

AMENDMENT IN THE NATURE OF A SUBSTITUTE
TO THE COMMITTEE PRINT
OFFERED BY Ms. Edwards

Strike all after the enacting clause and insert the following:

1 **SECTION 1. SHORT TITLE.**

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

4 **SEC. 2. FINDINGS.**

5 Congress finds the following:

6 (1) The United States faces significant risks
7 from many types of natural hazards, including
8 earthquakes, hurricanes, tornadoes, wildfires, and
9 floods. Increasing numbers of Americans are living
10 in areas prone to these hazards.

11 (2) Earthquakes occur without warning and can
12 have devastating effects. According to the U.S. Geo-
13 logical Survey, two recent earthquakes, the
14 Northridge Earthquake in 1994, and the Loma
15 Prieta Earthquake in 1989, killed nearly 100 people,
16 injured 12,757, and caused \$33 billion in damages.
17 Nearly all States face some level of seismic risk.

1 Twenty-six urban areas in 14 States have a signifi-
2 cant seismic risk.

3 (3) Severe weather is the most costly natural
4 hazard, measured on a per year basis. According to
5 data from the National Weather Service over the
6 last 10 years, tornadoes, thunderstorms, and hurri-
7 canes have caused an average of 226 fatalities and
8 \$16 billion of property damage per year. The 2005
9 hurricane season was one of the most destructive in
10 United States history, killing 1,836 people, and
11 causing \$80 billion in damage.

12 (4) The United States Fire Administration re-
13 ports that 38 percent of new home construction in
14 2002 was in areas adjacent to, or intermixed with,
15 wildlands. Fires in the wildland-urban interface are
16 costly. For example, the 2007 California Witch fire
17 alone caused \$1.3 billion in insured property losses,
18 according to the Insurance Services Office (ISO). In
19 addition, Government Accountability Office reported
20 in 2007 that the Federal spending for wildfire sup-
21 pression between 2001 and 2005 was, on average,
22 \$2.9 billion per year.

23 (5) Developing better knowledge about natural
24 hazard phenomena and their effects is crucial to as-
25 sessing the risks these hazards pose to communities.

1 Instrumentation, monitoring, and data gathering to
2 characterize earthquakes and wind events are impor-
3 tant activities to increase this knowledge.

4 (6) Current building codes and standards can
5 mitigate the damages caused by natural hazards.
6 The Institute for Business and Home Safety esti-
7 mated that the \$19 billion in damage caused by
8 Hurricane Andrew in 1994 could have been reduced
9 by half if such codes and standards were in effect.
10 Research for the continuous improvement of building
11 codes, standards, and design practices—and for de-
12 veloping methods to retrofit existing structures—is
13 crucial to mitigating losses from natural hazards.

14 (7) Since its creation in 1977, the National
15 Earthquake Hazards Reduction Program (NEHRP)
16 has supported research to develop seismic codes,
17 standards, and building practices that have been
18 widely adopted. The NEHRP Recommended Provi-
19 sions for Seismic Regulations for New Buildings and
20 Other Structures and the Guidance for Seismic Per-
21 formance Assessment of Buildings are two examples.

22 (8) Research to understand the institutional,
23 social, behavioral, and economic factors that influ-
24 ence how households, businesses, and communities
25 perceive risk and prepare for natural hazards, and

1 how well they recover after a disaster, can increase
2 the implementation of risk mitigation measures.

3 (9) A major goal of the Federal natural haz-
4 ards-related research and development effort should
5 be to reduce the loss of life and damage to commu-
6 nities and infrastructure through increasing the
7 adoption of hazard mitigation measures.

8 (10) Research, development, and technology
9 transfer to secure infrastructure is vitally important.
10 Infrastructure that supports electricity, transpor-
11 tation, drinking water, and other services is vital im-
12 mediately after a disaster, and their quick return to
13 function speeds the economic recovery of a disaster-
14 impacted community.

15 **TITLE I—EARTHQUAKES**

16 **SEC. 101. SHORT TITLE.**

17 This title may be cited as the “National Earthquake
18 Hazards Reduction Program Reauthorization Act of
19 2011”.

20 **SEC. 102. FINDINGS.**

21 Section 2 of the Earthquake Hazards Reduction Act
22 of 1977 (42 U.S.C. 7701) is repealed.

1 **SEC. 103. DEFINITIONS.**

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

5 **SEC. 104. NATIONAL EARTHQUAKE HAZARDS REDUCTION**
6 **PROGRAM.**

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

9 (1) in subsection (a)—

10 (A) by amending paragraph (2) to read as
11 follows:

12 “(2) PROGRAM ACTIVITIES.—The activities of
13 the Program shall be designed to—

14 “(A) research and develop effective meth-
15 ods, tools, and technologies to reduce the risk
16 posed by earthquakes to the built environment,
17 especially to lessen the risk to existing struc-
18 tures and lifelines;

19 “(B) improve the understanding of earth-
20 quakes and their effects on households, busi-
21 nesses, communities, buildings, structures, and
22 lifelines, through interdisciplinary and multi-
23 disciplinary research that involves engineering,
24 natural sciences, and social sciences; and

25 “(C) facilitate the adoption of earthquake
26 risk reduction measures by households, busi-

1 nesses, communities, local, State, and Federal
2 governments, national standards and model
3 building code organizations, architects and engi-
4 neers, building owners, and others with a role
5 in planning for disasters and planning, con-
6 structing, retrofitting, and insuring buildings,
7 structures, and lifelines through—

8 “(i) grants, contracts, cooperative
9 agreements, and technical assistance;

10 “(ii) development of standards, guide-
11 lines, voluntary consensus standards, and
12 other design guidance for earthquake haz-
13 ards risk reduction for buildings, struc-
14 tures, and lifelines;

15 “(iii) outreach and information dis-
16 semination to communities on location-spe-
17 cific earthquake hazards and methods to
18 reduce the risks from those hazards; and

19 “(iv) development and maintenance of
20 a repository of information, including tech-
21 nical data, on seismic risk and hazards re-
22 duction.”; and

23 (B) by striking paragraphs (3) through
24 (5);

1 (2) by amending subsection (b) to read as fol-
2 lows:

3 “(b) RESPONSIBILITIES OF PROGRAM AGENCIES.—

4 “(1) LEAD AGENCY.—The National Institute of
5 Standards and Technology (in this section referred
6 to as the ‘Institute’) shall be responsible for plan-
7 ning and coordinating the Program. In carrying out
8 this paragraph, the Director of the Institute shall—

