nating Committee on Earthquake Hazards Reduction established under section 7704(a) of this title.

(9) The term "Advisory Committee" means the Advisory Committee established under section 7704(a)(5) of this title.

(Pub. L. 95-124, §4, Oct. 7, 1977, 91 Stat. 1099; Pub. L. 101-614, §4, Nov. 16, 1990, 104 Stat. 3232; Pub. L. 106-503, title II, §209, Nov. 13, 2000, 114 Stat. 2308; Pub. L. 108-360, title I, §102, Oct. 25, 2004, 118 Stat. 1668.)

#### Amendments

2004—Pars. (8), (9). Pub. L. 108-360 added pars. (8) and (9).

 $2000{-}{\rm Par.}$  (6). Pub. L.  $106{-}503$  inserted ''and infrastructure'' after ''communication facilities''.

1990—Par. (2). Pub. L. 101–614, §4(1), amended par. (2) generally. Prior to amendment, par. (2) read as follows: "The term 'program' means the earthquake hazards reduction program established under section 7704 of this title."

Pars. (6), (7). Pub. L. 101–614, 4(2), added pars. (6) and (7).

#### TRANSFER OF FUNCTIONS

For transfer of all functions, personnel, assets, components, authorities, grant programs, and liabilities of the Federal Emergency Management Agency, including the functions of the Under Secretary for Federal Emergency Management relating thereto, to the Federal Emergency Management Agency, see section 315(a)(1) of Title 6, Domestic Security.

For transfer of functions, personnel, assets, and liabilities of the Federal Emergency Management Agency, including the functions of the Director of the Federal Emergency Management Agency relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see former section 313(1) and sections 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

### §7704. National Earthquake Hazards Reduction Program

## (a) Establishment

### (1) In general

There is established the National Earthquake Hazards Reduction Program.

## (2) Program activities

The activities of the Program shall be designed to—

(A) develop effective measures for earthquake hazards reduction;

(B) promote the adoption of earthquake hazards reduction measures by Federal, State, and local governments, national standards and model code organizations, architects and engineers, building owners, and others with a role in planning and constructing buildings, structures, and lifelines through—

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

(ii) development of standards, guidelines, and voluntary consensus codes for earthquake hazards reduction for buildings, structures, and lifelines;

(iii) development and maintenance of a repository of information, including technical data, on seismic risk and hazards reduction; and (C) improve the understanding of earthquakes and their effects on communities, buildings, structures, and lifelines, through interdisciplinary research that involves engineering, natural sciences, and social, economic, and decisions sciences; and

(D) develop, operate, and maintain an Advanced National Seismic Research and Monitoring System established under section 7707 of this title, the George E. Brown, Jr. Network for Earthquake Engineering Simulation established under section 7708 of this title, and the Global Seismographic Network.

# (3) Interagency Coordinating Committee on Earthquake Hazards Reduction

## (A) In general

There is established an Interagency Coordinating Committee on Earthquake Hazards Reduction chaired by the Director of the National Institute of Standards and Technology (referred to in this subsection as the "Director").

## (B) Membership

The committee shall be composed of the directors of—

(i) the Federal Emergency Management Agency;

(ii) the United States Geological Survey;(iii) the National Science Foundation;

 $(\mathrm{iv})$  the Office of Science and Technology Policy; and

 $\left( v\right)$  the Office of Management and Budget.

### (C) Meetings

The Committee shall meet not less than 3 times a year at the call of the Director.

### (D) Purpose and duties

The Interagency Coordinating Committee shall oversee the planning, management, and coordination of the Program. The Interagency Coordinating Committee shall—

(i) develop, not later than 6 months after October 25, 2004, and update periodically—

(I) a strategic plan that establishes goals and priorities for the Program activities described under subsection (a)(2) of this section; and

(II) a detailed management plan to implement such strategic plan; and

(ii) develop a coordinated interagency budget for the Program that will ensure appropriate balance among the Program activities described under subsection (a)(2)of this section, and, in accordance with the plans developed under clause (i), submit such budget to the Director of the Office of Management and Budget at the time designated by that office for agencies to submit annual budgets.

#### (4) Annual report

The Interagency Coordinating Committee shall transmit, at the time of the President's budget request to Congress, an annual report to the Committee on Science and the Committee on Resources of the House of Representatives, and the Committee on Commerce, Science, and Transportation of the Senate. Such report shall include—

(A) the Program budget for the current fiscal year for each agency that participates in the Program, and for each major goal established for the Program activities under subparagraph (3)(A);

(B) the proposed Program budget for the next fiscal year for each agency that participates in the Program, and for each major goal established for the Program activities under subparagraph (3)(A);

(C) a description of the activities and results of the Program during the previous year, including an assessment of the effectiveness of the Program in furthering the goals established in the strategic plan under  $(3)(A)^1$ ;

(D) a description of the extent to which the Program has incorporated the recommendations of the Advisory Committee;

(E) a description of activities, including budgets for the current fiscal year and proposed budgets for the next fiscal year, that are carried out by Program agencies and contribute to the Program, but are not included in the Program; and

(F) a description of the activities, including budgets for the current fiscal year and proposed budgets for the following fiscal year, related to the grant program carried out under subsection (b)(2)(A)(i) of this section.

### (5) Advisory Committee

# (A) In general

The Director shall establish an Advisory Committee on Earthquake Hazards Reduction of at least 11 members. none of whom may be an employee (as defined in subparagraphs (A) through (F) of section 7342(a)(1) of title 5<sup>2</sup> including representatives of research and academic institutions, industry standards development organizations, State and local government, and financial communities who are qualified to provide advice on earthquake hazards 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) Assessment

The Advisory Committee shall assess-

(i) trends and developments in the science and engineering of earthquake hazards reduction;

(ii) effectiveness of the Program in carrying out the activities under  $(a)(2)^3$  of this section;

(iii) the need to revise the Program; and (iv) the management, coordination, implementation, and activities of the Program.

