Project Title: Planning, Training and Exercising for Crisis Events on the Railroad
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Overall Project Goal:
Assisting railroads to adapt to climate change related crises by examining climate-related hazards to railroads. This evaluation will generate climate change related Incident Command System (ICS) training and guidance on updating the emergency operations plans (EOPS) and emergency operations center (EOC) staff checklists, and an exercise to validate the strategies.

Key Project Tasks/Approach/Objectives:
This research begins by collecting information on how railroads are currently planning to adapt to climate change, and other sources of climate-related threat and hazard assessments (THIRA). The result will be a climate-informed THIRA for railroad operations.

RESEARCH
- Threat/Hazard Identification and Risk Assessment
- Best practices for climate change adaptation used by railroads

WRITING
- Guidance for ICS for railroad staff
- Guidance for railroad emergency plans for climate change
- Guidance for railroad emergency operations center staff

TRAINING
- Teach a pilot class on each new element: ICS, EOP, EOC
- Conduct an exercise using a climate change scenario to validate/ revise the guidance

The THIRA will be used to develop ICS training for railroad field staff, in compliance with Homeland Security Presidential Directive-5. The THIRA will be used to create climate-related guidance for the updating of emergency operations plans (EOPS) for the railroads, including creating or improving EOP annexes that address climate issues. EOC checklists will include managing climate crises.

One location will host the three pilot training classes on the new emergency response materials: ICS with a climate focus, recommended additions to the EOP, and recommended changes to the EOC checklists. Student evaluations will be used to modify the final publications. Finally, an exercise will use the new training and strategies for managing a climate-related crisis scenario on a railroad facility, validating the changes and gathering further recommendations to update materials.

Project Outcomes/Benefits:
American railroads are investing billions of dollars improving infrastructure to adapt to climate change. Using the final publications on the Mineta Transportation Institute website, railroad emergency management staff will be able to review best practices for developing climate-specific operations products, saving both time and costs.