort will help to bridge the connections with first responders by providing information and training resources and to educate the public about the safe movement of hazardous materials by rail. In 2019, the OAR program trained 2,428 first responders across the Norfolk Southern network using a rolling learning lab that helps communities prepare for and safely respond to potential rail incidents. In 2020, the program kicks off an 18-stop tour across our system. The 2020 schedule and additional information on the program is available at http://www.joinnsoar.com.

OPERATION LIFESAVER IS KEY TO EDUCATIONAL EFFORTS.

Norfolk Southern and our other railroad partners strongly advocate for continued Federal support for Operation Lifesaver. This federal support has been key to the program's success as demonstrated by the recent launch of a new "Near Miss" public service announcement targeting distracted pedestrians that was made possible by funding from the FRA as well as the generosity of organizations like the Posner Foundation of Pittsburgh.

While the new campaign focuses attention on the danger of distractions for pedestrians, distracted driving remains a significant threat when it comes to highway rail crossing safety. Organizations like Operation Lifesaver will remain important partners in the efforts to educate motorists about the dangers of distraction when driving near railroad tracks and to spread the important message of grade crossing safety in our schools and communities. To ensure the important work of this organization continues, Congress should authorize at least $3 million per year for Operation Lifesaver through FHWA, FRA, and FTA.

OTHER OPPORTUNITIES EXIST FOR COMMUNITY EDUCATION AND ENFORCEMENT

Walking on railroad tracks is dangerous and illegal. In 2019, Norfolk Southern police warned and ejected 11,883 individuals for trespassing on tracks and other railroad property. Norfolk Southern police also arrested 566 individuals for trespassing. While enforcement efforts are essential, Norfolk Southern's Police Department plays an active role in promoting rail safety in our communities through education. Through the department's Trespasser Abatement Program, or TAP, NS police hold a series of events in communities across our system to educate people about the dangers of walking on or near railroad tracks.

In 2019, Norfolk Southern police held six of the two-day TAPs in locations selected based on the previous year's trespassing activity and pedestrian injuries or fatalities on railroad property. The 2019 events focused on the Gastonia, NC; Hamilton, OH; Johnson City, TN; Sandusky, OH; Greenville, SC; and Louisville, KY areas. The events included meeting with local law enforcement, talking with community members, patrolling the tracks, and handing out antitrespassing brochures.

In addition to TAP, Norfolk Southern police will teach a course in 2020 for local law enforcement officers that focuses on safety and techniques for investigating collisions involving trains and motor vehicles at highway-rail grade crossings.

As I mentioned in my introductory remarks, there is a human dimension to grade crossing and trespasser incidents that cannot be ignored, and that includes the impact to train crews involved in accidents. Norfolk Southern and other railroads have Critical Incident Stress Plans to ensure crewmembers have access to counseling and other assistance in the aftermath of a trespasser or highway-rail grade crossing accident. Those plans are on file with labor organizations, and their efforts to communicate the availability of this assistance to their members is vitally important. But the best course of action is to continue working to prevent these accidents from ever occurring. As we work to address grade crossing safety, we should remember that trespasser prevention is a closely linked topic, and the education and awareness aimed at trespassers can often have an impact on improving driver behavior in the vicinity of crossings too.

With respect to addressing occupied crossings and other grade crossing safety matters at individual crossings, education efforts will continue to emphasize that

every crossing has a blue emergency notification sign posted with a 24/7 emergency phone number and an identification number unique to that crossing so callers can immediately communicate issues at crossings with the responsible railroad. Getting real-time information allows railroads to coordinate with communities to identify workable short- and long-term solutions to mitigate crossing impacts. In some instances that coordination allows railroads to be able to provide real-time information about a current occupied crossing and an estimated time for when the issue may be resolved.

While driver inattention, distraction, and failure to understand and/or follow laws regarding highway rail grade crossings are a problem, the failure of professional drivers in these areas is particularly disturbing. More than 660 of the 1830 highway-rail grade crossing accidents in the FRA database for the first ten months of 2019 (over 35%) involve trucks, trucks and trailers, vans or buses. A sizeable portion of these accidents likely involve professional drivers over which the federal government exercises enhanced control through the Federal Motor Carrier Safety Administration (FMCSA). At a minimum, FMCSA should evaluate whether currently provided grade crossing safety training in driver education programs for commercial drivers is effective. Furthermore, NHTSA should encourage states to incorporate grade crossing safety training in their driver education programs for all drivers, and apply any lessons learned from FMCSA's experience.

Norfolk Southern is committed to operating the safest, most customer-focused and successful transportation company in the world. We will continue to work cooperatively with federal, state, and local governments to achieve these aims and to ensure that North American railroads remain the envy of the world. We appreciate this opportunity to testify and look forward to working with the subcommittee to developing meaningful solutions to reach zero grade crossing accidents and incidents.

Mr. LIPINSKI. Thank you, Mr. Morris.

We will now move on to questions. I will begin by recognizing the chair of the full committee, Mr. DeFazio, for 5 minutes.

Mr. DEFAZIO. I thank the chair for holding this important hearing as we work towards surface reauthorization, which will include a robust rail title.

Mr. Alexy, last June we had the Administrator, Mr. Batory, before the subcommittee, and I asked, "Should train length be limited?" He didn't exactly address the question. There was no direct response. In fact, later he indicated he didn't think there was much problem with 3-mile-long trains with a one-person crew.

But he did later say that the FRA should not become involved with blocked crossings because such authority is currently with the States and municipalities. Well, clearly, because of a series of State court decisions and preemption, they can't do anything. So that is kind of a nonanswer.

But then, apparently in recognition there might be some sort of a problem, he did later write and say that there should be some action on this issue and urge the freight railroads, and then you reinforced that in December. What steps have been taken by freight rail since that time?

Mr. ALEXY. Thank you for the question. Just a clarification, regarding train length?

Mr. DEFAZIO. Well, it is train length, which leads to blocked crossings.

Mr. ALEXY. So we haven't taken any specific steps other than our enforcement efforts that we do. We—you know, when we do our—when we go out and we do audits of the train operations to ensure that—a number of things. One, that the crew is properly trained and certified and they understand the territory over which they are traveling, and that the equipment is safe. So it is an ongoing——

Mr. DEFAZIO. Right. But the issue is, and you heard eloquently from Alderman O'Shea and others who raised concerns, that because of pressure from Wall Street, we are moving to destroying the freight industry with Precision Scheduled Railroading, which may improve stockholder profitability but has a whole lot of other problems.

So the question is, it seems like after that hearing, ultimately Mr. Batory wrote to the railroads, and then you later reinforced that. And my question is: has there been any action taken by the railroads? Have they even communicated back with you saying, "Yeah, we get it. There is a problem, and we are going to work on this"?

Mr. ALEXY. So we did reach out. You are correct, and I——

Mr. DEFAZIO. Have they responded?

Mr. ALEXY. We did get responses to say that we are——

Mr. DEFAZIO. Meaningful responses?

Mr. ALEXY. They were. You know, they acknowledged the problem, and they are taking a variety of steps.

Mr. DEFAZIO. OK. Please, we would like to see their written responses.

Mr. ALEXY. OK.

Mr. DEFAZIO. Would you provide those?

Mr. ALEXY. Yes.

Mr. DEFAZIO. That would be great. Is FRA confident that if you have a 3-mile-long train that the end-of-train device's distributed power units and communications work over—we have heard repeated anecdotal testimony that particularly in challenged terrain or tunnels there is no communication between the front and back of the train, 3 miles long.

Are you confident that there are no issues regarding 3-mile-long trains that raise safety issues, braking or communication or anything else?

Mr. ALEXY. I think that that is something that the railroads need to take into consideration when they do train makeup. They have to understand the territory over which that train will be traveling. So if there are going to be challenges with the territory on communications, they need to adjust train length accordingly. So there are operational and terrain issues that they need to take into account.

Mr. DEFAZIO. So if they were running a 3-mile-long train through mountainous terrain where we could prove or we would know that the inadequate radio systems they have—not satellite-based—couldn't communicate, would that be a safety violation that would be fineable?

Mr. ALEXY. That would be a problem if we identified that there was a loss of communications over the allowed time in the Federal regulations, yes.

Mr. DEFAZIO. OK. Thanks.

And, Alderman O'Shea, very quickly, my understanding is STB imposed restrictions to allow the use of that route and those things have just been not enforced. Is that correct?

Mr. O'SHEA. Yes. The main thing is a closed-circuit television feed to our two local hospitals—Little Company of Mary Hospital, which is one-half mile east of Elsdon Line, and Advocate Christ

Medical Center, again, as I mentioned, the only trauma center on the Southwest Side of Chicago.

Mr. DEFAZIO. And do you have any legal recourse with it? I mean——

Mr. O'SHEA. No, sir.

Mr. DEFAZIO. OK. None. OK. I just wanted to let you know my mother's name was Dorothy Margaret O'Shea. Maybe we are distant relatives. Anyway, thanks. Thanks very much for being here.

Mr. O'SHEA. Thank you, sir.

Mr. LIPINSKI. The Chair will now recognize Ranking Member Crawford for 5 minutes.

Mr. CRAWFORD. Thank you, Mr. Chairman.

Mr. Morris, I have a question for you. We have heard a lot of testimony this morning about the impacts, grade crossing issues, safety issues, certainly blocked crossings, and so on, as applies to urban environments. I have some questions about how this impacts rural communities.

Certainly, we are affected by that, too, and one of the other challenges we face in rural communities, like the district that I represent, is we don't have the resources, the funding, to actually address those issues.

What are some ways you might suggest that railroads, State and Federal Governments, and Congress, in fact, can help ensure that rural communities are able to address that issue?

Mr. MORRIS. Well, thank you for your question, Congressman. I think that is a great question. Obviously, high-density areas, there are going to be community impacts, but those community impacts can also occur in rural areas.

There are some great opportunities and examples where we have had some success. One, a Leighton, Alabama, project where we were able to work with the Alabama Department of Transportation on a project that—and, really, what it was—what were able to do is take more of a corridor, larger area approach, and get changes in crossing configuration, including the installation of active warning devices at some public passive crossings, modifications for flashers to flashing lights and gates at another public crossing in the area, closures, and putting in a siting extension that not only increased network capacity but allowed us an area for a train to stage where it would not impact any public grade crossings.

I think when we look to projects like that, when you can take an area—and this goes to one of the recommendations made in the written testimony—that the work of this committee to continue to advocate for Federal policy to incentivize States to bundle projects, grade crossing projects into a single grant application, and some of the other written testimony of people on here about clarifying who is eligible for those, I think those are steps that when we look at BUILD, INFRA, and CRISI, can allow you to start to, we will say, create a force multiplier because particularly in rural areas the solution to one community's problem may be able to spread out and hit several other communities I think as we improve our ability to say, "Hey, this could be a larger issue," and the solution may involve more than just, you know, one small community.

Mr. CRAWFORD. Thank you. I yield back.

Mr. LIPINSKI. I now recognize myself for 5 minutes, and I will begin with talking about the blocked crossings, and Alderman O'Shea gave some compelling examples of the impact.

I want to ask, Mr. Vercruysse, what do you—can you expand on why you think a Federal blocked crossing law would be effective? And how would—what would you recommend in terms of that law? And what would the impact be on the railroads with this?

Mr. VERCRUYSSE. Currently, we have had, you know, a number of examples where we have been able to work with railroads successfully to change operations, as Mr. Morris said, and try and alleviate concerns. But it is not under a direct process or something that would give the ground rules for that discussion, and sometimes we have seen where the concern then ends up on a different section of the line.

So especially for change in operation locations, I believe that the use of a Federal law to identify how this is supposed to be investigated, whether it is by FRA inspectors, State-certified inspectors, or others, and how we communicate and coordinate with the railroads, should be defined.

For locations where we have continuous blockage and we haven't been able to come up with a successful solution, then a penalty structure similar to what we have seen in other State statutes for time where we get over the 10 minutes and above.

For historically heavy locations like we see on the South Side of Chicago, our areas of Decatur, sections of Springfield, and then the Illinois portion of the St. Louis district, I would believe we should have safety plans in place, and then we should always monitor to see if changes have created more severity.

So under a Federal legislation package, maybe it is trying to compile all of these different safety plans, get a good understanding of the problem locations and what is in place, if a larger train does break down. Again, we have had success stories with trying to manage those issues. We have examples of emergency plans in place in and around the Midway Airport of Chicago, and those just need to be reviewed and continued vigilance in them.

I hope that answers the question. If you have followup—thank you.

Mr. LIPINSKI. Thank you. I want to move on to something that I think there will be agreement upon, except for the question of where the additional money is going to come from. But grade separations—Mr. Christoffels, it is very impressive to me—I have been to the Alameda Corridor, have not gone through the East Corridor there, but this was, you know, as you said, State and local money. And you mentioned how much Federal money—the percentage of Federal money has gone down for grade separation.

How much would you like to see going into the section 130 for grade separations? How would this have an impact on what you are able to do in other locations in the country?

Mr. CHRISTOFFELS. I think I can give you a monetary example. As you know, that section 130 may be $200 to $300 million a year. For us, let's just say most recently, for example, we have upgraded a crossing with pedestrian safety gates. There are a lot of areas in the Nation that are now doing that and using section 130 money to initiate that work.

Five crossings upgraded to quadrant gates and pedestrian gates. It is going to cost us $24 million, and that is just five crossings located in the city of Pomona in southern California. You multiply that across all of the crossings across the United States that could use similar improvements and you realize how far that section 130 money actually takes us, which is not very far at all.

As I stated earlier, the demand so far exceeds the funding availability that we have out there, and there is only so much that local agencies can contribute to those types of improvements. There is only so much that local residents are willing to tax themselves because it is a tradeoff, obviously, for other things that they would get taxed for. And, you know, as I stated earlier, much of this mitigation revolves around interstate commerce, national goods movement, and I think it is beholden upon the Federal Government to increase the amount of funds that go into that section 130 program to address this issue.

Mr. LIPINSKI. Thank you, and I will not abuse my role as chair and go on another question, because my time is up now. So I will now recognize Mr. Babin for 5 minutes.

Dr. BABIN. Yes, sir. Thank you, Mr. Chairman, and thank you, witnesses, for being here. We appreciate it.

Continuing to improve safety at our highway-rail grade crossings is of vital and life-saving significance. I hope in response to this hearing we reaffirm our shared commitment on the State, local and Federal levels to ensure that trains move safely and efficiently, and that we work to minimize conflicts in the communities in which they operate.

Given that U.S. freight shipments are estimated to go only up in numbers, it is imperative that we continue to invest resources, innovation and partnership into this space, as seen in dedicated section 130 program funding over the years.

And, Mr. Morris, I'd like to ask you what sort of technological advances is Norfolk Southern, or other railway companies that you can speak on behalf of, embracing to enhance safety and efficiency at our railroad crossings?

Mr. MORRIS. Well, we've already talked about our Waze initiative as one, and I—first off, I'll say thank you for the question. I think technology is going to be a big part of our advancement. So that is one area that we have seen, with driver behavior being such a huge component of grade crossing safety, particularly when you look at the numbers associated with those accidents, with 36 percent of the accidents of people, you know, not stopping. Those types of numbers—any way that we have to reach people is going to be very helpful with addressing that next level. So that is one technology that we have taken.

Other technologies, I know that we continue to work with the FRA and others on putting in remote grade crossing monitoring as one option that will give us better visibility over what is happening at the grade crossing and the ability to run analysis.

So there are several technological advances that we continue to push, both on the education side and the engineering side.

Dr. BABIN. OK. And can you share any examples of partnerships between technology companies and the railroad industry that strive to help first responders and emergency service vehicles to find al-

ternate routes in real-time in order to avoid delays that could threaten the lives of individuals under their care? As our urban areas grow and roads become more congested, these delays at crossings become even more acute.

Mr. MORRIS. Well, again, I think Waze is a start with a partnership with a technology company. In terms of our first responders, the FRA, there is already a regulation for emergency notification signs that are in place. So, and that is something that it is important, I think, for all drivers to know, is that when you get to a crossing, there is a blue sign at the crossing that has a toll-free number and identification for that specific crossing. And what they may not see is that feeds into a network operations center that we have.

Over the last year or so, Norfolk Southern centralized our dispatching operations in Atlanta. So now with a network operations center that's centered in Atlanta, we have all of our dispatching operations, so when that call comes in to the police communications center, you're able to get a real person who can then plug that in and work with the network operations center—they are all housed in the same building—with recognizing the network impact of a lot of these things.

They have access to the information from the movement of trains across our network to look for alternatives and hopefully give an idea of potential estimates on how long that may last, and other alternatives. But you are—it really comes down to the technology enabling people to better respond, in answer to the question.

Dr. BABIN. And all good to know. So what can Congress, and specifically this committee, do to help railroad industries to fight trespassing and suicides as well?

Mr. MORRIS. Well, another great question. Trespassing is, of course, a big concern, and I think you have hit on one of the, I won't say hidden facts, but I don't know that we really understand the true scope of the suicide issue with trespassing, because it is likely rather underreported.

So the FRA has already—I know their work with Volpe, Dr. Gabree has come in, and worked with not only industry but Operation Lifesaver and others to help us better understand as we work to address trespassing and some of these other issues of safety to make sure we understand the impact that may have on suicide and that we are not doing anything to increase the problem.

So I think education not just for us but for the communities is a big deal and a big help. I would say—and as we put in the written statement—Operation Lifesaver is a crucial ally to the railroads and to Government in how we work some of these issues. So the recommendation about increasing their funding, I think that is something where you can put in a little and get a lot.

Dr. BABIN. Thank you so very much. And my time has expired so I yield back, Mr. Chairman.

Mr. LIPINSKI. The Chair will now recognize Mr. Malinowski for 5 minutes.

Mr. MALINOWSKI. Thank you, Mr. Chairman. I want to build on some of the questions that Chairman DeFazio began with, and I want to start with you, Mr. Alexy.

Would you acknowledge—and let me just make this very basic—would you acknowledge that there is a relationship between the length of a train and how long people are going to be waiting at a railroad crossing?

Mr. ALEXY. Unfortunately, we don't have any data to support that. We know that the blocked crossings happen, but the information that comes with any blocked crossing reports is——

Mr. MALINOWSKI. I'm sorry, I'm a little confused. This seems to be like first-grade arithmetic here. The longer the train, the longer people are going to be waiting for that train to clear a crossing. Is that not correct?

Mr. ALEXY. That—as far as if that train is moving, yes, it will take longer for that train to clear a crossing.

Mr. MALINOWSKI. Thank you. And this would include first responders who may be stuck waiting 3, 5, 10 minutes, depending, again, on the length of the train. Is that not correct?

Mr. ALEXY. That is correct.

Mr. MALINOWSKI. And the longer the train, if it has to stop for whatever reason, the greater the chance that it will be blocking a crossing, especially in a populated area where there are more crossings.

Mr. ALEXY. That is correct.

Mr. MALINOWSKI. And yet it is the position of the FRA that decisions about the lengths of trains should be left entirely to the industry. Is that still your position, that you hope that they take safety into account but that there should be no regulations here on a national level?

Mr. ALEXY. Yes, I believe that the railroads need to identify their—you know, through their understanding of their operations, make those decisions.

Mr. MALINOWSKI. And you believe that the railroads, that the freight railway industry will make those decisions with safety as their primary consideration, even given the strong economic incentives that they face to build longer and longer trains?

Mr. ALEXY. I believe that——

Mr. MALINOWSKI. You trust them to do that?

Mr. ALEXY. Yes, I believe that there are new rulemakings coming out for risk reduction and systems safety, and the railroads are going to be required to look at the risk associated with the train lengths. So they are——

Mr. MALINOWSKI. They will be required to look at the risk, but they get to make the decision however they want. As long as they have told you they have looked at the risk, you will be satisfied. Is that what you are saying?

Mr. ALEXY. They are going to have to adjust their operations to address that risk that has been identified.

Mr. MALINOWSKI. And what about crew size? We are seeing pressure on the industry to cut crew size in some cases to one crewmember per train. Imagine a 3-mile-long train with one crewmember. I had an exchange with Mr. Batory on this issue. I asked him if such a train were stopped because of an accident, how long would it take the single crewmember to walk from the front to the back of the train, and he memorably replied to me, well, maybe a

couple of hours, but it depends on whether he is a good walker or not. Got to say that didn't build my confidence.

Don't you—we heard from Mr. O'Shea about the importance of cutting trains under those circumstances. Don't you think having a second crewmember might be helpful in terms of very rapidly cutting a train so that first responders and others can get through?

Mr. ALEXY. That—that is a good question. The—when you look at—not necessarily. I would say that the time it takes to cut a train is considerable, and given the data that we have on the time that crossings are blocked, you would not—you may even exacerbate the problem by sending someone back there and do all the things they have to to secure the train that you are cutting away from.

So it could create more problems in the long run.

Mr. MALINOWSKI. That makes very little sense to me. It would seem that having more than one crew person would make it easier to perform those kinds of functions.

Mr. Morris, if I could ask you, we saw an industry white paper recently that stated that one of the reasons blocked crossings occur is when trains are being held to change operating crews in order to prevent hours-of-service violations. And I was curious, with the implementation of Precision Scheduled Railroading, in which railroad schedulers' schedules are much more precise, how can it be that operating crews would be scheduled to time out just as they arrive at a crossing? Wouldn't you be able to avoid that?

Mr. MORRIS. And that is a great question, Congressman. I think one answer is that Norfolk Southern has about 24,000 grade crossings just ourselves. So that is an average of more than one crossing per mile. So the sheer number of crossings presents a little bit of a challenge, and that is another great point that you made in terms of the scheduled railroading. We hear a lot kind of about downsides; I would think that is one improvement of knowing where people are supposed to be, when they need to be there, what they're going to do. That is why it would be helpful as we get more information to look at the baseline impacts.

Mr. MALINOWSKI. Thank you, I yield back.

Mr. LIPINSKI. The Chair will now recognize Mr. LaMalfa for 5 minutes.

Mr. LAMALFA. Thank you, Mr. Chairman. Thank you, panelists, for being here today. I am going to direct my questions to Mr. Morris and Mr. Alexy mostly here, so I—you know, we all, I suppose, in a way struggle with the at-grade crossings and some of the challenges that they provide, but also the flexibility they allow. So, you know, what I hear about in—so in northern California areas, is that especially private crossings, at-grade crossings, that railroads like to perhaps close them down so they don't have the headache of a safety issue or whatever.

And I think that the more we close down at-grade crossings, whether they're private crossings that go into a processing plant or a family farm or just a home or whatever, it makes it harder on somebody for not having those availability. And if you were to close more at-grade crossings just in town, that means you now have to go a different route just to get over. I don't think there is enough

money in the world to build split crossings to accommodate everything.

So, you know, I know there is a tension here in figuring that out. But, Mr. Morris, what do you see as the best strategy, I think, to accommodate the need for them but also achieve a higher safety factor?

And then, what is it on the education side? Do we just need smarter people that know how to use railroad crossings and take the normal warnings of looking both directions and things like that? I mean, as I look at these, and we've had the issues, again, in my district, some of them have no-cross arms and all the other mechanisms, and those are probably a gazillion dollars to put in. So is there a way to put a simpler—just maybe a simple red light that would be activated at a private crossing or small crossing without the high expense?