#### (C) Report

Not later than 1 year after October 25, 2004, and at least once every 2 years thereafter, the Advisory Committee shall report to the Director on its findings of the assessment carried out under subparagraph (B) and its recommendations for ways to improve the Program. In developing recommendations, the Committee shall consider the recommendations of the United States Geological Survey Scientific Earthquake Studies Advisory Committee.

## (D) Federal Advisory Committee Act application

Section 14 of the Federal Advisory Committee Act (5 App. U.S.C. 14) shall not apply to the Advisory Committee.

# (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 Program. In carrying out this paragraph, the Director of the Institute shall—

(A) ensure that the Program includes the necessary steps to promote the implementation of earthquake hazard 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 seismic engineering tools, and work with appropriate groups to promote the commercial application of such tools, through earthquake-related building codes, standards, and construction practices;

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

(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.

# (2) Department of Homeland Security; Federal Emergency Management Agency

# (A) Program responsibilities

The Under Secretary of Homeland Security for Emergency Preparedness and Response (the Administrator of the Federal Emergency Management Agency)—

(i) shall work closely with national standards and model building code organizations, in conjunction with the National Institute of Standards and Technology, to promote the implementation of research results;

(ii) shall promote better building practices within the building design and con-

<sup>&</sup>lt;sup>1</sup>So in original. Probably should be preceded by "subparagraph".

<sup>&</sup>lt;sup>2</sup>So in original. Probably should be followed by a closing parenthesis.

<sup>&</sup>lt;sup>3</sup>So in original. Probably should be preceded by "subsection".

struction industry including architects, engineers, contractors, builders, and inspectors;

(iii) shall operate a program of grants and assistance to enable States to develop mitigation, preparedness, and response plans, prepare inventories and conduct seismic safety inspections of critical structures and lifelines, update building and zoning codes and ordinances to enhance seismic safety, increase earthquake awareness and education, and encourage the development of multi-State groups for such purposes;

(iv) shall support the implementation of a comprehensive earthquake education and public awareness program, including development of materials and their wide dissemination to all appropriate audiences and support public access to locality-specific information that may assist the public in preparing for, mitigating against, responding to and recovering from earthquakes and related disasters;

(v) shall assist the National Institute of Standards and Technology, other Federal agencies, and private sector groups, in the preparation, maintenance, and wide dissemination of seismic resistant design guidance and related information on building codes, standards, and practices for new and existing buildings, structures, and lifelines, and aid in the development of performance-based design guidelines and methodologies supporting model codes for buildings, structures, and lifelines that are cost effective and affordable;

(vi) shall develop, coordinate, and execute the National Response Plan when required following an earthquake, and support the development of specific State and local plans for each high risk area to ensure the availability of adequate emergency medical resources, search and rescue personnel and equipment, and emergency broadcast capability;

(vii) shall develop approaches to combine measures for earthquake hazards reduction with measures for reduction of other natural and technological hazards including performance-based design approaches;

(viii) shall provide preparedness, response, and mitigation recommendations to communities after an earthquake prediction has been made under paragraph (3)(D); and

(ix) may enter into cooperative agreements or contracts with States and local jurisdictions and other Federal agencies to establish demonstration projects on earthquake hazard mitigation, to link earthquake research and mitigation efforts with emergency management programs, or to prepare educational materials for national distribution.

### (B) State assistance program criteria

In order to qualify for assistance under subparagraph (A)(i), a State must—

(i) demonstrate that the assistance will result in enhanced seismic safety in the State; (ii) provide a share of the costs of the activities for which assistance is being given, in accordance with subparagraph (C); and

(iii) meet such other requirements as the Administrator of the Agency shall prescribe.

#### (C) Non-Federal cost sharing

(i) In the case of any State which has received, before October 1, 1990, a grant from the Agency for activities under this chapter which included a requirement for cost sharing by matching such grant, any grant obtained from the Agency for activities under subparagraph (A)(i) after such date shall not include a requirement for cost sharing in an amount greater than 50 percent of the cost of the project for which the grant is made.

(ii) In the case of any State which has not received, before October 1, 1990, a grant from the Agency for activities under this chapter which included a requirement for cost sharing by matching such grant, any grant obtained from the Agency for activities under subparagraph (A)(i) after such date—

(I) shall not include a requirement for cost sharing for the first fiscal year of such a grant;

(II) shall not include a requirement for cost sharing in an amount greater than 25 percent of the cost of the project for which the grant is made for the second fiscal year of such grant, and any cost sharing requirement may be satisfied through inkind contributions;

(III) shall not include a requirement for cost sharing in an amount greater than 35 percent of the cost of the project for which the grant is made for the third fiscal year of such grant, and any cost sharing requirement may be satisfied through inkind contributions; and

(IV) shall not include a requirement for cost sharing in an amount greater than 50 percent of the cost of the project for which the grant is made for the fourth and subsequent fiscal years of such grant.

