IN THE HOUSE OF REPRESENTATIVES

November 18, 2011

Mrs. Biggert (for herself, Mr. Neugebauer, Mr. Smith of Texas, Mr. Hall, and Mr. Palazzo) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committees on Transportation and Infrastructure and Natural Resources, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned.

September 12, 2012

Reported from the Committee on Science, Space, and Technology

[Strike out all after the enacting clause and insert the part printed in italics]

September 12, 2012

The Committees on Transportation and Infrastructure and Natural Resources discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed

[For text of introduced bill, see copy of bill as introduced on November 18, 2011]
A BILL

To reauthorize Federal natural hazards reduction programs, and for other purposes.
Be it enacted by the Senate and House of Representa-
tives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Natural Hazards Risk
Reduction Act of 2011”.

SEC. 2. TABLE OF CONTENTS.

The table of contents for this Act is as follows:

Sec. 1. Short title.
Sec. 2. Table of contents.

TITLE I—EARTHQUAKES

Sec. 101. Short title.
Sec. 102. Definitions.
Sec. 103. National Earthquake Hazards Reduction Program.
Sec. 104. Post-Earthquake Investigations Program.
Sec. 105. Authorization of appropriations.

TITLE II—WIND

Sec. 201. Short title.
Sec. 203. National Windstorm Impact Reduction Program.
Sec. 204. National Advisory Committee on Windstorm Impact Reduction.
Sec. 205. Authorization of appropriations.

TITLE III—INTERAGENCY COORDINATION

Sec. 301. Interagency Coordinating Committee on Natural Hazards Risk Reduc-
tion.
Sec. 302. Coordination of Federal disaster research, development, and technology
transfer.
Sec. 303. Authorizations.

TITLE IV—FIRE RESEARCH PROGRAM

Sec. 401. Fire research program.

TITLE I—EARTHQUAKES

SEC. 101. SHORT TITLE.

This title may be cited as the “National Earthquake
Hazards Reduction Program Reauthorization Act of 2011”.

•HR 3479 RH
SEC. 102. DEFINITIONS.

Section 4 of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7703) is amended by striking paragraphs (8) and (9).

SEC. 103. NATIONAL EARTHQUAKE HAZARDS REDUCTION PROGRAM.

Section 5 of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704) is amended—

(1) in subsection (a)—

(A) in paragraph (1), by inserting “to be administered, as provided under this section, by the National Institute of Standards and Technology, the Federal Emergency Management Agency, the United States Geological Survey, and the National Science Foundation” after “Reduction Program”; 

(B) in paragraph (2)—

(i) by amending subparagraph (A) to read as follows:

“(A) research and develop effective methods, tools, and technologies to reduce the risk posed by earthquakes to the built environment, especially to lessen the risk to existing structures and lifelines;”;
(ii) in subparagraph (B), by inserting “and retrofitting” after “planning and constructing”;

(iii) by striking “and” at the end of subparagraph (C);

(iv) in subparagraph (D), by striking the period at the end and inserting “, as appropriate; and”; and

(v) by adding at the end the following new subparagraph:

“(E) support public education and outreach to assist different populations, including individuals and households with special needs, in preparing for and responding to earthquake-related disasters.”; and

(C) by striking paragraphs (3) through (5); (2) in subsection (b)—

(A) by amending paragraph (1) to read as follows:

“(1) LEAD AGENCY.—The National Institute of Standards and Technology shall have the primary responsibility for planning and coordinating the Program. In carrying out this paragraph, the Director of the Institute shall—
“(A) ensure that the Program includes the necessary components to promote the implementation of earthquake hazards risk reduction measures by Federal, State, and local governments, national standards and model building code organizations, architects and engineers, and others with a role in planning, constructing, and retrofitting structures and lifelines;

“(B) support the development of performance-based seismic engineering tools, and work with appropriate groups to promote the commercial application of such tools, through earthquake-related model building codes, voluntary standards, and construction best practices;

“(C) request the assistance of Federal agencies other than the Program agencies, as necessary to assist in carrying out this Act;

“(D) work with the Federal Emergency Management Agency, the National Science Foundation, and the United States Geological Survey, to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (existing at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate
new, innovative testing approaches to the research infrastructure in a systematic manner; and

“(E) when warranted by research or investigative findings, issue recommendations to assist in informing the development of model codes, and provide information to Congress on the use of such recommendations.”;

(B) in paragraph (3)—

(i) in subparagraph (A), by striking “seismic microzonation” and inserting “detailed seismic hazard and risk”;

(ii) by amending subparagraphs (F) and (G) to read as follows:

