Federal Railroad Administration
Safety Research
Opportunities for the Future

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Agenda

• Railroad Industry Overview
• Railroad Industry Workforce
• FRA Safety R&D Program Areas
• Research Needs and Engagement
Rail Industry Overview

How Railroads Address US DOT Priorities -

• **Safety** - Very Safe Mode and getting safer (35 people killed over last 5 yrs)
• **State of Good repair** - Rail infrastructure is in the best shape it has been in over 60 years
• **Economic Competitiveness** - The US Freight Rail transportation system is the envy of the world
• **Quality of Life** - People are choosing rail. Amtrak ridership up 30% over last ten years. Re-urbanization is allowing more people to benefit from downtown to downtown rail service
• **Environmental Sustainability** – Rail Moves a ton of freight over 400 miles per gallon of fuel. 40% lower CO2 emissions than trucking. Natural Gas is coming on as a fuel, will meet EPA Tier 4 emissions.
Demographics

- **51% of the rail workforce is 45 years or older**
- Women represent only 9% of the rail workforce *(38% less than the national average)*
FRA Safety R&D Program Areas

• **Track and Structures** — Rail, Track Structure, Vehicle/Track Interaction, Bridges

• **Rolling Stock** — Freight, Passenger, High Speed, Hazmat, Accommodations for Disabled

• **Human Factors** — Safety Culture, Human Centered Design

• **Signals and Communications** — Positive Train Control (PTC), Grade Crossing Safety
FRA Safety Research Needs and Potential Engagement

• Crude Oil and Natural Gas Safe Transport
• Improved Passenger Safety & Accessibility
• High Speed Rail – Adapting foreign technology

• FRA Broad Agency Announcement
  – FRA-BAA-2015-1
  – 15 research areas
  – Closing Date May 4th

• Partnering with existing FRA R&D Contractors
Thank You

Questions?

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