9 “(A) ensure that the Program includes the
10 necessary components to promote the imple-
11 mentation of earthquake hazards risk reduction
12 measures by households, businesses, commu-
13 nities, local, State, and Federal governments,
14 national standards and model building code or-
15 ganizations, architects and engineers, building
16 owners, and others with a role in preparing for
17 disasters, or the planning, constructing, retro-
18 fitting, and insuring of buildings, structures,
19 and lifelines;

20 “(B) support the development of perform-
21 ance-based seismic engineering tools, and work
22 with the appropriate groups to promote the
23 commercial application of such tools, through
24 earthquake-related building codes, standards,
25 and construction practices;

1 “(C) ensure the use of social science re-
2 search and findings in informing research and
3 technology development priorities, commu-
4 nicating earthquake risks to the public, devel-
5 oping earthquake risk mitigation strategies, and
6 preparing for earthquake disasters;

7 “(D) coordinate all Federal post-earth-
8 quake investigations; and

9 “(E) when warranted by research or inves-
10 tigative findings, issue recommendations for
11 changes in model codes to the relevant code de-
12 velopment organizations, and report back to
13 Congress on whether such recommendations
14 were adopted.

15 “(2) NATIONAL INSTITUTE OF STANDARDS AND
16 TECHNOLOGY.—In addition to the lead agency re-
17 sponsibilities described under paragraph (1), the In-
18 stitute shall be responsible for carrying out research
19 and development to improve building codes and
20 standards and practices for buildings, structures,
21 and lifelines. In carrying out this paragraph, the Di-
22 rector of the Institute shall—

23 “(A) work, in conjunction with other ap-
24 propriate Federal agencies, to support the de-

1 velopment of improved seismic standards and
2 model codes;

3 “(B) in coordination with other appro-
4 priate Federal agencies, work closely with
5 standards and model code development organi-
6 zations, professional societies, and practicing
7 engineers, architects, and others involved in the
8 construction of buildings, structures, and life-
9 lines, to promote better building practices, in-
10 cluding by—

11 “(i) developing technical resources for
12 practitioners on new knowledge and stand-
13 ards of practice; and

14 “(ii) developing methods and tools to
15 facilitate the incorporation of earthquake
16 engineering principles into design and con-
17 struction practices;

18 “(C) develop tools, technologies, methods,
19 and practitioner guidance to feasibly and cost-
20 effectively retrofit existing buildings and struc-
21 tures to increase their earthquake resiliency;
22 and

23 “(D) work closely with national standards
24 organizations, and other interested parties, to

1 develop seismic safety standards and practices
2 for new and existing lifelines.

3 “(3) FEDERAL EMERGENCY MANAGEMENT
4 AGENCY.—

5 “(A) IN GENERAL.—The Federal Emer-
6 gency Management Agency (in this paragraph
7 referred to as the ‘Agency’), consistent with the
8 Agency’s all hazards approach, shall be respon-
9 sible for facilitating the development and adop-
10 tion of standards, model building codes, and
11 better seismic building practices, developing
12 tools to assess earthquake hazards, promoting
13 the adoption of hazard mitigation measures,
14 and carrying out a program of direct assistance
15 to States and localities to mitigate earthquake
16 risks to buildings, structures, lifelines, and com-
17 munities.

18 “(B) DIRECTOR’S DUTIES.—The Director
19 of the Agency shall—

20 “(i) work closely with other relevant
21 Federal agencies, standards and model
22 building code development organizations,
23 architects, engineers, and other profes-
24 sionals, to facilitate the development and
25 adoption of standards, model codes, and

1 design and construction practices to in-
2 crease the earthquake resiliency of new
3 and existing buildings, structures, and life-
4 lines in the—

5 “(I) preparation, maintenance,
6 and wide dissemination of design
7 guidance, model building codes and
8 standards, and practices to increase
9 the earthquake resiliency of new and
10 existing buildings, structures, and life-
11 lines;

12 “(II) development of perform-
13 ance-based design guidelines and
14 methodologies supporting model codes
15 for buildings, structures, and lifelines;
16 and

17 “(III) development of methods
18 and tools to facilitate the incorpora-
19 tion of earthquake engineering prin-
20 ciples into design and construction
21 practices;

22 “(ii) develop tools, technologies, and
23 methods to assist local planners, and oth-
24 ers, to model and predict the potential im-

1 pact of earthquake damage in seismically
2 hazardous areas; and

3 “(iii) support the implementation of a
4 comprehensive earthquake education and
5 public awareness program, including the
6 development of materials and their wide
7 dissemination to all appropriate audiences,
8 and support public access to locality-spe-
9 cific information that may assist the public
10 in preparing for, mitigating against, re-
11 sponding to, and recovering from earth-
12 quakes and related disasters.

13 “(C) STATE ASSISTANCE GRANT PRO-
14 GRAM.—The Director of the Agency shall oper-
15 ate a program of grants and assistance to en-
16 able States to develop mitigation, preparedness,
17 and response plans, compare inventories and
18 conduct seismic safety inspections of critical
19 structures and lifelines, update building and
20 zoning codes and ordinances to enhance seismic
21 safety, increase earthquake awareness and edu-
22 cation, and encourage the development of
23 multistate groups for such purposes. The Direc-
24 tor shall operate such programs in coordination
25 with the all hazards mitigation and prepared-

1 ness programs authorized by the Robert T.
2 Stafford Disaster Relief and Emergency Assist-
3 ance Act (42 U.S.C. 5121 et seq.), in order to
4 ensure that such programs are as consistent as
5 possible. In order to qualify for assistance
6 under this subparagraph, a State must—

7 “(i) demonstrate that the assistance
8 will result in enhanced seismic safety in
9 the State;

10 “(ii) provide 50 percent of the costs of
11 the activities for which assistance is being
12 given, except that the Director may lower
13 or waive the cost-share requirement for
14 these activities in exceptional cases of eco-
15 nomic hardship; and

16 “(iii) meet such other requirements as
17 the Director of the Agency shall prescribe.

18 “(D) FEDERAL EMERGENCY MANAGEMENT
19 AGENCY ROLE AND RESPONSIBILITY.—Nothing
20 in this Act shall be construed to diminish the
21 role and responsibility of the Federal Emer-
22 gency Management Agency with regard to all
23 hazards preparedness, response, recovery, and
24 mitigation.