“(F) operate, in cooperation with the National Science Foundation, a Global Seismographic Network for detection of earthquakes around the world and research into fundamental earth processes;

“(G) support the operation of regional seismic networks in areas of higher seismic risk;”;

(iii) by striking the period at the end of subparagraph (H) and inserting a semi-colon; and
(iv) by amending subparagraph (I) to read as follows:

“(I) work with other Program agencies to maintain awareness of, and where appropriate coordinate with, earthquake risk reduction efforts in other countries to ensure that the Program benefits from relevant information and advances in those countries; and”;

(C) in paragraph (4)(D), by striking “of the George” and all that follows through “Reduction Program” and inserting “of institutions engaged in research and the implementation of the National Earthquake Hazards Reduction Program, which may include the George E. Brown Jr. Network for Earthquake Engineering Simulation”; and

(D) in paragraph (5)—

(i) in subparagraph (C)—

(I) by inserting “and other stakeholders with relevant expertise” after “standards organizations”; and

(II) by inserting “and” after the semicolon at the end;
(ii) by striking “; and” at the end of
subparagraph (D) and inserting a period;

and

(iii) by striking subparagraph (E);

(3) by redesignating subsection (c) as subsection
(d);

(4) by inserting after subsection (b) the following
new subsection:

“(c) ADVISORY COMMITTEE ON EARTHQUAKE HAZ-
ARDS REDUCTION.—

“(1) IN GENERAL.—The Director of the National
Institute of Standards and Technology shall establish
an Advisory Committee on Earthquake Hazards Re-
duction, which shall be composed of at least 11 mem-
erors, none of whom may be employees of the Federal
Government, including representatives of research and
academic institutions, industry standards develop-
ment organizations, emergency management agencies,
State and local government, and business commu-
nities who are qualified to provide advice on earth-
quake hazards reduction and represent all related sci-
entific, architectural, and engineering disciplines. The
recommendations of the Advisory Committee shall be
considered by Federal agencies in implementing the
Program.
“(2) Assessments.—The Advisory Committee on Earthquake Hazards Reduction shall offer assessments on—

“(A) trends and developments in the natural, social, and engineering sciences and practices of earthquake hazards impact mitigation;

“(B) the priorities of the Program’s Strategic Plan;

“(C) the coordination of the Program; and

“(D) any revisions to the Program which may be necessary.

“(3) Compensation.—The members of the Advisory Committee established under this subsection shall serve without compensation.

“(4) Reports.—At least every 2 years, the Advisory Committee shall report to the Director of the National Institute of Standards and Technology on the assessments carried out under paragraph (2) and its recommendations for ways to improve the Program.

“(5) Termination.—The Advisory Committee established under this subsection shall terminate not later than 5 years after the date of enactment of the Natural Hazards Risk Reduction Act of 2011.”; and
(5) in subsection (d)(1), as so redesignated by paragraph (3) of this section, by inserting “on Natural Hazards Risk Reduction established under section 301 of the Natural Hazards Risk Reduction Act of 2011” after “Interagency Coordinating Committee”.

SEC. 104. POST-EARTHQUAKE INVESTIGATIONS PROGRAM.

Section 11 of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7705e) is amended by inserting “and utilizing the coordination expertise of the lead Program agency” after “consultation with each Program agency”.

SEC. 105. AUTHORIZATION OF APPROPRIATIONS.

(a) IN GENERAL.—Section 12 of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7706) is amended to read as follows:

“SEC. 12. AUTHORIZATION OF APPROPRIATIONS.

“(a) FEDERAL EMERGENCY MANAGEMENT AGENCY.—There are authorized to be appropriated to the Federal Emergency Management Agency for carrying out this Act—

“(1) $6,400,000 for fiscal year 2012;

“(2) $6,400,000 for fiscal year 2013; and

“(3) $6,400,000 for fiscal year 2014.

“(b) UNITED STATES GEOLOGICAL SURVEY.—There are authorized to be appropriated to the United States Geological Survey for carrying out this Act—
“(1) $57,700,000 for fiscal year 2012;
“(2) $57,700,000 for fiscal year 2013; and
“(3) $57,700,000 for fiscal year 2014.

“(c) NATIONAL SCIENCE FOUNDATION.—There are au-

thorized to be appropriated to the National Science Foun-
dation for carrying out this Act—
“(1) $53,800,000 for fiscal year 2012;
“(2) $53,800,000 for fiscal year 2013; and
“(3) $53,800,000 for fiscal year 2014.