What can we do to—in order to keep more at-grade crossings in rural areas, not have them eliminated for convenience or for less lawsuits or whatever, but still achieve a safety factor that would be maybe more acceptable than what this committee has talked about today?

Mr. MORRIS. That's another great question, Congressman. I—one of the recommendations that we have made, and we will address it—kind of engineering and education. From an education standpoint, one of the recommendations that we made is that this committee and others should really encourage the Federal Motor Carrier Safety Administration, the FMCSA, to evaluate their current driver education programs for commercial drivers to see, you know, how effective they are.

And the second part of that recommendation would be to then take the lessons learned from, you know, their evaluation and move that over to encourage the National Highway Traffic Safety Administration to encourage States to incorporate more grade crossing safety training in their driver education programs. I mean, simple things of stop, look, listen. The meaning of crossbuck signs to make sure people understand it.

I know when I'm driving with my children, it is kind of—that is one thing that you would do, is just point out to them what the proper behavior is.

Mr. LAMALFA. I am sorry, I am limited on time here. So is there a push by railroads to close more and more at-grade crossings, or do they try to maintain? Because, again, in rural areas, the more you close, the farther they have to go to get around them. When you have a train blocking a crossing, and in my town, it's like, OK, you just turn around and you go back up—sometimes it is a dirt road, but you go up a mile and then you find a way to cross. I mean, you kind of have to know that that is part of commerce too.

So, again, what is the balance on closing them and dealing with stopped trains in rural areas?

Mr. MORRIS. Well, sir, the safest grade crossing is a closed grade crossing. It's to limit the interaction. What we try to do, and in keeping with the recommendation that the closure incentive be increased from $7,500 to $100,000, was really a reflection of the work that we try to do. When we go in a community, we are trying to give answers and options on—so it is not just close a crossing; it

is maybe there are—it is a redundant crossing, and by a little bit of roadway work, we can close that crossing and route traffic to another crossing, then create one crossing that won't be occupied unnecessarily.

So it is a match, and it is a whole lot easier for us to go in and say, take our $100,000, and for that to be turned into $200,000. There is a lot larger impact than that $100,000 that we give just going up to $107,500. So that is linked to that increasing that contribution.

Mr. LAMALFA. Yes, OK. Well, 5 minutes flies by here, but just in a lot of cases closing crossings is an unacceptable option to and would be really detrimental to rural areas and rural processing plants and things like that. So I just—I don't want to see an overreaction because, you know, people can't figure it out.

So thank you, I yield back.

Mr. CARSON [presiding]. Mrs. Napolitano.

Mrs. NAPOLITANO. Thank you, Mr. Chair. Mr. Christoffels, the public agencies needing cooperation of private freight railroads, what are the chances of working with the private railroads when trying to construct a grade separation and discuss the bureaucratic problems, delays that end up costing the taxpayer and associated problems?

Mr. CHRISTOFFELS. Thank you for the question. Obviously, we have had almost 20 years working with railroads on trying to improve their crossings. And yes, sometimes getting their attention on a taxpayer-funded project, to get them to respond in a timely manner, has been challenging. We are not necessarily their highest priority. Obviously, moving freight is their number one goal. And we are considered at many times an inconvenience to them as we try to move forward on these grade separation projects.

We have had several instances where we have had major delay claims from our contractors because the railroad couldn't respond in a timely manner to some of our construction projects, costing perhaps millions of dollars at times.

I would also like to talk a little bit about their contribution. Right now, the railroads, by Federal statute, are required to contribute 5 percent to a typical grade separation project. Just so you know, in the State of California that is 10 percent if there are no Federal funds. We have deliberately defederalized projects in order to increase the railroad's contribution in some of these projects.

But what is misunderstood about that statute is the railroad can still charge us for their work on the project, for example, if they have a flagman or they have a rail crew that will be part of the construction activity. The net contribution, for example, on our $1.8 billion program has been less than 2 percent by the private sector, and in many cases it is actually a negative because by the time I paid them for their crew activity or other services they provided in conjunction with the building of these projects, and then I look at what they were required to contribute, we have actually participated more in funding them than they have in us in these projects. And I think that is something that this subcommittee and Congress in general should take a look at. We are mitigating impacts by the private sector. They are for-profit businesses, and we need to take a hard look at times at what kind of contribution we should

get from these entities in mitigating the impacts to our local communities.

Mrs. NAPOLITANO. How long has it been since this—the 5 percent?

Mr. CHRISTOFFELS. Pardon me?

Mrs. NAPOLITANO. How long have the railroads——

Mr. CHRISTOFFELS. The 5 percent has been in statute for a long time, and it has not increased.

Mrs. NAPOLITANO. We will be working to improve the section 130 program. What role does FRA and the Federal Government play in regulating grade crossings in their related projects? And can policy or Federal regulations be improved for addressing grade crossings' safety and related projects, and what are the changes for improvement that you recommend?

Mr. CHRISTOFFELS. Well, I think a lot of my fellow panelists have spoken about what might they have done on the FRA to improve crossing safety. Our experience has been relatively positive. We do have some quiet zones which we have worked very closely with FRA on in implementing them for the communities once these improvements are put in place.

But, you know, one of the big issues for us as well is the blocked crossings. There was the discussion earlier about a 3-mile train. You can imagine in a community like ours, that's six crossings that would be simultaneously obstructed by a 3-mile train. And what you get and what you have to understand is that in addition to crew changes, they're looking for passing sidings, looking for a clearance track, and when their passing tracks were designed for trains that were only one-half mile in length, the rest of that train has to sit somewhere, and where it sits, of course, is on active crossings.

And so as the train length and train volume increases, we see more and more of our crossings getting blocked as they're waiting for that passing opportunity on their overcrowded system. And even technology won't correct that. So I just wanted to share that with you that we've seen that, and I think FRA needs to take a hard look as train length is increasing, what that will mean on especially in an urbanized environment where you have very close proximity of your crossings. There are no opportunities for a motorist to veer off onto a different street to get by this particular train.

Mrs. NAPOLITANO. Thank you, Mr. Christoffels.

Mr. Alexy, in December 2019, last year, the FRA pointed out that there are no Federal laws or regulations pertaining to blocked passage. Why is that?

Mr. ALEXY. I can't speak to why there is not a regulation. There is a regulation about if the unnecessary closure of a crossing with the signals being activated, so there is that. If there are switching operations that are causing the signal to—or the grade crossing to close and unnecessarily block that crossing. But I can't speak to as to why there is not a regulation about occupying a crossing.

Mrs. NAPOLITANO. Would you agree that it's time for a change?

Mr. ALEXY. I think that is something that we should certainly look into. I think it's a difficult thing to regulate. I think there are a variety of issues that need to be taken into account. There are regulations that the railroads already have to adhere to, and pro-

hibiting the blockage of a crossing may then contradict compliance with those other regulations, and also this is a potentially difficult regulation to enforce.

Mrs. NAPOLITANO. Thank you, Mr. Chair. I will submit questions for the record.

Mr. CARSON. Mr. Balderson.

Mr. BALDERSON. Thank you, Mr. Chairman. Thank you, panel, for being here.

Mr. Alexy, for the first question, the FRA recently awarded funding to four law enforcement agencies to address railroad trespassing enforcement. Your findings show a significant reduction in trespassing incidents in these four local jurisdictions. How do you think these funds helped reduce railroad trespassing and does the FRA plan to expand this program so more law enforcement agencies can crack down on trespassing incidents and improve safety?

Mr. ALEXY. So thank you for that question. Yes, we have seen the benefit of having these law enforcement liaisons that work with law enforcement and to train them, to spend time out there educating the public, working with judges for the prosecution of violations under—to make the local law enforcement understand how important it is that they do enforce the local trespassing rules.

So yes, it has been very, very helpful, and we will expand it as we are currently doing that. We have a grant that is out and we are looking at the applications that are coming in. So we hope to expand this to as great an extent as we can.

Mr. BALDERSON. All right. Thank you very much.

Mr. Morris, thank you for being here this morning, and I know that you have discussed this a little bit this morning, but I just want to get into it a little bit deeper because we are dealing with Ohio, and that is my home State. But in your testimony you discussed Norfolk Southern's partnership with the Waze navigation app. I see from your testimony that Toledo, Ohio, is one of the pilot projects targeted. While I don't represent Toledo, I am interested in how we can expand this technology across the Buckeye State.

Can you discuss how this program has been successful and does Norfolk Southern have plans to expand it to other parts of its network?

Mr. MORRIS. Yes, sir. Happy to discuss it. Our pilot project really started in March of 2019, and the idea was to utilize the advertising aspect, the targeted advertising aspect of Waze. So Toledo was one of the areas. There were seven crossings that we wanted to target. And what we do is set up a geofence around the area that we would like to target. When a motorist uses the app and they are inside of that geofence, you get an advertisement that pops up, an awareness message from the railroad, and that allows us to reach not only those that may go over the crossing but those that are generally in that area.

It only pops up when the vehicles stop. So we can kind of sidestep any issue or thoughts about distraction. We are planning to continue the campaign because we found great success in those areas.

The idea is to kind of take that total market saturation, expand it not just in the number of locations that we're targeting, but also taking the message and potentially, I guess you would say, special-

izing the message for the area or for what we are finding in that specific area, and then linking in on the back end for those who want to save it for later or click through, you know, more indepth messaging about Norfolk Southern, about grade crossing and trespassing awareness, and really link that in to our overall grade crossing awareness campaign. And that would match with the efforts of our operation awareness and response train.

As we go around to communities, we have added a grade crossing safety component to that to go along with the education that we provide for first responders for hazmat and accident response and those issues.

Mr. BALDERSON. OK. Thank you very much for your answer, and Mr. Chairman, I yield back my remaining time.

Mr. CARSON. Gentleman yields back. Thank you.

Mr. Payne.

Mr. PAYNE. Thank you, Mr. Chairman. Mr. Alexy, I wish—you know, we are kind of talking in hypotheticals pretty much for this discussion. But I wish I was still speaking in a hypothetical, but, you know, a frequent cause of fatalities at grade crossings is a driver trying to make it across a railroad crossing before an oncoming train arrives. Sadly, there were two fatalities just last month in New Jersey when a train hit a car in a railroad crossing. It is unclear if the driver was trying to cross while the train was coming, oncoming, or if there were other circumstances.

However, I believe the FRA should be giving States all necessary resources to enhance grade crossing safety to minimize fatalities.

Can you elaborate on what assistance the FRA is offering to help States prevent deaths for motorists entering grade crossings in the path of oncoming trains?

Mr. ALEXY. Well, we have grade crossing inspectors across the entire country. And we work closely with communities. You know, we go out and we make sure, one, that everything is functioning as it is supposed to at a crossing. And we do a lot of outreach. But as far as what we're giving to States in particular, as far as the Office of Safety, which is my office, I am not familiar with anything in particular other than what we do as far as our enforcement and outreach efforts.

Mr. PAYNE. So the only resources are in outreach, and is that correct?

Mr. ALEXY. I think there is probably more. There are additional resources in our grant program that if localities want to apply for CRISI grants or those types of grants, that they certainly can.

So FRA in general does.

Mr. PAYNE. And those are readily made available? Do communities know of these grants?

Mr. ALEXY. Yes, they are publicly—they are announced and they are out there.

Mr. PAYNE. OK. All right. Mr. Morris, a key component of grade crossing safety is ensuring that grade crossings are not blocked by oncoming trains for extended periods of time. What is Norfolk Southern doing to reduce the risk of blocked grade crossings and to improve grade crossing safety overall?

Mr. MORRIS. Another very good question, sir, and I can understand the interest of everybody, and that is why we appreciate

being a part of this hearing. I think one of the things that we continue to stress is just the partnership with the communities that are out there.

With the emergency notification system coming in, we get—you know, when we get a report, it is routing that through to the appropriate people to understand what is happening and understand why, and then evaluating to see if there are repeated instances. So I think there is a difference in handling on a case-by-case basis, a one-off versus something that appears to be happening repeatedly are going to be handled differently in evaluating, hey, what is—what is the proper course of action here?

And as we have already indicated, sometimes it is an engineering answer; sometimes it is an education answer about where we can stage our trains; sometimes it is an education answer with the community about specifically what is happening. But really the feedback loop is the most important thing of understanding, you know, hey, we understand it is an issue and we are trying to get to the bottom of what is going on.

Mr. PAYNE. OK. Mr. Chair, I will yield back the balance of my time.

Mr. CARSON. The gentleman yields back.

Mr. Pence.

Mr. PENCE. Thank you, Mr. Chairman. Indiana has over 3,800 miles of Class I railroad tracks, the majority operated by CSX and Norfolk Southern Corporation. As the crossroads of America, our rail industry is one of the busiest in the Nation, holding true to our nickname as the crossroads of America, moving over 328 million tons of freight annually.

According to the 2018 Indiana State Freight Plan, our State ranks ninth in the U.S. for railroad miles, yet that same year we ranked sixth in the Nation for railroad crossings. As Mr. Morris says in his written testimony, we are now number 5.

Safety is the major concern. The city of Rushville, in my district, has a population of 6,000 people. When a freight train stops at one of their main crossings, it splits the town in half. Ambulances and firefighters could be rerouted, threatening lives in case of emergency. Mr. O'Shea, as you noted, 10 minutes could mean zero chance to save a life, as it does in your community where my grandfather and grandmother lived for many years.

In Muncie, Indiana, the Tillotson crossing splits a local neighborhood from West View Elementary School, and you are not going to believe this but maybe it can—I have received calls from constituents and local officials in Muncie who have witnessed children climbing under and around the train to get to school. I am sure we can all agree that that is a major safety concern.

Mr. Morris, we are grateful that Norfolk Southern vowed to work with the Muncie, Indiana, transit system to address this specific problem.

In addition, I am pleased that in Rushville, CSX joined a task force with local officials to reduce stoppages and the impact on their community. These are both great examples of industry and Government working together to improve grade crossing safety and minimizing avoidable stoppages.

Mr. Morris, I appreciate that you highlighted Indiana's Local Trax Rail Overpass program, a public-private partnership grant program created by Governor Holcomb in 2017 to enhance railroad intersections with local roads.

Regardless of these ongoing efforts, my office—and I know my colleague and fellow Hoosier, Representative Carson, our offices are inundated with calls about problems that our constituents encounter in rural communities.

Mr. Morris, in your testimony you agree there is more to be done, stating the rail industry is not satisfied either. With population size among the grant eligibility criteria, small towns like Rushville will likely never qualify for Local Trax or section 130 funding, like L.A. or Chicago.

Mr. Morris, do you see an opportunity for industry and Government to develop a strategy like an operating procedure or a set of standards to mitigate the impact on rural communities that will not be awarded competitive grants because of their size?

Mr. MORRIS. Thank you. Yes, sir, I do. I mentioned we have about 24,000 grade crossings on Norfolk Southern. The fact that I recognize Tillotson should, I think, tell you everything about it. And that is a perfect example of we mentioned engineering as one solution, education, and this is a great example of education both inward and outward.

That was the situation where we were actually able to kind of take that feedback, look at the operation, get a sense of what was creating the issues, and by adjusting the locations of pickups and set-outs of customer freight on two trains operating in the area, adjusting some of the timing of some of our more irregular local trains that were operating on less of a scheduled time, we think that we have addressed that issue.

But I think that is a perfect example of where it goes to, you know, some of these issues, really, they start to get very complicated because it can create a cascading effect if you are trying to fix it by pulling on the wrong lever. And that was a perfect example of getting kind of the safety people, our operating folks together and saying, hey, what gives? And you should see that decrease. But perfect example of education works both ways.

Mr. PENCE. Thank you all for being here. Mr. Chairman, I yield back.

Mr. LIPINSKI [presiding]. The Chair will now recognize Ms. Norton for 5 minutes.

Ms. NORTON. Thank you, Mr. Chairman. I appreciate this hearing. Well, I have an interest in railroads and trespassing, and the statistics that show that people are often killed by walking the railroads. This is a kind of romantic notion of walking on the railroad tracks. And I have some statistics, and there is also the notion, of course, of taking a shortcut across the railroad tracks. And so I am trying to find out what we are doing about that. And I noted some data that surprised me. Up to 500, 400, between 400 and 500 casualties, or I'm sorry, fatalities, perhaps many more injuries than we know, because only the casualties, I believe, are reported.

Now, I appreciate that the FRA has looked at the statistics, done a lot of research and come up with some notions like educating the public. I am more interested in one of their ideas about law en-

forcement and policing and fines. I recognize that would take some work, but when you have that amount of—that number of fatalities, it seems to me it is worth the work.

Now, I do note the interest therefore in warning signs and medians and signage generally. Are there—I suppose this question could go to Mr. Vercruysse, Mr. Christoffels, or Alderman O'Shea, or all of you, are there any—what work is being done that you know of and are there grade crossing projects that may be ineligible for the Federal funding 130 program that you believe should be eligible under that program to bring funding to it as a safety matter?

Mr. VERCRUYSSE. Thank you very much. I am happy to answer the question and address trespassing more from the State funding perspective and what we are doing, and maybe that could serve as guidance to—at the Federal level and what we have been discussing with the FRA. In 2001, our State statutes were changed so that we could fund pedestrian bridges, overpasses, underpasses, and that was in direct response to a location where we had blocked crossings and kids going through trains.

Ultimately, the first bridge project that we did construct was at a location where a middle school was separated from a whole community and the children have to walk 1½ to 2 miles along an unimproved area. The seventh grader, she was killed at this location and from there we started building bridges.

And that is when we started getting involved in what was really trespassing mitigation. More recently in the last—I would say in the last 6 months, we have been looking at our State statutes on how we can address trespassing mitigation especially with the findings by the FRA that 75 percent of the incidents happen within 1,000 feet of a crossing. How do we expand that definition of the crossing, or at least whatever we are working on—trying to take care of two factors?

So as part of our State statute in review of what we are trying to do is to allow us to help fund those projects which might be fencing. It may be more bridges that we have done in the past. We know how to do those things. I think the bigger challenge is how do we make it for law enforcement so on their normal patrols and their normal day-to-day operations that we integrate it? How do we use technology whether it is radar systems or other detection modes for trespassers going off of the crossing, and then provide that information to law enforcement in a usable way?

We have worked with programs before, actually one that was funded federally, the PEERS Program, the Public Education and Enforcement Research Study, and I believe some of these programs after that have been just, you know, part continuation. Those did show a benefit but that involved—overtime, that involved trying to, you know, make sure you have those resources always available. So our question is using technology today, what can we get to the police departments and how can they address it in a more immediate fashion? Thank you.

Ms. NORTON. Thank you very much, Mr. Chairman. I think this is a matter that has received too little attention from the Congress, for these fatalities demand our attention. Thank you very much.

Mr. LIPINSKI. Thank you. Now, the Chair will now recognize Mr. Bost for 5 minutes.

Mr. BOST. Thank you, Mr. Chair. Just so you know, I served as a professional firefighter, as a union firefighter for many years, and I was trained at one of the best schools in the Nation, the Illinois Firefighters Academy. It is second best in the Nation only to New York. Now, part of that training and let me tell you—look at me. It was a long time ago.

The training dealing with hazmat spills whether it was train or whether it was other transport, and/or dealing with fires on those types of situations was a pretty intense training. And then—and I'm not joking about this. This is actually some of the training. Then we had what was known as the "cop" test.

We would come with the firetruck, OK? You hit one-eighth mile off. You get your binoculars out and if you think you'd had a hazmat spill, if the cops were down, don't go in. That really was part of it back then. Now, things have changed since then on how training goes, but that being said we are trained on a lot of things. And just recently we had a train derailment right in my district and there was a fire, and fortunately no lives were lost.

And no property was destroyed except for the damage to the train that occurred there. That being said, Mr. Morris, how are you working—because I was in a fire department that we had professional training because we were paid by the city. The city could afford that. We could afford to be sent to the best training. How are you working with rural area first responders on trying to make sure that they are trained to the level they are that can assist to be the responders they need to be?

Mr. MORRIS. It is a very important issue and Norfolk Southern's approach has been to as much as possible take the training to the departments. And that is the Operation Awareness and Response training that I mentioned, and the stops across our system. We have an 18-stop tour scheduled for 2020.

This is something we have done for years. We pick areas across the system. We let people know that we are coming and then that training is provided free of charge to first responders to let them know what they need to know when it comes to dealing with hazmat, and to let them know resources that are out there.

The industry has put a lot in developing technology resources, like the AskRail app that is out there from the railroad industry and available for our first responders to where you can actually log in, and at the click of a button get a better understanding of what is in the consist. And not only that but it routes you out to some of the emergency response guidelines, such as your clear distances and evacuation or isolation distances to let you know more about that particular commodity and the dangers associated.

Beyond that, we fund scholarships. Again, on the industry level to our SERTC Program out in Pueblo, Colorado, that is run in collaboration with TTCI to give an even more indepth training where people leave that training HAZWOPER certified. So I think the industry would agree that it is very important for our first responders to have at least some familiarity with the different commodities that we're moving and how to appropriately respond in an incident.

Mr. BOST. I am glad you mentioned the app and I am glad technology is being dropped in there because whenever I was firefighting and I was responding you had a book in the glove compartment. And then you had to go with a number, and the description and find it. And it had all that information, but today, the technology a firefighter can en route, hopefully, be able to get the information.

So the other question I have here and I have just got a short period of time, but so when you say you notify the communities, you just go down your existing rail and say OK, this is a community that hasn't been trained yet. Boom. That is when we are going to—and then you reach out to the local law enforcement and/or first responders, or how is that done?

Mr. MORRIS. We have hazmat officers located around our system and hazmat officers and environmental operations officers that, you know, really a lot of them are former first responders, and they have partnerships and relationships with the communities. It is on our web—it is also a link to it from our website.

I don't think it is on the actual Norfolk Southern. It is a separate website that you can get to from there that will allow you to get the information. And I believe it is joinnsoar.com. And that is in the written testimony as well. So people can go to that and get more information about where those events are and when they are coming.

Mr. BOST. All right. Thank you very much. With that, Mr. Chairman, I yield back.

Mr. LIPINSKI. The Chair now recognizes Mr. Carson for 5 minutes.

Mr. CARSON. Thank you, Chair. Mr. Morris, in your testimony you ask for increased Federal funding for the section 130 program. How has your organization invested in improving grade crossing safety and how does fiscal year 2020 projected spending compare to previous years?

Mr. MORRIS. Another very important topic which is section 130. I think it is at $245 million for 2020 and our recommendation that it be maintained at that if not increased as we move into the future. It is important to realize that we are not just asking for this money and not investing in anything ourselves. The railroad industry spent hundreds of millions of dollars a year on our infrastructure maintenance as it directly connected to grade crossings.

Norfolk Southern, itself, spends $30 to $40 million a year maintaining warning devices and we are reimbursed under $2 million for that work. So it is an ongoing effort. I think when we look to section 130, what we are looking at for those projects are projects that can have an outsized influence.