1 “(4) UNITED STATES GEOLOGICAL SURVEY.—
2 The United States Geological Survey (in this para-
3 graph referred to as the ‘Survey’) shall conduct re-
4 search and other activities necessary to characterize
5 and identify earthquake hazards, assess earthquake
6 risks, monitor seismic activity, and provide real-time
7 earthquake information. In carrying out this para-
8 graph, the Director of the Survey shall—

9 “(A) conduct a systematic assessment of
10 the seismic risks in each region of the Nation
11 prone to earthquakes, including, where appro-
12 priate, the establishment and operation of in-
13 tensive monitoring projects on hazardous faults,
14 detailed seismic hazard and risk studies in
15 urban and other developed areas where earth-
16 quake risk is determined to be significant, and
17 engineering seismology studies;

18 “(B) work with officials of State and local
19 governments to ensure that they are knowledge-
20 able about the specific seismic risks in their
21 areas;

22 “(C) develop standard procedures, in con-
23 sultation with the Director of the Federal
24 Emergency Management Agency, for issuing
25 earthquake alerts, including aftershock

1 advisories, and, to the extent possible, ensure
2 that such alerts are compatible with the Inte-
3 grated Public Alerts and Warning System pro-
4 gram authorized by section 202 of the Robert
5 T. Stafford Disaster Relief and Emergency As-
6 sistance Act (42 U.S.C. 5132);

7 “(D) issue when justified, and notify the
8 Director of the Federal Emergency Manage-
9 ment Agency of, an earthquake prediction or
10 other earthquake advisory, which may be evalu-
11 ated by the National Earthquake Prediction
12 Evaluation Council;

13 “(E) operate, as integral parts of the Ad-
14 vanced National Seismic Research and Moni-
15 toring System, a National Earthquake Informa-
16 tion Center and a national seismic network, to-
17 gether providing timely and accurate informa-
18 tion on earthquakes world-wide;

19 “(F) support the operation of regional seis-
20 mic networks in areas of higher seismic risk;

21 “(G) develop and support seismic instru-
22 mentation of buildings and other structures to
23 obtain data on their response to earthquakes
24 for use in engineering studies and assessment
25 of damage;

1 “(H) monitor and assess Earth surface de-
2 formation as it pertains to the evaluation of
3 earthquake hazards and impacts;

4 “(I) work with other Program agencies to
5 maintain awareness of, and where appropriate
6 cooperate with, earthquake risk reduction ef-
7 forts in other countries, to ensure that the Pro-
8 gram benefits from relevant information and
9 advances in those countries;

10 “(J) maintain suitable seismic hazard
11 maps in support of building codes for structures
12 and lifelines, including additional maps needed
13 for performance-based design approaches, and,
14 to the extent possible, ensure that such maps
15 are developed consistent with the multihazard
16 advisory maps authorized by section 203(k) of
17 the Robert T. Stafford Disaster Relief and
18 Emergency Assistance Act (42 U.S.C. 5133(k));

19 “(K) conduct a competitive, peer-reviewed
20 process which awards grants and cooperative
21 agreements to complement and extend related
22 internal Survey research and monitoring activi-
23 ties; and

24 “(L) operate, in cooperation with the Na-
25 tional Science Foundation, a Global Seis-

1 mographic Network for detection of earth-
2 quakes around the world and research into fun-
3 damental earth processes.

4 “(5) NATIONAL SCIENCE FOUNDATION.—The
5 National Science Foundation shall be responsible for
6 funding basic research that furthers the under-
7 standing of earthquakes, earthquake engineering,
8 and community preparation and response to earth-
9 quakes. In carrying out this paragraph, the Director
10 of the National Science Foundation shall—

11 “(A) support multidisciplinary and inter-
12 disciplinary research that will improve the resil-
13 iency of communities to earthquakes, includ-
14 ing—

15 “(i) research that improves the safety
16 and performance of buildings, structures,
17 and lifelines, including the use of the large-
18 scale experimental and computational fa-
19 cilities of the George E. Brown, Jr. Net-
20 work for Engineering Earthquake Simula-
21 tion;

22 “(ii) research to support more effec-
23 tive earthquake mitigation and response
24 measures, such as developing better knowl-
25 edge of the specific types of vulnerabilities

1 faced by segments of the community vul-
2 nerable to earthquakes, addressing the bar-
3 riers they face in adopting mitigation and
4 preparation measures, and developing
5 methods to better communicate the risks of
6 earthquakes and to promote mitigation;
7 and

8 “(iii) research on the response of com-
9 munities, households, businesses, and
10 emergency responders to earthquakes;

11 “(B) support research to understand
12 earthquake processes, earthquake patterns, and
13 earthquake frequencies;

14 “(C) encourage prompt dissemination of
15 significant findings, sharing of data, samples,
16 physical collections, and other supporting mate-
17 rials, and development of intellectual property
18 so research results can be used by appropriate
19 organizations to mitigate earthquake damage;

20 “(D) work with other Program agencies to
21 maintain awareness of, and where appropriate
22 cooperate with, earthquake risk reduction re-
23 search efforts in other countries, to ensure that
24 the Program benefits from relevant information
25 and advances in those countries; and

1 “(E) include to the maximum extent prac-
2 ticable diverse institutions, including Histori-
3 cally Black Colleges and Universities, Hispanic-
4 serving institutions, Tribal Colleges and Univer-
5 sities, Alaska Native-serving institutions, and
6 Native Hawaiian-serving institutions.”; and

7 (3) in subsection (c)(1) by inserting “on Nat-
8 ural Hazards Risk Reduction established under sec-
9 tion 301 of the Natural Hazards Risk Reduction Act
10 of 2011” after “Interagency Coordinating Com-
11 mittee”.

12 **SEC. 105. POST-EARTHQUAKE INVESTIGATIONS PROGRAM.**

13 Section 11 of the Earthquake Hazards Reduction Act
14 of 1977 (42 U.S.C. 7705e) is amended by striking “There
15 is established” and all that follows through “conduct of
16 such earthquake investigations.” and inserting “The Pro-
17 gram shall include a post-earthquake investigations pro-
18 gram, the purpose of which is to investigate major earth-
19 quakes so as to learn lessons which can be applied to re-
20 duce the loss of lives and property in future earthquakes.
21 The lead Program agency, in consultation with each Pro-
22 gram agency, shall organize investigations to study the im-
23 plications of the earthquakes in the areas of responsibility
24 of each Program agency. The investigations shall begin
25 as rapidly as possible and may be conducted by grantees

1 and contractors. The Program agencies shall ensure that
2 the results of the investigations are disseminated widely.”.

