



Realistic Earthquake Drills Shake Up INDOT Responders

(Posted Sept. 30 2015) Dozens of INDOT employees statewide participated in an annual full-scale disaster response exercise Sept. 14-18 at the Muscatatuck Urban Training Center near North Vernon. The exercise mirrored a realistic disaster setting, and this year's theme was earthquakes.

Called the Vincennes Temblors, the exercise simulated effects of two major earthquakes that included collapsed bridges and pavement, derailed trains, and burning cars. Mock aftershocks produced even more mayhem.



INDOT crews encountered roadblocks like these as they used snowplows to move vehicles and downed tree limbs.

As if replicating earthquakes weren't enough, the exercise also incorporated simulated effects of an EF1 tornado that included debris-littered streets, downed limbs and flooded homes.

Crawfordsville District and Greenfield District personnel, more than 60 per district, trained for the emergencies.

"Earthquakes in Indiana are not far-fetched," said INDOT Emergency Planning & Response Director Tom Vanderpool. "Parts of the Vincennes District are within the New Madrid Fault Line, the most active seismic area in the United States. The nearby Wabash Valley Seismic Zone is also a concern."

Vanderpool noted that in the event of an earthquake, the western sections of the Vincennes District likely would suffer from soil liquefaction (decreased strength of soil), reducing the soil's ability to support foundations for buildings and bridges. If this actually occurred, the Vincennes District

building could collapse, meaning INDOT workers there would need to retreat east to the Paoli Subdistrict, where the hilly terrain contains soil that would not liquefy.

INDOT mimicked this scenario, with Crawfordsville District (Sept. 14-16) and Greenfield District (Sept. 16-18) personnel deploying to support Vincennes District workers. Instead of using the Paoli Subdistrict as their location, they congregated in the operations center of the Seymour District building. That's because the Muscatatuck center is only 20 miles from the Seymour District building.

“The command center at the Seymour District is the part of the training that I was most excited about,” said Vanderpool. “This was the first time that we had additional training for a mock district command and operations center to supplement the actual disaster training on-site at Muscatatuck.”

“If the Vincennes District had to retreat to Paoli,” Vanderpool continued, “then those workers would need to have their command center there. So, the Seymour District building played the part of Paoli, and employees learned to manage a catastrophic event by taking charge and communicating the information involving roads, facilities, equipment and personnel to the proper parties.”

Vanderpool noted that the Colorado Department of Transportation had 100 people in its operations center to deal with that state’s devastating floods in the fall of 2013.

In a real-life earthquake, Vincennes Subdistrict personnel would need to retreat east to the Washington Unit. Again, the Seymour District played host to that scenario, as the North Vernon Unit acted as the Washington Unit because of its close proximity to Muscatatuck.

At North Vernon, employees ate meals – military-grade Meals Ready to Eat (MREs) – and slept on cots after their long day at Muscatatuck (support employees stayed the night at Muscatatuck).

“Maybe it’s because I’m a country boy, but the cots didn’t bother me,” said Crawfordsville District Fowler Subdistrict Crew Leader Josh Rich. “As a matter of fact, the cots felt comfortable. But I have to admit that I’ve eaten better food than MREs, but this was disaster training and it had to mirror what would really happen.”

At Muscatatuck, employees were astounded by the chaos that resembled real-life disasters. Flood waters were up to the eaves of houses and buildings. A truck caught fire, a semitrailer sat on two vehicles, and tree limbs were scattered everywhere. Clearing the roads with snowplows was a priority so that emergency personnel could get through the mock disaster scene.

“We learned to expect the unexpected, keep an open mind, rely on past training and experiences, and work as a team,” said Crawfordsville District Lafayette Unit Highway Technician Ross Bucher. “It was great to work with other units and conduct two rounds of exercises to help streamline the process because we can’t waste time – we have to get victims out and first responders in.”

A real disaster might provoke civil unrest such as looting, so an Indiana Department of Homeland Security (IDHS) rescue trainer played an agitated citizen who wanted to divert INDOT’s truck off its assigned route to provide aid for a family member. Team members informed the Indiana State Police



The command center in the Seymour District building features work stations (above) and maps (below, led by Seymour District Deputy Commissioner Tony McClellan in the middle) that allowed for strategic planning.





Chip Sunier of the IDHS (from left) tends to INDOT's Rachel Greenwood, who played the part of an injured person at Muscatatuck.

(ISP) trooper who was in the task force, and he took charge of the individual, allowing the INDOT crew to continue on with its task of clearing and assessing the route.

Also, LaPorte District Maintenance Program Coordinator Rachel Greenwood played the part of an injured person at a trailer court hit by the mock tornado. Again, INDOT personnel notified the proper authority in the task force, this time Jennings County emergency medical services (EMS) workers, who took care of Greenwood to allow the INDOT team to continue clearing/assessing its route.

The exercise included participation by the ISP, firefighters and EMS personnel. The Ohio Department of Transportation observed the event, as did several IDHS directors and three members of

the Federal Highway Administration.

Besides the Crawfordsville and Greenfield employees, many Central Office personnel participated in the event, including those from the divisions of Aviation, Bridge Inspection, Maintenance Management, Management Information Systems, Operations Processes and Systems Management, Pavement, Statewide Safety, Traffic Engineering and the Traffic Management Center. Other participants were the Indiana Wing Civil Air Patrol and members of the 181st Intelligence Wing of the Indiana Air National Guard.

“We appreciate everyone’s involvement to further our agency as one that is ready for anything,” said Vanderpool. “I also would like to single out Bob Demuth, who temporarily came out of retirement to help develop and manage the program, and also Jerry Halperin, who came back to assist in the exercise.”

Thanks to such large-scale cooperation, the exercise wasn’t a disaster, after all. INDOT personnel helped make it a rousing success.



Flooded homes at Muscatatuck (left) and cots at the North Vernon Unit (below) were a few of the indelible images from the weeklong training.

