

## 177. Railroad Resiliency Response to Severe Weather Catastrophes

Gary Rozmus – GEI Consultants, Inc.

Severe storms have wreaked havoc on our nation's transit and freight rail systems. Hurricanes, Superstorms, tropical storms, nor'easters and blizzards combined with polar vortexes and measurable and predicted sea level rise have and are predicted to cause catastrophic damage which can shut down our rail systems and result in enormous repair and rebuilding costs. These scenarios have caused railroads to plan and build measures into their systems to make them more resilient to these events. This includes not only systems along sea coast shorelines but also along inland lakes and waterways experiencing frequent and damaging flooding.

A host of capital improvements are both underway and being planned to harden and protect railroad assets including ways to isolate and protect critical infrastructure, trains, and power and communication systems. These measures will cost in the billions of dollars. These measures are also intended to enable rail systems to evacuate people to safe havens ahead of these life threatening storms and recover and be back on line as quickly as possible.

Gary Rozmus will describe the impacts caused by Hurricane Irene, Tropical Storm Lee and Superstorm Sandy to the New York City metropolitan area, New York State, New Jersey and Connecticut and the recovery and resiliency work performed and underway by the New York Metropolitan Transportation Authority (MTA), Metro North Railroad, Long Island Railroad, New York City Transit Authority, Metro area bridges and tunnels and Staten Island Railway, Port Authority New York New Jersey/ PATH and New Jersey Transit. This will also cover environmental issues involved in rapid response situations. Amtrak (Joanne Maxwell or her designee) will discuss Amtrak's resiliency planning efforts in response to these and predicted future severe weather related events. Once this abstract is approved, Gary Rozmus with the assistance of Chris Barkan will invite transit railroads involved in these or similar resiliency planning efforts to present their railroad's plans directly on the panel. We will also invite the freight railroads to present their resiliency plans for a comparative discussion of how the nation's freight and transit railroad system is responding to this real and looming threat. If we are able to get representation by transit and freight railroads on the panel then Gary will move into a moderator and facilitator role on the panel.

---