### (3) United States Geological Survey

The United States Geological Survey shall conduct research and other activities necessary to characterize and identify earthquake hazards, assess earthquake risks, monitor seismic activity, and improve earthquake predictions. In carrying out this paragraph, the Director of the United States Geological Survey shall—

(A) conduct a systematic assessment of the seismic risks in each region of the Nation prone to earthquakes, including, where appropriate, the establishment and operation of intensive monitoring projects on hazardous faults, seismic microzonation studies in urban and other developed areas where earthquake risk is determined to be significant, and engineering seismology studies:

(B) work with officials of State and local governments to ensure that they are knowledgeable about the specific seismic risks in their areas;

(C) develop standard procedures, in consultation with the Administrator of the Federal Emergency Management Agency and

the Director of the National Institute of Standards and Technology, for issuing earthquake predictions, including aftershock advisories;

(D) issue when necessary, and notify the Administrator of the Federal Emergency Management Agency and the Director of the National Institute of Standards and Technology of, an earthquake prediction or other earthquake advisory, which may be evaluated by the National Earthquake Prediction Evaluation Council, which shall be exempt from the requirements of section 10(a)(2) of the Federal Advisory Committee Act when meeting for such purposes;

(E) operate, using the National Earthquake Information Center, a forum for the international exchange of earthquake information which shall—

(i) promote the exchange of information on earthquake research and earthquake preparedness between the United States and other nations;

(ii) maintain a library containing selected reports, research papers, and data produced through the Program;

(iii) answer requests from other nations for information on United States earthquake research and earthquake preparedness programs; and

(iv) direct foreign requests to the agency involved in the Program which is best able to respond to the request;

(F) operate a National Seismic System;

(G) support regional seismic networks, which shall complement the National Seismic Network; and  $^4$ 

(H) work with the National Science Foundation, the Federal Emergency Management Agency, and the National Institute of Standards and Technology to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence 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.<sup>5</sup>

(I) work with other Program agencies to coordinate Program activities with similar earthquake hazards reduction efforts in other countries, to ensure that the Program benefits from relevant information and advances in those countries; and

(J) maintain suitable seismic hazard maps in support of building codes for structures and lifelines, including additional maps needed for performance-based design approaches.

### (4) National Science Foundation

The National Science Foundation shall be responsible for funding research on earth sciences to improve the understanding of the causes and behavior of earthquakes, on earthquake engineering, and on human response to earthquakes. In carrying out this paragraph, the Director of the National Science Foundation shall—

(A) encourage prompt dissemination of significant findings, sharing of data, samples, physical collections, and other supporting materials, and development of intellectual property so research results can be used by appropriate organizations to mitigate earthquake damage;

(B) in addition to supporting individual investigators, support university research consortia and centers for research in geosciences and in earthquake engineering;

(C) work closely with the United States Geological Survey to identify geographic regions of national concern that should be the focus of targeted solicitations for earthquake-related research proposals;

(D) support research that improves the safety and performance of buildings, structures, and lifeline systems using large-scale experimental and computational facilities of the George E. Brown Jr. Network for Earthquake Engineering Simulation and other institutions engaged in research and the implementation of the National Earthquake Hazards Reduction Program;

(E) emphasize, in earthquake engineering research, development of economically feasible methods to retrofit existing buildings and to protect lifelines to mitigate earthquake damage;

(F) support research that studies the political, economic, and social factors that influence the implementation of hazard reduction measures;

(G) include to the maximum extent practicable diverse institutions, including Historically Black Colleges and Universities and those serving large proportions of Hispanics, Native Americans, Asian-Pacific Americans, and other underrepresented populations; and

(H) develop, in conjunction with the Federal Emergency Management Agency, the National Institute of Standards and Technology, and the United States Geological Survey, a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence 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.

### (5) 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 building codes and standards and practices for structures and lifelines. In carrying out this paragraph, the Director of the National Institute of Standards and Technology shall—

(A) work closely with national standards and model building code organizations, in conjunction with the Agency, to promote the implementation of research results;

 $<sup>^{4}\,\</sup>mathrm{So}$  in original. The word ''and'' probably should not appear.

 $<sup>^5\,\</sup>mathrm{So}$  in original. The period probably should be a semicolon.

(B) promote better building practices among architects and engineers;

(C) work closely with national standards organizations to develop seismic safety standards and practices for new and existing lifelines;

(D) support the development and commercial application of cost effective and affordable performance-based seismic engineering by providing technical support for seismic engineering practices and related building code, standards, and practices development; and

(E) work with the National Science Foundation, the Federal Emergency Management Agency, and the United States Geological Survey to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence 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.

### (c) Budget coordination

### (1) Guidance

The Interagency Coordinating Committee shall each year provide guidance to the other Program agencies concerning the preparation of requests for appropriations for activities related to the Program, and shall prepare, in conjunction with the other Program agencies, an annual Program budget to be submitted to the Office of Management and Budget.

## (2) Reports

Each Program agency shall include with its annual request for appropriations submitted to the Office of Management and Budget a report that—

(A) identifies each element of the proposed Program activities of the agency;

(B) specifies how each of these activities contributes to the Program; and

(C) states the portion of its request for appropriations allocated to each element of the Program.

(Pub. L. 95–124, §5, Oct. 7, 1977, 91 Stat. 1099; Pub. L. 96–472, title I, §101, Oct. 19, 1980, 94 Stat. 2257; Pub. L. 99–105, §§5, 6, Sept. 30, 1985, 99 Stat. 475; Pub. L. 100–252, §2, Feb. 29, 1988, 102 Stat. 18; Pub. L. 100–418, title V, §5115(c), Aug. 23, 1988, 102 Stat. 1433; Pub. L. 100–707, title I, §109(u), Nov. 23, 1988, 102 Stat. 4710; Pub. L. 101–614, §5, Nov. 16, 1990, 104 Stat. 3232; Pub. L. 105–47, §3, Oct. 1, 1997, 111 Stat. 1162; Pub. L. 106–503, title II, §§206, 208, Nov. 13, 2000, 114 Stat. 2307; Pub. L. 108–360, title I, §103, Oct. 25, 2004, 118 Stat. 1669; Pub. L. 109–295, title VI, §612(c), Oct. 4, 2006, 120 Stat. 1410.)

#### References in Text

Sections 14 and 10(a)(2) of the Federal Advisory Committee Act, referred to in subsecs. (a)(5)(D) and (b)(3)(D), are sections 14 and 10(a)(2) of Pub. L. 92–463, which are set out in the Appendix to Title 5, Government Organization and Employees.