You know, these larger grade separation projects where we think we can solve a lot of issues in collaboration with localities and others to really have a larger impact. So that money is not for little things. The, you know, $245 million or more that goes into that, I think you can see from the other witnesses there is an outsized impact of what goes into that.

Mr. CARSON. Thank you, sir. Mr. Vercruysse, your testimony states that four-quadrant gates should be the goal of efforts to install, renew and significantly change crossing. What safety benefits

do four-quad gates offer railroads and communities? And do barriers exist to installing these gates?

Mr. VERCRUYSSE. Thank you, very much. Four-quadrant gates, we have 178 locations in the State of Illinois and primarily we have an accident figure, where approximately 25 percent of people go around the gates. The four-quadrant gates will seal off the entire crossing so that that person or motorist cannot go around the gates.

And we have gone farther in use of vehicle detection in the crossing and along our corridor from Chicago to St. Louis. Those vehicle loops also have additional services. So this vehicle detection will actually communicate back to the train if we have an obstruction, say a farm vehicle, a truck or some other implement on the crossing.

So there we can provide safety in terms of avoiding derailments. Our passenger trains, those passengers on the train did not go around the gate. We need to find a way to address all of their concerns. But four-quadrant gates to us provide the best available technology that solves about—we see 25 percent of the accidents. And if we were not to look at that, we have not looked at all of our engineering solutions. And as such we found a great benefit in accident reduction through that area.

Mr. CARSON. Thank you, sir. Thank you, Chair. I yield back.

Mr. LIPINSKI. Thank you, Mr. Carson. I now yield 5 minutes to Mr. Davis.

Mr. DAVIS. Thank you, Mr. Chair. I appreciate the opportunity. I apologize I missed opening testimony and some of the other questions. So I am going to keep my questions to more of a local-level issue and Mr. Vercruysse, good to see you again. Thank you for being here. I have heard from one of my good friends, Mayor Chris Koos of Normal. Normal, Illinois, for those of you who have not been there. It is issues regarding rail blockings.

I understand his office has been in close communications with the rail company which really is key to addressing these local-level concerns. And as we draft the next surface transportation bill, what can we as legislators provide you in Illinois to make sure our State is the safest in the country when it comes to rail crossings?

Mr. VERCRUYSSE. Thank you very much and good to see you too. With the rail crossings, I think in terms of blocked crossings we would like to see a plan in place as far as when operation changes occur, how are these to be addressed. If there is a continuous need to address the blocked crossings, then are we looking to infrastructure plans and how do we fund those plans?

How do we get all of the parties together and formulate what is a coordinated effort before it happens? That would be a primary goal. After that, expanding past the normal area, loss of shunt issues and trying to go to the next development of Positive Train Control, right now we still have track circuits that were derived from the late 1800s.

So that is the underlying technology that is used, and then obviously through our great use of computing power we have been able to augment that, but we still are relying on track circuits. So under a new Federal legislative initiative, I think it would be nice to see help and have Positive Train Control addressing the grade crossings.

Mr. DAVIS. OK. Well, I appreciate your viewpoint on that and you mention the short shunt issue and the impact on rail safety. I know this is also an issue that has been raised in connection with Amtrak's Illini route and how it may have affected their on-time performance. The Illini route services my constituents in Champaign-Urbana, and can you speak to your efforts with the railways IDOT and Amtrak to address this issue so that our commuter trains arrive safely, but also on time?

Mr. VERCRUYSSE. Yeah. Thank you. There has been a great effort in the last 2 years with the railroads, all of the major parties. Yesterday I was at a meeting of the loss of shunt committee which had pretty much the "who's who" of railroad signaling and warning devices present to help address the concerns.

And as a result there have been modifications to warning systems, settings. There have been software modifications but yet there are the speed restrictions that you have discussed that ultimately affect or impact what the commuter time may take. But at this point we are working towards the next product which is something that has been utilized in Europe for quite some time and is to help assist that track circuit that I discussed with the old signal technology.

We just signed an agreement to help fund that portion. In addition, the railroads have expended a great deal of resources. Amtrak is working towards a solution as is the Illinois Department of Transportation. So this project, we anticipate, will be 1 year to 2 years, but ultimately, we still believe the direction would be to move to that next level of radio-based or wireless detection.

Mr. DAVIS. So the implementation of PTC technology as we see it nationwide probably isn't going to affect the issue that you think we may be having on the Illini route?

Mr. VERCRUYSSE. Correct. It does not address the at-grade crossings and my understanding it doesn't solve the loss of shunt concern.

Mr. DAVIS. OK. Well, I look forward to continuing to work with you and the commission, and also our partners in the rail industry, Amtrak and IDOT too, to move forward on both of these issues. Thank you for your time, and thank you to all of the witnesses.

I yield back, Mr. Chair.

Mr. LIPINSKI. Thank you, the Chair now recognizes Mr. García for 5 minutes.

Mr. GARCÍA. Thank you, Mr. Chairman and to all of the witnesses who came this morning, I apologize I couldn't be here for all of your statements. I had a bill up in a neighboring committee. But I am glad to see not one but two witnesses from Illinois here. Thank you, Alderman O'Shea and Administrator Vercruysse. And of course it makes sense that we have great representation from the Chicago area at today's hearing.

Chicago is America's transportation hub with over 7,400 miles of railroad tracks and thousands of rail crossings. We are quite familiar with rail and all of the positive and negatives that come with it. Safety, of course, must be our top priority. So I am glad we are focused on that today. One area of safety I think we often overlook, however, is the long-term dangers of communities in close prox-

imity or immediate adjacency to heavily industrialized areas or major rail infrastructure.

More often than that it is working-class communities and communities of color that run along railroad tracks. These are areas that need more infrastructure investment right where I live. In the district I represent we have trains and tracks running right through our neighborhoods by our schools. It is part of life.

You hear the trains rumble through at all hours of the day and night, and of course we are all too familiar with blocked crossings. What we don't talk about enough are the environmental justice implications of blocked crossings. Those of us who don't live near railroad tracks may not see this but I see it all the time in my district.

A few weeks ago, the Chicago rep from CSX, Tom Livingston, gave me a tour of CREATE, a landmark public-private partnership to clear up congestion in Chicago. And my key takeaway is when we invest and bring Government and the public sector together, we can provide real solutions. But there is still so much more we can do.

On the Northwest Side we get backups along Belmont between Pulaski and Kedzie Avenue. And the Southwest Side by my home we have got issues like the ones we see on Pulaski and 33rd Street. When blocked trains back up traffic, it is not just a nuisance or congestion. It is a health and safety issue as well. Idling trucks from the local freight and logistics operation lead to heavy tractor-trailers idling right outside of schools and right through neighborhoods.

There are plumes of smoke at times and the constant smell of thick, diesel fumes. There are kids that walk all along these congested truck routes. My question is what happens to the families and the kids for whom this is their everyday? This is simply the air they breathe day in and day out. What about their safety?

So, Mr. Christoffels, in your testimony you shared a lot about the success of the Alameda Corridor Project. Can you talk about the added air quality and environmental benefit you have achieved by successfully completing grade separation projects?

Mr. CHRISTOFFELS. Yes, thank you for the question. I stated earlier in my testimony the crossings that we have eliminated through grade separation has reduced approximately 2,000 vehicle-hours of delay per day. So that's—again, that's 2,000 vehicles sitting there, idling in these neighborhoods that you were just alluding to.

That is pollution that these residents and children are not being subjected to. The same thing also—in providing these crossings we are moving the freight through their communities as opposed to allowing those trains to sit, and stall and idle, which is also improving the air quality for those residents living in the area.

And of course there is beyond just the environmental; it is a safety issue. We now have the ability to get students to their classrooms via these underpasses where they will not be subjected to standing at a crossing, and being in close proximity to the rail engines as they are traveling through their communities.

Mr. GARCÍA. Thank you, and do you believe that more Federal funding for these grade separation projects and a dedicated funding stream would help?

Mr. CHRISTOFFELS. Absolutely. Yes.

Mr. GARCÍA. Excellent. Now, I want to turn to Alderman O'Shea and maybe, perhaps if time allows, back to Mr. Christoffels. Can you speak to some of the same concerns about blocked crossings and the resulting air quality issues that can arise from idling trucks and diverted traffic, because in Chicago the first person they call is the local alderman, as you know too well, Alderman O'Shea? And do you believe that the Federal Government could provide a more dedicated funding stream to build grade separated crossings?

Mr. O'SHEA. Thank you for the question. Something I didn't talk about in my testimony but also is a problem in communities throughout the country, and I have certainly seen it, when trains are stopped, maybe not necessarily blocking a crossing, but stopped because the motor facility or the yard they are headed to is crowded, they will sit in my community for hours at a time with the locomotive running.

And that is a tremendous amount of pollution that the residents in that area will see. And like your neighborhood that you represent, the neighborhood I represent, I remember when the Surface Transportation Board came out. They couldn't believe the proximity from the residential homes to the rail lines.

I mean, literally in my community there are homes 60 feet from the rail line. And when you have 5,000-foot-long trains with a locomotive running, idling for, in some cases, hours at a time, that is a tremendous amount of pollution being released in the air which is really bad for a community.

So although my—the problems I have seen in my community are a little different, that most certainly is a real problem. We have got to keep these trains moving. I think any community would understand that we need freight rail traffic. This is commerce, but we need the trains to move. And when they stop, whether it is blocking a crossing which is dangerous to both pedestrians, but also dangerous and problematic, and quality of life issues for motorists and community residents, stopped trains that are idling is also a very serious issue as far as it pertains to pollution.

So I would welcome any thoughts, any ideas to try to resolve some of these issues as it affects my neighborhood on the Southwest Side of Chicago.

Mr. GARCÍA. Thank you, sir. Thank you, Mr. Chairman for your indulgence. I yield back.

Mr. LIPINSKI. Thank you, Mr. García. The Chair now recognizes Ms. Wilson for 5 minutes.

Ms. WILSON. Thank you, Mr. Chairman. Preventing grade crossing collisions and fatalities is a major challenge in Florida where passenger and freight railroad tracks stretch across the State. I have watched several troubling videos of vehicles narrowly escaping Brightline trains in my district.

While these incidents did not result in fatalities or injuries, so many others have. FRA data and those reports indicate that since 2017, at least 40 Brightline collisions have resulted in fatalities. It is absolutely incredible and we have never experienced anything like this before in the railroad industry.

Given this deadly increase, I urge FRA to review these incidents and issue recommendations. I encouraged Brightline to attend this hearing. They declined but said they would include a statement for

the record, because we need to find new effective solutions to this problem because whatever everyone has been doing up to this point is simply not working.

I have a few questions. Mr. Alexy, the rail line in Florida, itself, has been around for years as part of the Florida East Coast Railway. But Brightline began operating in 2017 and has dramatically expanded service. In the past, slower freight trains used the line, but Brightline now runs up to 20 trains per day operating at an average speed of 80 miles per hour.

Since Brightline launched 2 years ago, on average more than one person a month has been killed on the tracks in a car, on a bike or on foot. An analysis by the Associated Press found that this was the worst death rate per mile of any of the Nation's railroads. And as of today more than 40 lives have been lost. How is the FRA working with Brightline and local authorities to reduce incidents and fatalities?

Mr. ALEXY. Thank you. Thank you for the question. We are well aware of the issues down there and it is important to us. We have been working with Brightline from the beginning, from the inception of the project, and to ensure that their operations one, are in compliance.

We have also worked with them for outreach reasons to reach out to others—to the communities along that route to understand the differences in the operations that you point out, that these are much faster trains. And the time that they catch up with you is much shorter. So there is less time, but the important thing is to get people to—whatever we can do to get them to stop trespassing.

That is an important element of this and that outreach is vital, and important to that. We also have—again, I have spoken about it before about the grants that are available to do any type of grade crossing upgrades or improvements and the like, and also trespass prevention as well for local communities.

Ms. WILSON. Have you given any safety recommendations to Brightline itself and have they been implemented, recommendations that the company can do to stop some of these deaths?

Mr. ALEXY. Well, we have stressed the importance of outreach and working with the communities——

Ms. WILSON. We have done outreach. We have done outreach. We have—in fact, I taped a commercial myself to—for the community and for people to understand the difference in the speed of the trains. But that has not worked.

Mr. ALEXY. We have—you know what? I will say that we have done a lot of enforcement. We have been down there making sure that one, their gates and lights, and their crossing equipment is working right, and their operations are all in compliance. And generally their compliance record is very good. And we continue to keep a very close eye on them.

Ms. WILSON. Have you spoken with them at all about having law enforcement or private security companies stationed at the crossings when the trains are scheduled to come along the tracks?

Mr. ALEXY. I have not. I can check on that to find out if we have had those conversations. I know the president of Brightline was up meeting with our Deputy Administrator to talk about different strategies they have implemented. I will have to go back and

doublecheck that to find out if that conversation happened, but—and we can submit that.

Ms. WILSON. Ms. Maleh, thank you and your colleagues at Operation Lifesaver for your work to promote rails safely and save lives in Florida, and across this Nation. Can you highlight Operation Lifesaver's work to reduce Brightline related fatalities and the potential impact on increased Federal funding? How would that help those efforts?

Ms. MALEH. Thank you very much for the question. We recently participated in a safety blitz in Florida with Brightline with our State coordinator there. And my colleague Chantez Bailey who is here with me in the room did multiple press conferences. They also ran a mobile van throughout the State where the tracks run to share the importance of when you see tracks, think train.

It is really the outreach and the education. I think a lot of people don't realize how fast the train is moving. It is an optical illusion or they are distracted and they don't stop, or they are used to driving around a gate because trains never come. It has moved slowly. So we are trying to change human behavior which is a daily, as well as an hourly, project that we undertake through our education efforts.

But we are also reaching back younger, to the younger ages, to students in schools to work with school administrators to get the word out through their school assemblies. We are working with driver's education programs so that they learn the signs, as my colleague to my left talked about, so that drivers know what the signs mean and how to yield or stop at a crossing.

So we do a multitude of trainings and education, and outreach throughout the State of Florida as well as the other States in the country. One of the things that is really—that we are noticing is the selfies and photographers taking pictures on the tracks.

So one of the outreaches that we did with Brightline was educating photographers, amateur photographers and the teenagers not to take photos on the tracks. So they had this mobile selfie booth with rail safety messages near the crossings as part of events so that they were part of a community outreach festival.

Ms. WILSON. I yield back.

Mr. LIPINSKI. Thank you. We have been going for over 2 hours now. So at the risk of prolonging this, I want to see if any of the witnesses had any short comment they want to add at this time? All right. Thank you. And everyone else thanks you too, probably. I want to thank all of you for your testimony today.

The discussion has been very informative and helpful. You know this is an issue where we need to figure out where we are going to draw lines because no one—as I said in my opening statement, our freight rail network is the envy of the world and helps our country be—all of our businesses be more efficient.

There are issues though that arise because of the vast network of freight railroads and we need to figure out the right place to make sure that communities are protected from the negatives that do come from that. So I think all of the testimony today has been very helpful as we move forward with writing the reauthorization bill.

And we will continue to have discussions with all of you and relevant stakeholders as we move forward in the next month or two. So with that I want to ask unanimous consent that the record of today's hearing remain open until such time as our witnesses have provided answers to any questions that may be submitted to them in writing.

And I ask unanimous consent that the record remain open for 15 days for any additional comments and information submitted by Members or witnesses to be included in the record of today's hearing. Without objection so ordered, and if no other Members have anything to add, the subcommittee stands adjourned.

[Whereupon, at 12:19 p.m., the subcommittee was adjourned.]

SUBMISSIONS FOR THE RECORD

Prepared Statement of Hon. Peter A. DeFazio, a Representative in Congress from the State of Oregon, and Chairman, Committee on Transportation and Infrastructure

Thank you, Chairman Lipinski and Ranking Member Crawford, for calling today's hearing to look at issues surrounding grade crossing safety.

The last time this Committee held a hearing to examine grade crossing issues was 15 years ago. A lot has changed since then. We all now have cell phones, which is the number one contributor to distracted driving. We rely on apps like Google Maps and Waze to find shortcuts to help us get to our destinations faster. The Class I railroads have implemented Precision Scheduled Railroading (PSR), which includes operating longer trains, closing yards, and demanding signalmen cover more and more territory in order to cut labor expenses. All these changes have an impact on safety at public grade crossings.

States and localities have tried to address some of the grade crossing issues they face but have a hard time keeping up—often with little financial support from the Federal Government or railroads. While the railroads advocate for closing more grade crossings, these projects often aren't realistic solutions in densely populated communities that have been built around rail lines.

Grade crossing separation projects can increase capacity and free-flowing movement for both trains and vehicles, while reducing vehicle-train conflict and increasing safety. However, we'll hear from witnesses today just how expensive these projects can be. With only $245 million available nationwide this year for projects through the Section 130 Railway-Highway Grade Crossing Program, many states struggle to cover the costs of multi-million dollar projects. As a result, we plan to provide more funding opportunities for these larger grade crossing safety projects through rail safety grants in the Rail Title of the Surface Reauthorization bill.

Another issue compounding the problems at grade crossings is the growing length of freight trains. Though railroads don't make train length publicly available, two Class I railroads provided information to the Government Accountability Office that showed train length has increased by 25 percent in just the last 10 years. I am very concerned by this trend and suspect that train length will continue to grow with the Class I railroads' implementation of Precision Scheduled Railroading.

While increasing train lengths to over 3 miles long might provide a cost-savings to the railroads, it has major impacts on the communities these trains traverse, sometimes bisecting entire communities and bringing traffic to a halt for hours or even days! And without sidings long enough to hold such long trains, trains idle on tracks while waiting to enter a yard, sometimes blocking crossings and creating traffic jams.

We have heard from numerous state and local officials that long trains and trains stopped on crossings have prolonged response times for emergency responders and forced them to find alternative routes.

Thirty-five states and Washington, D.C. have laws in place allowing them to issue a civil fine to a railroad when it blocks a crossing for an extended amount of time. But in the last decade, the railroads have challenged many of these state laws in court on the grounds that they are pre-empted by federal law. However, there are no federal regulations pertaining to trains blocking public grade crossing.

To make matters worse, FRA Administrator Ronald Batory told this Committee last June that solutions to these problems should be addressed at the local level leaving little incentive for railroads to take community concerns seriously. States continue to try to address persistent blocked crossings by working with railroad representatives, but problems persist, and I continue to hear complaints from constituents.

Today's panel includes witnesses with varied first-hand experiences in dealing with grade crossings issues. I look forward to hearing their suggestions on improv-

ing grade crossing safety, reducing blocked crossings, and how best to engage railroads, local communities, and the Federal Government in being cooperative partners on grade crossing issues.

Prepared Statement of Hon. Sam Graves, a Representative in Congress from the State of Missouri, and Ranking Member, Committee on Transportation and Infrastructure

I want to thank Chairman Lipinski for holding this hearing, and I want to thank our witnesses for attending.

Today's hearing is a good opportunity to evaluate the work being done to improve railroad grade crossing safety, including the critical issues of railroad trespassing and suicides, as well as problems with blocked grade crossings.

Railroad safety is a top priority for the rail industry, for our states and communities, and for this Committee. Preventing injuries and fatalities on our nation's railroad tracks, including through initiatives that address suicides, is crucial to the future of our rail system.

Finding practical and cost-effective solutions to improve grade crossing safety, such as through equipment upgrades, grade visibility improvements, and closing or eliminating crossings, serve to not only to save lives, but also eliminate traffic and gridlock in our communities.

The rail industry and local communities have focused in on addressing grade crossing issues. Efforts have been made to track and prevent railroad trespassing and suicides through the use of various technologies and expanded public education.

The FRA has recently highlighted the issue of blocked grade crossings. It has taken steps to better understand this problem through stakeholder outreach and improving tracking efforts, and through soliciting public input on individual blocked crossing incidents.

I look forward to hearing about the FRA's current work to improve grade crossings, and future plans to continue this work.

I also look forward to hearing from railroad stakeholders on the challenges they face with grade crossing issues, including efforts to enhance safety and save lives, and potential solutions to these concerns.

The various federal grant programs directed at improving grade crossings have provided assistance with crossing upgrades. The Section 130 program, which is funded by the federal government and administered by the states, directly addresses hazards at rail crossings.

We should continue to evaluate these grant programs to ensure the money is accessible and is being used effectively.

Thank you again to our witnesses, and I look forward to our discussion.

Statement of Jerry C. Boles, President, Brotherhood of Railroad Signalmen, Submitted for the Record by Hon. Peter A. DeFazio

Thank you, Mr. Chairman, Ranking Member, and honorable members of the Railroads, Pipelines, and Hazardous Materials Subcommittee. My name is Jerry Boles, President of the Brotherhood of Railroad Signalmen (BRS). The BRS is primarily responsible for performing the installation, maintenance, repair, and testing of safety critical highway-rail grade crossing warning systems. On behalf of more than 9,600 BRS members and railroad workers across the country who serve this nation's transportation needs, I want to express my appreciation to the Subcommittee for holding this hearing on current issues regarding highway grade crossings including blocked grade crossings, the improvement of grade crossing safety, and the concerns that many communities have regarding highway grade crossings. It is imperative to understand that the issues reflected in my testimony affects not only the general public, but also our members, and the general safety of the railroad.

Much of this testimony delves into life-saving and safety critical work on highway grade crossing warning systems, which the Subcommittee should be familiar with. While the general subjects of my testimony are of a somewhat different nature than that under consideration by the Subcommittee today, they are pertinent to reach the goal of zero accidents, injuries, and/or fatalities.

As railroading has evolved, safety has always been the highest priority for the BRS and we have worked diligently towards achieving it. A prime example of the BRS working towards necessary safety improvements came in the early 1990's with the implementation of life saving and critical highway grade crossing regulations

that are in place today. These regulations addressed serious gaps in highway grade crossing warning system safety and improved the safety of the general public and railroad workers, as well as protected and safeguarded railroad property. In fact, before these regulations were implemented, there were not federal requirements to document problems and issues that occurred at highway grade crossings, nor were there measures to prevent them.

A brief explanation of some of the key improvements that came with the implementation of these regulations is proper. One of the key improvements came under 49 CFR Part 234—Subpart D—§234.225, which established parameters on a highway grade crossing warning system's minimum warning time. 49 CFR Part 234—Subpart D—§234.225 reads as follows (in part):

> "A highway-rail grade crossing warning system shall be maintained to activate in accordance with the design of the warning system, but in no event shall it provide less than 20 seconds warning time for the normal operation of through trains before the grade crossing is occupied by rail traffic."

The aforementioned regulation established that, at minimum, there must be at least 20 seconds of actual warning time before a train occupies the street that the railroad crosses. Conversely, 49 CFR Part 234—Subpart A—§234.5 defined what occurs if that crossing warning system does not provide the minimum warning time of 20 seconds. 49 CFR Part 234—Subpart A—§234.5 reads as follows (in part):

> Activation failure means the failure of an active highway-rail grade crossing warning system to indicate the approach of a train at least 20 seconds prior to the train's arrival at the crossing, or to indicate the presence of a train occupying the crossing, unless the crossing is provided with an alternative means of active warning to highway users of approaching trains. (This failure indicates to the motorist that it is safe to proceed across the railroad tracks when, in fact, it is not safe to do so.) A grade crossing signal system does not indicate the approach of a train within the meaning of this paragraph if—more than 50% of the flashing lights (not gate arm lights) on any approach lane to the crossing are not functioning as intended, or in the case of an approach lane for which two or more pairs of flashing lights are provided, there is not at least one flashing light pair operating as intended. Back lights on the far side of the crossing are not considered in making these determinations."