3 **SEC. 106. AUTHORIZATION OF APPROPRIATIONS.**

4 (a) IN GENERAL.—Section 12 of the Earthquake
5 Hazards Reduction Act of 1977 (42 U.S.C. 7706) is
6 amended—

7 (1) by adding at the end of subsection (a) the
8 following:

9 “(9) There are authorized to be appropriated to the
10 Federal Emergency Management Agency for carrying out
11 this Act—

12 “(A) \$10,238,000 for fiscal year 2011;

13 “(B) \$10,545,000 for fiscal year 2012;

14 “(C) \$10,861,000 for fiscal year 2013;

15 “(D) \$11,187,000 for fiscal year 2014; and

16 “(E) \$11,523,000 for fiscal year 2015.”;

17 (2) by adding at the end of subsection (b) the
18 following:

19 “(3) There are authorized to be appropriated to the
20 United States Geological Survey for carrying out this
21 Act—

22 “(A) \$90,000,000 for fiscal year 2011, of which
23 \$36,000,000 shall be made available for completion
24 of the Advanced National Seismic Research and
25 Monitoring System;

1 “(B) \$92,100,000 for fiscal year 2012, of which
2 \$37,000,000 shall be made available for completion
3 of the Advanced National Seismic Research and
4 Monitoring System;

5 “(C) \$94,263,000 for fiscal year 2013, of which
6 \$38,000,000 shall be made available for completion
7 of the Advanced National Seismic Research and
8 Monitoring System;

9 “(D) \$96,491,000 for fiscal year 2014, of which
10 \$39,000,000 shall be made available for completion
11 of the Advanced National Seismic Research and
12 Monitoring System; and

13 “(E) \$98,786,000 for fiscal year 2015, of which
14 \$40,000,000 shall be made available for completion
15 of the Advanced National Seismic Research and
16 Monitoring System.”;

17 (3) by adding at the end of subsection (c) the
18 following:

19 “(3) There are authorized to be appropriated to the
20 National Science Foundation for carrying out this Act—

21 “(A) \$64,125,000 for fiscal year 2011;

22 “(B) \$66,049,000 for fiscal year 2012;

23 “(C) \$68,030,000 for fiscal year 2013;

24 “(D) \$70,071,000 for fiscal year 2014; and

25 “(E) \$72,173,000 for fiscal year 2015.”; and

1 (4) by adding at the end of subsection (d) the
2 following:

3 “(3) There are authorized to be appropriated to the
4 National Institute of Standards and Technology for car-
5 rying out this Act—

6 “(A) \$7,000,000 for fiscal year 2011;

7 “(B) \$7,700,000 for fiscal year 2012;

8 “(C) \$7,931,000 for fiscal year 2013;

9 “(D) \$8,169,000 for fiscal year 2014; and

10 “(E) \$8,414,000 for fiscal year 2015.”

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

14 (1) by striking “(a) ESTABLISHMENT.—”; and

15 (2) by striking subsection (b).

16 **TITLE II—WIND**

17 **SEC. 201. SHORT TITLE.**

18 This title may be cited as the “National Windstorm
19 Impact Reduction Act Reauthorization of 2011”.

20 **SEC. 202. PURPOSE.**

21 Section 202 of the National Windstorm Impact Re-
22 duction Act of 2004 (42 U.S.C. 15701) is amended to
23 read as follows:

1 **“SEC. 202. PURPOSE.**

2 “It is the purpose of the Congress in this title to
3 achieve a major measurable reduction in losses of life and
4 property from windstorms through the establishment and
5 maintenance of an effective Windstorm Impact Reduction
6 Program. The objectives of such Program shall include—

7 “(1) the education of households, businesses,
8 and communities about the risks posed by wind-
9 storms, and the identification of locations, struc-
10 tures, lifelines, and segments of the community
11 which are especially vulnerable to windstorm damage
12 and disruption, and the dissemination of information
13 on methods to reduce those risks;

14 “(2) the development of technologically and eco-
15 nomically feasible design and construction methods
16 and procedures to make new and existing structures,
17 in areas of windstorm risk, windstorm resilient, giv-
18 ing high priority to the development of such methods
19 and procedures for lifelines, structures associated
20 with a potential high loss of life, and structures that
21 are especially needed in times of disasters, such as
22 hospitals and public safety and shelter facilities;

23 “(3) the implementation, in areas of major
24 windstorm risk, of instrumentation to record and
25 gather data on windstorms and the characteristics of
26 the wind during those events, and continued re-

1 search to increase the understanding of windstorm
2 phenomena;

3 “(4) the development, publication, and pro-
4 motion, in conjunction with State and local officials
5 and professional organizations, of model building
6 codes and standards and other means to encourage
7 consideration of information about windstorm risk in
8 making decisions about land use policy and construc-
9 tion activity; and

10 “(5) the facilitation of the adoption of wind-
11 storm risk mitigation measures in areas of wind-
12 storm risk by households, businesses, and commu-
13 nities through outreach, incentive programs, and
14 other means.”.

15 **SEC. 203. DEFINITIONS.**

16 Section 203(1) of the National Windstorm Impact
17 Reduction Act of 2004 (42 U.S.C. 15702(1)) is amended
18 by striking “Director of the Office of Science and Tech-
19 nology Policy” and inserting “Director of the National In-
20 stitute of Standards and Technology”.

21 **SEC. 204. NATIONAL WINDSTORM IMPACT REDUCTION PRO-**
22 **GRAM.**

23 Section 204 of the National Windstorm Impact Re-
24 duction Act of 2004 (42 U.S.C. 15703) is amended to
25 read as follows:

1 **“SEC. 204. NATIONAL WINDSTORM IMPACT REDUCTION**
2 **PROGRAM.**

3 “(a) ESTABLISHMENT.—There is established the Na-
4 tional Windstorm Impact Reduction Program.

