

# FRA's Engineering and Technology (ET) Division (December 2024)

## Novel Technology

- Alternative fuels safety hazard/safety assessment
- SBCTA – ZEMU hydrogen passenger rail project
- Battery and dual fuel project support
- Joint Policy (Shared Use) projects
- High-speed rail support (BLW, Acela, CA-HSR)
- OST HASS and Volpe partnership
- International outreach: (Momentum Project)
- Maglev and Hyperloop support

## Automated Track Inspection Program

ATIP Operations	2024 (Thru 11/30)
Miles Surveyed	<b>188,146</b>
Total Exceptions	<b>8,452</b>
Safety Critical Exc.	<b>2,203</b>

*(ATIP contracts awarded to ENSCO and Tetra Tech)*

## Technology and Automation

- Change detection (AI)
- Machine vision/Lidar
- TDS data analytics
- G&W/Parallel Systems
- GPS interference w/OST
- ATIP advancements
- NETT Council support
- ATIP support for HRA
- R&D support for new tech
- Position, Navigation and Timing (PNT) comms support
- High-speed noise rule
- Labor and industry outreach
- Rail PNT pilot project
- Cybersecurity support

## Washington, DC Union Station (Authority Having Jurisdiction)

- Transition from USRC to Amtrak following eminent domain ruling (this doesn't impact the AHJ role)
- Subbasement bridge project
- Claytor Concourse modernization completion
- Code compliance inspections for numerous new vendors