Before these regulations were in place, there was not a requirement establishing a minimum warning time nor were there any reporting requirements for an activation failure. Simply put, the railroads may have desired to provide sufficient warning time; however, there was not a regulation requiring it, nor were there any consequences if there was not sufficient warning time. Also, there were not any requirements to report a situation where there was not sufficient warning time.

When the minimum warning time requirement was established for highway grade crossing warning systems, it prompted 49 CFR Part 234—Subpart D—§234.257. This regulation established the timelines for on-site testing and visual inspections, reading as follows (in part):

> "(a) Each highway-rail crossing warning system shall be tested to determine that it functions as intended when it is placed in service. Thereafter, it shall be tested at least once each month and whenever modified or disarranged.
>
> (b) Warning bells or other stationary audible warning devices shall be tested when installed to determine that they function as intended. Thereafter, they shall be tested at least once each month and whenever modified or disarranged."

Establishing that a highway grade crossing warning system can only be considered safe with at least 20 seconds of warning time, a regulation requiring that highway grade crossing warning systems need to be tested and inspected every 30 days was implemented to ensure that all components are functioning as intended. While this is a very rudimentary explanation, the aforementioned regulations are examples of how regulations help address and alleviate safety and problems before they occur.

It must be noted the regulations cited above are a small sampling of the many life-saving and critical highway grade crossing test and inspection requirements in place that define exactly what must be done by signal workers in order to ensure highway grade crossing warning systems are functioning properly. The additional regulatory requirements were established and have proven time and time again to provide for the safest and most reliable highway grade crossing warning systems in the railroad industry. A more detailed explanation regarding the current regulations

in place for highway grade crossing warning systems can be provided, should the Subcommittee desire.

Since the implementation of the highway grade crossing warning system regulations, accidents, and incidents have decreased significantly. Concurrently, highway grade crossing warning systems have seen vast and significant technological changes resulting in dramatic advancements. As with any technological advance, safety of the general public and of the workers tasked to install and maintain these systems should be the driving force behind implementing them. However, while technology is a valuable tool and can help increase safety at highway grade crossings, it in no way trumps or replaces the proven test and inspection system currently mandated.

Carriers are installing the most technologically advanced crossing warning systems available and, in some cases, are attempting to use those systems to argue for deregulation of time-proven tests and inspections at highway grade crossings. Further exacerbating this problem are the many waiver applications Administrator Batory's Federal Railroad Administration are granting. Simply put, the more waiver applications that are granted, the less that on-site testing and inspections will occur. This puts the public, rail workers, and Carriers' property at a much higher risk. Additionally, under the inflexible Precision Scheduled Railroading (PSR) business model many railroads employ, eliminating regulations will result in larger and unrealistic territory size. This will no doubt result in more equipment failures, including highway grade crossing warning systems, increasing the potential for tragic incidents and consequences.

I am certain that the main reason there are so few tragic failures that result from equipment malfunction on highway grade crossing warning systems is due to the fact that signal workers are on-site doing required, regular testing and inspections. What Congress, regulatory agencies, and the general public may not realize is there are many times that failures of the highway grade crossing warning system, and the potentially tragic consequences that may occur, never actually happen because of the regulatory mandate for on-site testing and inspections.

Further, while some would try to convince us that technology can somehow replace the regulations currently in place, this would actually be a step back and would no doubt result in more accidents and incidents. Moreover, individuals not familiar with the day to day testing and inspection requirements would have us believe that technology is somehow responsible for the good track record in highway grade crossing safety, rather than current testing and inspection requirements, which is simply not true. Make no mistake, technology does not make highway grade crossing warning systems safe; life- saving testing, inspection requirements, and the workers tasked with performing them make crossings safe.

Our economy is reliant upon the many trains that ship our goods across our country. Shipping by rail is one of the safest, most efficient, and environmentally-friendly transportation options available, and it is incumbent upon all of us to find ways to minimize the likelihood of another accident at any railroad grade crossing. The BRS has consistently fought to improve safety for our members and the public through measures such as highway grade crossing warning system regulations, roadway worker rules, and the Rail Safety Improvement Act of 2008. These are just some of the innovations we are proud to have advocated for and accomplished. However, we realize that the work of keeping our nations rail network safe never ends and we will continue to work with Labor, the FRA, the National Transportation Safety Board (NTSB), Railroads, and Congress to ensure safety for the general public, rail workers, and railroad property.

Letter of February 13, 2020, from Ann Begeman, Chairman, Surface Transportation Board, Submitted for the Record by Hon. Daniel Lipinski

FEBRUARY 13, 2020.

Hon. DANIEL LIPINSKI,
Chairman,
Subcommittee on Railroads, Pipelines, and Hazardous Materials, U.S. House of Representatives, Washington, DC.

DEAR CHAIRMAN LIPINSKI,

I am writing in response to certain witness testimony given last week during your Subcommittee's hearing entitled, "Tracking Toward Zero: Improving Grade Crossing Safety and Addressing Community Concerns." Specifically, Alderman Matthew O'Shea commented on the impacts of blocked crossings in his ward as a result of rail operations by CSX Transportation Inc. (CSXT) on the Elsdon Line in the Chi-

cago area. The purpose of this letter is to address issues raised by Alderman O'Shea with respect to the Surface Transportation Board (STB or Board) and its work concerning the Elsdon Line.

In 2013, the Board approved CSXT's application to acquire an operating easement over the Grand Trunk Western Railway Company's Elsdon Line. *See CSX Transp., Inc.—Acquis. of Operating Easement—Grand Trunk W. R.R.*, FD 35522 (STB served Feb. 8, 2013). That approval was made subject to conditions, including voluntary mitigation measures proposed by CSXT and mandatory mitigation measures developed by the Board's Office of Environmental Analysis (OEA), to help mitigate anticipated effects of the transaction with respect to, among other things, traffic and grade crossing delay, emergency response, pedestrian and bicycle safety, and rail safety. The Board also imposed monitoring and enforcement conditions requiring CSXT to report quarterly (for three years) on the progress of, implementation of, and compliance with, the mitigation measures.

The Board recognized that the Village of Evergreen Park and other communities experienced frustrating and difficult challenges when CSXT commenced operations on the Elsdon Line. That is why the Board remained actively engaged after the transaction's approval. In addition to the Board-monitored mitigation, Board members met with CSXT officials to discuss operational concerns on the line. Board members and staff also traveled to Evergreen Park in 2014 and 2015 to visit with officials and tour the most impacted areas first-hand. And, Board staff communicated regularly with State Representative Kelly Burke, Mayor James Sexton, and CSXT representatives to address community concerns regarding rail operations.

These efforts continued until the Board formally reopened the proceeding on June 22, 2016, stating that CSXT had been allowed more than enough time to address the many problems that had arisen on the line since the application was approved. The Board ordered CSXT to comply with the representation it made in its application (that it would not route a train onto the Elsdon Line unless the line was clear) or show cause why it is unable to do so. Additionally, the Board ordered CSXT to report monthly on a number of issues, including gate malfunctions and crossing blockages exceeding 10 minutes. The Board twice extended CSXT's monthly reporting requirements, with the final monthly report being filed July 16, 2018. In a decision served July 27, 2018, the Board noted that, while CSXT's monthly reports indicated that CSXT had reduced the number of false activations on the line, issues remained regarding the number and duration of blocked crossings. The Board ordered CSXT to establish and provide to the Board a plan detailing additional actions CSXT would take to improve fluidity and reduce the number and duration of blocked crossings on the line. CSXT submitted its response in August 2018.

Please be assured that the Board has maintained an active role, both formally and informally, in overseeing CSXT's implementation of the transaction and the required mitigation measures and has continued its informal oversight. Last May, the Board sent a letter to CSXT President and CEO James Foote requesting an update on operations over the Elsdon Line, specifically asking about the line's fluidity and specific actions CSXT had taken during 2019 to enhance train movement and bolster community engagement. In response, Mr. Foote reported continued favorable performance trends including a 35% reduction in the number of blocked crossings and a 23% reduction in the total duration of those blockages. CSXT further reported that 97% of trains traversed a grade crossing in 10 minutes or less. Moreover, I request an update on operations on the Elsdon Line each time I meet with CSXT officials.

Attached please find a status update regarding the three mitigation provisions raised in the Alderman's testimony. I'd be happy to answer any questions you may have regarding these matters. The Board's decisions, parties' filings, and CSXT monthly reports related to these matters may be found on the Board's website under Docket No. FD 35522. Additionally, the Board's May 2019 letter to Mr. Foote is available on Board's website under Non-Docketed Public Correspondence.

Thank you for the opportunity to provide information regarding some of the Board's many actions concerning the Elsdon Line. Please do not hesitate to contact me or Lucille Marvin, Director of the Office of Public Assistance, Governmental Affairs, and Compliance, if you or your staff have any questions or would like further information.

Sincerely,

ANN BEGEMAN,
Chairman.

ATTACHMENT

Alderman O'Shea's testimony included allegations concerning three specific mitigation measures imposed by the Board in its 2013 decision approving the transaction. The three mitigation measures are stated below, along with the status of their implementation:

Mandatory Mitigation Measure 2 (MM 2). MM 2 required CSXT to consult with all appropriate agencies and hospitals to install a closed-circuit television system with video cameras so that the movement of trains could be predicted at the 95th Street highway/rail at-grade crossing. CSXT was to fund, install, and maintain all necessary equipment. This was to be done in order to further assist with the timely response of emergency service providers for Advocate Christ Medical Center and the Little Company of Mary Hospital.

- In its December 31, 2013 quarterly monitoring report, CSXT informed the Board that installation and operation of the closed-circuit camera was completed. Evergreen Park controls the camera. The Board has not been received any complaints or comments regarding this mitigation measure or its status of completeness.

Voluntary Mitigation Measure 37 (VM 37). VM 37 required CSXT to notify Emergency Services Dispatching Centers for communities along the affected segments of all crossings blocked by trains that are stopped and may be unable to move for a significant amount of time. CSXT was required to work with affected communities to minimize emergency vehicle delay by maintaining facilities for emergency communication with local Emergency Response Centers through a dedicated toll-free number.

- In its May 31, 2016 quarterly monitoring report, CSXT informed the Board that it had installed a dedicated toll-free number on all road crossings and CSXT's Public Safety Coordination Center was notifying its Command Center of blocked crossings.

Voluntary Mitigation Measure 6 (VM 6): VM 6 required CSXT to operate under U.S. Operating Rule No. 526 (Public Crossings), which provides that a public crossing must not be blocked longer than 10 minutes, unless the blockage cannot be avoided. VM 6 also required that the train be promptly cut to clear the blocked crossing if the blockage was likely to exceed this time frame.

- On July 27, 2017, the Board granted CSXT's unopposed request to revise VM 6 because, based on CSXT's monthly reports, the voluntary mitigation measure proposed by CSXT—that it would cut a train if that train would block a crossing for more than 10 minutes—had proven infeasible (causing longer delays) in many circumstances. Accordingly, VM 6 was revised to read as follows: "CSXT shall take appropriate actions to clear a public crossing or crossings blocked by a stopped train as quickly as possible, including by cutting the train where it appears that cutting the train would be the fastest way to clear the crossing and, if possible, rail cars, engines, and rail equipment may not stand closer than 200 feet from a highway/rail at-grade crossing when there is an adjacent track."

Letter of February 11, 2020, from John Patelli, Head of Regulatory and Federal Affairs/Associate General Counsel, CSX Transportation, Submitted for the Record by Hon. Daniel Lipinski

FEBRUARY 11, 2020.

Hon. DANIEL LIPINSKI,
Chairman,
Subcommittee on Railroads, Pipelines, and Hazardous Materials, Committee on Transportation and Infrastructure, Washington, DC.

DEAR CHAIRMAN LIPINSKI,

CSX is submitting this letter and request it be included in the hearing record in response to certain testimony at the Subcommittee on Railroads, Pipelines and Hazardous Materials' February 5, 2020 hearing: *Tracking Toward Zero: Improving Grade Crossing Safety and Addressing Community Concerns*. Specifically, certain testimony presented by a Chicago alderman at that hearing contained significant misstatements about CSX's operations on the Elsdon Line in the Chicago area and the Surface Transportation Board's ("STB's") monitoring of those operations. These misstatements included inaccurate allegations that grade crossing blockages on the Elsdon Line remain a significant problem; that CSX had not complied with an STB

condition requiring construction of a closed circuit television monitoring system; and that the STB should not have concluded formal monitoring in June 2018.

The facts show that the Elsdon Line is a tremendous success story for what can be achieved by railroads, communities and government striving towards a common goal. When CSX acquired operating rights on the Elsdon Line in 2013, the track and signals on the Line were not in the condition required for consistent and reliable operations, and we experienced equipment failures and operational problems that led to an unexpectedly high number of blocked grade crossings, including in the communities of Evergreen Park and the 19th Ward. But the story did not end there. We responded to the community's and the STB's concerns by taking multiple significant actions to improve our performance and reduce the impact of rail operations in the communities through which the Line runs. We made $31 million in capital investments in the Line, including major investments to replace signals equipment, improve fluidity, and alleviate chokepoints. We also took a hard look at our operating procedures to find ways to reduce blocked crossings, including improved communications with connecting railroads. We also committed to extensive engagement with the community, meeting regularly with community leaders to address issues and ensuring that the public had clear ways to express and resolve their concerns. Our capital investments, operational changes, and improved community outreach are detailed in our STB filings.[1]

These efforts resulted in substantial reductions in blocked crossings on the Elsdon Line. In 2018, CSX showed that the Elsdon's fluidity level (as measured by average train speed) was on par or better than any other CSX Chicago corridor.[2] Indeed CSX's performance on the Line has only improved since the STB discontinued monthly reporting. For example, during the entire month of January 2020, only two CSXT trains were forced to stop in the portions of the Line running through Evergreen Park and the 19th Ward (which are the portions of the Line that were the focus of grade crossing concerns expressed to the STB). Every other train traversed these communities without stopping once. During the fourth quarter of 2019 and the partial first quarter of 2020, 95% of trains passing through Evergreen Park and the 19th Ward cleared grade crossings in less than 10 minutes.

Moreover, the alderman's claim that CSX is not complying with a condition that the STB placed on the transaction is simply wrong. The alderman testified that CSX had disregarded the STB's requirement that CSX install a closed circuit television system to monitor the 95th Street at-grade crossing to assist with the timely responses of emergency service providers to the Advocate Christ Medical Center and the Little Company of Mary Hospital. He specifically said that "no system has been installed," and suggested that the STB had failed to take any action to enforce this condition. This is not true. In 2013, CSX completed installation of a closed-circuit TV monitoring system after consultation with the Village of Evergreen Park, Advocate Christ Medical Center and the Little Company of Mary Hospital. Based on that consultation, cameras were installed on the roof of the Evergreen Park municipal facility, which provides a good vantage point to view the 95th Street grade crossing, and monitoring equipment was provided to Evergreen Park. CSX paid for all installation, equipment, and training costs. It was agreed by all parties that Evergreen Park would maintain control of the camera and the monitoring system; because hospitals do not dispatch ambulances, they saw no need to themselves monitor the video feed.

CSX reported to the STB in 2013 that the closed circuit TV was installed.[3] The alderman should have been well aware of this fact, since it was discussed at a technical hearing before the STB on October 21, 2016 that he attended and in multiple pleadings with which he was served.[4] Before the alderman's testimony last week, CSXT's compliance with this requirement has never been contested by the alderman, the Village of Evergreen Park, or any other party.

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[1] *See, e.g.*, Response to July 27, 2018 Decision, *CSX Transp., Inc.—Acquisition of Operating Easement—Grand Trunk W. R.R.*, STB Docket No. 35522 (filed Aug. 23, 2018)

[2] *See id*. at 32–35.

[3] See Quarterly Status Report, Summary of Elsdon Subdivision Mitigation Measures at 6, *CSX Transp., Inc.—Acquisition of Operating Easement—Grand Trunk W. R.R.*, STB Docket No. 35522 (filed Dec. 31, 2013) ("Installation and operating of the closed circuit camera[a] is complete. Evergreen Park is controlling the camera.").

[4] Technical Conference Tr. at 64–65, 120–21, *CSX Transp., Inc.—Acquisition of Operating Easement—Grand Trunk W. R.R.*, STB Docket No. 35522 (Oct. 21, 2016); *see also* Reply to Petition to Reopen, at 17, *CSX Transp., Inc.—Acquisition of Operating Easement—Grand Trunk W. R.R.*, STB Docket No. 35522 (filed Mar. 10, 2016) (discussing installation of closed circuit cameras); Report on Operational Fluidity, at 36–37, *CSX Transp., Inc.—Acquisition of Operating Easement—Grand Trunk W. R.R.*, STB Docket No. 35522 (filed May 30, 2017) (same).

Finally, it was ill-informed to suggest the STB should not have discontinued formal monitoring of the Line back in June of 2018. On the contrary, the STB responded to the community's concerns by requiring monthly reporting on blocked crossings for two years (July 2016 through June 2018). The STB only discontinued that monitoring after CSX presented a detailed report explaining the actions it had taken to reduce grade crossing blockages on the Elsdon, the actions it planned to take in the future, and how CSX's fluidity on the Elsdon compared to other lines in Chicago. No party contested that evidence.

Similarly, the complaint about the STB's decision to amend the condition indicating that any trains blocking a crossing for more than ten minutes must be cut ignores the STB's sound basis for that amendment. In most circumstances, the operation to cut and reassemble a train would take an hour or more, and make grade crossing delays worse, not better. As a result, the STB made a well-supported decision to amend this condition into a requirement that CSXT "take appropriate actions to clear a public crossing or crossings blocked by a stopped train as quickly as possible, including by cutting the train where it appears that cutting the train would be the fastest way to clear the crossing."[5] No party opposed this request.

We hope that this correction to the record is useful to the Subcommittee's work. CSXT remains committed to providing excellent, fluid service over the Elsdon Line and being actively engaged with all the communities through which we operate. Please let us know if we can provide further information or do anything else to assist you or the Subcommittee. We look forward to continuing to work with you on these important issues in the district and around the nation.

JOHN PATELLI,
Head of Regulatory and Federal Affairs/Associate General Counsel.

Letter of February 19, 2020, from Hon. Jim Cooper, a Representative in Congress from the State of Tennessee, Submitted for the Record by Hon. Daniel Lipinski

FEBRUARY 19, 2020.

CHAIRMAN LIPINSKI AND RANKING MEMBER CRAWFORD,

I appreciate the opportunity to submit documents for the record on behalf of my constituents who are elected leaders in Nashville. Their statements demonstrate the impact of blocked grade crossings on our community.

Middle Tennesseans are far too familiar with the inconvenience and safety concerns that blocked rail crossings pose to Nashville—from blocked roads during rush hour to emergency response vehicles being routinely rerouted. It's frustrating and dangerous.

CSX's former CEO famously believed that their freight always came before Nashville commuters or commuters anywhere. I strongly disagree. That kind of thinking gives freight rail a bad name. Respecting rush hour, and the needs of commuters, should be the normal course of behavior for railroads.

There must be ways to force railroads to work with U.S. taxpayers to help everyone get their work done on time. Freight railroad companies should be able to turn a profit and move Middle Tennessee's goods without an entire community grinding to a halt.

If the Federal Railroad Administration won't take action to regulate blocked crossings, Congress needs to step in and allow cities and states to govern the issue themselves. Who knows the area better than our locally-elected officials?

I am thankful to you for holding this hearing and calling attention to a problem that has persisted far too long. In the meantime, I am going to keep trying to find a way to stop this abuse and I look forward to continue working with the Subcommittee.

Sincerely,

JIM COOPER,
Member of Congress.

[5] *CSX Transp., Inc.—Acquisition of Operating Easement—Grand Trunk W. R.R.*, at 3, STB Docket No. 35522 (July 27, 2017).

Letter of February 14, 2020, from Hon. John Cooper, Mayor, Metropolitan Government of Nashville and Davidson County, Tennessee, Submitted for the Record by Hon. Daniel Lipinski

FEBRUARY 14, 2020.

Hon. DANIEL LIPINSKI,
Chairman,
Subcommittee on Railroads, Pipelines, and Hazardous Materials, Committee on Transportation and Infrastructure, Washington, DC.

Hon. RICK CRAWFORD,
Ranking Member,
Subcommittee on Railroads, Pipelines, and Hazardous Materials, Committee on Transportation and Infrastructure, Washington, DC.

DEAR CHAIRMAN LIPINSKI AND RANKING MEMBER CRAWFORD,

Every four hours in America, either a person or a vehicle is hit by a train—and many of these crashes occur at-grade crossings. As Mayor of a city with 142 public at-grade crossings, many of which are in dire need of improvement, I'm writing to urge you both to strongly consider increasing infrastructure investments to help improve the condition of railroad crossings throughout Nashville and the State of Tennessee.

Nashville's SMSA population has exponentially grown to over 1.9 million residents in recent years. Last year alone, we broke visitor records with 16,000,000 tourists from throughout the United States and around the world. Accordingly, our community's infrastructure requires a considerable amount of maintenance to protect in order to protect the safety of all our residents and visitors alike.

I strongly encourage you and the other esteemed members of the House Committee on Transportation and Infrastructure to consider the safety and well-being of Nashvillians, as well as the economic contributions and burdens of municipalities like ours, when carefully deliberating the benefits of increased at-grade railroad crossing investments.

Sincerely,

JOHN COOPER,
Mayor, Metropolitan Government of Nashville and Davidson County.

Letter of February 10, 2020, from Jeff Syracuse, Metropolitan Council Member, District 15, Nashville, Tennessee, Submitted for the Record by Hon. Daniel Lipinski

FEBRUARY 10, 2020.

Hon. DANIEL LIPINSKI,
Chairman.

Hon. RICK CRAWFORD,
Ranking Member.

DEAR SIRS,

Thank you for the opportunity to give input to the Subcommittee on Railroads, Pipelines, and Hazardous Materials. In addition to being a member of Metro Council, I also represent Metro Nashville-Davidson County as a board member of the Nashville & Eastern Rail Authority and have enjoyed my service there. As Nashville and Middle Tennessee's growth continues to skyrocket, the number of commuters on our roads has, of course, increased as well and "rush hour" has become a multi-hour challenging commute. Traffic jams can occur much more quickly due to the high volume of automobiles and those negative effects are compounded when long freight trains cross major arteries during those times.

