- (1) The term "includes" and variants thereof should be read as if the phrase "but is not limited to" were also set forth.
- (2) The term "Program" means the National Earthquake Hazards Reduction Program established under section 7704 of this title.
- (3) The term "seismic" and variants thereof mean having to do with, or caused by earthquakes.
- (4) The term "State" means each of the States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Mariana Islands, and any other territory or possession of the United States.
- (5) The term "United States" means, when used in a geographical sense, all of the States as defined in paragraph (4) of this section.
- (6) The term "lifelines" means public works and utilities, including transportation facilities and infrastructure, oil and gas pipelines, electrical power and communication facilities and infrastructure, and water supply and sewage treatment facilities.
- (7) The term "Program agencies" means the Federal Emergency Management Agency, the United States Geological Survey, the National Science Foundation, and the National Institute of Standards and Technology.
- (8) The term "Interagency Coordinating Committee" means the Interagency Coordinating 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—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, $\S4(2)$, 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 Reor-

ganization 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;
- (iv) the Office of Science and Technology Policy; and
- (v) 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 sub-

paragraph (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 5^2 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;

 $^{^1\}mathrm{So}$ in original. Probably should be preceded by "subparagraph".

 $^{^2}$ So in original. Probably should be followed by a closing parenthesis.

³ So in original. Probably should be preceded by "subsection".

(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 construction 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 sup-

port 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 re-

quirement 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.⁵
- (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 influ-

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

⁵ So in original. The period probably should be a semicolon.

ence 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;
- (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;"

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 '. 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

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 subpars. (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.

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

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 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" stituted 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 WARNING SYSTEM DEVELOPMENT, AND OTHER ACTIVITIES

Pub. L. 105–47, $\S2$, Oct. 1, 1997, 111 Stat. 1160, as amended by Pub. L. 106–503, title II, $\S202(c)$, Nov. 13, 2000, 114 Stat. 2305; Pub. L. 107–110, title X, $\S1076(cc)$, Jan. 8, 2002, 115 Stat. 2093; Pub. L. 114–95, title IX, $\S9215(aa)$, 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 high-speed 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 necessary—

"(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 necessary 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

"(É) 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 non-profit 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.

EX. ORD. NO. 12699. SEISMIC SAFETY OF FEDERAL AND FEDERALLY ASSISTED OR REGULATED NEW BUILDING

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, provided:

By the authority vested in me as President by the Constitution and laws of the United States of America, and in furtherance of the Earthquake Hazards Reduction Act of 1977, as amended (42 U.S.C. 7701 et seq.), which requires that Federal preparedness and mitigation activities are to include "development and promulgation of specifications, building standards, design criteria, and construction practices to achieve appropriate earthquake resistance for new . . . structures,' and "an examination of alternative provisions and requirements for reducing earthquake hazards through Federal and federally financed construction, loans, loan guarantees, and licenses. . . " (42 U.S.C. 7704(f)(3, 4)), it is hereby ordered as follows:

SECTION 1. Requirements for Earthquake Safety of New Federal Buildings.

The purposes of these requirements are to reduce risks to the lives of occupants of buildings owned by the Federal Government and to persons who would be affected by the failures of Federal buildings in earthquakes, to improve the capability of essential Federal buildings to function during or after an earthquake, and to reduce earthquake losses of public buildings, all in a cost-effective manner. A building means any structure, fully or partially enclosed, used or intended for sheltering persons or property.

Each Federal agency responsible for the design and construction of each new Federal building shall ensure that the building is designed and constructed in accord with appropriate seismic design and construction standards. This requirement pertains to all building projects for which development of detailed plans and specifications is initiated subsequent to the issuance of the order. Seismic design and construction standards shall be adopted for agency use in accord with sections 3(a) and 4(a) of this order. SEC. 2. Federally Leased, Assisted, or Regulated

Buildings.

The purposes of these requirements are to reduce risks to the lives of occupants of buildings leased for Federal uses or purchased or constructed with Federal assistance, to reduce risks to the lives of persons who would be affected by earthquake failures of federally assisted or regulated buildings, and to protect public investments, all in a cost-effective manner. The provisions of this order shall apply to all the new construction activities specified in the subsections below.

(a) Space Leased for Federal Occupancy. Each Federal agency responsible for the construction and lease of a new building for Federal use shall ensure that the building is designed and constructed in accord with appropriate seismic design and construction standards. This requirement pertains to all leased building projects for which the agreement covering development of detailed plans and specifications is effected subsequent to the issuance of this order. Local building codes shall be used in design and construction by those concerned with such activities in accord with section 3(a) and 3(c) of this order and augmented when necessary to achieve appropriate seismic design and construction standards.

(b) Federal Domestic Assistance Programs. Each Federal agency assisting in the financing, through Federal grants or loans, or guaranteeing the financing, through loan or mortgage insurance programs, of newly constructed buildings shall plan, and shall initiate no later than 3 years subsequent to the issuance of this order, measures consistent with section 3(a) of this order, to assure appropriate consideration of seismic safety.

