

Grade Crossing Safety and Railroad Trespass Prevention Workshop

May 9–10, 2023

Harris County Department of Education Center
6300 Irvington Blvd
Houston, TX 77022

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	Harris County Department of Education 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 	Michail Grizkewitsch , Transportation Specialist – FRA Mike Long , Director of Railroad Operations and Outreach – FRA
9:00 AM–10:00 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 Houston area Union Pacific Railroad and BNSF Railway <ul style="list-style-type: none"> • Train crews’ perspectives North Carolina Department of Transportation <ul style="list-style-type: none"> • Comprehensive cost of rail incidents 	Moderator: Michail Grizkewitsch – FRA Curtis Dougherty , Rail Safety Inspector – FRA Paul Rathgeber , Director of Industry and Public Projects – UP Cheryl Townlian , Assistant Director of Public Projects – BNSF Roger Smock , Rail Safety Consultant, Rail Division – NCDOT
10:00 AM–10:15 AM	Break	
10:15 AM–12:00 PM	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 Emergency Management Planning <ul style="list-style-type: none"> • Efficient action plan to mitigate the results and effects of railroad emergencies AskRail	Moderator: Francesco Bedini Jacobini , Program Manager – FRA Tashi Ngamdung , Operations Research Analyst – Volpe Center Dr. Shala Blue , Engineering Psychologist – FRA Asim Zaman , P.E., Project Engineer II – Rutgers University Roland Glenister , Inspector – FRA Andy Elkins , Director of HazMat Compliance – Association of American Railroads

	<ul style="list-style-type: none"> • First responders' accurate, timely data about what type of hazardous materials a railcar is carrying 	
12:00 PM–1:00 PM	Lunch on your own	
1:00 PM–2:30 PM	Mobility and Safety FRA <ul style="list-style-type: none"> • Overview of blocked grade crossings program Texas Operation Lifesaver <ul style="list-style-type: none"> • Overview of railroad trespassing educational and prevention strategies Houston Smart Crossing Project <ul style="list-style-type: none"> • The use of data and emerging technologies to control impacts of blocked railroad crossings TRAINFO <ul style="list-style-type: none"> • Blocked crossing prediction and communication 	Moderator: Jack Hanagriff , Manager, Road Safety and Mobility Program, Eastend District – City of Houston Ryan Jones , Rail Safety Inspector – FRA Curtis Dougherty , Rail Safety Inspector – FRA Jessica Devorsky , State Coordinator – TX Operation Lifesaver Jesse Bounds , Director, Mayor's Office of Innovation – City of Houston Neil Ternowetsky , Co-Founder – TRAINFO
2:30 PM–2:40 PM	Break	
2:40 PM–3:30 PM	Innovation Strategic Safety Planning and Design <ul style="list-style-type: none"> • Considerations for crossing safety design and collaboration • Organizing a diagnostic team Houston Area Rail Transformation (HART) <ul style="list-style-type: none"> • A collaborative and programmatic approach to leverage private and public funding opportunities 	Moderator: Ryan Jones , Rail Safety Inspector – FRA Rick Campbell , Senior Technical Manager – Alfred Benesch & Company Katherine Parker , Executive Director – Gulf Coast Rail District
3:30 PM–4:00 PM	Wrap-Up and Next Steps <ul style="list-style-type: none"> • Feedback on trespasser prevention discussions • Day 2 strategic development session overview 	Monica Shaw and Michail Grizkewitsch – FRA Francesco Bedini Jacobini – FRA

Day 2

Time	Focus	Speakers
7:00 AM–4:30 PM	Registration	Harris County Department of Education 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 – FRA Francesco Bedini Jacobini – FRA
8:30 AM–10:00 AM	Developing a Safe System Approach Safe System Approach (SSA) <ul style="list-style-type: none"> • SSA concepts, resources, examples to prevent injuries and deaths and improve rail and road safety FRA's Safety System Program <ul style="list-style-type: none"> • Proactive hazard management methods that support continuous safety improvement • Efforts to ensure applicable Federal, State, and local safety regulations and safety requirements are identified and addressed Harris County Sheriff's Office and Houston Police Department <ul style="list-style-type: none"> • Homeless resources Billings Montana Railroad Trespassing Task Force <ul style="list-style-type: none"> • How to create a successful trespassing enforcement task force 	Moderator: Colby Scott, Inspector – FRA T. Bella Dinh-Zarr , PhD, MPH, Senior Advisor, Public Health & Transportation – TIRF and FIA Foundation (retired NTSB) Rachel Grice , Senior Engineering Psychologist – FRA Darrell Fizer , Transportation Specialist – FRA Derrick Fontenot , Sergeant, Homeless Outreach Team – Houston Police Department John Whitley , Deputy – Harris County Sheriff's Office Brandon Ihde , Officer –

		Billings Police Department
10:00 AM–10:15 AM	Break	
10:15 AM–12:00 AM	Grade Crossing Round Table FRA/Volpe <ul style="list-style-type: none"> • Engineering versus enforcement • Media and awareness • Predictability and risk 	Moderator: Francesco Bedini Jacobini – FRA Dr. Shala Blue – FRA Tashi Ngamdung – Volpe Center
12:00 PM–1:00 PM	Lunch on your own	
1:00 PM–3:30 PM	Trespassing Round Table FRA/Volpe <ul style="list-style-type: none"> • Trespassing issues • Mitigation plans • Next steps 	Moderator: Monica Shaw – FRA Michail Grizkewitsch – FRA Francesco Bedini Jacobini – FRA Tashi Ngamdung – Volpe Center
3:30 PM–3:45 PM	Break	
3:45 PM–4:30 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 Edward Pritchard , Equal Opportunity Specialist – FRA Matt Lorah , Supervisory Grants Management Specialist – FRA Jenny Zeng , Transportation Industry Analyst – FRA
4:30 PM	<ul style="list-style-type: none"> • Recap and next steps 	Workshop Staff