

Grade Crossing Safety and Railroad Trespass Prevention Workshop

January 30 – February 1, 2024

Rutgers University
Livingston Student Center – Livingston Hall
84 Joyce Kilmer Avenue
Piscataway, NJ 08854

Workshop Goals – One goal is to identify existing and emerging technology designed and used to mitigate, reduce, and ultimately eliminate highway-rail grade crossing and trespasser incidents. Other goals are to raise awareness of the dangers and effects of highway-rail grade crossing and trespasser incidents, to seek out low-cost solutions, and to discuss practicable ideas for technological improvements for vehicular and pedestrian safety at highway-rail grade crossings.

Day 1

Time	Focus	Speakers
7:00 AM–5:00 PM	Registration	Rutgers University Livingston Student Center Auditorium Foyer
8:00 AM–9:00 AM	Welcome and Introductions <ul style="list-style-type: none"> • Safety briefing • Agenda, goals, introductions • Welcoming remarks 	Monica Shaw , Transportation Specialist – Federal Railroad Administration (FRA) James Payne , Staff Director – Federal Railroad Administration Amitabha Bose , Administrator – Federal Railroad Administration Barbara Foran , Diagnostic Team Leader – NJDOT Parth Oza , Assistant Commissioner – Capital Program Management
9:00 AM–10:30 AM	Overview of Railroad Incidents FRA <ul style="list-style-type: none"> • Overview of railroad incident data analysis • Data analysis of railroad incidents in the New Jersey/New York Area New Jersey Department of Transportation (NJDOT) <ul style="list-style-type: none"> • Local grade crossing and trespassing updates North Carolina Department of Transportation (NCDOT) <ul style="list-style-type: none"> • Reduction in railroad trespassing incidents • Comprehensive cost of rail incidents 	Moderator: Michail Grizkewitsch – FRA Chip Greiner , Railroad Safety Inspector – FRA Gregory Spiritosanto , Supervising Engineer – NJDOT Roger Smock , Rail Safety Consultant, Rail Division – NCDOT
10:30 AM–10:45 AM	Break	
10:45 AM–12:00 PM	Grade Crossing and Railroad Trespassing Treatments and Tools FRA <ul style="list-style-type: none"> • Low-cost treatments (grade crossing and trespassing) • Trespassing and Suicide Prevention Toolkit Artificial Intelligence-Aided Trespassing Detection and Analytics <ul style="list-style-type: none"> • An artificial intelligence-aided system for detecting grade crossing violations and ROW trespassing 	Moderator: Francesco Bedini Jacobini , Program Manager – FRA Marco daSilva , Mechanical Engineer – Volpe Center Asim Zaman , P.E., Project Engineer II – Rutgers University

	Long Island Rail Road (LIRR) <ul style="list-style-type: none"> LIRR high intensity fencing program 	Karl Meyer , Director – Safety Operations, Corporate Safety Department, MTA/LIRR John Kay , Senior Safety Officer – MTA/LIRR
12:00 PM–1:00 PM	Lunch	
1:00 PM–2:30 PM	Community and Public Outreach Engagement New Jersey Operation Lifesaver <ul style="list-style-type: none"> Overview of railroad trespassing educational and prevention strategies Norfolk Southern (NS) Railroad Police <ul style="list-style-type: none"> Rail Investigations and Safety Course FRA <ul style="list-style-type: none"> Overview of blocked grade crossings program Long Island Rail Road/MTA <ul style="list-style-type: none"> Reflective Delineator Program Waze app to prevent drivers from turning down the railroad tracks off grade crossings Glen Rock, New Jersey Police Department <ul style="list-style-type: none"> Overview of the Community Outreach Program that addressed railroad trespassing issues 	Moderator: Colby Scott , Railroad Safety Inspector – FRA Barbara Foran , State Coordinator – NJ Operation Lifesaver Thomas Jedic , Special Agent – Norfolk Southern Ryan Jones , Railroad Safety Inspector – FRA Karl Meyer , MTA/LIRR Dean Ackermann , Chief – Glen Rock, NJ Police Department
2:30 PM–2:40 PM	Break	
2:40 PM–4:30 PM	Innovation Strategic Safety Planning and Design <ul style="list-style-type: none"> Considerations for crossing safety design and collaboration Organizing a diagnostic team FRA/NJDOT/Rutgers University <ul style="list-style-type: none"> Grade crossing treatments Safe House <ul style="list-style-type: none"> One App, Any Crisis 	Moderator: Norma Griffiths , Railroad Safety Inspector – FRA Rick Campbell , Senior Technical Manager – Alfred Benesch & Company Lou Frangella , Supervisory Railroad Safety Specialist – FRA Asim Zaman – Rutgers University Eric Souders , Senior Engineer – NJDOT Eliza Conley-Lepene , Founder, CEO, President – Safe House
4:30 PM–5:00 PM	Wrap-Up and Next Steps <ul style="list-style-type: none"> Feedback on discussions Day 2 session overview 	Monica Shaw and Michail Grizkewitsch – FRA Francesco Bedini Jacobini – FRA