My constituents have reported to me on many occasions about their experiences when a train is crossing the highway during morning and afternoon rush hour. Three such examples of areas receiving numerous reports are:

- The crossing over U.S. Highway 70 / State Route 24 at Lebanon Pike where it becomes Hermitage Avenue.
- The crossing near Elm Hill Pike at Arlington Avenue. Elm Hill Pike is parallel to Lebanon Pike as well as Interstate 40 and all are used to commute into and out of downtown Nashville. Although Elm Hill Pike is not a U.S. Highway or State Route, it is a four-lane road with the same auto capacity as the Lebanon Pike crossing.
- The crossings over 2nd Avenue, 4th Avenue, and Chestnut Avenue.

This not only affects automobile commuters, it has also affected WeGo, our public transit system. The CSX crossing on Nolensville Pike is one such location where a WeGo bus is stuck fairly regularly.

Thank you again and I stand ready to assist with this issue however I can be of service.

Best Regards,

JEFF SYRACUSE,
Metro Council Member, District 15.

Statement of Paul P. Skoutelas, President and Chief Executive Officer, American Public Transportation Association, Submitted for the Record by Hon. Daniel Lipinski

INTRODUCTION

Chairman Lipinski, Ranking Member Crawford, and Members of the Subcommittee on Railroads, Pipelines, and Hazardous Materials, on behalf of the American Public Transportation Association (APTA) and its 1,500 public- and private-sector member organizations, thank you for the opportunity to submit testimony for the record on "Tracking Toward Zero: Improving Grade Crossing Safety and Addressing Community Concerns."

My name is Paul Skoutelas, and I am the President and Chief Executive Officer (CEO) of APTA, an international association representing a $71 billion industry that employs 430,000 people and supports millions of private-sector jobs. We are the only association in North America that represents all modes of public transportation—bus, paratransit, light rail, commuter rail, subways, waterborne services, and high-performance intercity passenger rail.[1]

Public transportation not only spurs economic growth, but reduces congestion, improves air quality, saves time and money, and advances an equitable and better quality of life for our communities.

COMMUTER RAIL

Nearly 40 years ago, Congress enacted the Northeast Rail Services Act of 1981 (P.L. 97–35) to salvage commuter rail operations from Conrail and created six commuter rail authorities.[2] The state of commuter rail at that time suffered from low and declining ridership and equipment long beyond its useful life. These agencies and the many others across the nation that existed then or have started anew have transformed commuter rail into an essential, reliable, growing, safe, and affordable mobility option carrying hundreds of millions of travelers each year.

Today, commuter rail is a $9.9 billion industry, creating and supporting more than 200,000 public- and private-sector jobs. Moreover, the overwhelming majority (63 percent) of this funding flows to the private sector.

32 Commuter Rail Agencies

Today, there are 32 agencies operating commuter railroads.[3] Commuter rail services are higher-speed, higher capacity trains with less frequent stops. They are traditionally used to connect people from suburban areas to city centers. In the last decade, nine new commuter rail systems[4] have begun operation, with the latest—TexRail in Fort Worth, Texas—starting up last year.

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[1] APTA members include public transportation systems; planning, design, construction, and finance firms; product and service providers; academic institutions; state transit associations; and state departments of transportation.

[2] The six commuter rail authorities are the: Metropolitan Transportation Authority; Connecticut Department of Transportation; Maryland Department of Transportation; Southeastern Pennsylvania Transportation Authority (SEPTA); New Jersey Transit Corporation; and Massachusetts Bay Transportation Authority.

[3] A list of commuter railroad agencies can be found in Appendix A. APTA's list includes all commuter and hybrid rail agencies that receive funding from the Federal Transit Administration (FTA) and report data to the National Transit Database.

[4] The nine new systems are Portland, OR (Westside Express, 2009); Minneapolis, MN (Northstar, 2009); Austin, TX (Capital MetroRail, 2010); Denton, TX (A Train, 2011); Orlando, FL (SunRail, 2014); Denver, CO (A Line, 2016); Marin County, CA (SMART, 2017); Antioch, CA (eBART, 2018); and Fort Worth, TX (TEXRail, 2019).

COMMUTER RAIL AGENCIES IN THE UNITED STATES

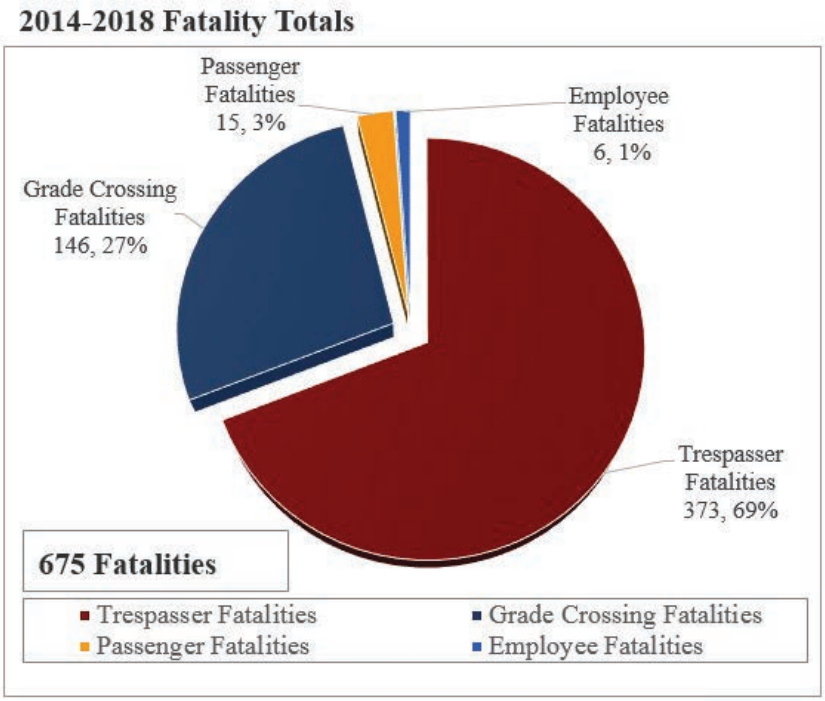
SAFETY IS A CORE VALUE

For commuter rail operators and the entire public transportation industry, safety is a core value—a non-negotiable operating principle and promise to our riders. The men and women responsible for managing and operating public transportation systems are fully committed to the safety of their systems, passengers, employees, and the general public.

As a result of this overriding and sustained commitment to safety, public transportation is the safest form of surface transportation. Every year, 32 commuter railroads across America safely carry passengers on more than 500 million trips. And, traveling by commuter and intercity passenger rail is 18 times safer than traveling by car.

Highway-Rail Grade-Crossing Safety and Trespassing Issues

Highway-rail grade-crossing safety and trespassing remain significant issues for commuter rail. Over the last five years (2014–2018), 96 percent of commuter railroad fatalities were attributable to highway-rail grade-crossing or trespassing. Commuter rail systems operate on approximately 3,447 publicly accessible grade crossings.



Grade-Crossing Safety

Our commuter railroads have been working hard to mitigate these grade-crossing incidents, often involving unlawful entry to the railroad's right of way. These incidents cost lives, cause serious injuries and property losses, and result in delays to the traveling public. To address highway-rail grade-crossing hazards, commuter rail agencies are using myriad treatments and technologies, including creating pedestrian crossings, constructing corridor fencing, installing delineators, and placing cameras at crossings and in railcars. Engineered solutions are very expensive to construct. According to a recent Government Accountability Office (GAO) report,[5] 2016 Department of Transportation data show that separating a grade crossing from traffic can cost between $5 million and $40 million, while installing four quadrant gates to grade crossings with flashing lights can cost between $250,000 to $500,000.

Private-sector mapping technology is also critical to combating this significant safety issue. For example, the Metropolitan Transportation Authority's Long Island Rail Road (LIRR) and Metro-North have partnered with Waze to integrate a railroad crossing warning into its GPS application. The application warns drivers that they are approaching a grade crossing and not to turn onto the tracks. LIRR and Metro-North automated a feed to ensure the hazard alerts are always maintained in the Waze application. In conjunction with the Waze implementation, LIRR installed delineators and road markings at its more than 290,000 grade crossings. As a result, LIRR experienced an immediate and remarkable reduction in events significantly enhancing its safety and operations. SEPTA also partners with Waze and provides the company with a table of its grade-crossing locations. Using this table, Waze updates the information daily for six months. After the six-month period is up, SEPTA re-sends Waze the grade-crossing file.

APTA is encouraged by these individual partnerships with technology companies and welcomes other map navigation developers to work with our industry to add automatic notifications of railroad grade crossings to their maps. There are too many senseless incidents and deaths because cars do not stop at grade crossings or

[5] *See* GAO, Grade Crossing Safety; DOT Should Evaluate Whether Program Provides States Flexibility to Address Ongoing Challenges (GAO–19–80) (November 2018), at 24.

bypass the gates. Navigation developers have created powerful tools for helping us find our way and drive more safely. With their support, we can provide an important tool to warn drivers and prevent needless accidents and deaths.

Education is key and many commuter rail agencies have participated in specific campaigns to reduce highway-rail grade-crossing incidents. It will take a collective effort to reduce these grade-crossing incidents. Although we are grateful for Congress' continued funding of grade-crossing measures under the railway-highway crossings set-aside (23 U.S.C. §130), more needs to be done.

APTA urges Congress to authorize a total of $1.5 billion over six years ($225 million per year) under the CRISI program to provide grants to commuter rail and operators in high-ridership corridors for highway-rail grade-crossing safety initiatives.

Trespassing on Railroad Properties

Commuter railroads are also addressing the long-standing, critical issue of trespassing on railroad tracks. APTA's most recent analysis of commuter rail data over the last five years indicate that trespassing remains a major contributing factor to railroad fatalities—nearly 70 percent of rail-related fatalities were as a result of trespassing. Causal factors for trespassing-related fatalities include suicide, direct-route crossing, and general distraction.[6] Trespassing issues are complex. Our commuter railroads have partnered with their local communities, mental health care providers, law enforcement, and national organizations to launch educational campaigns about the dangers of trespassing and to develop ways to mitigate these incidents.

For example, in 2016, Metro-North launched a rail education and community outreach program designed to reduce grade-crossing incidents. Its safety outreach program, Together Railroads And Communities Keeping Safe (TRACKS), was developed in response to a 2015 grade-crossing incident in which six people were killed. One focus of the TRACKS program is to educate the younger members of the Metro-North community with presentations specifically targeted to children using a character called Metro-Man. Since its launch, TRACKS has reached nearly 345,000 people in the Metro-North service area and Metro-North reports a decrease in trespasser strikes of 14 percent in 2019.[7]

APTA and its commuter rail members will continue to be leading advocates to improve railroad and public safety. We urge Congress to do its part by providing the funding that is needed to assist commuter rail in making these important safety investments. In addition, we urge Congress to ensure that the rail statutes and regulations, which are often very prescriptive, do not prevent railroads from introducing new technologies to make our railroads safer.

SURFACE TRANSPORTATION AUTHORIZATION RECOMMENDATIONS

On October 12, 2019, APTA's Board of Directors unanimously approved APTA Recommendations on Surface Transportation Law, reflecting the consensus views and priorities of APTA's diverse membership, including commuter rail.

APTA strongly urges the Committee to invest $145 billion over six years in public transportation and fund critical projects that will repair, maintain, and improve our public transit systems (including commuter rail) today and in the future. Our proposal, which includes $112 billion for Urbanized Area Formula, State of Good Repair, and CIG grants, would address the entire state-of-good-repair backlog and fund all CIG projects in the pipeline in the next six years.

Together with this increased funding, APTA recommends that the Committee conduct a zero-based review of the CIG program to assess all statutory, regulatory, and other administrative requirements. We have previously testified that the bureaucratic maze that project sponsors, including commuter railroads, must adhere to is costly and burdensome.

Finally, APTA calls on the Committee to create a Passenger Rail Trust Fund funded in part with new, long-term, dedicated revenues to significantly increase passenger rail investment to $32 billion over six years. This investment would include $7.1 billion for CRISI grants.

More investment is needed to ensure that commuter rail agencies can pay for important safety initiatives, including mitigating grade-crossing incidents and funding

[6] Federal Railroad Administration, Report to Congress: National Strategy to Prevent Trespassing on Railroad Property (October 2018), at 11.

[7] LIRR launched its TRACKS program in 1988 as a result of the deaths of nine teenagers whose van was hit by a train after driving around activated crossing gates. In partnership with the MTA Police Department, the program reaches over 100,000 participants annually. Training is provided to audiences from preschool through adults in schools, community settings, and businesses.

the operation and maintenance costs of positive train control (PTC). APTA urges the Committee to expand the eligibility of the CRISI grant program to commuter rail to provide specific funding for:

- Passenger Rail-Highway Grade Crossing Grants ($250 million per year; $1.5 billion over six years); and
- Operations and maintenance of PTC ($160 million per year; $1 billion over six years).

We urge Congress to provide the necessary, dedicated funding to ensure safe, reliable, and efficient commuter rail systems.

CONCLUSION

On behalf of APTA, thank you for giving us the opportunity to submit testimony for the record on "Tracking Toward Zero: Improving Grade Crossing Safety and Addressing Community Concerns". We look forward to working with the Committee on Transportation and Infrastructure as it writes the next Surface Transportation Authorization Act. It is imperative that we make meaningful investments in commuter rail to enable these critical services to continue to remain safe, grow, serve our communities, and contribute to the national economy.

Appendix A

32 Commuter Rail Agencies

State	Primary City Name	Urbanized Area	Agency	Year Opened	Ridership 2018 (Unlinked Passenger Trips)
Alaska	Anchorage	Anchorage	Alaska Railroad Corporation (ARRC)	1923	199,666
California	Los Angeles	Los Angeles	Southern California Regional Rail Authority (SCRRA) (Metrolink).	1991	12,523,337
California	San Diego	San Diego	North San Diego County Transit District (NCTD) (Coaster & Sprinter).	1995	3,838,002
California	San Francisco	San Francisco	Peninsula Corridor Joint Powers Board (PCJPB) (CalTrain).	1992	18,562,763
California	San Francisco	San Francisco	San Francisco Bay Area Rapid Transit District (Bart) (eBART).	2018	1,316,134
California	San Rafael	San Francisco	Sonoma Marin Area Rail Transit District (SMART).	2017	714,653
California	Stockton	San Jose	Altamont Commuter Express (ACE) (ACE Rail)	1998	1,479,150
Colorado	Denver	Denver	Regional Transportation District (Denver RTD)	2016	7,619,589
Connecticut	New Haven	New Haven	Connecticut Department of Transportation Shore Line East (SLE).	1990	597,616
Florida	Miami	Miami	South Florida Regional Transportation Authority (Tri-Rail).	1989	4,414,030
Florida	Orlando	Orlando	SunRail	2014	1,114,859
Illinois	Chicago	Chicago	Northeast Illinois Regional Commuter Railroad Corp (Metra).	1856	68,446,239
Indiana	Chicago	Chicago	Northern Indiana Commuter Transportation District (NICTD) (South Shore Line).	1908	3,400,197
Maine	Portland	Portland	Northern New England Passenger Rail Authority (NNEPRA).	2001	534,058
Maryland	Baltimore	Baltimore	Maryland Area Regional Commuter (MARC)	1830	9,387,801
Massachusetts	Boston	Boston	Massachusetts Bay Transportation Authority (MBTA).	1931	32,143,251
Minnesota	Minneapolis	Minneapolis	Metro Transit Northstar Commuter Rail (Northstar).	2009	787,327
New Jersey	New York	New York	New Jersey Transit Corporation (NJ TRANSIT) (Rail & River Line).	1839	91,170,160
New Mexico	Albuquerque	Albuquerque	New Mexico (Rail Runner)	2006	771,602
New York	New York	New York	Metro-North Commuter Railroad Company (Metro-North).	1832	91,873,366
New York	New York	New York	MTA Long Island Rail Road (LIRR)	1844	105,538,101
Oregon	Portland	Portland	Tri-County Metropolitan Transportation District of Oregon (TriMet) (Westside Express).	2009	394,708
Pennsylvania	Harrisburg	Philadelphia	Pennsylvania Department of Transportation Keystone Line (Keystone).	1980	1,533,055
Pennsylvania	Philadelphia	Philadelphia	Southeastern Pennsylvania Transportation Authority (SEPTA).	1834	33,318,746
Tennessee	Nashville	Nashville	Regional Transportation Authority (Music City Star).	2006	298,765
Texas	Austin	Austin	Capital Metropolitan Transportation Authority (Metro Rail).	2010	807,869
Texas	Dallas	Dallas	Trinity Railway Express (TRE)	1990	2,039,990
Texas	Denton	Denton	Denton County Transportation Authority (A Train).	2011	409,667
Texas	Fort Worth	Dallas	TEXRail	2019	N/A
Utah	Salt Lake City	Salt Lake City	Utah Transit Authority (Front Runner)	2008	5,082,168
Virginia	Washington	Washington	Virginia Railway Express (VRE)	1992	4,529,091
Washington	Seattle	Seattle	Central Puget Sound Regional Transit Authority (Sounder).	2000	4,631,525

APTA's list includes all commuter and hybrid rail agencies that receive funding from the Federal Transit Administration and report data to the National Transit Database.

NNEPRA and Keystone are operated by Amtrak and are counted in the FTA National Transit Database.

TexRail opened in 2019 and therefore does not have any 2018 ridership.

Letter of February 20, 2020, from Mike O'Malley, President, Railway Supply Institute, Submitted for the Record by Hon. Daniel Lipinski

FEBRUARY 20, 2020.

Hon. DANIEL LIPINSKI,
Chairman,
House Subcommittee on Railroads, Pipelines, and Hazardous Materials, Washington, DC.

Hon. RICK CRAWFORD,
Ranking Member,
House Subcommittee on Railroads, Pipelines, and Hazardous Materials, Washington, DC.

DEAR CHAIRMAN LIPINSKI AND RANKING MEMBER CRAWFORD,

On behalf of the members of the Railway Supply Institute (RSI), thank you for this opportunity to submit this statement for the record in response to the February 5, 2020 hearing "Tracking Toward Zero: Improving Grade Crossing Safety and Addressing Community Concerns." RSI is a trade association representing more than 200 companies involved in the manufacture of products and services in the freight car, tank car, locomotive, maintenance-of-way, communications and signaling, and passenger rail industries. America's railway suppliers represent a $74 billion/year industry supporting more than 125,000 American workers.

Rail suppliers serve as a critical component to the railroad industry, and our economic impact on the communities in which we manufacture our products is vitally important. From rail cars and tracks to signals and switches, the railway supply industry has been a vital and dynamic part of the U.S. economy for over 200 years. Railway suppliers play an essential role in supporting the rail system here in the U.S. and have done so since the origin of U.S. railroads in the early 1800's. In 2017, the North American railroad system comprised more than 1.6 million railcars powered by more than 38,000 locomotives over more than 140,000 miles of rail. Nearly every piece of this intricate puzzle was shaped and put into place by railroad suppliers for their railroad customers. Today, the rail industry is leading the transportation world in technological advancements and has embraced digitization and the Internet of Things (IoT). Such technology has generated significant improvements in operational safety and network efficiency and much of it was developed and driven by the railway supply community.

Increased investment in our rail and public transportation systems will vastly improve the safety, efficiency and productivity of moving goods and people across the United States. Greater public investments, coupled with policies that incentivize private investments, could relieve major bottlenecks and chokepoints and increase track, tunnel, bridge and station capacity across the passenger and freight rail system. Such enhanced investments will also encourage greater use of rail in moving both people and goods, thus reducing harmful emissions and growing congestion on our nation's roadways. These investments also will help directly support and sustain the more than 125,000 jobs tied to the rail supply industry, including high-value manufacturing jobs spread across all parts of the country.

RSI encourages Congress to support rail safety by continuing to provide funds for the elimination of hazards at railway-highway crossings. The Section 130 Railway Highway Crossing Program has helped railroads, suppliers, and our state partners deliver a significant decrease in fatalities at railway-highway grade crossings. From 1987 through 2018, fatalities at these crossings have decreased by 58 percent. RSI strongly supports the Section 130 program and makes the following recommendations to further strengthen it:

A. Increase federal match for Section 130 program to 100% federal share, like many other highway safety programs.
B. Incentive Payments: States and railroads currently may make incentive payments of up to $7,500 for the permanent closure of railway-highway grade crossings. Although there are funds set aside to help incentivize communities to close grade crossings, the $7,500 limit is often not enough to convince officials to support closing as these projects are substantially more expensive. Congress should increase the limit on incentive payments from $7,500 to $100,000 for the closing of a railway-highway grade crossing.
C. Modernize Eligible Activity: There is confusion among the states as to whether Section 130 funds can be used for the replacement of functionally obsolete warning devices. It is imperative to make clear that these funds can be used for their replacement because these devices are critical to the safe and efficient operation of railway-highway grade crossings.

D. In Section 130(f)(3) of S. 2302, the Senate Environment & Public Works Committee approved bill, the measure directs GAO to perform a study of the effectiveness of the Section 130 program. RSI recommends adding an additional requirement that the railroad and rail supply industry be consulted as party of this study.

RSI also supports continued funding for Operation Lifesaver (OLI), a nonprofit public safety education and awareness organization dedicated to reducing collisions, fatalities and injuries at railway highway crossings and trespassing on or near railroad tracks. OLI plays a critical role in rail safety and is funded by a combination of federal and private funding. With a nationwide network of volunteers, OLI provides free safety presentations and creates education programs and public awareness campaigns to reach audiences of all ages. In 2017, the organization reached 2.1 million people directly via 21,226 safety presentations, 245 training sessions and 1,821 special events conducted by state programs nationwide in 2017. In addition, 333 CDL drivers and 1,912 school bus drivers were exposed to OLI's online eLearning safety programs during the year. Section 1418, Consolidation of Programs, of FAST Act authorizes not less than $3.5 million from Highway Safety Improvement Program for fiscal years 20162020 distributed among four activities: Operation Lifesaver, Work Zone and Guardrail Safety Training, the National Work Zone Safety Information Clearinghouse, and the Public Road Safety Clearinghouse. RSI recommends continuing or expanding federal investments in OLI given its demonstrated track record in enhancing safety awareness nationwide.

Finally, as Congress considers the reauthorization of the FAST Act, this subcommittee can help ensure public investments achieve better reliability and resiliency by recognizing and incentivizing digital infrastructure applications as part of eligible public investments to provide increased reliability, efficiency, and lengthen the life of rail assets. These applications should advance rail and transit automation for both commuter and intercity passenger rail, and intermodal applications including seaport-rail network connections where appropriate. Today's rolling stock manufacturers and rail technology suppliers offer Internet of Things (IoT) platforms to virtually monitor, analyze and predict rail operations for smarter, safer and more reliable systems. By incentivizing the increased deployment of the "Internet of Trains," commuter and intercity passenger rail operators can bring their operations into the digital era. Public benefits include reduced unplanned downtime, improved operational efficiency, better business planning, improved performance, as well as energy savings. Digitalizing rail operations that receive federal funds is the single best way to maximize the use of public funds granted to localities and take advantage of technologies that have already been widely deployed by America's privately-owned railroads.

In closing, RSI continues to seek dedicated investment in infrastructure, balanced economic regulation, and the promotion of domestic manufacturing to drive American innovation. We are encouraged by the interest shown by Congress to bring America's transportation systems into the 21st century. We look forward to working with this Subcommittee as we continue to look for ways to innovate, enhance and promote investment in rail infrastructure and our national freight and passenger rail system.