“(d) NATIONAL INSTITUTE OF STANDARDS AND TECH-

NOLOGY.—There are authorized to be appropriated to the
National Institute of Standards and Technology for car-
rying out this Act—
“(1) $4,100,000 for fiscal year 2012;
“(2) $4,100,000 for fiscal year 2013; and
“(3) $4,100,000 for fiscal year 2014.”.

(b) CONFORMING AMENDMENT.—Section 14 of the
Earthquake Hazards Reduction Act of 1977 (42 U.S.C.
7708) is amended—

(1) by striking “(a) E STABLISHMENT.—”; and

(2) by striking subsection (b).

TITLE II—WIND

SEC. 201. SHORT TITLE.

This title may be cited as the “National Windstorm
Impact Reduction Act Reauthorization of 2011”. 
SEC. 202. DEFINITIONS.

Section 203(1) of the National Windstorm Impact Reduction Act of 2004 (42 U.S.C. 15702(1)) is amended by striking “Director of the Office of Science and Technology Policy” and inserting “Director of the National Institute of Standards and Technology”.

SEC. 203. NATIONAL WINDSTORM IMPACT REDUCTION PROGRAM.

Section 204 of the National Windstorm Impact Reduction Act of 2004 (42 U.S.C. 15703) is amended—

(1) by striking subsections (a), (b), and (c) and inserting the following:

“(a) ESTABLISHMENT.—There is established the National Windstorm Impact Reduction Program, the purpose of which is to achieve major measurable reductions in the losses of life and property from windstorms through a coordinated Federal effort, in cooperation with other levels of government, academia, and the private sector, aimed at improving the understanding of windstorms and their impacts and developing and encouraging the implementation of cost-effective mitigation measures to reduce those impacts.

“(b) RESPONSIBILITIES OF PROGRAM AGENCIES.—

“(1) LEAD AGENCY.—The National Institute of Standards and Technology shall have the primary responsibility for planning and coordinating the Pro-
gram. In carrying out this paragraph, the Director shall—

“(A) ensure that the Program includes the necessary components to promote the implementation of windstorm risk reduction measures by Federal, State, and local governments, national standards and model building code organizations, architects and engineers, and others with a role in planning and constructing buildings and lifelines;

“(B) support the development of performance-based engineering tools, and work with appropriate groups to promote the commercial application of such tools, including through wind-related model building codes, voluntary standards, and construction best practices;

“(C) request the assistance of Federal agencies other than the Program agencies, as necessary to assist in carrying out this Act;

“(D) coordinate all Federal post-windstorm investigations; and

“(E) when warranted by research or investigative findings, issue recommendations to assist in informing the development of model codes,
and provide information to Congress on the use of such recommendations.

“(2) NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.—In addition to the lead agency responsibilities described under paragraph (1), the National Institute of Standards and Technology shall be responsible for carrying out research and development to improve model building codes, voluntary standards, and best practices for the design, construction, and retrofit of buildings, structures, and lifelines.

“(3) NATIONAL SCIENCE FOUNDATION.—The National Science Foundation shall support research in engineering and the atmospheric sciences to improve the understanding of the behavior of windstorms and their impact on buildings, structures, and lifelines.

“(4) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.—The National Oceanic and Atmospheric Administration shall support atmospheric sciences research and data collection to improve the understanding of the behavior of windstorms and their impact on buildings, structures, and lifelines.

“(5) FEDERAL EMERGENCY MANAGEMENT AGENCY.—The Federal Emergency Management Agency shall support the development of risk assessment tools and effective mitigation techniques, windstorm-related
data collection and analysis, public outreach, information dissemination, and implementation of mitigation measures consistent with the Agency’s all-hazards approach.”;

(2) by redesignating subsection (d) as subsection (c);

(3) in subsection (c), as so redesignated by paragraph (2) of this section, amend paragraph (4)(A) to read as follows:

“(A) development of improved outreach and implementation mechanisms to translate—

“(i) existing information and research findings into cost-effective and affordable practices for design and construction professionals, and State and local officials; and

“(ii) research, including social science research, into windstorm risk mitigation and preparedness strategies for individuals and households, including individuals and households with special needs, and businesses”; and

(4) by striking subsections (e) and (f).
SEC. 204. NATIONAL ADVISORY COMMITTEE ON WIND-STORM IMPACT REDUCTION.

Section 205 of the National Windstorm Impact Reduction Act of 2004 (42 U.S.C. 15704) is amended to read as follows:

“SEC. 205. NATIONAL ADVISORY COMMITTEE ON WIND-STORM IMPACT REDUCTION.