Day 2

Time	Focus	Speakers
7:00 AM–4:30 PM	Registration	Rutgers University Livingston Student Center Auditorium Foyer
8:00 AM–8:30 AM	Welcome and Introductions <ul style="list-style-type: none"> Safety briefing Agenda, goals, introductions Welcoming remarks 	Monica Shaw – FRA Michail Grizkewitsch – FRA Debra Chappell , Deputy Staff Director – FRA
8:30 AM–10:00 AM	Developing a Safe System Approach Federal Railroad Administration <ul style="list-style-type: none"> Digitizing Grade Crossings University of North Carolina at Charlotte <ul style="list-style-type: none"> Vehicle crashes on highway segments with a rail grade crossing: insights into the key risk factors in North Carolina Pedestrian Considerations	Moderator: Lou Frangella – FRA Francesco Bedini Jacobini , Program Manager – FRA Srinivas Pulugurtha , Professor of Civil Engineering – UNC Charlotte Rick Campbell – Alfred Benesch & Company R. Michael White , President – Dirigo Spatial Systems, Inc.

	<ul style="list-style-type: none"> Review of pedestrian issues at grade crossings Rutgers University Externship Program <ul style="list-style-type: none"> Classifying and quantifying visual distractions at grade crossings 	
10:00 AM–10:15 AM	Break	
10:15 AM–12:00 AM	Emergency Services Outreach FRA <ul style="list-style-type: none"> Review of Law Enforcement Grant Program MTA Police <ul style="list-style-type: none"> Overview of Metro-North Right-of-Way Task Force Greensboro, North Carolina Railroad Trespassing Task Force <ul style="list-style-type: none"> How to create a successful trespassing enforcement task force AskRail <ul style="list-style-type: none"> First responders' accurate, timely data about what type of hazardous materials a railcar is carrying 	Moderator: Chip Greiner – FRA Michail Grizkewitsch – FRA Charles Pisanelli , Commander – MTA Police Department Jason Richmond , Security Manager – Metro-North Security Jason Warren , Detective – Greensboro Police Department Andy Elkins , Director of Hazmat Compliance – Association of American Railroads
12:00 PM–1:00 PM	Lunch	
1:00 PM–3:30 PM	Grade Crossing and Trespassing Round Table MUTCD Update FRA/Volpe Center <ul style="list-style-type: none"> Engineering versus enforcement Media and awareness Predictability and risk Trespassing issues Mitigation plans Next steps 	Moderator: Francesco Bedini Jacobini – FRA Debra Chappell , Deputy Staff Director – FRA Esther Strawder , Program Manager, FHWA Dr. Shala Blue , Engineering Psychologist – FRA Scott Gabree – Volpe Center Marco daSilva – Volpe Center
3:30 PM–3:45 PM	Break	
3:45 PM–4:30 PM	<ul style="list-style-type: none"> Feedback on discussions Day 3 session overview 	Workshop Staff

Day 3

Time	Focus	Speakers
7:00 AM–12:30 PM	Registration	Rutgers University Livingston Student Center Auditorium Foyer
8:00 AM–8:30 AM	Welcome and Introductions <ul style="list-style-type: none"> Safety briefing Agenda, goals, introductions Welcoming remarks 	Monica Shaw – FRA Michail Grizkewitsch – FRA
8:30 AM–10:30 AM	Grade Crossing & Trespassing Suicide Prevention FRA/Volpe Center <ul style="list-style-type: none"> Suicide prevention Metra (Chicago, Illinois) <ul style="list-style-type: none"> Commuter railroad and suicide prevention perspective Brightline (Florida) <ul style="list-style-type: none"> Trespassing and suicide prevention efforts along the Brightline Corridor Metro-North/MTA <ul style="list-style-type: none"> Overview of Metro-North's safety education and community outreach program, TRACKS (Together Railroads and Communities Keeping Safe) 	Moderator: Dr. Shala Blue – FRA Scott Gabree – Volpe Center Hilary Konczal , Chief Safety and Environmental Officer – Metra Joe Meade , Director of Safety – Brightline Shelley Prettyman , Vice President System Safety – Metro-North Railroad Jami Spordone , Deputy Director Safety Analytics and Initiatives – Metro-North Railroad
10:30 AM–10:45 AM	Break	

<p>10:45 AM–12:00 PM</p>	<p>Funding Solutions</p> <ul style="list-style-type: none"> • FRA Office of Civil Rights <p>FHWA</p> <ul style="list-style-type: none"> • Section 130 Funding Solutions <p>FRA</p> <ul style="list-style-type: none"> • Consolidated Rail Infrastructure and Safety Improvements (CRISI) grants • Railroad Crossing Elimination (RCE) grants 	<p>Monica Shaw and Michail Grizkewitsch – FRA</p> <p>Felipe Toro, Equal Opportunity Specialist – FRA</p> <p>Hugo Vives, Equal Opportunity Specialist – FRA</p> <p>Esther Strawder, Program Manager - FHWA</p> <p>Matthew Lorah, Supervisory Grants Management Specialist – FRA</p> <p>Elena Gonzalez, Grants Management Analyst – FRA</p>
<p>12:00 PM–12:30 PM</p>	<p>Closing</p> <ul style="list-style-type: none"> • Recap and next steps 	<p>Workshop Staff</p>