Thank you for the opportunity to share our views.

Sincerely,

MIKE O'MALLEY,
President.

Statement of Ian Jefferies, President and Chief Executive Officer, Association of American Railroads, Submitted for the Record by Hon. Eric A. "Rick" Crawford

INTRODUCTION

On behalf of the members of the Association of American Railroads (AAR), thank you for the opportunity to submit this statement for the record. AAR members include the seven U.S. Class I freight railroads; scores of U.S. short line and regional freight railroads; Amtrak and several major U.S. commuter railroads; and dozens of suppliers and others associated with the rail industry.

Railroads are well aware that blocked grade crossings can lead to friction with impacted communities. Railroads try to be good neighbors at all times and seek to minimize negative community impacts in all aspects of their operations. However, as communities near rail lines and rail facilities expand; as motor vehicle traffic in-

creases and new roads are built; and as rail traffic patterns change, new challenges related to grade crossings continuously arise.

Railroads don't want a stopped train any more than the broader community does—it's in the best interest of railroads to keep trains moving safely and efficiently and to minimize conflicts with the communities in which they operate. Because of the complexity of rail operations and the sometimes-competing demands of other stakeholders (for example, rail customers versus residents living near those customers), finding effective solutions to the challenges often takes significant time and effort, but railroads are committed to working cooperatively with local officials and other stakeholders to address these challenges as effectively as possible.

WHY DO GRADE CROSSING BLOCKAGES OCCUR?

A highway-rail grade crossing is where a railway and roadway intersect at the same level. There are nearly 210,000 public grade crossings (that is, where a rail line intersects with a road) in the United States. Meanwhile, total motor vehicle miles driven in the United States continue to rise, reaching a record 3.24 trillion in 2018,[1] thanks in part to the fact that the U.S. population sets a new record every day. And demand for moving things by rail won't go away: the Federal Highway Administration forecasts that total U.S. freight shipments will rise from an estimated 17.8 billion tons in 2017 to 24.1 billion tons in 2040, a 35 percent increase.

In aggregate, these and related factors mean that interactions between railroads and the public, and potential conflicts, are a fact of life and have to be actively managed.

There's no simple answer to the question "what causes blocked crossings?" because there are so many actual and potential causes. Some blockages result from what are basically random acts over which railroads have little or no control—e.g., weather events or an "act of God" like a sudden rockslide in an inopportune area; an accident at a neighboring grade crossing that halts nearby trains; vandalism of rail signals or tracks; the presence of trespassers on rail tracks; emergency response activity in an area that requires trains to stop; and so on. It is impossible to plan in advance for these kinds of eventualities, but when they occur, railroads work very hard to return to normal operations and eliminate negative impacts on nearby communities.

Other blockages are the result of actions or factors that are associated with rail operating practices in one way or another—e.g., temporary blockages as railcars are dropped off or picked up at a rail customer facility that's located near a grade crossing, or congestion on the tracks ahead or in a nearby rail yard;[2] a track signal malfunction; equipment breakdowns or lack of preparedness at rail customer facilities that make timely rail movements impossible; a defective freight car or segment of track that necessitates slow speeds or an emergency halt in train movements; or mandatory safety tests or crew changes required by government regulation.

In these and similar cases, railroads don't want blockages any more than anyone else and already are incentivized to work diligently to prevent them from occurring.

WAYS RAILROADS ARE WORKING TO REDUCE GRADE CROSSING BLOCKAGES

The reasons why blockages occur are varied, which is why railroads use a variety of ways to try to reduce their prevalence.

One important way is to gather useful intelligence. Railroads work with local officials, their own operating personnel, their customers, and others to identify where and why blockages are occurring and to develop counterstrategies to avoid foreseeable future problems.

Today, every public grade crossing has a 24/7 emergency phone number and an identification number that callers can use to communicate crossing-related issues with the owning railroad. Railroads use this caller information, information from their operating teams, and information gathered from other sources to help identify workable short- and long-term solutions to blocked crossings.

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[1] Federal Highway Administration, Highway Statistics 2018, Table VM–1.

[2] In many cases, blockages occur at crossings near customer facilities or rail facilities that were originally built in isolated areas but, because of community expansion, now find themselves adjacent to roadways or developed areas.

In addition, some railroads are partnering with technology companies to develop dynamic signs that let motorists and first responders know when a train is occupying a crossing so they can choose a different route in advance. "Estimated Wait Time" signs are already in use in some locations.

Information gathering and subsequent investigations sometimes reveal that site-specific adjustments to operating practices are feasible. For example, in cases where blockages are caused by trains entering or exiting a customer facility, it is sometimes possible to modify the time these activities take place to minimize blockages. Or, in cases where trains stop to enable crew changes, it may be possible to switch the crew change to locations with less potential conflict with the public.

Changes to rail operating practices are not always feasible, though. Rail customers, and the broader economy, depend on a rail industry that is as safe, efficient, and cost effective as possible. Railroads must be able to always take the big picture into account when determining the best way to operate their networks, with the understanding that railroads should always act in good faith in their interactions with public officials and with the communities in which they operate.

In some cases, railroads address grade crossing blockages through new investments. For example, infrastructure investments such as lengthening rail sidings or building new sidings to accommodate current train lengths are undertaken to help prevent grade crossing blockages.

Blocked crossings can be eliminated if the crossing is closed or if the crossing is grade separated by building either an underpass or an overpass. When considered objectively, thousands of existing grade crossings serve no significant transportation mobility or access purpose. Many of these crossings remain open only because small but vocal local opposition transforms what should be an objective transportation safety and mobility decision into an emotional political confrontation. Make no mistake, railroads are not saying that crossings that experience blockages should simply be closed. Rather, when evaluating how to minimize problems associated with any aspect of rail operations, including blocked crossings, it's best to consider all potential solutions. In some cases, closing a particular crossing might be the best answer.

Likewise, even though grade separations can cost millions of dollars for a single crossing, there are cases where they could be the best answer to the problem of blocked crossings in locations with very high train and/or motorist traffic.

I respectfully suggest that Congress could take steps to help mitigate grade crossing blockages and other community impacts as part of the FAST Act reauthorization. For example, in addition to at least maintaining—or, better yet, increasing—dedicated funding for the federal Section 130 program (which provides funds to eliminate hazards at highway-rail grade crossings), Section 130 incentive payments for grade crossing closures could be increased from the current cap of $7,500 to $100,000. In addition, FAST reauthorization could enable or incentivize states to

bundle grade crossing projects into a single grant application under applicable discretionary grant programs, such as BUILD, INFRA or CRISI. Railroads also respectfully urge policymakers to increase funding for these important discretionary grant programs.[3]

As I noted in testimony to this committee on December 5, 2019, recent years have been the safest in rail history, but creating an even safer rail network requires a modernized approach to federal regulations that allows railroads to innovate with new technologies and processes. Unfortunately, the regulatory approach to rail safety today is largely prescriptive and does not readily allow for the incorporation of new technologies that would improve safety and performance. Consequently, innovation is impeded because existing designs, technology, and ways of thinking are largely "locked in" by existing command-and-control regulations. A shift to a performance-based approach—under which railroads would have discretion to test new ways to improve safety, though they would still be subject to Federal Railroad Administration (FRA) oversight—would mean rail safety would be enhanced more effectively than is possible today.

There would be other additional benefits, though, of shifting from a command-and-control to a performance-based safety regulatory regime. One probable additional benefit would be fewer blocked crossings. That's because some blocked crossings occur because railroads must adhere to various FRA regulations before train movements can take place. For example, today, FRA regulations require manual brake inspections at intervals determined by mileage. However, technology exists that can better measure actual braking performance. One example: wheel temperature detectors that use infrared sensors to measure the surface temperature of wheels passing the detectors. Using well-developed algorithms, these temperature measurements determine whether brakes on a railcar are working properly. "Cold" wheels could indicate ineffective or inoperative brakes, while unusually "hot" wheels could indicate brakes that are sticking. The detectors measure performance objectively, quantifiably, and independently of conditions that can impair a visual inspection by a human (such as weather, lighting, fatigue, inexperience, or error).

A modification of FRA regulations to allow more widespread use of wheel temperature detectors in place of some manual brake tests required by mileage would enhance safety, but it would have the ancillary benefit of reducing the number of blocked crossings caused by the inability to move trains until the manual brake tests are performed.

This is just one example of the many cases where unnecessary and outdated regulatory requirements negatively impact rail operations and have negative spillover effects on the wider community. The public would be better served by a regulatory system that looked forward instead of backward and that encouraged innovation and the development of new technologies that would make railroads safer and less prone to negative community impacts.

CONCLUSION

To sum up, railroads are always seeking to minimize negative impacts from their operations. Negative impacts are not good for the communities in which railroads operate, and most of the time they aren't good for railroads either. Railroads work closely with their own operational teams, community leaders, government partners, first responders, and the public to manage and mitigate blocked crossings across the nation's rail network.

[3] Railroads respectfully suggest that, as part of the FAST Act reauthorization, Congress consider other grade crossing-related policy changes that would make crossings safer. For example, policymakers should expand flexibility in the use of Section 130 funds by eliminating the existing arbitrary 50 percent cap on spending for hazard elimination projects, and by allowing Section 130 funds to be used to replace functionally obsolete warning devices at crossings.

Fact Sheet: "How Railroads Collaborate With Stakeholders to Reduce Grade Crossing Impacts," Association of American Railroads, Submitted for the Record by Hon. Eric A. "Rick" Crawford

How Railroads Collaborate with Stakeholders to Reduce Grade Crossing Impacts

America's private freight railroads operate the world's safest, most efficient freight rail network and have evolved for nearly 200 years to meet the changing needs of freight shippers, the economy and the nation. Over that time, our country's population has increased, freight traffic has grown, motor vehicle usage has accelerated and extensive street and roadway networks have been developed and expanded around busy railroad corridors.

A rail line once located on the outskirts of a small town with minimal public interaction may today bisect a bustling suburb, where citizens frequently cross that line as part of their daily travels. As rail and vehicle traffic continues to grow, the railroad industry remains committed to safely and efficiently serving customers while minimizing the impact of operations on surrounding communities, including at busy grade crossings where roads intersect with railroad tracks.

With more than 200,000 such grade crossings across the country, railroads work closely with community leaders, government partners, first responders, the public and their own operational teams to manage and mitigate the impact of rail crossings on communities.

Railroads regularly review and improve operating procedures to minimize occupying crossings.

Where possible, railroads plan train schedules, inbound and outbound yard movements and crew work schedules to minimize the time a train occupies a grade crossing. They may also modify railcar-switching practices and operations such as stopping a train clear of a crossing to conduct legally required mechanical inspections.

Currently, the industry is working with the federal government to develop other solutions, including trying to reduce the standing time for some federally required train inspections by 10 to 30 minutes or more.

America's freight railroads invest an average of $25 billion annually to maintain and modernize the nation's nearly 140,000-mile rail network. These investments include projects to extend existing passing sidings or construct new sidings that can reduce or eliminate crossing delays.

Key Takeaway

Each railroad crossing is different. Railroads work closely with their own operational teams, community leaders, government partners, first responders and the public to manage and mitigate grade crossing impacts on communities. There is no one-size-fits-all approach to managing crossings.

Why do Trains Occupy Crossings?

Railroads occupy crossings in the normal course of business as trains move between terminals. While railroads manage operations to minimize the time trains occupy crossings, delays may occur for a variety of reasons, including:

- Unplanned events such as weather-related track blockages, signaling malfunctions, equipment failures, or unexpected crew change delays on the rail network.
- Switching (moving rail cars between tracks, adding or removing cars from a train, or moving rail cars into and out of a customer's facility), which must occur for a customer to receive traffic.
- Trains slowing to enter or depart yards near crossings.
- Trains operating under reduced speed restrictions such as during track maintenance or slowing in approach to a moveable bridge open for water traffic.
- Vandalism of rail signals or tracks; the presence of trespassers on rail tracks; or emergency response activity near the tracks that requires trains to stop.
- Trains held due to passenger or freight rail traffic ahead.
- Trains held for re-crewing to comply with federal Hours of Service regulations.

Railroads work with government partners to reduce or improve crossings.

One of the most effective ways to prevent crossing impacts is to reduce the number of crossings along the rail network. Railroads work with the local road authority, private property owners and the U.S. Department of Transportation to identify crossings that can be consolidated, upgraded or closed. Railroads work with communities to identify a variety of federal grant programs or funding streams allocated to the states such as the Section 130 program. Railroads also partner with local and state governments to improve alternate access for roadway users, such as new grade separations.

As business and residential development continues to grow, railroads work with local planning authorities to help carefully plan new infrastructure developments to limit community interaction with railroad activities, while allowing the continued operation of the railroad corridor itself.

Railroads collaborate with communities to communicate about and manage crossing impacts.

Nothing is more important to railroads than the safety of their employees and the communities where they operate. By listening to the feedback from communities — and working directly with first responders — railroads can better identify problem areas and determine how best to manage them.

- **Phone Numbers at Every Crossing**: Every crossing has a 24/7 emergency phone number and an identification number so callers can immediately communicate issues with the railroad. Using this caller information, railroads coordinate with communities to identify workable short- and long-term solutions to mitigate crossing impacts. Some railroads also provide real-time information about a current occupied crossing and an estimated time for when it may be resolved.
- **Advanced Warning Technology**: The freight rail industry embraces technology that enhances safety and efficiency. Railroads are partnering with technology companies to develop digital signs that let the public know when a train is occupying a crossing so they can choose another route in advance. "Estimated Wait Time" signs are already in use in some areas and that information also helps emergency response dispatchers direct resources around the occupied crossing.
- **Operation Lifesaver:** The freight rail industry wants to reduce blocked crossings caused by trespassers on the tracks or car/train collisions. The railroads have partnered with the non-profit organization Operation Lifesaver to sponsor programs in more than 40 states to educate communities about safety around rail-highway grade crossings. Operation Lifesaver works with the U.S. Department of Transportation each year to raise awareness, including during Rail Safety Week.

Reducing Motorist Delays in Chicago

As part of the multi-billion dollar Chicago Region Environmental & Transportation Efficiency (CREATE) program, railroads are working with public partners to separate grade crossings in the nation's busiest rail corridor.

Example Emergency Notification System (ENS)

Operation Lifesaver and AAR awareness campaign

ASSOCIATION OF AMERICAN RAILROADS AAR.org

Letter of February 17, 2020, from Chris Arvas, State Coordinator, Idaho Operation Lifesaver, Submitted for the Record by Hon. Eric A. "Rick" Crawford

FEBRUARY 17, 2020.

Hon. DANIEL LIPINSKI,
Chairman,
Subcommittee on Railroads, Pipelines and Hazardous Materials, U.S. House of Representatives, Washington, DC.

Letter: Regarding Federal Funding for safety around railroad crossings and right of ways

DEAR RANKING MEMBER CRAWFORD,

My name is Chris Arvas and I serve as the State Coordinator of Idaho Operation Lifesaver, Inc. I am writing you and The Subcommittee on Railroads, Pipelines and Hazardous Materials on behalf of our organization regarding Federal funding for Rail Crossing safety.

I am writing regarding the testimony presented to the House Subcommittee on Railroads, Pipelines and Hazardous Materials on February 5, 2020 by Ms. Rachel Maleh from Operation Lifesaver Inc. and by Jason Morris of the Norfolk Southern Corporation.

We agree with many of the points made during the testimony of Ms. Maleh and Mr. Jason Morris. We rely upon and need the funding and support of our many railroad crossing safety partners including the FRA, FHWA and FTA. To lose any of this funding and support would be a severe blow to our program and Rail Crossing Safety efforts. Currently, Operation Lifesaver Inc. has determined that unless the state programs sign a partnership agreement with them, we are not eligible for any federal funds.

Idaho Operation Lifesaver along with a few other states have declined to sign a partnership agreement which would essentially subordinate our program to the wishes of Operation Lifesaver Inc. and would eliminate our ownership of the name Idaho Operation Lifesaver Inc. We ask that a funding formula of the allocated funds be designated for state Operation Lifesaver programs not affiliated with Operation Lifesaver Inc.

From the very beginning of the founding of Operation Lifesaver in Idaho, the first in the nation, we have maintained a strong and effective Rail Crossing Safety Program. Idaho was the first state to have an Operation Lifesaver program which began in our state in 1972 and then spread in the following years to other states until now every state in the Union has a program. The name Idaho Operation Lifesaver was established by Idaho Law Enforcement at the Peace Officers Association meeting in Coeur d'Alene Idaho at the inception of the program.

Idaho Operation Lifesaver is a 501 C3 nonprofit and our safety partners include:

The Idaho Chief of Police Association
The Idaho Sheriff's Association
Idaho State Police
Idaho Department of Transportation
Idaho Department of Education
Idaho Public Utilities Commission
Idaho Railroads
Idaho Community Volunteers

The work of the Idaho program is done by folks from the above groups. These folks speak to over 100,000 people annually at presentation, community events and state fairs regarding the potential dangers that exist around railroad right of ways and railroad crossings. We give presentations to groups ranging from preschool to senior citizens with a special emphasis on student driver education classes and professional drivers.

Operation Lifesaver Incorporated the National organization was established in 1986 as a support and referral center for the various state programs and has since morphed into an autocratic organization that was not foreseen or anticipated at the time of its creation.

We feel that all states that have an established, effective and active Operation Lifesaver program should share in federal funding, not just those who are affiliated with Operation Lifesaver Incorporated.

We believe that the non-affiliated states should be able to apply to the FRA, FHWA and FTA directly for their fair piece of the funding pie.

We hope you will give our request due consideration. We appreciate this opportunity to present our concerns and recommendations to the subcommittee.

Sincerely,

CHRIS ARVAS,
State Coordinator, Idaho Operation Lifesaver.

Letter of February 14, 2020, from Vern Keeslar, Executive Director, Utah Operation Lifesaver, Inc., Submitted for the Record by Hon. Eric A. "Rick" Crawford

FEBRUARY 14, 2020.

DEAR CHAIRMAN LIPINSKI, RANKING MEMBER CRAWFORD, AND MEMBERS OF THE SUBCOMMITTEE,

Thank you for allowing public input on the testimony given at the Hearing on Tracking Toward Zero: Improving Grade Crossing Safety and Addressing Community Concerns from February 5, 2020.

My name is Vern Keeslar and I have been the Executive Director of Utah Operation Lifesaver, Inc. for the past 16 years. Utah Operation Lifesaver, a nonprofit 501 (c) (3), has been a constant and consistent voice for highway-rail grade crossing safety and trespass prevention education in Utah since 1976.

Utah Operation Lifesaver continues to perform public outreach and education by providing presentations and educational material to the following targeted audiences; elementary, junior high, and high school students, driver education students, school bus drivers, professional truck and bus drivers, first responders, and other community and civic organizations. In fact, Utah is the only State in the country that requires one hour of railroad crossing safety instruction be given in public driver education classes!

I want to bring to your attention to a few items listed below regarding Federal funding.

1. Operation Lifesaver was first started as a grassroots safety program in the State of Idaho in 1972.
2. Operation Lifesaver, Inc. (OLI) was formed in 1986, originally as a support and referral center for the established State Operation Lifesaver programs.
3. OLI receives Federal funding from the Federal Railroad Administration (FRA), Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA) all while being housed in the offices of the Association of American Railroads (AAR)—a lobbying organization for the freight railroads.
4. OLI has terminated their partnership with Utah Operation Lifesaver because we would not sign a subscription agreement with them because we want to maintain our independent voice for rail safety education in Utah. We are a rail safety education organization, not a railroad organization!
5. OLI has also informed Utah Operation Lifesaver in writing that they are not eligible for these Federal grants from the FRA, FHWA, and FTA even though it is Utah Operation Lifesaver that implements and coordinates all rail safety outreach in Utah.
6. If governmental Federal funding is being distributed by the FRA, FHWA, and FTA to a nongovernmental organization, in this case OLI, shouldn't all State rail safety programs be eligible for this funding? According to OLI they are not. I wonder if the Administrators of the FRA, FHWA, and FTA know that their funding is not being considered for all States.

I am recommending a full investigation into this matter of OLI playing favorites by not allowing Federal funding to be distributed to all State rail safety programs.

Sincerely,

VERN KEESLAR,
Executive Director, Utah Operation Lifesaver, Inc.

Statement of Patrick Goddard, President, Virgin Trains USA Florida, LLC (aka Brightline Trains), Submitted for the Record by Hon. Frederica S. Wilson

INTRODUCTION

Chairman Lipinski, Ranking Member Crawford and members of the subcommittee, my name is Patrick Goddard and I am the President of Virgin Trains USA Florida, aka Brightline Trains. While I was not able to participate in this hearing on grade crossing safety, I am pleased to submit this statement for the record outlining our passenger rail company's initiatives to address crossing safety along our South Florida rail corridor.

Virgin Trains USA Florida (VTUSA), is a wholly owned subsidiary of Florida East Coast Industries, LLC (FECI) a transportation, infrastructure, and real-estate devel-

opment company based at our signature Virgin MiamiCentral station in downtown Miami.

Our passenger train subsidiary was established in 2012 to pursue passenger rail opportunities on a private, for-profit basis. VTUSA is the first major private passenger rail start-up effort in last 100 years and represents the return of intercity passenger rail on the historic Florida East Coast Railway corridor.

FECI traces its roots to the late 1890's and the company founded by Henry Flagler who first introduced an integrated rail network into Florida. That railroad gave rise to the growth of most of what is now the country's third largest state. Originally the system was built as a railroad that carried passengers from points north to new development projects along the Florida coastline, and also carried the freight to support the needs of those people and of those building the communities emerging along the new infrastructure backbone. FEC Railway supported Flagler's chain of resort hotels stretching from St. Augustine to Key West, including the famed Breakers, still owned and operated by today by descendants of Flagler. In the late 1960's the passenger service ceased operations, but the freight service continued to support the growth of the state. After some 120 years of continuous operations, the original railroad remains a profitable private enterprise.

In 2007, Fortress Investment Group (a New York based investment management firm) acquired Florida East Coast Industries, which was at the time a publicly traded company, and converted the assets into two distinct private companies with interests divided between freight and passenger railroad operations. In 2017, the freight operator, Florida East Coast Railway, was sold by Fortress Investment Group and is no longer part of the Fortress/FECI family of companies. However, Virgin Trains and Florida East Coast Railway continue to operate along the rail corridor under a permanent easement and Joint Use Agreement.

A VISION FOR PASSENGER RAIL IN AMERICA

Leveraging the legacy of the original company and its historic assets, VTUSA is investing $4 billion of private capital toward the reintroduction of passenger rail service to major Florida cities. This express, intercity passenger train is a newly created, consumer-oriented brand built to support an optimistic vision for what it means to travel by train in America. VTUSA is being introduced in two phases. Phase one service between Miami, Fort Lauderdale and West Palm Beach began revenue operations in 2018, with phase two service extending from West Palm Beach to Orlando International Airport currently under construction. Service to Orlando is expected to begin service in 2022. Phase three planning and design to Walt Disney World and Tampa is underway.