(c) Federally Regulated Buildings. Each Federal agency with generic responsibility for regulating the structural safety of buildings shall plan to require use of appropriate seismic design and construction standards for new buildings within the agency's purview. Implementation of the plan shall be initiated no later than 3 years subsequent to the issuance of this order.

SEC. 3. Concurrent Requirements. (a) In accord with Office of Management and Budget Circular A-119 of January 17, 1980, entitled "Federal Participation in the Development and Use of Voluntary Standards," nationally recognized private sector standards and practices shall be used for the purposes identified in sections 1 and 2 above unless the responsible agency finds that none is available that meets its requirements. The actions ordered herein shall consider the seismic hazards in various areas of the country to be as shown in the most recent edition of the American National Standards Institute Standards A58, Minimum Design Loans for Buildings and Other Structures, or subsequent maps adopted for Federal use in accord with this order. Local building codes determined by the responsible agency or by the Interagency Committee for Seismic Safety in Construction to provide adequately for seismic safety, or special seismic standards and practices required by unique agency mission needs, may be used.

(b) All orders, regulations, circulars, or other directives issued, and all other actions taken prior to the date of this order that meet the requirements of this order, are hereby confirmed and ratified and shall be deemed to have been issued under this order.

(c) Federal agencies that are as of this date requiring seismic safety levels that are higher than those imposed by this order in their assigned new building construction programs shall continue to maintain in force such levels.

(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 Sections 402, 403, 502, and 503 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (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 Sections 408 and 411 of the Stafford Act (42 U.S.C. 5174 and former 5178). However, this order shall apply to other provisions of the Stafford Act [42 U.S.C. 5121 et seq.] after a presidentially declared major disaster or emergency when assistance actions involve new construction or total replacement of a building. Grantees and subgrantees shall be encouraged to adopt the standards established in section 3(a) of this order for use when the construction does not involve Federal funding as well as when Department of Homeland Security funding applies.

SEC. 4. Agency Responsibilities. (a) The Secretary of Homeland Security shall be responsible for reporting to the President on the execution of this order and providing support for the secretariat of the Interagency Committee on Seismic Safety in Construction (ICSSC). The ICSSC, using consensus procedures, shall be responsible to FEMA for the recommendation for adoption of cost-effective seismic design and construction standards and practices required by sections 1 and 2 of this order. Participation in ICSSC shall be open to all agencies with programs affected by this order.

(b) To the extent permitted by law, each agency shall issue or amend existing regulations or procedures to comply with this order within 3 years of its issuance and plan for their implementation through the usual budget process. Thereafter, each agency shall review, within a period not to exceed 3 years, its regulations or procedures to assess the need to incorporate new or revised standards and practices.

SEC. 5. Reporting. The Department of Homeland Security shall request, from each agency affected by this order, information on the status of its procedures,

progress in its implementation plan, and the impact of this order on its operations. The Department of Homeland Security shall include an assessment of the execution of this order in its annual report to the Congress on the National Earthquake Hazards Reduction Program.

SEC. 6. Judicial Review. Nothing in this order is intended to create any right or benefit, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any person.

§ 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.

(c) Consultation

In carrying out this section, the Secretary shall consult with the Administrator of the Federal Emergency Management Agency and may utilize the resources under the National Earthquake Hazards Reduction Program (established under the Earthquake Hazards Reduction Act of 1977 [42 U.S.C. 7701 et seq.]) and any other resources as may be required to carry out the activities under this section.

(Pub. L. 101–625, title IX, §947, Nov. 28, 1990, 104 Stat. 4416; Pub. L. 109–295, title VI, §612(c), Oct. 4, 2006, 120 Stat. 1410.)

References in Text

The Earthquake Hazards Reduction Act of 1977, referred to in subsec. (c), is Pub. L. 95–124, Oct. 7, 1977, 91 Stat. 1098, as amended, which is classified generally to this chapter (§7701 et seq.). For complete classification of this Act to the Code, see Short Title note set out under section 7701 of this title and Tables.

CODIFICATION

Subsec. (d) of this section, which required the Secretary to submit a report to Congress not less than biennially on the findings of the risk assessment study conducted under this section and the activities undertaken, and the expenditures made, by the Secretary to carry out this section and Executive Order No. 12699, terminated, effective May 15, 2000, pursuant to section 3003 of Pub. L. 104-66, as amended, set out as a note under section 1113 of Title 31, Money and Finance. See, also, the 4th item on page 104 of House Document No. 103.7

Section was enacted as part of the Cranston-Gonzalez National Affordable Housing Act, and not as part of the Earthquake Hazards Reduction Act of 1977 which comprises this chapter.

CHANGE OF NAME

"Administrator of the Federal Emergency Management Agency" substituted for "Director of the Federal