5 “(b) PROGRAM ACTIVITIES.—The activities of the
6 Program shall be designed to—

7 “(1) research and develop cost-effective, feasible
8 methods, tools, and technologies to reduce the risks
9 posed by windstorms to the built environment, espe-
10 cially to lessen the risk to existing structures and
11 lifelines;

12 “(2) improve the understanding of windstorms
13 and their impacts on households, businesses, com-
14 munities, buildings, structures, and lifelines, through
15 interdisciplinary and multidisciplinary research that
16 involves engineering, natural sciences, and social
17 sciences; and

18 “(3) facilitate the adoption of windstorm risk
19 reduction measures by households, businesses, com-
20 munities, local, State and Federal governments, na-
21 tional standards and model building code organiza-
22 tions, architects and engineers, building owners, and
23 others with a role in planning for disasters and plan-
24 ning, constructing, retrofitting, and insuring build-
25 ings, structures, and lifelines through—

1 “(A) grants, contracts, cooperative agree-
2 ments, and technical assistance;

3 “(B) development of hazard maps, stand-
4 ards, guidelines, voluntary consensus standards,
5 and other design guidance for windstorm risk
6 reduction for buildings, structures, and lifelines;

7 “(C) outreach and information dissemina-
8 tion to communities on site specific windstorm
9 hazards and ways to reduce the risks from
10 those hazards; and

11 “(D) development and maintenance of a
12 repository of information, including technical
13 data, on windstorm hazards and risk reduction;

14 “(c) RESPONSIBILITIES OF PROGRAM AGENCIES.—

15 “(1) LEAD AGENCY.—The National Institute of
16 Standards and Technology (in this section referred
17 to as the ‘Institute’) shall be responsible for plan-
18 ning and coordinating the Program. In carrying out
19 this paragraph, the Director of the Institute shall—

20 “(A) ensure that the Program includes the
21 necessary components to promote the imple-
22 mentation of windstorm risk reduction meas-
23 ures by households, businesses, communities,
24 local, State, and Federal governments, national
25 standards and model building code organiza-

1 tions, architects and engineers, building owners,
2 and others with a role in planning and pre-
3 paring for disasters, and planning constructing,
4 and retrofitting, and insuring buildings, struc-
5 tures, and lifelines;

6 “(B) support the development of perform-
7 ance-based engineering tools, and work with the
8 appropriate groups to promote the commercial
9 application of such tools, through wind-related
10 building codes, standards, and construction
11 practices;

12 “(C) ensure the use of social science re-
13 search and findings in informing the develop-
14 ment of technology and research priorities, in
15 communicating windstorm risks to the public,
16 in developing windstorm risk mitigation strate-
17 gies, and in preparing for windstorm disasters;

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

20 “(E) when warranted by research or inves-
21 tigative findings, issue recommendations for
22 changes in model codes to the relevant code de-
23 velopment organizations, and report back to
24 Congress on whether such recommendations
25 were adopted.

1 “(2) NATIONAL INSTITUTE OF STANDARDS AND
2 TECHNOLOGY.—In addition to the lead agency re-
3 sponsibilities described under paragraph (1), the In-
4 stitute shall be responsible for carrying out research
5 and development to improve model codes, standards,
6 design guidance and practices for the construction
7 and retrofit of buildings, structures, and lifelines. In
8 carrying out this paragraph, the Director of the In-
9 stitute shall—

10 “(A) support the development of instru-
11 mentation, data processing, and archival capa-
12 bilities, and standards for the instrumentation
13 and its deployment, to measure wind, wind
14 loading, and other properties of severe wind and
15 structure response;

16 “(B) coordinate with other appropriate
17 Federal agencies to make the data described in
18 subparagraph (A) available to researchers,
19 standards and code developers, and local plan-
20 ners;

21 “(C) support the development of tools and
22 methods for the collection of data on the loss of
23 and damage to structures, and data on sur-
24 viving structures after severe windstorm events;

1 “(D) improve the knowledge of the impact
2 of severe wind on buildings, structures, lifelines,
3 and communities;

4 “(E) develop cost-effective windstorm im-
5 pact reduction tools, methods, and technologies;

6 “(F) work, in conjunction with other ap-
7 propriate Federal agencies, to support the de-
8 velopment of wind standards and model codes;
9 and

10 “(G) in conjunction with other appropriate
11 Federal agencies, work closely with standards
12 and model code development organizations, pro-
13 fessional societies, and practicing engineers, ar-
14 chitects, and others involved in the construction
15 of buildings, structures, and lifelines, to pro-
16 mote better building practices, including by—

17 “(i) supporting the development of
18 technical resources for practitioners to im-
19 plement new knowledge; and

20 “(ii) supporting the development of
21 methods and tools to incorporate wind en-
22 gineering principles into design and con-
23 struction practices.

24 “(3) FEDERAL EMERGENCY MANAGEMENT
25 AGENCY.—The Federal Emergency Management

1 Agency, consistent with the Agency’s all hazards ap-
2 proach, shall support the development of risk assess-
3 ment tools and effective mitigation techniques, assist
4 with windstorm-related data collection and analysis,
5 and support outreach, information dissemination,
6 and implementation of windstorm preparedness and
7 mitigation measures by households, businesses, and
8 communities, including by—

9 “(A) working to develop or improve risk-
10 assessment tools, methods, and models;

11 “(B) work closely with other appropriate
12 Federal agencies to develop and facilitate the
13 adoption of windstorm impact reduction meas-
14 ures, including by—

15 “(i) developing cost-effective retrofit
16 measures for existing buildings, structures,
17 and lifelines to improve windstorm per-
18 formance;

19 “(ii) developing methods, tools, and
20 technologies to improve the planning, de-
21 sign, and construction of new buildings,
22 structures, and lifelines;

23 “(iii) supporting the development of
24 model wind codes and standards for build-
25 ings, structures, and lifelines; and

1 “(iv) developing technical resources
2 for practitioners that reflect new knowl-
3 edge and standards of practice; and

4 “(C) develop and disseminate guidelines
5 for the construction of windstorm shelters.

6 Nothing in this Act shall be construed to diminish
7 the role and responsibility of the Federal Emergency
8 Management Agency with regard to all hazards pre-
9 paredness, response, recovery, and mitigation.

