

Grade Crossing Safety and Railroad Trespass Prevention Workshop

January 30 – February 1, 2024

Rutgers University
Busch Student Center – Room 604
604 Bartholomew Road
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 Busch 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) Mike Long , Director of Railroad Operations and Outreach – FRA 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 Barbara Foran , Diagnostic Team Leader – 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 Long Island Rail Road (LIRR) <ul style="list-style-type: none"> • LIRR high intensity fencing program 	Moderator: Francesco Bedini Jacobini , Program Manager – FRA Marco daSilva , Mechanical Engineer – Volpe Center Scott Gabree , Engineering Psychologist – Volpe Center Asim Zaman , P.E., Project Engineer II – Rutgers University 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 <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 <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 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 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 Metropolitan Transportation Authority <ul style="list-style-type: none"> MTA/LIRR Grade Crossing Strategic Safety Plan 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 Chris Diodato , Senior Director, Strategic Planning & Policy – MTA 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 Busch 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 James Payne, Staff Director – FRA Francesco Bedini Jacobini – FRA
8:30 AM–10:00 AM	Developing a Safe System Approach Safe System Approach <ul style="list-style-type: none"> SSA concepts, resources, examples to prevent injuries and deaths and improve rail and road safety TRAINFO <ul style="list-style-type: none"> Blocked crossing prediction and communication FRA’s Safety Management Program <ul style="list-style-type: none"> Proactive hazard management methods that support continuous safety improvement 	Moderator: Lou Frangella – FRA T. Bella Dinh-Zarr , PhD, MPH, Senior Advisor, Public Health & Transportation – Traffic Injury Research Foundation and FIA Foundation (retired National Transportation Safety Board) Neil Ternowetsky , Co-Founder – TRAINFO Darrell Fizer , Transportation Specialist – FRA

	<ul style="list-style-type: none"> Efforts to ensure applicable Federal, State, and local safety regulations and safety requirements are identified and addressed <p>Pedestrian Considerations</p> <ul style="list-style-type: none"> Review of pedestrian issues at grade crossings <p>Rutgers University Externship Program</p> <ul style="list-style-type: none"> Classifying and quantifying visual distractions at grade crossings 	<p>Rick Campbell – Alfred Benesch & Company R. Michael White, President – Dirigo Spatial Systems, Inc.</p>
10:00 AM–10:15 AM	Break	
10:15 AM–12:00 AM	<p>Emergency Services Outreach FRA</p> <ul style="list-style-type: none"> Review of Law Enforcement Grant Program <p>Metro North Police</p> <ul style="list-style-type: none"> Overview of Right-of-Way Task Force <p>Greensboro, North Carolina Railroad Trespassing Task Force</p> <ul style="list-style-type: none"> How to create a successful trespassing enforcement task force <p>AskRail</p> <ul style="list-style-type: none"> First responders’ accurate, timely data about what type of hazardous materials a railcar is carrying 	<p>Moderator: Chip Greiner – FRA Michail Grizkewitsch – FRA Charles Pisanelli, Commander – Metro North Police Department Jason Warren, Detective – Greensboro Police Department Andy Elkins, Director of Hazmat Compliance – Association of American Railroads</p>
12:00 PM–1:00 PM	Lunch	
1:00 PM–3:30 PM	<p>Grade Crossing and Trespassing Round Table University of North Carolina at Charlotte</p> <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 <p>FRA/Volpe Center</p> <ul style="list-style-type: none"> Engineering versus enforcement Media and awareness Predictability and risk Trespassing issues Mitigation plans Next steps 	<p>Moderator: Francesco Bedini Jacobini – FRA Srinivas Pulugurtha, Professor of Civil Engineering – UNC Charlotte Dr. Shala Blue, Engineering Psychologist – FRA Scott Gabree – Volpe Center Marco daSilva – Volpe Center</p>
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 Busch Student Center Auditorium Foyer
8:00 AM–8:30 AM	<p>Welcome and Introductions</p> <ul style="list-style-type: none"> Safety briefing Agenda, goals, introductions Welcoming remarks 	<p>Monica Shaw – FRA Michail Grizkewitsch – FRA Francesco Bedini Jacobini – FRA</p>
8:30 AM–10:30 AM	<p>Grade Crossing & Trespassing Suicide Prevention FRA/Volpe Center</p> <ul style="list-style-type: none"> Suicide prevention <p>Metra</p> <ul style="list-style-type: none"> Commuter railroad and suicide prevention perspective <p>Brightline</p> <ul style="list-style-type: none"> Trespassing and suicide prevention efforts along the Brightline Corridor 	<p>Moderator: Dr. Shala Blue – FRA Scott Gabree – Volpe Center Hilary Konczal, Chief Safety and Environmental Officer – Metra Joe Meade, Director of Safety – Brightline</p>

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