NIST's Responsibilities Under the National Construction Safety Team Act

What does the National Construction Safety Team (NCST) Act do?

The act, signed into law on Oct. 1, 2002, by President Bush, authorizes the National Institute of Standards and Technology (NIST) to establish teams to investigate building failures. These authorities are modeled after those of the National Transportation Safety Board (NTSB) for investigating transportation accidents. NIST is a non-regulatory agency of the U.S. Department of Commerce.

What was the previous authority under which NIST conducted structural failure investigations?

The legislative authority under which NIST conducted structural investigations prior to the NCST is found in 15 U.S. Code Sec. 281a - Structural Failures. This law states that "NIST, on its own initiative but only after consultation with local authorities, may initiate and conduct investigations to determine the causes of structural failures in structures that are used or occupied by the general public. No part of any report resulting from such investigation shall be admitted as evidence or used in any suit or action for damages arising out of any matter mentioned in such report."

NIST also is a technical support agency within the Federal Response Framework as well as the National Disaster Recovery Framework that outline how the federal government will responds to major disaster declarations under the Robert T. Stafford Disaster Relief And Emergency Assistance Act.

What was NIST's prior role in the investigation of structural failure?

Prior to the enactment of the NCST, NIST's role in the investigation of structural failures typically included:

- establishing probable technical cause(s) of the high-magnitude consequences in the context of current practice and codes and standards;
- identifying issues and making safety recommendations for existing or new facilities through improvements to codes, standards, and practices;
- producing the technical basis for needed changes or improvements to practice or standards and codes that will enhance public safety and health and homeland security; and,
- preparing technically sound, archival, publicly available documents as references for future investigations or responsive actions.

A non-regulatory agency, NIST did not consider findings of fault, responsibility, or negligence. NIST's new authorities do not change that approach.

For more information on NIST's extensive experience and expertise in conducting disaster investigations following structural/construction failures, fires, and natural disasters, see the fact sheet on current and past NIST investigations available online at http://www.nist.gov/el/disasterstudies/wtc/.

What responsibility does the NCST give to NIST?

The NCST gives NIST responsibility to dispatch teams of experts, where appropriate and practical, within 48 hours after major building disasters.

The act specifically states that at least one member of each team must be a NIST employee.

The act gives the teams a clear mandate to:

- 1. establish the likely technical cause of building failures;
- 2. evaluate the technical aspects of procedures used for evacuation and emergency response;
- 3. recommend specific changes to building codes, standards, and practices;
- 4. recommend any research or other appropriate actions needed to improve the structural safety of buildings; and/or changes in emergency response and evacuation procedures; and,
- 5. make final recommendations within 90 days of completing an investigation.

What authorities does the NCST give NIST?

The stated purpose of the act is "... to provide for the establishment of investigative teams to assess building performance and emergency response and evacuation procedures in the wake of any building failure that has resulted in substantial loss of life or that posed the potential for substantial loss of life." Investigations are conducted under its authorities "... to improve the safety and structural integrity of buildings in the United States."

In this context, the act gives NIST and its teams comprehensive investigative authorities to:

- access the site of a building disaster;
- subpoena evidence;
- access key pieces of evidence such as records and documents; and
- move and preserve evidence.

What does the NCST say about NIST's responsibilities for communicating to the public about structural failure investigations?

The act calls for NIST to brief the public regularly on the status of investigative proceedings and findings.

What happens after NIST completes its investigation and publishes a report?

The act authorizes NIST to take the following actions based on its investigation reports:

- conduct, enable, or encourage appropriate research as recommended by the investigation teams; and
- promote appropriate adoption of the investigation team's recommendations.

Is there an advisory committee to provide guidance for and independent review of NCST investigations?

Under the law, the NIST Director, in consultation with the U.S. Fire Administration and other appropriate federal agencies, maintains a standing advisory committee of as many as 10 persons to advise him or her on carrying out the act, and to review procedures and reports issued. Members of the committee must

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have received recognition for distinguished professional service, possess broad technical expertise and experience, and have a reputation for independence, objectivity, and impartiality.

The panel is known as the National Construction Safety Team (NCST) Advisory Committee.

On Jan. 1 of each year, the advisory committee transmits to the Committee on Science of the House of Representatives and to the Committee on Commerce, Science, and Transportation of the Senate a report that includes:

- an evaluation of NCST activities, along with recommendations to improve the operation and effectiveness of investigation teams; and
- an assessment of the implementation of the recommendations of teams and of the advisory committee.

Does the act give NIST any authority to create and enforce reforms in building and fire safety codes, standards and practices?

No, the act specifically states that NIST is not authorized to require the adoption of building codes, standards or practices. NIST is not a regulatory agency, so it does not determine which building and fire safety codes, standards and practices get adopted by state and local governments. However, NIST researchers are active participants in many standards developing and professional organizations. Thus, NIST research typically provides the technical basis for new and improved standards, codes and practices. NIST will work actively with other organizations to ensure that "lessons learned" from investigations are put to use.