“(a) IN GENERAL.—The Director of the National Institute of Standards and Technology shall establish an Advisory Committee on Windstorm Impact Reduction, which shall be composed of at least 7 members, none of whom may be employees of the Federal Government, including representatives of research and academic institutions, industry standards development organizations, emergency management agencies, State and local government, and business communities who are qualified to provide advice on windstorm impact reduction and represent all related scientific, architectural, and engineering disciplines. The recommendations of the Advisory Committee shall be considered by Federal agencies in implementing the Program.

“(b) ASSESSMENTS.—The Advisory Committee on Windstorm Impact Reduction shall offer assessments on—

“(1) trends and developments in the natural, social, and engineering sciences and practices of windstorm impact mitigation;
“(2) the priorities of the Program’s Strategic Plan;

“(3) the coordination of the Program; and

“(4) any revisions to the Program which may be necessary.

“(c) COMPENSATION.—The members of the Advisory Committee established under this section shall serve without compensation.

“(d) REPORTS.—At least every 2 years, the Advisory Committee shall report to the Director on the assessments carried out under subsection (b) and its recommendations for ways to improve the Program.

“(e) TERMINATION.—The Advisory Committee shall terminate not later than 5 years after the date of enactment of the Natural Hazards Risk Reduction Act of 2011.”.

SEC. 205. AUTHORIZATION OF APPROPRIATIONS.

Section 207 of the National Windstorm Impact Reduction Act of 2004 (42 U.S.C. 15706) is amended to read as follows:

“SEC. 207. AUTHORIZATION OF APPROPRIATIONS.

“(a) FEDERAL EMERGENCY MANAGEMENT AGENCY.—There are authorized to be appropriated to the Federal Emergency Management Agency for carrying out this title—

“(1) $4,000,000 for fiscal year 2012;
“(2) $4,000,000 for fiscal year 2013; and
“(3) $4,000,000 for fiscal year 2014.

“(b) NATIONAL SCIENCE FOUNDATION.—There are au-

thorized to be appropriated to the National Science Foun-
dation for carrying out this title—

“(1) $9,400,000 for fiscal year 2012;
“(2) $9,400,000 for fiscal year 2013; and
“(3) $9,400,000 for fiscal year 2014.

“(c) NATIONAL INSTITUTE OF STANDARDS AND TECH-

NOLOGY.—There are authorized to be appropriated to the
National Institute of Standards and Technology for car-
rying out this title—

“(1) $5,300,000 for fiscal year 2012;
“(2) $5,300,000 for fiscal year 2013; and
“(3) $5,300,000 for fiscal year 2014.

“(d) NATIONAL OCEANIC AND ATMOSPHERIC ADMINIS-

TRATION.—There are authorized to be appropriated to the
National Oceanic and Atmospheric Administration for car-
rying out this title—

“(1) $2,700,000 for fiscal year 2012;
“(2) $2,700,000 for fiscal year 2013; and
“(3) $2,700,000 for fiscal year 2014.”.
TITLE III—INTERAGENCY COORDINATION

SEC. 301. INTERAGENCY COORDINATING COMMITTEE ON NATURAL HAZARDS RISK REDUCTION.

(a) Establishment.—There is established an Interagency Coordinating Committee on Natural Hazards Risk Reduction, chaired by the Director of the National Institute of Standards and Technology.

(b) Membership.—In addition to the chair, the Committee shall be composed of—

(1) the heads of—

(A) the Federal Emergency Management Agency;

(B) the United States Geological Survey;

(C) the National Oceanic and Atmospheric Administration;

(D) the National Science Foundation;

(E) the Office of Science and Technology Policy; and

(F) the Office of Management and Budget;

and

(2) the head of any other Federal agency the chair considers appropriate.
(c) MEETINGS.—The Committee shall meet not less than 1 time a year at the call of the Director of the National Institute of Standards and Technology.

(d) GENERAL PURPOSE AND DUTIES.—The Committee shall oversee the planning and coordination of the National Earthquake Hazards Reduction Program and the National Windstorm Impact Reduction Program, and shall make proposals for planning and coordination of any other Federal research for natural hazard mitigation that the Committee considers appropriate.