#### Amendments

 $2004{--}Subsec.$  (a). Pub. L. 108-360, 103(1), amended heading and text of subsec. (a) generally. Prior to

amendment, text read as follows: "There is established a National Earthquake Hazards Reduction Program."

Subsec. (b)(1). Pub. L. 108-360, §103(2)(A)(i), (iv), in introductory provisions, substituted "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" for "Federal Emergency Management Agency (hereafter in this chapter referred to as the 'Agency') shall have the primary responsibility for planning and coordinating the Program. In carrying out this paragraph, the Director of the Agency" and struck out concluding provisions which read as follows: "The principal official carrying out the responsibilities described in this paragraph shall be at a level no lower than that of Associate Director."

Subsec. (b)(1)(B). Pub. L. 108–360, §103(2)(A)(ii), (iii), added subpar. (B) and struck out former subpar. (B) which read as follows: "prepare, in conjunction with the other Program agencies, a written plan for the Program, which shall include specific tasks and milestones for each Program agency, and which shall be submitted to the Congress and updated at such times as may be required by significant Program events, but in no event less frequently than every 3 years;".

less frequently than every 3 years;". Subsec. (b)(1)(C). Pub. L. 108-360, \$103(2)(A)(ii), redesignated subpar. (D) as (C) and struck out former subpar. (C) which read as follows: "prepare, in conjunction with the other Program agencies, a biennial report, to be submitted to the Congress within 90 days after the end of each even-numbered fiscal year, which shall describe the activities and achievements of the Program during the preceding two fiscal years;".

Subsec. (b)(1)(D), (E). Pub. L. 108-360, §103(2)(A)(ii), (v), redesignated subpar. (E) as (D) and substituted "Federal Emergency Management Agency, the National Science Foundation" for "National Science Foundation, the National Institute of Standards and Technology". Former subpar. (D) redesignated (C).

Subsec. (b)(2). Pub. L. 108-360, §103(2)(B), inserted heading, struck out former heading "Federal Emergency Management Agency", added subpar. (A), and struck out heading and text of former subpar. (A) which related to earthquake program responsibilities of the Director of the Federal Emergency Management Agency.

Subsec. (b)(3). Pub. L. 108-360, 103(2)(C)(i), inserted "and other activities" after "shall conduct research" in introductory provisions.

Subsec. (b)(3)(C). Pub. L. 108-360, §103(2)(C)(ii), substituted "the Director of the Federal Emergency Management Agency and the Director of the National Institute of Standards and Technology" for "the Agency".

Subsec. (b)(3)(D). Pub. L. 108–360, §103(2)(C)(iii), substituted "the Director of the Federal Emergency Management Agency and the Director of the National Institute of Standards and Technology" for "the Director of the Agency".

Subsec. (b)(3)(E). Pub. L. 108-360, 103(2)(C)(iv), substituted "operate, using the National Earthquake Information Center, a forum for the international exchange of earthquake information" for "establish, using existing facilities, a Center for the International Exchange of Earthquake Information" in introductory provisions.

Subsec. (b)(3)(F). Pub. L. 108-360, §103(2)(C)(v), substituted "System" for "Network".

Subsec. (b)(3)(I), (J). Pub. L. 108-360, 103(2)(C)(vi), added subpars. (I) and (J).

Subsec. (b)(4)(D) to (H). Pub. L. 108-360, 103(2)(D), added subpars. (D) and (G) and redesignated former sub-

pars. (D), (E), and (F) as (E), (F), and (H), respectively. Subsec. (b)(5). Pub. L. 108-360, §103(2)(E), in introductory provisions, substituted "In addition to the lead agency responsibilities described under paragraph (1), the National" for "The National".

Subsec. (b)(5)(D), (E). Pub. L. 108–360, 103(2)(F), added subpar. (D) and redesignated former subpar. (D) as (E).

Subsec. (c)(1). Pub. L. 108-360, §103(3), substituted "Interagency Coordinating Committee" for "Agency".

2000—Subsec. (b)(1). Pub. L. 106-503, §206(1), redesignated subpars. (B) to (F) as (A) to (E), respectively, and struck out former subpar. (A) which read as follows: "prepare, in conjunction with the other Program agencies, an annual budget for the Program to be submitted to the Office of Management and Budget;".

Subsec. (b)(2)(A)(ii). Pub. L. 106-503, §208, inserted before semicolon at end ", and development of means of increasing public access to available locality-specific information that may assist the public in preparing for or responding to earthquakes".

Subsec. (c). Pub. L. 106-503, §206(2), added subsec. (c). 1997—Subsec. (b)(1)(F). Pub. L. 105-47, §3(b), added subpar. (F).

Subsec. (b)(3)(H). Pub. L. 105-47, §3(c), added subpar. (H).

Subsec. (b)(4)(F). Pub. L. 105-47, §3(a), added subpar. (F).

Subsec. (b)(5)(D). Pub. L. 105-47, §3(d), added subpar. (D).

1990—Pub. L. 101-614 amended section generally, substituting present provisions consisting of subsecs. (a) and (b) for former provisions which provided for: in subsec. (a), establishment of program; in subsec. (b), duties of President and Director of Federal Emergency Management Agency; in subsec. (c), objectives of program; in subsec. (d), Federal participation; in subsec. (e), research elements; in subsec. (f), mitigation elements; in subsec. (g), State assistance; in subsec. (h), non-Federal participation; in subsec. (i), study and recommendations on disaster relief; and in subsec. (j), cost sharing.

1988—Subsec. (b)(2)(F). Pub. L. 100–418 substituted "National Institute of Standards and Technology" for "National Bureau of Standards".