10 “(4) NATIONAL OCEANIC AND ATMOSPHERIC
11 ADMINISTRATION.—The National Oceanic and At-
12 mospheric Administration shall support atmospheric
13 sciences research and data collection to improve the
14 understanding of the behavior of windstorms and
15 their impact on buildings, structures, and lifelines,
16 including by—

17 “(A) working with other appropriate Fed-
18 eral agencies to develop and deploy instrumen-
19 tation to measure speed and other characteris-
20 tics of wind, and to collect, analyze, and make
21 available such data;

22 “(B) working with officials of State and
23 local governments to ensure that they are
24 knowledgeable about, and prepared for, the spe-
25 cific windstorm risks in their area;

1 “(C) supporting the development of suit-
2 able wind speed maps and other derivative
3 products that support building codes and other
4 hazard mitigation approaches for buildings,
5 structures, and lifelines, and, to the extent pos-
6 sible, ensure that such maps and other deriva-
7 tive products are developed consistent with the
8 multihazard advisory maps authorized by sec-
9 tion 203(k) of the Robert T. Stafford Disaster
10 Relief and Emergency Assistance Act (42
11 U.S.C. 5133(k));

12 “(D) conducting a competitive, peer-re-
13 viewed process which awards grants and cooper-
14 ative agreements to complement the National
15 Oceanic and Atmospheric Administration’s
16 wind-related and storm surge-related research
17 and data collection activities;

18 “(E) working with other appropriate Fed-
19 eral agencies and State and local governments
20 to develop or improve risk-assessment tools,
21 methods, and models; and

22 “(F) working with other appropriate Fed-
23 eral agencies to develop storm surge models to
24 better understand the interaction between wind-
25 storms and bodies of water.

1 “(5) NATIONAL SCIENCE FOUNDATION.—The
2 National Science Foundation shall be responsible for
3 funding basic research that furthers the under-
4 standing of windstorms, wind engineering, and com-
5 munity preparation and response to windstorms. In
6 carrying out this paragraph, the Director of the Na-
7 tional Science Foundation shall—

8 “(A) support multidisciplinary and inter-
9 disciplinary research that will improve the resil-
10 iency of communities to windstorms, includ-
11 ing—

12 “(i) research that improves the safety
13 and performance of buildings, structures,
14 and lifelines;

15 “(ii) research to support more effec-
16 tive windstorm mitigation and response
17 measures, such as developing better knowl-
18 edge of the specific types of vulnerabilities
19 faced by segments of the community vul-
20 nerable to windstorms, addressing the bar-
21 riers they face in adopting mitigation and
22 preparation measures, and developing
23 methods to better communicate the risks of
24 windstorms and to promote mitigation; and

1 “(iii) research on the response of com-
2 munities to windstorms, including on the
3 effectiveness of the emergency response,
4 and the recovery process of communities,
5 households, and businesses;

6 “(B) support research to understand wind-
7 storm processes, windstorm patterns, and wind-
8 storm frequencies;

9 “(C) encourage prompt dissemination of
10 significant findings, sharing of data, samples,
11 physical collections, and other supporting mate-
12 rials, and development of intellectual property
13 so research results can be used by appropriate
14 organizations to mitigate windstorm damage;

15 “(D) work with other Program agencies to
16 maintain awareness of, and where appropriate
17 cooperate with, windstorm risk reduction re-
18 search efforts in other countries, to ensure that
19 the Program benefits from relevant information
20 and advances in those countries; and

21 “(E) include to the maximum extent prac-
22 ticable diverse institutions, including Histori-
23 cally Black Colleges and Universities, Hispanic-
24 serving institutions, Tribal Colleges and Univer-

1 sities, Alaska Native-serving institutions, and
2 Native Hawaiian-serving institutions.”.

3 **SEC. 205. AUTHORIZATION OF APPROPRIATIONS.**

4 Section 207 of the National Windstorm Impact Re-
5 duction Program of 2004 (42 U.S.C. 15706) is amended
6 to read as follows:

7 **“SEC. 207. AUTHORIZATION OF APPROPRIATIONS.**

8 “(a) FEDERAL EMERGENCY MANAGEMENT AGEN-
9 CY.—There are authorized to be appropriated to the Fed-
10 eral Emergency Management Agency for carrying out this
11 title—

12 “(1) \$9,682,000 for fiscal year 2011;

13 “(2) \$9,972,500 for fiscal year 2012;

14 “(3) \$10,271,600 for fiscal year 2013;

15 “(4) \$10,579,800 for fiscal year 2014; and

16 “(5) \$10,897,200 for fiscal year 2015.

17 “(b) NATIONAL SCIENCE FOUNDATION.—There are
18 authorized to be appropriated to the National Science
19 Foundation for carrying out this title—

20 “(1) \$9,682,000 for fiscal year 2011;

21 “(2) \$9,972,500 for fiscal year 2012;

22 “(3) \$10,271,600 for fiscal year 2013;

23 “(4) \$10,579,800 for fiscal year 2014; and

24 “(5) \$10,897,200 for fiscal year 2015.

1 “(c) NATIONAL INSTITUTE OF STANDARDS AND
2 TECHNOLOGY.—There are authorized to be appropriated
3 to the National Institute of Standards and Technology for
4 carrying out this title—

5 “(1) \$4,120,000 for fiscal year 2011;

6 “(2) \$5,300,000 for fiscal year 2012;

7 “(3) \$5,460,000 for fiscal year 2013;

8 “(4) \$5,620,000 for fiscal year 2014; and

9 “(5) \$5,790,000 for fiscal year 2015.

10 “(d) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN-
11 ISTRATION.—There are authorized to be appropriated to
12 the National Oceanic and Atmospheric Administration for
13 carrying out this title—

14 “(1) \$2,266,000 for fiscal year 2011;

15 “(2) \$2,700,000 for fiscal year 2012;

16 “(3) \$2,780,000 for fiscal year 2013;

17 “(4) \$2,860,000 for fiscal year 2014; and

18 “(5) \$2,950,000 for fiscal year 2015.”.

1 **TITLE III—INTERAGENCY CO-**
2 **ORDINATING COMMITTEE ON**
3 **NATURAL HAZARDS RISK RE-**
4 **DUCTION**

5 **SEC. 301. INTERAGENCY COORDINATING COMMITTEE ON**
6 **NATURAL HAZARDS RISK REDUCTION.**

7 (a) IN GENERAL.—There is established an Inter-
8 agency Coordinating Committee on Natural Hazards Risk
9 Reduction, chaired by the Director of the National Insti-
10 tute of Standards and Technology.

