

# Disaster and Failure Studies Program and Data Repository

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## Abstract

The NIST Disaster and Failure Studies Program provides for the establishment of teams to assess building and infrastructure performance and emergency response and evacuation procedures in the wake of disaster and failure events that have resulted in substantial loss of life or posed significant potential of substantial loss of life. NIST studies are documented in technical reports containing data, findings, and recommendations for consideration by private sector bodies responsible for developing relevant national building and fire model codes, standards and/or practices; federal, state and local building and fire officials for adoption and enforcement of national model codes and standards; and research performing organizations such as universities, national laboratories, and private sector entities. NIST promotes, enables, and tracks adoption of recommendations through improved standards, codes, and practices as well as any research and other appropriate actions based on study findings.

NIST is creating a new research tool for archival and analysis of post-disaster data and information. The Disaster and Failure Events Data Repository will host a national archival database of significant hazard events, real-world performance of the built environment during those events, associated emergency response and evacuation procedures where appropriate, and the technical, social, and economic factors that affect pre-disaster mitigation activities and post-disaster response efforts. The repository will be accessible via the NIST Engineering Laboratory's Disaster and Failure Studies website (<http://www.nist.gov/el/disasterstudies/>). The data repository will be established in three phases:

- Phase 1 was deployed in the summer of 2011 and includes the publically releasable data for the World Trade Center investigation concluded by NIST
- Phase 2 is a pilot repository of data collected from the 2010 Chile earthquake.
- Phase 3 will include a larger repository of hazard event.

The presentation will provide an overview of the Disaster and Failure Studies Program and the Disaster and Failure Events Data Repository. More information about the disaster and failure studies program and data repository is available online at <http://www.nist.gov/el/disasterstudies/index.cfm>