The US Department of Homeland Security (DHS) requires grantees to develop training and exercise programs for their staffs to ensure readiness for disaster response. Changes to DHS programs grew out of PPD-8: National Preparedness issued March 30, 2011, which affects the way transportation agencies must prepare. The MTI researchers collected best practices and evaluated gaps in guidance for transportation exercise development and implementation in this handbook.

Study Methods
Mineta Transportation Institute (MTI) researchers received a seed money grant in 2010 (Project 2910; Report 09-16) to conduct a survey of transportation sector agency exercise staff members to understand the existing guidance that was available and the gaps in exercise support. The conclusion was that a comprehensive exercise handbook was needed with step-by-step guidance for the development and conduct of every type of exercise, including checklists and scenarios.

The researchers conducted a literature survey. The Federal Emergency Management Agency (FEMA) offers on-line independent study courses and in-person courses at its Maryland center on exercise development and implementation, but transportation personnel do not have the time to take them, and personnel rotated too frequently to build up capability over the long term. Also, the training was designed for cities and counties with multiple departments and roles, not single-focus transportation agencies. The 5-volume Homeland Security Exercise and Evaluation Program (HSEEP) guidance was too difficult to understand. Exercise books for businesses were not useful for agencies that must be an active part of the community’s emergency response.

The researchers studied FEMA, DHS and US Department of Transportation (DOT) security grant requirements for employee training and exercises to determine whether transportation agencies must conduct independent exercises, or whether multi-agency exercises sponsored by cities and counties were adequate. The grantees were required to exercise their own capabilities to evaluate their internal preparedness and plans.

Findings
The first finding was that in 2011, the DHS and FEMA changed systems based on the post-Katrina legislation. On March 2011, President Barack Obama issued PPD-8: National Preparedness, which replaced HSPD-8 issued in 2003. This began a series of new directives for emergency management, including changes to grant management. The report contains the first comprehensive evaluation of each new document issued as a result of this change.
The second finding is the agreement among transportation sector leaders that there is a need for the handbook. The researchers conferred with 14 senior transportation sector emergency management experts on the development of the comprehensive exercise handbook. They reviewed the material and offered comments and suggestions. The interviews generated consistent agreement in their answers to the seven questions about the handbook. There was consensus that a checklist format and project management approach to its organization and presentation would be beneficial.

**Policy Recommendations**

The outcome of the research is a two-part document. The first part is a research report that describes the research, the findings, and the changes to the exercise program and requirements. The second part is the practical, checklist-based handbook with step-by-step guidance for all types of HSEEP-defined exercises that supports staff with limited training in holding meaningful exercises. Second, training must include home and family preparedness, so handout materials are included in the handbook. Third, actual events are used as the basis for scenario examples for each type of exercise. Fourth, the after-action report and improvement plan must follow HSEEP requirements, so examples from an actual transportation exercise are included as guidance.

**About the Authors**

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**To Learn More**

For more details about the study, download the full report at [transweb.sjsu.edu/project/1103.html](http://transweb.sjsu.edu/project/1103.html)

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