(e) STRATEGIC PLANS.—The Committee shall develop and submit to Congress, not later than one year after the date of enactment of this Act—

(1) a Strategic Plan for the National Earthquake Hazards Reduction Program that includes—

(A) prioritized goals for such Program that will mitigate against the loss of life and property from future earthquakes;

(B) short-term, mid-term, and long-term research objectives to achieve those goals;

(C) a description of the role of each Program agency in achieving the prioritized goals;

(D) the methods by which progress towards the goals will be assessed;
(E) an explanation of how the Program will foster the transfer of research results into outcomes, such as improved model building codes;

(F) a description of how the George E. Brown, Jr. Network for Earthquake Engineering Simulation and the Advanced National Seismic Research and Monitoring System may be used in achieving the prioritized goals and research objectives; and

(G) an explanation of how the Program will coordinate its activities with other Federal agencies performing activities relevant to the Program; and

(2) a Strategic Plan for the National Windstorm Impact Reduction Program that includes—

(A) prioritized goals for such Program that will mitigate against the loss of life and property from future windstorms;

(B) short-term, mid-term, and long-term research objectives to achieve those goals;

(C) a description of the role of each Program agency in achieving the prioritized goals;

(D) the methods by which progress towards the goals will be assessed;
(E) an explanation of how the Program will foster the transfer of research results into outcomes, such as improved model building codes; and

(F) an explanation of how the Program will coordinate its activities with other Federal agencies performing activities relevant to the Program.

(f) PROGRESS REPORTS.—Not later than 18 months after the date of enactment of this Act, the Committee shall submit to the Congress—

(1) a report on the progress of the National Earthquake Hazards Reduction Program that includes—

(A) a description of the activities funded under the Program, a description of how these activities align with the prioritized goals and research objectives established in the Strategic Plan, and the budgets, per agency, for these activities;

(B) the outcomes achieved by the Program for each of the goals identified in the Strategic Plan;
(C) a description of any recommendations
made to change existing building codes that were
the result of Program activities;

(D) a description of activities carried out
under section 11 of the Earthquake Hazards Re-
duction Act of 1977 (42 U.S.C. 7705e), including
a description of agency activities and the
amount of funding provided for each investiga-
tion; and

(E) a description of the extent to which the
Program has incorporated recommendations
from the Advisory Committee on Earthquake
Hazards Reduction; and

(2) a report on the progress of the National
Windstorm Impact Reduction Program that in-
cludes—

(A) a description of the activities funded
under the Program, a description of how these
activities align with the prioritized goals and re-
search objectives established in the Strategic
Plan, and the budgets, per agency, for these ac-
tivities;

(B) the outcomes achieved by the Program
for each of the goals identified in the Strategic
Plan;
(C) a description of any recommendations made to change existing building codes that were the result of Program activities; and

(D) a description of the extent to which the Program has incorporated recommendations from the Advisory Committee on Windstorm Impact Reduction.

(g) COORDINATED BUDGET.—The Committee shall develop a coordinated budget for the National Earthquake Hazards Reduction Program and a coordinated budget for the National Windstorm Impact Reduction Program. These budgets shall be submitted to the Congress at the time of the President’s budget submission for each fiscal year.

SEC. 302. COORDINATION OF FEDERAL DISASTER RESEARCH, DEVELOPMENT, AND TECHNOLOGY TRANSFER.

Not later than 2 years after the date of enactment of this Act, the Subcommittee on Disaster Reduction of the Committee on Environment and Natural Resources of the National Science and Technology Council shall submit a report to the Congress detailing—

(1) current Federal research, development, and technology transfer activities, including those of the National Laboratories, that address hazard mitigation for natural disasters, including earthquakes,
windstorms, wildfires, floods, and the current budgets for these activities;

(2) areas of research that are common to two or more of the hazards identified in paragraph (1);

(3) opportunities to create synergies between the research activities for the hazards identified in paragraph (1); and

(4) the status of coordination of Federal disaster research, development, and technology transfer activities including those of the National Earthquake Hazards Reduction Program and the National Windstorm Impact Reduction Program.

SEC. 303. AUTHORIZATIONS.

No additional funds are authorized to carry out this title. This title shall be carried out using amounts otherwise authorized or appropriated.

TITLE IV—FIRE RESEARCH PROGRAM

SEC. 401. FIRE RESEARCH PROGRAM.

Section 16(a)(1) of the National Institute of Standards and Technology Act (15 U.S.C. 278f(a)(1)) is amended—

(1) in subparagraph (D), by inserting “fires at the wildland-urban interface that are the result of natural causes,” after “but not limited to,”; and
(2) in subparagraph (E), by inserting “fires at the wildland-urban interface that are the result of natural causes,” after “types of fires, including.”
A BILL

To reauthorize Federal natural hazards reduction programs, and for other purposes.

SEPTEMBER 12, 2012

Reported from the Committee on Science, Space, and Technology

Report No. 112-666, Part I

A BILL

To reauthorize Federal natural hazards reduction programs, and for other purposes.

SEPTEMBER 12, 2012

The Committees on Transportation and Infrastructure and Natural Resources discharged, committed to the Committee on Science, Space, and Technology, and ordered to be printed.

H. R. 3479

[Report No. 112-666, Part I]