Subsecs. (g), (i). Pub. L. 100-707 substituted "Disaster Relief and Emergency Assistance Act" for "Disaster Relief Act of 1974".

Subsec. (j). Pub. L. 100-252 added subsec. (j).

1985—Subsec. (b)(2)(E). Pub. L. 99–105, §5, amended subpar. (E) generally, substituting "to be submitted to the Congress and updated at such times as may be required by significant program events, but in no event less frequently than every three years;" for "which plan will recommend base and incremental budget options for the agencies to carry out the elements and programs specified through at least 1985, and which plan shall be completed by September 30, 1981, and transmitted to the Congress and shall be updated annually; and".

Subsec. (b)(2)(F), (G). Pub. L. 99–105, §6, added subpar. (F) and redesignated former subpar. (F) as (G).

1980—Subsec. (a). Pub. L. 96–472, §101(a), inserted provisions relating to non-Federal participation in par. (2), and substituted provisions respecting the elements described in subsec. (f) of this section, for provisions respecting the implementation plan described in subsec. (f) of this section in par. (3).

Subsec. (b). Pub. L. 96-472, \$101(b), substituted provisions setting forth the duties of the President and the Director of the Federal Emergency Management Agency with respect to the Program for provisions setting forth the duties of the President with respect to the program and plan.

Subsec. (d). Pub. L. 96-472, §101(c), substituted "(1)(A)" for "(3)(B)", "Department of Commerce" for "National Bureau of Standards", and "Federal Emergency Management Agency" for "National Fire Prevention and Control Administration".

Subsec. (e)(6). Pub. L. 96-472, §101(d), substituted "potential" for "political". Subsec. (f). Pub. L. 96-472, §101(e), substituted in pro-

Subsec. (f). Pub. L. 96-472, §101(e), substituted in provision preceding par. (1), provision directing that the mitigation elements of the program are to be as specified in pars. (1) to (8) for provision authorizing the establishment of a implementation plan, year-by-year targets, and Federal and non-Federal roles, in par. (1), substituted provision including as one of the mitigating elements, issuance of earthquake predictions for provision including in the implementation plan development of measures in preparing for earthquakes, actual predictions, warnings, and insuring a comprehensive response to an earthquake, added pars. (7) and (8), and struck out provision following par. (8), that when the implementation plan developed by the President contemplates specific action to be taken by a Federal agency, department, or entity, and at the end of the 30day period beginning on the date the President submits such plan to the appropriate authorizing committees of Congress and such action has not been initiated, the President submit to such committees a report why such action has not been taken.

Subsec. (i). Pub. L. 96-472, §101(f), added subsec. (i).

### CHANGE OF NAME

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007. Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

Committee on Resources of House of Representatives changed to Committee on Natural Resources of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.

"Administrator of the Federal Emergency Management Agency" and "Administrator of the Agency" substituted for "Director of the Federal Emergency Management Agency" and "Director of the Agency", respectively, in subsec. (b)(2)(A), (B)(iii), (3)(C), (D) on authority of section 612(c) of Pub. L. 109–295, set out as a note under section 313 of Title 6, Domestic Security. Any reference to the Administrator of the Federal Emergency Management Agency in title VI of Pub. L. 109–295 or an amendment by title VI to be considered to refer and apply to the Director of the Federal Emergency Management Agency until Mar. 31, 2007, see section 612(f)(2) of Pub. L. 109–295, set out as a note under section 313 of Title 6.

#### TRANSFER OF FUNCTIONS

For transfer of all functions, personnel, assets, components, authorities, grant programs, and liabilities of the Federal Emergency Management Agency, including the functions of the Under Secretary for Federal Emergency Management relating thereto, to the Federal Emergency Management Agency, see section 315(a)(1) of Title 6, Domestic Security.

For transfer of functions, personnel, assets, and liabilities of the Federal Emergency Management Agency, including the functions of the Director of the Federal Emergency Management Agency relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see former section 313(1) and sections 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

#### REAL-TIME PUBLIC AVAILABILITY OF RAW SEISMOLOGICAL DATA

Pub. L. 107-228, div. B, title XVI, §1602, Sept. 30, 2002, 116 Stat. 1460, provided that: "The head of the Air Force Technical Applications Center shall make available to the public, immediately upon receipt or as soon after receipt as is practicable, all raw seismological data provided to the United States Government by any international monitoring organization that is directly responsible for seismological monitoring."

Pub. L. 106-113, div. B, \$1000(a)(7) [div. B, title XI, \$1116], Nov. 29, 1999, 113 Stat. 1536, 1501A-489, provided that: "The United States Government shall, to the maximum extent practicable, make available to the public in real time, or as quickly as possible, all raw seismological data provided to the United States Government by any international organization that is directly responsible for seismological monitoring.

AUTHORIZATION OF REAL-TIME SEISMIC HAZARD WARN-ING SYSTEM DEVELOPMENT, AND OTHER ACTIVITIES

Pub. L. 105-47, §2, Oct. 1, 1997, 111 Stat. 1160, as amended by Pub. L. 106-503, title II, §202(c), Nov. 13, 2000, 114 Stat. 2305; Pub. L. 107-110, title X, §1076(cc), Jan. 8, 2002, 115 Stat. 2093; Pub. L. 114-95, title IX, §9215(aa), Dec. 10, 2015, 129 Stat. 2172, provided that: "(a) AUTOMATIC SEISMIC WARNING SYSTEM DEVELOP-MENT.-

"(1) DEFINITIONS.—In this section:

"(A) DIRECTOR.—The term 'Director' means the Director of the United States Geological Survey.

(B) HIGH-RISK ACTIVITY.—The term 'high-risk activity' means an activity that may be adversely affected by a moderate to severe seismic event (as determined by the Director). The term includes highspeed rail transportation.