Virgin Trains USA is also working to bring our transformative rail system to other regions. We recently acquired the rights to build a high-speed rail between Las Vegas and Southern California. Construction is expected to begin late 2020. These new passenger systems are an all-important first step toward the reintroduc-

tion of private passenger rail in America, financed through private investment and with a vision to connect major markets which are "too long to drive and too short to fly".

Only six years since it was conceived, Virgin Trains is now carrying customers in a fleet of new and innovative, biofuel powered 100% made in America trains. In 2019, our first year of full operations, we safely carried more than one million passengers.

Brightline/Virgin Trains Siemens Charger Locomotives, made in Sacramento, CA.

SAFETY BY DESIGN

With safety our foremost goal, in the design and operation of this passenger railroad we have incorporated the most advanced signaling and safety technology available, including Positive Train Control.

Our existing railroad crossings have been significantly upgraded with additional safety components and traffic warning systems under the stringent supervision of the Federal Railroad Administration (FRA) and Florida Department of Transportation (FDOT) in strict compliance with the FRA Highway-Rail Grade Crossing Guidelines for High Speed Passenger Rail. Conducted by a team of engineers from FRA, FDOT, VTUSA, and each county and city public works department, every highway-railroad crossing between Miami and Cocoa was subject to on-site inspection and evaluation to determine the scope of improvements necessary for the safe operation of higher speed passenger rail.

In the course of this evaluation, the FRA and FDOT determined that they would require VTUSA to upgrade crossings to meet national "Sealed Corridor" standards where speeds exceed 79 mph.

A major component of our commitment to safety was the restoration of the previously removed second track that will allow for joint freight and passenger use. The FEC Railway has always been considered the gold standard for safety and for the

early adoption of new technologies, such as the addition of Automatic Train Control (ATC) in the 1980's. ATC is a forerunner to PTC, which is currently being installed and will be operational by the end of 2020 in phase one. PTC will be fully installed in phase two by the time it begins service in 2022.

We are one of the early railroads that will utilize a new technology, Vehicle Presence Detection (VPD), a warning system that will automatically open an exit gate for a vehicle stopped on the track while simultaneously warning an approaching train.

In South Florida, where speeds do not exceed 79 mph, our trains began testing in 2017 with revenue service commencing in 2018 under the Brightline brand. During our two years of operations we have moved over 1.7 million people safely. Commensurate with this service, we've taken an aggressive approach to safety by launching safety awareness campaigns, focused on education . . . engineering . . . and enforcement.

We are experimenting with new technologies and engaging in an ongoing education program, distributing materials to the local schools and working with influencers and local celebrities to sign our rail safety pledge.

TRESPASSING ON THE TRACKS

Since a year prior to launching operations, Brightline engaged in a tri-lingual safety education campaign in the South Florida area. In 2017, prior to Brightline's launch of service Florida saw a ten year high in railroad fatalities totally 64. The past two years, fatalities rates actually gone down. Unfortunately, we still see incidents along the corridor. To be clear, not a single incident on our railroad has been due to a failure of safety systems associated with this rail service. Those who have been injured or tragically died have either ignored warning signals by circumventing the safety equipment designed to protect them or by committing suicide.

Too many people take unnecessary chances with their lives, ignoring warning signals attempting to drive around the gate or to run across the tracks. These actions are dangerous and illegal, and they put other lives at risk. Our public education efforts focus on asking members of the public to treat train crossings like red lights or stop signs and to pay attention around the track.

Train fatalities pale in comparison to automobile incidents. In 2018, the state of Florida had over 3,100 auto-related fatalities from a total of over 400,000 auto incidents. Florida also saw nearly 150 bicycle related fatalities.

These fatalities can also be considered in the context of other traffic safety risks. In 2018 (the most recent year available), the Florida Department of Highway Safety and Motor Vehicles reported 725 fatalities from motor vehicle crashes in the three counties served by Brightline: Miami-Dade, Broward and Palm Beach. 201 pedestrian fatalities were reported in these three counties in 2018.

Dividing the number of motor vehicle crash fatalities in these three counties by the number of annual vehicle miles traveled results in a motor vehicle fatal crash rate. Factoring the fatalities and vehicle miles traveled for these three counties for the three years of 2016 through 2018 results in a motor vehicle fatal crash rate of 4.99 fatalities per million vehicle miles traveled. Using 2019 Brightline ridership figures (total of 1,012,804) and allocating across the three city pairs of service (FLL–MIA, FLL–WPB, and MIA–WPB) produces a Passenger Miles Traveled measure (defined by the Federal Transit Administration's National Transit Database). This calculation results in 47,541,020 passenger miles traveled in 2019. Applying the average fatal crash rate to this measure of intercity passenger rail travel can approximate the relative risk of fatal crashes not experienced by Brightline passengers in these three counties. This calculation estimates that 237 fewer crash fatalities by intercity passenger rail trips in 2019 in these three counties.[1]

Based on all numbers available, train travel is safer than cars.

However, we are committed to do more to prevent these types of incidents. To protect the public, we are engaged in several new initiatives, including:

- Utilizing drones to patrol the railroad corridor and alert local authorities when trespassers or potential suicide victims are spotted on the corridor
- Installing additional fencing or natural barriers in certain areas where active trespassing is occurring
- Installing additional crossing warning and safety systems such as additional gates or delineators to deter drivers who might consider going around gates
- Installing Active Warning Signs . . . digital messaging signs and "Moving Eyes" which provide pedestrian and vehicular warnings. These signs remind pedes-

[1] Rail Safety Analysis, Allan Rutter, Freight and Investment Analysis Division Head, Texas A&M Transportation Institute, January 2020.

trians and drivers to look both ways prior to crossing. The dynamic or active message sign is interconnected with the railroad signal system and remains dark until it receives an alert that a train is approaching. This triggers the active message sign to display its warning messages.

- Working with Florida Department of Transportation to add "dynamic envelopes" at crossings, a reflective, bold striping on the pavement to prevent vehicles from stopping on or too close to crossings
- Working with FDOT and state and local law enforcement agencies, including the Florida Highway Patrol, sheriffs, and police chiefs, to help enforce rail safety laws
- Virgin Trains will participate with the Federal Railroad Administration in a May 2020 Regional workshop on Right of Way Trespassing in West Palm Beach, FL.

SUICIDE

While many incidents are due to reckless behavior at crossings, a higher number have been due to people taking their own lives. The majority of our incidents have involved individuals that have been impaired by drugs or alcohol or have been as a result of suicide. This estimation is based on a compilation of data obtained from Medical Examiner conclusions and autopsy toxicology reports, eyewitness accounts as observed by on-board train personnel, video records from on-board cameras, and narrative incident descriptions as reported to the Federal Railroad Administration under 49 CFR Part 225. This in an industry-wide concern. Suicide rates have increased more than 30% in the last 15 years. Florida's suicide rate is higher than the national average. Suicide by rail is a growing problem that should be addressed in another forum in the context of mental health issues and opioid abuse.

To address this problem locally, VTUSA recently formed a collaboration with a major South Florida mental health and suicide prevention organization to raise awareness of local help programs to intervene and direct those considering suicide to counseling and mental health programs.

Major components of this program include signage at railroad crossings directing people in crisis to the "211 Helpline" where counselors will engage with them and find them the help they need. The program will focus on homeless, low income and at-risk populations near South Florida railroad corridors where suicide rates are higher. Services include disseminating information about 211 Helpline and mental health and counseling services through events and outreach in targeted communities. The program will also utilize PSA's, print and social media and include outreach to school children.

EDUCATION

Be assured, Virgin Trains is not content with simply accepting injuries and deaths when people trespass on active railroads or ignore warning signals. We have taken extraordinary extra steps to educate the public about safe behavior around railroads and to explore additional ways to reduces incidents.

Since Virgin Trains began service in January of 2018, we have added a number of initiatives to our ongoing safety campaign, including:

- Placing Variable Message Signs (VMS) at major crossings with warning messages about new train activity
- Working with Operation Lifesaver, training 40+ teammates as authorized Operation Lifesaver Volunteers
- Broadcasting over 1000 public service announcements on TV and Radio
- Deploying Teammates at major highway-railroad crossings to meet with pedestrians, hand out flyers in nearby businesses, and engage and educate our South Florida communities about the importance of staying safe around active railroad tracks
- Conducting more 40 emergency response seminars, training more than 350 First Responders in 18 fire and police departments
- Working jointly with the Palm Beach State College Fire Academy developing an ongoing training curriculum and holding full scale emergency response exercises.
- Mailing 92,000 safety pamphlets to families with school-age children. School children are given pledge cards where they pledge to never walk or bike along tracks, cross tracks when a train is moving and to "b" safe near railroads
- Training 500 bus drivers about train activity and safe driving near tracks
- Employing off-duty police at key crossings to step up enforcement of trespassing laws
- Working with local cities, installing additional safety features where feasible.

Our most innovative awareness education initiative received a 2019 Rail Safety Certificate of Merit from APTA. Known as the Buzz Boxx, this unique safety campaign is a mobile Barber Shop that we place at homeless organizations and youth centers. In exchange for taking a rail safety pledge, we provide a free haircut. We also provide mental health counselors at certain venues. Partnering with more than a dozen law enforcement and community service agencies, the Buzz Boxx is an effective and unique way to engage kids and teach them about safety around railroads and raise awareness.

Brightline Buzz Boxx Safety Education Mobile Barbershop

WHAT CAN CONGRESS DO?

In considering new programs to prevent trespassing, we urge Congress to provide additional funding for programs that provide for more aggressive enforcement of trespassing and disobeying crossing signals, including increased penalties.

Congress should explore ways to limit liability claims against private railroads due to damaged or missing fences.

Maintenance of fencing over hundreds of miles is costly and difficult to manage. Numerous studies have shown that widespread installation is impractical and often ineffective as those determined to trespass will vandalize, damage or otherwise destroy them in order to restore the unfettered access they were previously accustomed to. In such case railroads are vulnerable to lawsuits for injury to trespassers who gain entry through a damaged fence.

Increase funding for crossing grade separation programs, crossing safety infrastructure, fencing and other barrier systems to prevent unauthorized access to rail corridors.

With the growing emergence of private sector passenger rail in the U.S., we also urge Congress to make private passenger rail companies eligible for crossing safety and trespass prevention grant programs which currently allow only public agencies to apply.

CONCLUSION

VTUSA is operating on a rail corridor that has been in continuous use since 1895, private property on which VTUSA and Florida East Coast Railway share ownership. Having spent more than $2 billion dollars to date, none of which are taxpayer funds, we are committed to completing this rail system to Orlando and then Tampa, making real a long-sought Florida dream to give our 20 million residents and 115 million visitors an alternative to crowded highways.

As we continue work on the expansion of our system, we invite each member of this committee and others interested to visit our operations in Florida and to meet

with those directly involved with the safety and security of our railroad. We have designed a thorough and complete set of initiatives focused on education, engineering and enforcement and a first-hand look is critical.

Thank you for the opportunity to submit our comments.

APPENDIX

QUESTIONS FROM HON. PETER A. DEFAZIO TO KARL ALEXY, ASSOCIATE ADMINISTRATOR FOR RAILROAD SAFETY AND CHIEF SAFETY OFFICER, FEDERAL RAILROAD ADMINISTRATION

Question 1. When Administrator Batory testified before the Subcommittee in June, he stated that some trains can measure as long as 16,000 feet.

a.) Does the FRA collect data on train lengths? In the case that FRA does not collect data on train lengths, has FRA studied potential safety problems at various lengths? If so, please share your research with the Committee.

ANSWER. FRA does not directly regulate train length, and as such, FRA does not collect comprehensive data on train length. However, FRA does require railroads to report certain information when reporting accidents/incidents. For all reportable accidents/incidents, FRA requires the involved railroads to report the number of cars in the train, but not the train length itself. Although cars are manufactured in various lengths, knowing the number of cars can produce an estimate of the train's overall length.

As noted in GAO's May 2019 Report (Report No. GAO–19–443), "Rail Safety: Freight Trains Are Getting Longer, and Additional Information Is Needed to Assess Their Impact," FRA, through its Office of Research, Development, & Technology (RDT), is currently evaluating the braking performance of longer trains (i.e., freight trains with 150-to-250 railcars), with technical feedback and collaboration with the industry. FRA's study includes evaluations of the train dynamics of operating longer trains. *See* GAO Report at 22–26. That study is on-going, with a target of completing the first phase of the study by the end of 2020 and the second phase by the end of 2021. The phases of the study are described in the GAO report. *See* GAO Report at 23, Table 1.

In addition, through FRA's comprehensive safety program, the agency continually assesses railroad safety performance through data analysis, simulation, inspections, audits, and accident investigations. FRA has, in-house, two simulators that evaluate train performance, taking into consideration the number and types of cars in the train, train makeup (i.e., the location of car types within the train), and brake performance, as well as the physical characteristics of the route. These simulators are being used to support FRA's study. If FRA has reason to believe the length of the train or train makeup was a factor in an accident/incident, FRA evaluates that issue during its accident investigation, including simulation.

b.) Is the FRA confident that braking systems, end-of-train devices, and distributed power units can consistently communicate over the length of trains, including those that can run up to 16,000 feet long?

i.) If so, what data has been gathered by the FRA to support this?

ii.) Up to what distance do braking systems, end-of-train devices, distributed power units, and handheld radios generally transmit properly? Up to what distance do they generally transmit in mountainous terrain?

iii.) Can you provide that research to this Committee?

ANSWER b.)i.) through b.)iii.). The ability of braking systems, end-of-train devices, distributed power units, and handheld radios to communicate over the length of trains is affected by several factors. For example, surrounding terrain (e.g., mountains and valleys) and structures may impact the systems' ability to consistently communicate over the length of a train. To better understand how various factors affect the ability of these systems to maintain communications and what operational and technological solutions exist to ensure communications are maintained, FRA, in a notice of proposed rulemaking published on January 15, 2020, requested data related to: (1) the frequency and duration of communications losses; (2) what operational and technological solutions for communication losses the industry has considered and implemented; and (3) how and when an emergency signal should be sounded or other notification sent to a locomotive engineer when a loss of commu-

nications has occurred. 85 FR 2494. FRA is using all relevant data and information received in response to this request for information to inform its future actions on this issue.

In the meantime, FRA requires railroads to comply with federal rail safety regulations that specify the minimum requirements for the safe use of braking systems, end-of-train devices, and radio and wireless communications. FRA's regulations are designed so that a properly performed brake test should provide the necessary safety assurances that the brakes will work as intended until the next required brake inspection. Moreover, FRA's regulations specify actions that must be taken when radio communications and end-of-train devices and such systems fail to work properly. *See* 49 CFR Part 220, Subpart B, and 49 CFR Part 232, Subpart E.

Distributed power units are locomotives and are regulated under FRA's regulation on locomotive safety standards. *See* 49 CFR Part 229. The number and placement of distributed power units within a train consist impacts the quality of brake signal transmissions throughout the train consist. A distributed power locomotive, in the middle of a train consist, effectively acts as a repeater of the brake signal transmission from the controlling locomotive to the rear of the train, which enhances the ability to maintain communication between the front and rear of the train through a variety of circumstances. (Distributed power locomotives have the added advantage of helping to control in-train lateral forces, depending on where they are located in the train consist). For example, operations under an FRA test waiver (Docket No. FRA–2016–0086 at www.regulations.gov) have demonstrated that even in cold weather conditions, when it takes longer to pressurize air brake systems and trains are more prone to air brake leakage, a distributed power equipped train can withstand leakage at 50% more air flow than a conventional train and still have compliant brake performance. The distributed power locomotive reduces the time required to pressurize the air brake system throughout the train consist, despite train length, allowing the brakes to effectively function despite the brake pipe leakage. In the final phases of the FRA RDT study, FRA will study distributed power quantity and placement in longer trains.

Question 2. As discussed during the hearing, please provide the responses that the FRA received from the freight railroads relating to Administrator Batory's May letter to the Class I's on blocked crossings prevention.

ANSWER. The letters FRA received from BNSF, CSX, Kansas City Southern, Norfolk Southern, and Union Pacific are attached.

ATTACHED LETTERS

BNSF RAILWAY,
2600 LOU MENK DRIVE,
Fort Worth, TX 76131, June 13, 2019.

Hon. RONALD L. BATORY,
Administrator,
Federal Railroad Administration, United States Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC.

DEAR ADMINISTRATOR BATORY:

I write in response to your May 16, 2019 letters addressed to Carl Ice, BNSF Chief Executive Officer, and me regarding the issue of blocked highway-rail grade crossings and your request for our assistance in this matter. As you outline in your letter, blocked crossings are a recognized area of concern within some of the communities where we operate and BNSF is always concerned about the potential impact to public safety and quality of life in those communities. BNSF is pleased to work further with the Federal Railroad Administration (FRA) on this matter, as requested in your letter.

At BNSF, we have been and will continue to be committed to the practices discussed in your letter, as well as other efforts to mitigate and prevent road and rail traffic conflict where it is within our ability to improve outcomes. Given increased vehicular traffic near the rail network, the problem is often more complex than railroad operating practices. Therefore, BNSF appreciates the comprehensive approach that the Department of Transportation (DOT) is taking on this matter.

As context to overall grade crossing safety at BNSF, BNSF has the lowest highway-rail grade crossing collision rate in the industry, reducing the rate of grade crossing collisions over 70% since the creation of BNSF in 1995. Much of BNSF's success is the product of grade crossing safety programs and processes which, like much of the industry, are centered around engineering, enforcement and education. Included in these efforts has been the elimination of over 6,400 highway-railroad grade crossings on BNSF since 2000. While BNSF's efforts have consistently re-

sulted in industry low incident rates, 2019 is producing historical lows in both grade crossing and trespasser incident rates. The well-established corporate grade crossing programs and processes, coupled with strong community, public safety officer and responder outreach will continue to guide us in this area. Although we are proud of this history, BNSF's focus is the path to zero—an imperative that supports our safety vision of an incident and injury-free operation.

These grade crossing safety practices are an important part of the multi-pronged approach that BNSF takes to addressing blocked crossings. Our approach consists of an ongoing effort to understanding which crossings are vulnerable to blockage as well as when and why. We apply significant planning tools and practices to operations, which I will discuss further below. In addition, BNSF's current operating rules seek to minimize occupation of a crossing under any operating scenario or unnecessarily activating automatic warning devices at crossings.

Blocked crossings, nevertheless, can result from a variety of operating activities and conditions. BNSF's ongoing review indicates that addressing unplanned train stoppages has significant leverage in avoiding blocked crossings. In short, BNSF's technology and operational programs designed to improve the reliability of our track and mechanical infrastructure directly affects its success with avoiding blocked crossings. BNSF has improved rail equipment incident rates by nearly 50% since 2000. Important to those efforts is our continued effective collaboration with the FRA in areas such as our automated track inspection pilot and brake health effectiveness waiver, among others. We know that the DOT is aware of BNSF's commitment to further the use and reliance upon these technologies—which not only improve safety, but provide the opportunity to improve operational and maintenance planning and, therefore, network fluidity.

Dispatcher training is also an important element of BNSF's operational approach to avoiding and mitigating blocked crossings on the network. Dispatchers are familiarized with public crossing locations and trained to minimize blocking these crossings as they operationalize siding utilization and meet/pass opportunities, opportunities for train stopping points, and clearance points and the distance between identified locations, including public crossings. Dispatchers plan operations to provide the most efficient train movement with the least impact to crossing operations. Likewise, BNSF's crew planning process is designed to include information on relevant public crossings as an important consideration in locating crew change points. Ultimately, there is specific focus on this issue at every level—at the department level, at each operating division, and with individual employees at the local level.

Finally, BNSF relies on its employees and the communities we serve to provide the company ongoing awareness of when conditions develop on the network and a public crossing is blocked. Like other railroads, BNSF utilizes a 1–800 emergency contact number which is broadly shared with the public and posted at all public grade crossings to contact the BNSF 24-hour Resource Operations Center with crossing related concerns. When a situation develops real-time, BNSF operations acts with urgency and part of that process includes ensuring appropriate contacts are made and lines of communication are open. Many times providing a local level of engagement and access helps to alleviate a blocked crossing situation. Where there is the potential for an ongoing chronic condition, we look at whether longer-term ongoing remediation plans can be put into place—for example, an operational change identified by local BNSF operating leadership, or working with local emergency responders to identify road crossing alternatives. BNSF has found that, in most cases, the best way to address these concerns is to engage local BNSF teams to coordinate with the community.

BNSF regularly assesses its existing processes, procedures and controls related to blocked highway-rail grade crossings. We will continue to do that and provide your staff insight into that process. I further commit to you that we will work with interested local communities and the Department of Transportation where grade separation opportunities present themselves. BNSF encourages public policies that support these projects where appropriate.

We appreciate you reaching out to us and partnering with us in this important area. I look forward to working with you and your team as we continue to provide safe, reliable and efficient transportation services.

Sincerely,

KATIE FARMER,
Executive Vice President, Operations.

CSX CORPORATION,
500 WATER ST., C900,
Jacksonville, FL 32202, June 24, 2019.

Mr. RONALD L. BATORY,
Administrator,
U.S. Department of Transportation, Federal Railroad Administration, 1200 New Jersey Avenue, SE, Washington, DC.

DEAR MR. BATORY:

I am responding to your recent letter concerning blocked highway-rail grade crossings across the United States.

Your letter requested CSX Transportation assess its operations to minimize blocked highway-rail grade crossings across its network. CSX continuously reviews its operations to determine how best to avoid disruptions caused by blocked crossings and has taken many steps to alleviate such issues. For example, CSX's operating rules include specific instructions that standing trains and switching movements should avoid blocking highway-rail grade crossings. Our train crews and dispatchers also understand the need to regularly communicate with one another about blocked crossings when trains are stopped or delayed and take additional steps (including, at times, separating the train) to minimize the impact to motor-vehicle traffic at these locations. Furthermore, our Network Operations team regularly reviews trains that have stopped to determine if additional assistance is required to avoid any disruptions to the public and surrounding communities.

You also ask that CSX consider train lengths and locations when stopping trains could potentially occupy a crossing or impede traffic. Regardless of train size, our Network Operations team carefully plans where our trains meet with one another to avoid such issues, including taking into consideration nearby sidings or timing such meets to reduce disruptions when other viable alternatives are limited. When necessary, we also identify locations in our timetables that additionally instruct crews to avoid occupying a specific crossing (or crossings) with a standing train or a train engaged in switching.

Finally, you encourage CSX to engage with state and local governments to discuss blocked-crossing issues and work to mitigate community-specific impacts. CSX's Operations and Public Affairs teams often engage state and local officials across our network to address community concerns. Our teams work directly with local officials to develop a workable solution to mitigate blocked crossings, solutions that have included crossing re-location or removal, operational changes and infrastructure investments. In fact, just recently CSX worked with local representatives in Fairport, New York where CSX rescheduled its operations to commence at midnight in an effort to avoid blocked crossings during the day.