11 (1) MEMBERSHIP.—In addition to the chair,
12 the Committee shall be composed of—

13 (A) the directors of—

14 (i) the Federal Emergency Manage-
15 ment Agency;

16 (ii) the United State Geological Sur-
17 vey;

18 (iii) the National Oceanic and Atmos-
19 pheric Administration;

20 (iv) the National Science Foundation;

21 (v) the Office of Science and Tech-
22 nology Policy; and

23 (vi) the Office of Management and
24 Budget; and

1 (B) the head of any other Federal agency
2 the Committee considers appropriate.

3 (2) MEETINGS.—The Committee shall not meet
4 less than 2 times a year at the call of the Director
5 of the National Institute of Standards and Tech-
6 nology.

7 (3) GENERAL PURPOSE AND DUTIES.—The
8 Committee shall oversee the planning and coordina-
9 tion of the National Earthquake Hazards Reduction
10 Program and the National Windstorm Impact Re-
11 duction Program, and shall make proposals for plan-
12 ning and coordination of any other Federal research
13 for natural hazard mitigation that the Committee
14 considers appropriate.

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

18 (A) a Strategic Plan for the National
19 Earthquake Hazards Reduction Program that
20 includes—

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

1 (ii) short-term, mid-term, and long-
2 term research objectives to achieve those
3 goals;

4 (iii) a description of the role of each
5 Program agency in achieving the
6 prioritized goals;

7 (iv) the methods by which progress to-
8 wards the goals will be assessed;

9 (v) an explanation of how the Pro-
10 gram will foster the transfer of research
11 results onto outcomes, such as improved
12 building codes;

13 (vi) a description of the role of social
14 science in informing the development of
15 the prioritized goals and research objec-
16 tives; and

17 (vii) a description of how the George
18 E. Brown, Jr. Network for Earthquake
19 Engineering Simulation and the Advanced
20 National Seismic Research and Monitoring
21 System will be used in achieving the
22 prioritized goals and research objectives;
23 and

1 (B) a Strategic Plan for the National
2 Windstorm Impact Reduction Program that in-
3 cludes—

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

7 (ii) short-term, mid-term, and long-
8 term research objectives to achieve those
9 goals;

10 (iii) a description of the role of each
11 Program agency in achieving the
12 prioritized goals;

13 (iv) the methods by which progress to-
14 wards the goals will be assessed;

15 (v) an explanation of how the Pro-
16 gram will foster the transfer of research
17 results onto outcomes, such as improved
18 building codes; and

19 (vi) a description of the role of social
20 science in informing the development of
21 the prioritized goals and research objec-
22 tives.

23 (5) PROGRESS REPORTS.—Not later than one
24 year after the date of enactment of this Act, and at

1 least once every two years thereafter, the Committee
2 shall submit to the Congress—

3 (A) a report on the progress of the Na-
4 tional Earthquake Hazards Reduction Program
5 that includes—

6 (i) a description of the activities fund-
7 ed for the previous two years of the Pro-
8 gram, a description of how these activities
9 align with the prioritized goals and re-
10 search objectives established in the Stra-
11 tegic Plan, and the budgets, per agency,
12 for these activities;

13 (ii) the outcomes achieved by the Pro-
14 gram for each of the goals identified in the
15 Strategic Plan;

16 (iii) a description of any recommenda-
17 tions made to change existing building
18 codes that were the result of Program ac-
19 tivities; and

20 (iv) a description of the extent to
21 which the Program has incorporated rec-
22 ommendations from the Advisory Com-
23 mittee on Earthquake Hazards Reduction;
24 and

1 (B) a report on the progress of the Na-
2 tional Windstorm Impact Reduction Program
3 that includes—

4 (i) a description of the activities fund-
5 ed for the previous two years of the Pro-
6 gram, a description of how these activities
7 align with the prioritized goals and re-
8 search objectives established in the Stra-
9 tegic Plan, and the budgets, per agency,
10 for these activities;

11 (ii) the outcomes achieved by the Pro-
12 gram for each of the goals identified in the
13 Strategic Plan;

14 (iii) a description of any recommenda-
15 tions made to change existing building
16 codes that were the result of Program ac-
17 tivities; and

18 (iv) a description of the extent to
19 which the Program has incorporated rec-
20 ommendations from the Advisory Com-
21 mittee on Windstorm Impact Reduction.

22 (6) COORDINATED BUDGET.—The Committee
23 shall develop a coordinated budget for the National
24 Earthquake Hazards Reduction Program and a co-
25 ordinated budget for the National Windstorm Im-

1 pact Reduction Program. These budgets shall be
2 submitted to the Congress at the time of the Presi-
3 dent's budget submission for each fiscal year.

4 (b) ADVISORY COMMITTEES ON NATURAL HAZARDS
5 REDUCTION.—

6 (1) IN GENERAL.—The Director of the National
7 Institute of Standards and Technology shall estab-
8 lish an Advisory Committee on Earthquake Hazards
9 Reduction, an Advisory Committee on Windstorm
10 Impact Reduction, and other such advisory commit-
11 tees as the Director considers necessary to advise
12 the Institute on research, development, and tech-
13 nology transfer activities to mitigate the impact of
14 natural disasters.

15 (2) ADVISORY COMMITTEE ON EARTHQUAKE
16 HAZARDS REDUCTION.—The Advisory Committee on
17 Earthquake Hazards Reduction shall be composed of
18 at least 11 members, none of whom may be employ-
19 ees of the Federal Government, including represent-
20 atives of research and academic institutions, indus-
21 try standards development organizations, emergency
22 management agencies, State and local government,
23 and business communities who are qualified to pro-
24 vide advice on earthquake hazards reduction and
25 represent all related scientific, architectural, and en-

1 gineering disciplines. The recommendations of the
2 Advisory Committee shall be considered by Federal
3 agencies in implementing the National Earthquake
4 Hazards Reduction Program.

5 (3) ADVISORY COMMITTEE ON WINDSTORM IM-
6 PACT REDUCTION.—The Advisory Committee on
7 Windstorm Impact Reduction shall be composed of
8 at least 7 members, none of whom may be employees
9 of the Federal Government, including representa-
10 tives of research and academic institutions, industry
11 standards development organizations, emergency
12 management agencies, State and local government,
13 and business communities who are qualified to pro-
14 vide advice on windstorm impact reduction and rep-
15 resent all related scientific, architectural, and engi-
16 neering disciplines. The recommendations of the Ad-
17 visory Committee shall be considered by Federal
18 agencies in implementing the National Windstorm
19 Impact Reduction Program.