"(C) REAL-TIME SEISMIC WARNING SYSTEM.-The term 'real-time seismic warning system' means a system that issues warnings in real-time from a network of seismic sensors to a set of analysis processors, directly to receivers related to high-risk activities.

"(2) IN GENERAL.—The Director shall conduct a program to develop a prototype real-time seismic warning system. The Director may enter into such agreements or contracts as may be necessary to carry out the program.

"(3) UPGRADE OF SEISMIC SENSORS.—In carrying out a program under paragraph (2), in order to increase the accuracy and speed of seismic event analysis to provide for timely warning signals, the Director shall provide for the upgrading of the network of seismic sensors participating in the prototype to increase the capability of the sensors-

"(A) to measure accurately large magnitude seismic events (as determined by the Director): and

"(B) to acquire additional parametric data.

"(4) DEVELOPMENT OF COMMUNICATIONS AND COM-PUTATION INFRASTRUCTURE.-In carrying out a program under paragraph (2), the Director shall develop a communications and computation infrastructure that is necessarv-

"(A) to process the data obtained from the upgraded seismic sensor network referred to in paragraph (3); and

'(B) to provide for, and carry out, such communications engineering and development as is necessarv to facilitate-

"(i) the timely flow of data within a real-time seismic hazard warning system; and

"(ii) the issuance of warnings to receivers related to high-risk activities.

"(5) PROCUREMENT OF COMPUTER HARDWARE AND COM-PUTER SOFTWARE .- In carrying out a program under paragraph (2), the Director shall procure such computer hardware and computer software as may be necessary to carry out the program.

(6) REPORTS ON PROGRESS.-

"(A) IN GENERAL.—Not later than 120 days after the date of enactment of this Act [Oct. 1, 1997], the Director shall prepare and submit to Congress a report that contains a plan for implementing a realtime seismic hazard warning system.

(B) ADDITIONAL REPORTS.—Not later than 1 year after the date on which the Director submits the report under subparagraph (A), and annually thereafter, the Director shall prepare and submit to Congress a report that summarizes the progress of the Director in implementing the plan referred to in subparagraph (A).

"(7) AUTHORIZATION OF APPROPRIATIONS .- In addition to the amounts made available to the Director under section 12(b) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7706(b)), there are authorized to be appropriated to the Department of the Interior, to be used by the Director to carry out paragraph (2), \$3,000,000 for each of fiscal years 1998 and 1999; \$2,600,000 for fiscal year 2001; \$2,710,000 for fiscal year 2002; and \$2,825,000 for fiscal year 2003.

(b) SEISMIC MONITORING NETWORKS ASSESSMENT.

"(1) IN GENERAL.—The Director shall provide for an assessment of regional seismic monitoring networks in the United States. The assessment shall address

"(A) the need to update the infrastructure used for collecting seismological data for research and monitoring of seismic events in the United States;

"(B) the need for expanding the capability to record strong ground motions, especially for urban area engineering purposes;

"(C) the need to measure accurately large magnitude seismic events (as determined by the Director);

"(D) the need to acquire additional parametric data; and

"(E) projected costs for meeting the needs described in subparagraphs (A) through (D).

"(2) RESULTS.—The Director shall transmit the results of the assessment conducted under this subsection to Congress not later than 1 year after the date of enactment of this Act [Oct. 1, 1997].

(c) EARTH SCIENCE TEACHING MATERIALS.

(1) DEFINITIONS.—In this subsection:

"(A) LOCAL EDUCATIONAL AGENCY.-The term 'local educational agency' has the meaning given that term in section 8101 of the Elementary and Secondary Education Act of 1965 [20 U.S.C. 7801].

"(B) SCHOOL.-The term 'school' means a nonprofit institutional day or residential school that provides education for any of the grades kindergarten through grade 12.

(2) TEACHING MATERIALS.—In a manner consistent with the requirement under section 5(b)(4) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704(b)(4)) and subject to a merit based competitive process, the Director of the National Science Foundation may use funds made available to him or her under section 12(c) of such Act (42 U.S.C. 7706(c)) to develop, and make available to schools and local educational agencies for use by schools, at a minimal cost, earth science teaching materials that are designed to meet the needs of elementary and secondary school teachers and students.

"(d) IMPROVED SEISMIC HAZARD ASSESSMENT .-

(1) IN GENERAL.—As soon as practicable after the date of enactment of this Act [Oct. 1, 1997], the Director shall conduct a project to improve the seismic hazard assessment of seismic zones.

(2) Reports.-

"(A) IN GENERAL.-Not later than 1 year after the date of enactment of this Act, and annually during the period of the project, the Director shall prepare, and submit to Congress, a report on the findings of the project.

"(B) FINAL REPORT.-Not later than 60 days after the date of termination of the project conducted under this subsection, the Director shall prepare and submit to Congress a report concerning the findings of the project. "(e) STUDY OF NATIONAL EARTHQUAKE EMERGENCY

TRAINING CAPABILITIES.-

(1) IN GENERAL.—The Director of the Federal Emergency Management Agency shall conduct an assessment of the need for additional Federal disasterresponse training capabilities that are applicable to earthquake response.

(2) CONTENTS OF ASSESSMENT.—The assessment conducted under this subsection shall include-

'(A) a review of the disaster training programs offered by the Federal Emergency Management Agency at the time of the assessment; "(B) an estimate of the number and types of

emergency response personnel that have, during the period beginning on January 1, 1990 and ending on July 1, 1997, sought the training referred to in subparagraph (A), but have been unable to receive that training as a result of the oversubscription of the training capabilities of the Federal Emergency Management Agency; and

"(C) a recommendation on the need to provide additional Federal disaster-response training centers. "(3) REPORT.—Not later than 180 days after the date of enactment of this Act [Oct. 1, 1997], the Director shall prepare and submit to Congress a report that addresses the results of the assessment conducted under this subsection."