In addition to the above steps, the efficiency gains achieved by CSX has further helped reduce blocked highway-rail grade crossings across our network. Increased velocity, reductions in terminal dwell and a decrease in the number of cars on line all result in less crossing disruptions. As a result, CSX is currently on track to receive approximately 30% less blocked crossing complaints then it did in 2018. Nevertheless, and as suggested in your letter, CSX will continue to assess its operations and engage with its Operations team and the communities across our network to further mitigate highway-rail grade crossing issues.

Please feel free to contact me should you have any additional questions or concerns.

Sincerely,

JAMES M. FOOTE,
President and Chief Executive Officer.

cc: Mr. Ian Jefferies, President & CEO, AAR
Mr. Ed Harris, Executive Vice President Operations, CSX

KANSAS CITY SOUTHERN RAILWAY,
CATHEDRAL SQUARE, 427 WEST 12TH STREET,
Kansas City, MO 64105, September 5, 2019.

Hon. RON BATORY,
Administrator,
Federal Railroad Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC.

Re: KCS Efforts to Minimize Blocked Crossings

DEAR ADMINISTRATOR BATORY:

Our Chief Executive Officer Pat Ottensmeyer asked me to respond to your recent letter highlighting the Federal Railroad Administration's ("FRA's") attention to the issue of blocked at-grade crossings, and requesting that The Kansas City Southern Railway Company ("KCS") re-examine its operations to avoid crossing blocking. I am happy to report that KCS is making strides to address this issue.

Like FRA, KCS is acutely aware that blocked grade crossings can be a point of friction between the railroad and the communities where we operate. KCS tries to be a good neighbor in the communities where we operate, and we have worked with many communities on crossing blocking issues. Sometimes this has involved bearing costs of improving some crossings while paying communities to close others. In one instance we have conferred with a community about installing a detection system at a crossing that the community felt was especially critical to its cross-town emergency vehicle and school bus traffic. The system would provide an advance notice to drivers several blocks from the crossing that could have allowed them to divert to other routes if the crossing was occupied. In another community we modified our operation so that trains would be held outside town if the railroad swing bridge on the other end of town needed to open to let river tows pass. Nevertheless, as the communities around our lines and yards continue to grow, their vehicular traffic increases and new streets are built, and as our own traffic grows, new challenges arise continually. Sometimes we simply have to apologize to our neighbors and tell them that we will try to do better.

I am pleased to tell you that, spurred by your letter to Mr. Ottensmeyer, KCS is taking further steps to track and assess blocked crossing reports. We have recently instituted a system for cataloging and handling blocked crossing calls received by our Critical Incident Desk (CID). Each time a call comes in, the Coordinator, whose office is in our central dispatching center, will make contact with the dispatcher or yard handling operations at the location of concern to determine additional facts about the situation, and will provide feedback to the caller about the situation and what we know about when it will resolve. In some instances, we have heard even while we are on the phone with the caller that the blockage is resolving. Call information is regularly reviewed by our operating and health & safety teams.

Call information thus far shows several common causes of blocked crossings, some of which should be manageable and some that are random or beyond our control. In the former category are train meets and trains being held out of a yard unexpectedly, sometimes by us and sometimes by our interchange partners. In the latter category are problems like equipment breakdowns, short-notice bridge openings for river traffic to pass, and even a tie fire on the track. Often the complaint involves industry switching, an activity that obviously must occur and that has to be scheduled when the shipper is able to receive the traffic. We have seen repeat problems at a couple of crossings, and so will be looking into those more intensively to see what can be done.

We are working to develop the best systematic way of using blocked crossing information to help avoid foreseeable future problems. Whether that requires discussions with teams in our operating department to develop a set of best practices and best alternatives or whether it requires site-specific adjustments of an operating pattern remains to be seen. Both may be helpful.

Thank you for your leadership on this issue and for motivating KCS to do more to be a good neighbor to the communities where we operate. I am confident that your encouragement to us to increase attention to crossing blocking will pay dividends for KCS and for the cities and towns where we operate.

Sincerely,

JEFF SONGER,
EVP & Chief Operations Officer.

NORFOLK SOUTHERN CORPORATION,
THREE COMMERCIAL PLACE,
Norfolk, Virginia 23510–2191, July 9, 2019.

Mr. RONALD L. BATORY,
Administrator,
Federal Railroad Administration, 1200 New Jersey Avenue, SE, Washington, DC.

DEAR ADMINISTRATOR BATORY:

I appreciate this opportunity to respond to your letter regarding complaints about blocked crossings. Norfolk Southern ("NS") addresses grade crossing safety, railroad trespassing prevention, and community concerns over blocked crossings in a very proactive manner. Norfolk Southern's approach to each of these issues is built on working collaboratively with the communities in which we operate and the customers we serve.

Over the next several decades, America's transportation system faces a doubling of freight volumes. The demands on railroads to meet this challenge will require a financially stable industry that can invest in new technologies which enhance safety, improve productivity, and create operational efficiency. In light of these trends Norfolk Southern has undertaken a dedicated approach to working with state transportation departments, state legislatures, and local elected officials. This new focus on creating state programs that seek to eliminate redundant crossings while also grade separating where appropriate will, we believe, provide the most benefits for all stakeholders.

The creation of novel programs to fund grade separations and road redesign, which enhance surface transportation mobility, has also been a primary concentration. Our efforts have been focused on our heaviest volume routes that tend to experience the largest number of crossing impacts in communities on our lines. In 2015, Norfolk Southern proactively began to work with the State of Indiana to foster a model grade crossing safety program centered on a corridor approach. In 2018, eight local governments along NS mainlines were awarded projects through Indiana DOT's Local TRAX Program. More information about the program can be found at: https://www.in.gov/indot/files/Local%20TRAX%20Presentation%20.pdf.

In 2019, NS began the effort to take the model Indiana program to other states along our Chicago line. I am pleased to report that the states of Illinois, Michigan, and Ohio are very interested in this new approach, and NS has or will soon be approaching numerous communities in these states concerning projects that support closing redundant crossings and grade separating additional crossings. In some instances these projects have been identified using data indicating significant positive impacts for motorists. In Ohio, for example, we are already working with Ohio Rail Development Commission and ODOT to begin the process to grade separate a crossing in Cleveland identified by FRA in 2016 as one of the fifteen most dangerous at-grade crossings.

The best solutions for providing predictable mobility at grade crossings require a shared vision and can take years to construct. Norfolk Southern is a willing partner to discuss these opportunities with any community who is seeking a long term solution to at-grade crossings. In a few instances Norfolk Southern has partnered with communities through the FRA's CRISI Grant Program. We are a strong proponent for expanding this program, and we appreciate working with the FRA and grant recipients on these meaningful partnerships.

Finally, I would also like to ask for your assistance in helping to modernize the Section 130 Railway-Highway Crossing Program. Norfolk Southern is a strong proponent of this best in class safety program. While this program is under the sole jurisdiction of the Federal Highway Administration, I wanted to share with you our team's ideas on some changes we think will make it even better. These changes include the following; 1) increasing the current limit of $7,500 for incentive payments to localities for the closing of a grade crossing to $100,000; 2) adding eligibility of Section 130 funds for the replacement of functionally obsolete warning devices, and 3) increasing the federal match for small or rural communities to 100%.

Norfolk Southern is deeply focused on safety where highways and railways cross. Our customers also depend on NS to operate a safe, efficient and high velocity network, which includes avoiding operational impediments such as trains stopped on mainline tracks. Enhancing the safe movement of goods and providing for an efficient transportation system benefits transportation providers, communities, and customers alike.

Sincerely,

JAMES A. SQUIRES,
Chairman, President and Chief Executive Officer.

cc: Ian Jefferies—President and CEO, AAR
Michael J.Wheeler—EVP and COO, NSC

UNION PACIFIC CORPORATION
1400 DOUGLAS STREET, 19TH FLOOR,
Omaha, NE 68179, June 7, 2019.

Hon. RONALD BATORY,
Administrator,
Federal Railroad Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC.

DEAR ADMINISTRATOR BATORY:

Thank you for your May 16, 2019, letter regarding blocked crossing complaints. Union Pacific shares FRA's mission to enable the safe, reliable and efficient movement of goods, now and in the future. Our industry succeeds—and our communities, employees and customers benefit—when our trains are moving.

As you know, we operate a highly interconnected network covering 23 states. Events in one location can sometimes impact the efficient flow of trains hundreds of miles away. For these and other reasons, a blocked crossing may feel local but is actually often the result of a distant or more complex operational issue. Sometimes weather, locomotives or railcar mechanical failures, and other unforeseen interruptions to operations can cause a crossing to be blocked for an unexpected duration. As you acknowledge in your letter, sometimes trains stop to comply with federal regulations, such as brake tests and equipment inspections.

Despite these obstacles, we must do better. We are cognizant of the negative impacts blocked crossings have on communities, and we are sensitive to their concerns. Union Pacific's public affairs team works tirelessly with state and local officials to listen to their concerns and create collaborative solutions that minimize impacts on surrounding vehicle traffic. We also assist state and local road authorities with their highway rail crossing assessment and improvement plans. These plans help identify crossings that are good candidates for improvements, closure and grade separation. In addition to these efforts, Union Pacific has made significant crossing infrastructure investments and improvements to promote safety and mitigate local community concerns.

More remains to be done. I will emphasize with my operating team that, in the development and execution of our transportation plan, we will scrutinize how our operations affect local communities, and we must make every operational effort to minimize blocked crossings. Moreover, if Union Pacific knows in advance of an operational issue that may significantly affect a community, our Response Management Communication Center (RMCC) dispatchers will work with local emergency dispatchers to eliminate imminent safety concerns.

We appreciate the open dialogue with the FRA regarding this issue, and we will continue to monitor our blocked crossing data and other risk identification tools to determine any safety mitigation or operational modifications that will allow us to develop enduring solutions to these issues. If you have further questions or concerns, please do not hesitate to contact me.

Sincerely,

LANCE M. FRITZ,
Chairman, President, and CEO.

QUESTIONS FROM HON. RANDY K. WEBER, SR., TO KARL ALEXY, ASSOCIATE ADMINISTRATOR FOR RAILROAD SAFETY AND CHIEF SAFETY OFFICER, FEDERAL RAILROAD ADMINISTRATION

Question 1. With five ports in my district, railroads are a critical mode of transportation, with hundreds of train cars moving goods from all over the world to distribution points further inland, while also facilitating an explosion of exports to overseas destinations. At the same time, these same trains can present challenges to our local communities.

Galveston, Texas is a case in point.

In addition to significant freight activity at the port, Galveston is also the fourth busiest cruise ship homeport in the United States. There are only two primary emergency evacuation routes from the City of Galveston: Broadway Avenue (Texas State Highway 87) and Harborside Drive. Lengthy train delays occur on one of these two critical routes from Galveston Island. Trains blocking Harborside Drive greatly impact public safety by eliminating half the primary available routes to and from the Island. The railroad companies using the associated tracks are Union Pacific Railroad and BNSF Railway.

According to city officials, the railroads are increasing their extended blocking of Harborside Drive for durations reaching or exceeding 30 minutes. These blockages of the roadway occur at early morning, during the evening commute, and many times throughout the day. Delays impact commerce at the port, as well as port cruise operations.

More specifically, Harborside Drive is a main artery to the University of Texas Medical Branch. The route is used by emergency vehicles daily.

Local administrators have complained that communication with the rail operators has not been easy; moreover, there does not appear to be any method to contact on-the-ground supervisory personnel for the railroads in Galveston. For example, one of the operators experienced a derailment near 77th Street, but there was no communication from the railroad to the city's public safety personnel.

As noted above, increased rail activity on the island—while reflective of a booming economy—may pose risks to public safety. The blocking of city streets and state highways, along with the transportation and storage (siding) of hazardous materials, heightens the risk to the general public.

While grade-separation projects are the most effective method to address blockages and improve safety, these are costly projects and may not always be fiscally or logistically realistic for the local community. Although other federal and state transportation funding can also be applied, grade crossing improvements—especially costly grade separation projects—must compete against a wide range of critical transportation needs. With these concerns in mind, the Section 130 Highway-Rail Crossing Safety Program provides states with federal formula funds to eliminate hazards posed by blocked grade crossings due to idling trains.

What protocols are in place to ensure that the railroads notify local first responders of all derailments, including what types of hazardous materials are being stored and/or transported through the City?

ANSWER. All railroads have protocols in place to notify local first responders and, in certain instances, the National Response Center (NRC) of any derailments and other rail accidents and/or incidents. FRA regulations require railroads to immediately report certain types of accidents and incidents to the NRC. 49 CFR § 225.9. The NRC then notifies applicable state and Federal agencies to assist in a collective response to mitigate risk to the public.

Regarding hazardous materials, the Pipeline and Hazardous Materials Safety Administration (PHMSA), and the Environmental Protection Agency (EPA) have regulatory requirements that mandate the reporting of hazardous materials incidents to local, State, and Federal authorities. PHMSA's requirement is found at 49 CFR § 171.15and EPA's requirement is found at 40 CFR § 300.125. As part of its regulatory oversight responsibility, FRA, in conjunction with other Federal authorities, conducts follow-up with response organizations to ensure reporting and information sharing is taking place with the freight carriers.

Communicating information to communities and first responders regarding high-hazard flammable trains transported and/or stored in their jurisdictions is required under PHMSA regulations. 49 CFR § 174.312. Additionally, a railroad is required to provide contact information to local emergency planning and first responders to request information regarding commodity flow information used to assess risk and develop emergency action plans. 49 CFR § 172.820.

Question 2. Does the FRA have any plans to alleviate use restrictions—such as the requirement that 50 percent of the Section 130 program funds must be spent

on protective devices—that impede a state's ability to select more grade-separation projects or other innovative projects?

ANSWER. The Section 130 Program is administered by the Federal Highway Administration (FHWA), not FRA. In addition, statute requires at least 50% of Section 130 program funds to be used for protective devices. 23 U.S.C. § 130(e)(1)(B). A legislative change is required to alleviate this restriction within the Section 130 Program.

Question 3. Does the FRA have any plans and/or recommendations for greater federal program flexibility to fund innovative approaches to significantly mitigate, if not eliminate, blocked railroad crossings?

ANSWER. FRA is working with industry and communities to identify and evaluate low-cost measures to mitigate the consequences of blocked crossings (e.g., new technology to communicate crossing status to motorists or emergency services). The City of Hattiesburg, Mississippi, was awarded a Consolidated Rail Infrastructure and Safety Improvements (CRISI) grant to use technology to communicate crossing status to motorists. By partnering with a private company, Trainfo, the City of Hattiesburg will install equipment to detect the presence, direction, and length of trains. Algorithms will be developed to determine which crossings will be blocked ahead of the train and for how long. This information will be shared with motorists through mobile mapping applications and dynamic message signs along the roadways. Although this will be the first use of such a system in the United States, Trainfo has successfully worked with local agencies in Canada on similar systems already in use.

Another solution is the innovative use of variable message signs. In Kirkwood, Missouri, and in Springfield, Massachusetts, electronic message signs are illuminated that direct motorists to nearby overpasses when trains are present at frequently blocked crossings.

In Houston, Texas, the police department started a "mobility committee" to mitigate impacts of blocked crossings. Representatives from the city, police department, and railroads meet monthly to discuss issues related to blocked crossings and potential solutions. The city of Houston also plans on deploying a camera system in the future to monitor blocked crossing hot spots.

In addition, FRA's blocked crossing data is shared with our stakeholders. Communities can use the information to plan emergency service contingencies such as staging vehicles or alternative routes where they will not be blocked by trains.

These projects and others like them are eligible projects under the CRISI program.

Projects eligible for CRISI or State of Good Repair grant funding include installation, repair, or improvement of grade separations; railroad crossing signals, gates, and related technologies; highway traffic signalization; highway lighting and crossing approach signage; roadway improvements such as medians or other barriers; railroad crossing panels and surfaces; and safety engineering improvements to reduce risk in quiet zones or potential quiet zones.

In our outreach to local communities, FRA notifies officials about funding opportunities and offers technical assistance for navigating federal funding processes and application requirements.

Question 4. Does the FRA have any authority to hold railroads more accountable for identifying solutions in consultation with communities adversely impacted by unreasonable or unsafe train delays at railroad crossings?

ANSWER. Under 49 U.S.C. Chapter 201–213 and its implementing regulations, FRA does not have specific authority to regulate railroad activity with regards to blocked crossings. Accordingly, the FRA does not have the authority to hold railroads accountable for identifying solutions to blocked crossings. However, we regularly investigate reports of blocked crossings and work with the railroads and the communities to collaboratively find solutions. Additionally, FRA launched an online portal for the public to report blocked crossings. The report includes the location, time, duration, and consequences of blocked crossings. FRA uses the data collected from this portal to identify frequently blocked crossings (greater than 3 times per month). FRA then contacts the railroad to obtain additional information, such as the number of cars in the trains and the reason for the stopped trains, and notifies the railroad of the issue at each crossing. FRA recently developed detailed geographic information system (GIS) maps of urban areas with high numbers of blocked crossing reports to provide additional information to develop local solutions. These GIS maps show locations of all crossings in a defined area, with at-grade and grade-separated crossings identified; reported blocked crossings; railroad infrastructure; streets and highways; and locations of emergency and first responder operations. These maps will be used by FRA personnel in discussions to develop measures, both

by railroads and communities, to reduce the frequency, duration, and ultimately the consequences of blocked crossings.

QUESTIONS FROM HON. SAM GRAVES TO JASON M. MORRIS, ASSISTANT VICE PRESIDENT, SAFETY AND ENVIRONMENTAL, NORFOLK SOUTHERN CORPORATION

Question 1. Would passing a law limiting the amount of time railroads could occupy at-grade crossings with a train alleviate or mitigate the impacts of grade crossings to communities?

ANSWER. No. In fact, enacting such a law would only exacerbate those impacts.

We understand the frustration communities sometimes feel about grade crossings that are occupied for longer periods of time than expected, and passing a law limiting the amount of time trains can occupy grade crossings might seem like a simple solution. But prescribing grade crossing time limits will have unintended consequences that ultimately will undermine the law's purpose and objectives.

The issue is that railroads only have so many ways in which they could comply with such a law, and all of them would create significant problems.

One way to comply would be to stop the train and "break" it by de-coupling cars and "clearing" the crossing of all rail cars before the prescribed time limit is reached. But breaking the train takes time, as a rail worker would need to travel to the crossing (either on foot from the locomotive at the head end of the train or perhaps by motor vehicle from some other location), de-couple two of the cars, then direct the train's engineer to pull forward so the cars that remain attached to the locomotive clear the crossing. If the prescribed time limit were too short, it would literally be impossible for a railroad to comply in many cases, because there would not be sufficient time to complete all of the necessary steps.

However, even if the crossing could be cleared within the prescribed time limit, breaking the train would offer only temporary relief. This is because the train crew will need to conduct a brake test required by federal regulations once the train is reassembled and before and it can move again. All of these activities (re-assembling the train, conducting the brake test, and moving the re-assembled train through the crossing) must take place while rail equipment occupies the crossing. Just as with the process of disassembling the train, there is a real question as to whether these activities can be conducted within the time period prescribed by a hypothetical law. But that issue aside, the *total* amount of time the train would occupy the crossing as required by a grade crossing law (including the time it takes to break the train, clear the crossing, re-assemble the train, and conduct the brake test) will in many cases *exceed* the total amount of time the train would have occupied the crossing *in the absence of a law*. Thus, the total impact to the community—as measured by the total time the train occupies the crossing—will often be *greater* as a direct consequence of the law.

Other ways to comply with a hypothetical law setting a time limit include altering operations by running shorter trains, by running trains at higher speeds, or by doing both. Any of these methods of compliance would have great potential to create negative community impacts.

Because the rail carrier would need to move the same amount of freight over the line irrespective of a hypothetical grade crossing law, a choice to operate shorter trains would necessarily mean operating more frequent trains. Under this scenario, the total community impacts along the lines would not improve. After all, the same number of rail cars will pass through these crossings every day, which can provide additional opportunities for blocked crossings because it increases network congestion. And running more frequent trains would increase the chance that one of those trains will be involved in a grade crossing or trespasser incident. The only result a law designed to improve public convenience will have delivered is an enhanced risk to public safety.

The other choice—operating at higher speeds—is equally unavailing. In many cases, rail carriers will not be allowed to make this choice because federal law prescribes maximum operating speeds depending on the "class" of track in question. For a rail carrier already operating at the maximum track speed, it simply will not be allowed to operate its trains faster in order to comply with a hypothetical grade crossing law. For rail carriers operating below the maximum speed, the hypothetical grade crossing law may leave them with no practical choice other than to operate faster trains. But the existing operating practices, including train speeds, are there for a reason. In some cases, rail carriers operate below maximum track speed to *minimize* community impacts from train noise or to reduce the likelihood or severity of grade crossing accidents. A hypothetical law regulating the time a train can occupy a grade crossing may force or at the very least encourage railroads to abandon

their voluntary speed restrictions in order to comply, and all of the public benefits delivered by existing operating practices would likely vanish.

A grade crossing law could have adverse community impacts in other, perhaps even less obvious ways. Railroads serve many of their customers by switching rail cars directly into their plants. These switching operations often require a series of forward and reverse moves, and depending on the layout of the customer's facility, the location of the track serving the customer, and the location of nearby roads and streets, these operations may in the normal course of business occupy grade crossings. If a law imposing a limit on the amount of time a grade crossing can be occupied by a train, service to these customer facilities may have to be abandoned. In some cases it may be possible to continue to serve the customer by transloading the freight to trucks at another location, but this operation would almost certainly be more expensive and less convenient for the customer, and would create community impacts as truck traffic is introduced or added at the customer's plant, the transload facility, and all points between them.

Question 2. How would a law regulating maximum train length impact rail operations?

ANSWER. As I mentioned in my first answer, a law regulating train length directly translates to shorter, more frequent trains. Reducing train lengths would not help to alleviate the overall inconvenience some communities experience from occupied grade crossings, but would instead create a heightened public safety risk.

The impacts would not end there, however. Operating more frequent trains would mean consuming more rail capacity to move the same amount of freight. This is because most freight rail operations are governed by methods that permit only one train to occupy a given segment of track at a time. More trains mean more occupied segments. Reduced rail capacity leads to potential diversions of freight to truck and the attendant increased burdens on roadways and other public infrastructure, particularly as demand for freight transportation grows (as it is expected to do for the foreseeable future).

Forcing railroads to operate shorter, more frequent trains also would negatively impact customer service. More numerous trains create a more complex network that operates more slowly and is more susceptible to disruption. In the last year, Norfolk Southern made significant gains in customer service by reducing operational complexity. Many and perhaps all of those gains would be reversed by a law forcing it to operate shorter trains. Unhappy rail customers tend to find other ways to more their freight, which would only further drive shipments to trucks.

Finally, operating shorter, more frequent trains would negatively impact the fuel efficiency of rail operations. More trains means more locomotives, which means higher fuel consumption to move the same amount of freight. And higher fuel consumption drives greater environmental impacts. These environmental impacts would be further exacerbated by the greater reliance on truck transportation resulting from the increased burden on rail capacity, the negative impact on customer service, and the increase in the cost of rail service (resulting from less efficient operations and higher fuel consumption), all of which are foreseeable consequences of a law limiting train length.

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