20 (4) ASSESSMENTS.—The Advisory Committee
21 on Earthquake Hazards Reduction and the Advisory
22 Committee on Windstorm Impact Reduction shall
23 offer assessments on—

24 (A) trends and developments in the nat-
25 ural, social, and engineering sciences and prac-

1 tices of earthquake hazards or windstorm im-
2 pact mitigation;

3 (B) the priorities of the Programs' Stra-
4 tegic Plans;

5 (C) the coordination of the Programs; and

6 (D) and any revisions to the Programs
7 which may be necessary.

8 (5) REPORTS.—At least every two years, the
9 Advisory Committees shall report to the Director of
10 the National Institute of Standards and Technology
11 on the assessments carried out under paragraph (4)
12 and their recommendations for ways to improve the
13 Programs. In developing recommendations for the
14 National Earthquake Hazards Reduction Program,
15 the Advisory Committee on Earthquake Hazards Re-
16 duction shall consider the recommendations of the
17 United States Geological Survey Scientific Earth-
18 quake Studies Advisory Committee.

19 (c) COORDINATION OF FEDERAL DISASTER RE-
20 SEARCH, DEVELOPMENT, AND TECHNOLOGY TRANS-
21 FER.—Not later than 2 years after the date of enactment
22 of this Act, the Subcommittee on Disaster Reduction of
23 the Committee on Environment and Natural Resources of
24 the National Science and Technology Council shall submit
25 a report to the Congress identifying—

1 (1) current Federal research, development, and
2 technology transfer activities that address hazard
3 mitigation for natural disasters, including earth-
4 quakes, hurricanes, tornados, wildfires, floods, and
5 the current budgets for these activities;

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

9 (3) opportunities to create synergies between
10 the research activities for the hazards identified in
11 paragraph (1).

12 **TITLE IV—NATIONAL CON-**
13 **STRUCTION SAFETY TEAM**
14 **ACT AMENDMENTS**

15 **SEC. 401. NATIONAL CONSTRUCTION SAFETY TEAM ACT**
16 **AMENDMENTS.**

17 The National Construction Safety Team Act (15
18 U.S.C. 7301 et seq.) is amended—

19 (1) in section 2(a)—

20 (A) by striking “a building or buildings”
21 and inserting “a building, buildings, or infra-
22 structure”; and

23 (B) by striking “To the maximum extent
24 practicable, the Director shall establish and de-
25 ploy a Team within 48 hours after such an

1 event.” and inserting “The Director shall make
2 a decision whether to deploy a Team within 72
3 hours after such an event.”;

4 (2) in section 2(b)(1), by striking “buildings”
5 and inserting “buildings or infrastructure”;

6 (3) in section 2(b)(2)(A), by striking “building”
7 and inserting “building or infrastructure”;

8 (4) in section 2(b)(2)(D), by striking “build-
9 ings” and inserting “buildings or infrastructure”;

10 (5) in section 2(c)(1), by striking “the United
11 States Fire Administration and”;

12 (6) in section 2(c)(1)(G), by striking “building”
13 and inserting “building or infrastructure”;

14 (7) in section 2(c)(1)(J)—

15 (A) by striking “building” and inserting
16 “building or infrastructure”; and

17 (B) by inserting “and the National Wind-
18 storm Impact Reduction Act of 2004” after
19 “Act of 1977”;

20 (8) in section 4(a), by striking “investigating a
21 building” and inserting “investigating building and
22 infrastructure”;

23 (9) in section 4(a)(1)—

24 (A) by striking “a building” and inserting
25 “a building or infrastructure”; and

1 (B) by striking “building” both of the
2 other places it appears and inserting “building
3 or infrastructure”;

4 (10) in section 4(a)(3), by striking “building”
5 both places it appears and inserting “building or in-
6 frastructure”;

7 (11) in section 4(b), by striking “building” both
8 places it appears and inserting “building or infra-
9 structure”;

10 (12) in section 4(c)(1) and (2), by striking
11 “building” both places it appears and inserting
12 “building or infrastructure”;

13 (13) by amending section 4(d)(1) to read as fol-
14 lows:

15 “(1) IN GENERAL.—Except as otherwise pro-
16 vided in this subsection, a Team investigation shall
17 have priority over any other investigation which is
18 related to the purpose and duties set forth in section
19 2(b) and undertaken by any other Federal agency.”;

20 (14) in section 4(d)(3) and (4), by striking
21 “building” both places it appears and inserting
22 “building or infrastructure”;

23 (15) in section 4, by adding at the end the fol-
24 lowing new paragraph:

1 “(5) INFRASTRUCTURE INVESTIGATIONS.—With
2 respect to an investigation relating to an infrastruc-
3 ture failure, a Federal agency with primary jurisdic-
4 tion over the failed infrastructure which is con-
5 ducting an investigation and asserts priority over the
6 Team investigation shall have such priority. Such
7 priority shall not otherwise affect the authority of
8 the Team to continue its investigation under this
9 Act.”;

10 (16) in section 7(a), by striking “on request
11 and at reasonable cost”;

12 (17) in section 7(e), by striking “building” and
13 inserting “building or infrastructure”;

14 (18) in section 8(1) and (4), by striking “build-
15 ing” both places it appears and inserting “building
16 or infrastructure”;

17 (19) in section 9, by striking “the United
18 States Fire Administration and”;

19 (20) in section 9(2)(C), by striking “building”
20 and inserting “building or infrastructure”;

21 (21) in section 10(3), by striking “building”
22 and inserting “building and infrastructure”;

23 (22) in section 11(a), by striking “the United
24 States Fire Administration and”;

25 (23) by striking section 12.

1 **TITLE V—FIRE RESEARCH**
2 **PROGRAM**

3 **SEC. 501. FIRE RESEARCH PROGRAM.**

4 Section 16(a)(1) of the National Institute of Stand-
5 ards and Technology Act (15 U.S.C. 278f(a)(1)) is
6 amended—

7 (1) in subparagraph (D), by inserting “fires at
8 the wildland-urban interface,” after “but not limited
9 to,”; and

10 (2) in subparagraph (E), by inserting “fires at
11 the wildland-urban interface,” after “types of fires,
12 including”.