STUDIES ON ECONOMIC IMPACT OF CATASTROPHIC EARTHQUAKES AND IMPROVING EARTHQUAKE MITIGATION

Pub. L. 101-614, §14, Nov. 16, 1990, 104 Stat. 3242, directed Director of Federal Emergency Management Agency to submit two reports to Congress within 12 months after Nov. 16, 1990, one report outlining results of a study on impact and repercussions of a catastrophic earthquake on local, regional, and national economies, and the other report outlining results of a study on adequacy of preparation and response capabilities for reducing and recovering from losses caused by a catastrophic earthquake.

#### EARTHQUAKE ENGINEERING RESEARCH

Pub. L. 100-570, title I, §115, Oct. 31, 1988, 102 Stat. 2871, directed National Academy of Sciences to conduct a study of earthquake engineering activities being carried out by the Foundation and other Federal agencies under the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.), such study to include (1) an assessment of adequacy of each agency's current Federal earthquake engineering efforts, including those designed to increase the implementation of new techniques; the need for specialized research facilities, including large-scale facilities; the division of responsibilities among the various Federal agencies; and recommended levels of funding that the Foundation and other agencies should provide, in the form of grants to individuals, groups, and centers, to non-Federal researchers principally engaged in earthquake engineering research; and (2) recommendations, if any, of the National Academy of Sciences for improvements in the current Federal efforts in the area of earthquake engineering research, with results of the study to be reported to Congress on or before expiration of 12-month period following Oct. 31, 1988.

#### EXECUTIVE ORDER NO. 12699

Ex. Ord. No. 12699, Jan. 5, 1990, 55 F.R. 835, as amended by Ex. Ord. No. 13286, §40, Feb. 28, 2003, 68 F.R. 10626, which related to seismic safety of Federal and federally assisted or regulated new building construction, was revoked by Ex. Ord. No. 13717, §5, Feb. 2, 2016, 81 F.R. 6409, set out below.

> EX. ORD. NO. 13717. ESTABLISHING A FEDERAL EARTHQUAKE RISK MANAGEMENT STANDARD

Ex. Ord. No. 13717, Feb. 2, 2016, 81 F.R. 6407, provided: By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Earthquake Hazards Reduction Act of 1977, as amended, and section 121(a) of title 40, United States Code, and to improve the Nation's resilience to earthquakes, I hereby direct the following:

SECTION 1. *Policy*. It is the policy of the United States to strengthen the security and resilience of the Nation against earthquakes, to promote public safety, economic strength, and national security. To that end, the Federal Government must continue to take proactive steps to enhance the resilience of buildings that are owned, leased, financed, or regulated by the Federal Government. When making investment decisions related to Federal buildings, each executive department and agency (agency) responsible for implementing this order shall seek to enhance resilience by reducing risk to the lives of building occupants and improving continued performance of essential functions following future earthquakes. The Federal Government recognizes that building codes and standards primarily focus on ensuring minimum acceptable levels of earthquake safety for preserving the lives of building occupants. To achieve true resilience against earthquakes, however, new and existing buildings may need to exceed those codes and standards to ensure, for example, that the buildings can continue to perform their essential functions following future earthquakes. Agencies are thus encouraged to consider going beyond the codes and standards set out in this order to ensure that buildings are fully earthquake resilient.

SEC. 2. Requirements for Earthquake Safety of New Federal Buildings, Improvements to Existing Federal Buildings, and Federally Leased, Financed, or Regulated Buildings.

(a) New Buildings and Alterations to Existing Buildings. Each agency responsible for the design and construction of a new building or an alteration to an existing building shall ensure that the building is designed, constructed, or altered, respectively, in accord with appropriate earthquake-resistant design and construction codes and standards as set forth in sections 3(a) and 3(b) of this order.

(b) Space Leased for Federal Occupancy. Each agency responsible for the lease of a building shall, to the extent permitted by law, ensure that it leases only buildings that have been designed and constructed in accord with the appropriate earthquake-resistant design and construction standards that apply to the type of lease at issue, as set forth in section 3(c) of this order.

(c) Federal Assistance Programs. Each agency assisting in the financing, through Federal grants or loans, or guaranteeing the financing, through loan or mortgage insurance programs, of a newly constructed building shall consider updating its procedures for providing the assistance to be consistent with section 3(a) of this order, to assure appropriate consideration of earthquake safety.

(d) Federally Regulated Buildings. Each agency with responsibility for regulating the structural safety of a new building shall consider using earthquake-resistant design and construction standards for the new building consistent with section 3(a) of this order.

SEC. 3. Codes, Standards, and Concurrent Requirements. (a) Commencing within 90 days after the date of this order, each agency shall ensure that every new building for which the agency has not started programming is in compliance with the earthquake-resistant design provisions of the 2015 editions of the International Building Code (IBC) or the International Residential Code (IRC), nationally recognized building codes promulgated by the International Code Council (ICC), or equivalent codes, consistent with the provisions of and to the extent required by 40 U.S.C. 3312. When the ICC releases a new version of the IRC or IBC, each agency that constructs buildings shall determine whether the new version is a nationally recognized code for the purposes of 40 U.S.C. 3312(b), as expeditiously as practicable, but not later than 2 years after the release of the new version. If an agency determines that a new version is a nationally recognized code, it shall ensure that any building, for which the agency has not started programming, shall be in compliance with that new version or an equivalent code.

(b) Each agency that owns an existing Federal building shall adopt the *Standards of Seismic Safety for Existing Federally Owned and Leased Buildings* (Standards), which are developed, issued, and maintained by the Interagency Committee on Seismic Safety in Construction (ICSSC), as the minimum level acceptable for managing the earthquake risks in that building. Any agency that has not adopted the Standards at the time of this order shall adopt the Standards no later than 90 days from the date of this order. All agencies shall adopt subsequent editions of the Standards as expeditiously as practicable, but no later than 2 years following their issuance.

