

Congress of the United States

House of Representatives

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

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MEMORANDUM

TO: Committee on Science, Space, and Technology Members and Staff
FROM: Science, Space, and Technology Committee Staff
DATE: June 28, 2013
RE: Subcommittee Markup

The Subcommittee on Research and Technology will meet on **Friday, June 28th at 9:00am** in Room 2318 of the Rayburn House Office Building to consider the following:

- **H.R. 1786, *The National Windstorm Impact Reduction Act Authorization of 2013***

Background and Need

Wind hazards—which include tornados, hurricanes, and derechos—are threats to all fifty states and cause injuries, deaths, economic disruptions, and property damage. Millions of Americans live in areas vulnerable to storms with damaging winds. The tornadic events of 2011 and 2013 show the devastating results of windstorms. The National Weather Service reported 553 fatalities attributed to tornadoes alone in 2011, compared to 109 American deaths in the 10 year average. As populations continue to grow in areas prone to hurricanes, tornadoes, and windstorms, vulnerability to severe weather will only increase. In 2005, the National Science and Technology Council (NSTC) stated that America’s primary focus on disaster response is “an impractical and inefficient strategy for dealing with these ongoing threats. Instead, communities must break the cycle of destruction and recovery by enhancing their disaster resilience.”

Major Provisions

- Four agencies make up the National Windstorm Impact Reduction Program (NWIRP): NIST, the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA), and the Federal Emergency Management Agency (FEMA); defines NIST as the lead program agency; and assigns responsibilities to the four program agencies.
 - NIST is being tasked as the new lead agency of the Program. In that role, NIST’s activities include planning and coordinating the Program; supporting the development of performance-based engineering tools; requesting the assistance of

Federal agencies, other than Program agencies, as necessary; coordinating all Federal post-windstorm investigations; and issuing recommendations to assist in informing model codes when warranted by research or investigative findings. In addition to the lead agency responsibilities, NIST shall also conduct research and development to improve model building codes, voluntary standards, and best practices for the design, construction, and retrofit of buildings, structures, and lifelines.

- NSF activities include research in engineering and the atmospheric sciences to improve the understanding of the behavior of windstorms and the impact on buildings, structures, and lifelines.
- NOAA activities include the support of atmospheric science research to improve the understanding of the behavior of windstorms and the impact on buildings, structures, and lifelines.
- FEMA activities include the development of risk assessment tools and effective mitigation techniques; data collection and analysis; and public outreach, information dissemination, and implementation of mitigation measures.
- Creation of an Interagency Coordinating Committee on Windstorm Impact Reduction. The Committee is chaired by the Director of NIST and is made up of the heads of FEMA, NOAA, NSF, OSTP, the Office of Management and the Budget (OMB), and the head of any other Federal agency the Chair considers appropriate. The Committee is to meet not less than 2 times a year and is tasked with developing and submitting to Congress a strategic plan, progress report, and coordinated budget for the Program.
- Updating the National Advisory Committee on Windstorm Impact Reduction made up of at least 7 relevant non-Federal employee experts to offer recommendations and assessments on program developments, priorities, coordination, and revisions as necessary. This section requires the Advisory Committee to report to the Director of NIST on the assessment and its recommendations at least every two years. Additionally, the Advisory Committee is terminated on September 30, 2016.
- Sets authorization levels, see breakdown below.

Legislative History

The NWIRP was originally established in 2004 by the National Windstorm Impact Reduction Act of 2004 (P.L. 108-360), authored by Rep. Randy Neugebauer. The National Earthquake Hazards Reduction Program Reauthorization Act of 2003 (H.R. 2608) and The National Windstorm Impact Reduction Act of 2004 (H.R.3980) were each introduced in the 108th Congress. After passing the House, the two bills were later combined in the Senate (as H.R. 2608) and became P.L. 108-360. The program authorized the National Institute of Standards and Technology (NIST), the Federal Emergency Management Agency (FEMA), the National Oceanic and Atmospheric Administration (NOAA), and the National Science Foundation (NSF) to support activities that improve the understanding of windstorms and their impacts. The program was authorized for three years—through FY 2008.

In the 111th Congress, The Natural Hazards Risk Reduction Act of 2010 (H.R.3820, Rep. Wu.) would have reauthorized NEHRP and NWIRP. The legislation passed the House, but was not considered by the Senate.

In the 112th Congress, Rep. Neugebauer introduced an NWIRP reauthorization measure (H.R. 3272), which was included in a larger hazards bill (H.R. 3479, The Natural Hazards Risk Reduction Act of 2011) which reauthorized both the earthquake (National Earthquake Hazards Reduction Program, NEHRP) and wind research programs for three years.

In 2013, the Subcommittees on Research and Technology held a joint hearing examining the current role of research and development in mitigating the damaging effects of windstorms across the Nation and the methods of transferring the results of research into practice for stakeholders including building code developers, builders, and property owners. The hearing reviewed the activities of NWIRP. The hearing also reviewed H.R. 1786. The Subcommittees heard testimony from Dr. Ernst Kiesling, Research Faculty, National Wind Institute, Texas Tech University; Ms. Debra Ballen, General Counsel and Senior Vice President, Public Policy, Insurance Institute for Business & Home Safety; and Dr. David Prevatt, Assistant Professor, Department of Civil and Coastal Engineering, University of Florida.

Authorization

H.R. 1786 funds the program at \$21.4 million/annually, broken down as follows:

- For FEMA: \$2,000,000 for each fiscal year 2014 through 2016.
- For NSF: \$11,400,000 for each fiscal year 2014 through 2016.
- For NIST: \$5,500,000 for each fiscal year 2014 through 2016.
- For NOAA: \$2,500,000 for each fiscal year 2014 through 2016.