

Workshops

Developing a Community-Centered Approach to Disaster Resilience

NIST Gaithersburg
April 7, 2014

Five regional workshops will be held as follows:

New York City
Hurricane
July 2014

Oklahoma City
Tornado
October 2014

Western U.S.
Wildfire
January 2015

Southeast U.S./
Gulf Coast
Hurricane
April 2015

West Coast
Earthquake and Tsunami
July 2015

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Disaster Resilience Framework

Natural and man-made disasters cause an estimated \$57B in average annual costs, with large single events resulting in losses of \$100B or more. The current approach of response and recovery from disasters is impractical and inefficient. A community-centric, resilience-based approach to the design, construction, and maintenance to achieve timely restoration of services in buildings and infrastructure lifelines can break the cycle of destruction and slow recovery, allowing communities to resist, respond to, and recover from hazard events more rapidly and at a lower cost.

Buildings, facilities, and lifelines play a key role in the life of a community by providing for the protection of life, industry, business, government, housing, and vital services. Recent events, such as the World Trade Center disaster, Hurricane Katrina, and most recently Superstorm Sandy, have highlighted the interconnected nature of buildings and infrastructure systems and their vulnerabilities. The needs of the citizens and institutions that comprise a community drive the functional requirements for buildings and infrastructure systems. Current practice does not adequately consider the functionality or interconnectedness of buildings and infrastructure systems and the role they play in restoring the fabric of the community following a hazard event.

To address this problem, the President's Climate Action Plan directs the National Institute of Standards and Technology (NIST) to "... convene a panel on disaster-resilience standards to develop a comprehensive, community-based resilience framework and provide guidelines for consistently safe buildings and infrastructure—products that can inform the development of private-sector standards and codes."

To accomplish this, NIST will convene a series of regional workshops engaging the broad network of stakeholders to focus on the role that buildings and infrastructure lifelines play in ensuring community resilience. The first of these workshops will be held April 7, 2014 at the NIST Gaithersburg, MD campus.

Through the regional workshops, NIST and the Contractor will develop a Disaster Resilience Framework to establish the overall performance goals; assess existing standards, codes, and practices; and identify gaps that must be addressed in order to bolster community resilience.

NIST plans to release the Disaster Resilience Framework for public comment in April 2015. This document will serve as the starting point to establish a Disaster Resilience Standards Panel (DRSP). The DRSP will be a self-governing body, supported by NIST, that will meet regularly to develop Model Resilience Guidelines for critical buildings and infrastructure lifelines essential to community resilience. The DRSP also will expand on the Disaster Resilience Framework for achieving community resilience, considering the technical interdependence of the community's physical and human assets, operations, and policies/regulations.