(c) Each agency that leases space in an existing building shall adopt the Standards as the minimum level acceptable for managing the earthquake risks in that building. This requirement shall apply to existing leases or leases existing at the time of issuance of up-

dated Standards only to the extent appropriate, as determined by the leasing agency. With respect to leases for a building being constructed to accommodate a Federal agency under the authority in 40 U.S.C. 585(a), the leasing agency shall ensure that the building complies with the earthquake-resistant design and construction standards that would apply to a building constructed by the agency pursuant to section 3(a) of this order. With respect to such leases entered into under authority other than 40 U.S.C. 585(a), the leasing agency shall ensure that the building complies with the earthquake-resistant design and construction standards that would apply to a building constructed by the agency pursuant to section 3(a) of this order, to the extent permitted by law.

(d) Agencies may require higher performance levels than exist in the codes and standards described in sections 3(a), (b), and (c) of this order.

SEC. 4. Agency and Committee Responsibilities. (a) The ICSSC shall be composed of representatives of all Federal agencies engaged in construction, financing of construction, or related activities. The National Earthquake Hazards Reduction Program (NEHRP) Lead Agency, currently the National Institute of Standards and Technology (NIST), shall lead the ICSSC, and shall lead the development and maintenance of ICSSC guidelines to assist the Federal agencies with implementing earthquake risk reduction measures in their construction programs.

(b) Agencies whose activities are covered by this order shall designate one or more Seismic Safety Coordinator(s) to serve as focal points for the agency's compliance with this order and to participate in the ICSSC as appropriate. Within 30 days of the date of this order, each agency shall identify its Seismic Safety Coordinator(s) to the Director of NIST.

(c) The Director of NIST, on behalf of the ICSSC. shall issue implementing guidelines to assist agency compliance with this order within 8 months of the date of this order. The implementing guidelines shall provide specific guidance, including guidance about the roles and responsibilities of the agencies under section 2 of this order. The implementing guidelines shall also describe the responsibilities and necessary qualifications of the Seismic Safety Coordinator.

(d) The Director of NIST, on behalf of the ICSSC, shall provide assistance in interpreting the implementing guidelines to the Federal departments and agencies.

(e) The ICSSC shall publish updated Standards for assessing and enhancing the earthquake resilience of existing buildings as required by this order. The ICSSC shall review and update the Standards as needed to comply with this order at the maximum interval of every 6 years. Participation in the ICSSC shall continue to be open to all agencies with programs affected by this order. The Director of NIST shall provide support for the secretariat of the ICSSC and determine the frequency and scope of the ICSSC meetings as necessary to support this order.

(f) Agencies whose activities are covered by this order shall submit biennial reports to the Director of the Office of Management and Budget (OMB) and the Director of NIST on their progress in implementing the order, commencing 2 years from the date of this order. (g) Agency compliance shall be summarized in the NEHRP reports to the Congress.

SEC. 5. Revocation. Executive Order 12699 of January 5, 1990 (Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction), as amended, and Executive Order 12941 of December 1, 1994 (Seismic Safety of Existing Federally Owned or Leased Buildings) are hereby revoked.

SEC. 6. *Definitions*. As used in this order: (a) "building" means any structure, fully or partially enclosed, used or intended for sheltering persons or property:

(b) "alteration to an existing building" means an action that alters, as defined in 40 U.S.C. 3301(a)(1), a building and that significantly extends the building's useful life and totals more than the replacement values established in the Standards for the building's assigned Seismic Design Category; and

(c) "programming" means developing and validating project assumptions, scope, budgets, and implementation strategy for a building.

SEC. 7. Exemption Authority. (a) The head of an agency may exempt a building from sections 2 and 3 of this order:

(i) to the extent the head of an agency determines that exempting such building is substantially related to an important law enforcement purpose; or

(ii) to the extent the head of an agency determines that exempting such building is necessary to address an extraordinary circumstance relating to national security or public safety.

(b) Even when otherwise eligible for an exemption under this section, each agency shall strive to comply with the purposes, goals, and requirements set forth in this order to the maximum extent practicable.

(c) If the head of an agency issues an exemption under this section, the agency must notify the Director of OMB in writing within 30 days of issuance of the exemption under this subsection.

SEC. 8. General Provisions. (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department, agency, or the head thereof; or

(ii) the functions of the Director of OMB relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

(d) Nothing in this order shall apply to assistance provided for emergency work essential to save lives and protect property and public health and safety, performed pursuant to agencies' statutory authorities, and sections 402, 403, 502, and 503 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (the "Stafford Act") (42 U.S.C. 5170a, 5170b, 5192, and 5193), or for temporary housing assistance programs and individual and family grants performed pursuant to section 408 of the Stafford Act (42 U.S.C. 5174). This order shall, however, apply to other provisions of the Stafford Act after a Presidentially declared major disaster or emergency when assistance actions involve new construction or alterations to an existing building.

(e) This order applies only to buildings within the United States and its territories and possessions.

#### BARACK OBAMA.

### §7704a. Report on seismic safety property standards

### (a) Authority

The Secretary of Housing and Urban Development (in this section referred to as the "Secretary") shall assess the risk of earthquake-related damage to properties assisted under programs administered by the Secretary and shall develop seismic safety standards for such properties. This section may not be construed to prohibit the Secretary from deferring to local building codes that meet the requirements of the seismic safety standards developed under this section.

#### (b) Standards

The standards shall be designed to reduce the risk of loss of life to building occupants to the maximum extent feasible and to reduce the risk of shake-related property damage to the maximum extent practicable.