



AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: In the nature of a substitute.

**IN THE SENATE OF THE UNITED STATES—115th Cong., 1st Sess.**

**S. 1768**

To reauthorize and amend the National Earthquake Hazards Reduction Program, and for other purposes.

Referred to the Committee on \_\_\_\_\_ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended to be proposed by Mr. GARDNER (for himself and Ms. CANTWELL)

Viz:

1 Strike all after the enacting clause and insert the fol-

2 lowing:

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “National Earthquake  
5 Hazards Reduction Program Reauthorization Act of  
6 2017”.

7 **SEC. 2. MODIFICATION OF FINDINGS AND PURPOSE.**

8 (a) FINDINGS.—Section 2 of the Earthquake Haz-  
9 ards Reduction Act of 1977 (42 U.S.C. 7701) is amend-  
10 ed—

11 (1) in paragraph (1)—

1 (A) by inserting “Oregon,” after “New  
2 York,”; and

3 (B) by inserting “Tennessee,” after  
4 “South Carolina”;

5 (2) in paragraph (2), by striking “prediction  
6 techniques and”;

7 (3) by striking paragraph (4) and inserting the  
8 following:

9 “(4) A well-funded seismological research pro-  
10 gram could provide the scientific understanding  
11 needed to fully implement an effective earthquake  
12 early warning system.”;

13 (4) in paragraphs (6) and (7), by striking “life-  
14 lines” each place it appears and inserting “lifeline  
15 infrastructure”; and

16 (5) by adding at the end the following:

17 “(12) The built environment has generally been  
18 constructed and maintained to meet the needs of the  
19 users under normal conditions. When earthquakes  
20 occur, the built environment is generally designed to  
21 prevent severe injuries or loss of human life and is  
22 not expected to remain operational or able to recover  
23 under any specified schedule.

24 “(13) The National Research Council published  
25 a study on reducing hazards and risks associated

1 with earthquakes based on the goals and objectives  
2 for achieving national earthquake resilience de-  
3 scribed in the strategic plan entitled ‘Strategic Plan  
4 for the National Earthquake Hazards Reduction  
5 Program’. The study and an accompanying report  
6 called for work in 18 tasks focused on research, pre-  
7 paredness, and mitigation and annual funding of ap-  
8 proximately \$300,000,000 per year for 20 years.”.

9 (b) PURPOSE.—Section 3 of such Act (42 U.S.C.  
10 7702) is amended—

11 (1) in the matter preceding paragraph (1), in  
12 the first sentence, by inserting “and increase the re-  
13 siliience of communities” after “future earthquakes”;

14 (2) in paragraph (1), by inserting “to individ-  
15 uals and the communities” after “an earthquake”;

16 (3) in paragraph (2), by striking “in time of  
17 disaster” and inserting “to facilitate community-  
18 wide post-earthquake recovery and in times of dis-  
19 aster”;

20 (4) in paragraph (3), by striking “for predicting  
21 damaging earthquakes and”;

22 (5) in paragraph (4), by inserting “and plan-  
23 ning” after “model building”; and

1 (6) in paragraph (5), by striking “reconstruc-  
2 tion” and inserting “re-occupancy, recovery, recon-  
3 struction,”.

4 (c) DEFINITIONS.—

5 (1) LIFELINE INFRASTRUCTURE.—

6 (A) IN GENERAL.—Section 4(6) of such  
7 Act (42 U.S.C. 7703(6)) is amended by striking  
8 “lifelines” and inserting “lifeline infrastruc-  
9 ture”.

10 (B) CONFORMING AMENDMENT.—Such Act  
11 (42 U.S.C. 7701 et seq.) is amended by striking  
12 “lifelines” each place it appears and inserting  
13 “lifeline infrastructure”.

14 (2) COMMUNITY RESILIENCE.—Section 4 of  
15 such Act (42 U.S.C. 7703) is amended by adding at  
16 the end the following:

17 “(3) The term ‘community resilience’ means the  
18 ability of a community to prepare and plan for, ab-  
19 sorb, recover from, and more successfully adapt to  
20 adverse seismic events.”.

21 **SEC. 3. MODIFICATION OF NATIONAL EARTHQUAKE HAZ-**  
22 **ARDS REDUCTION PROGRAM.**

23 (a) MODIFICATION OF PROGRAM ACTIVITIES.—Sub-  
24 section (a)(2) of section 5 of the Earthquake Hazards Re-  
25 duction Act of 1977 (42 U.S.C. 7704) is amended—

1 (1) in subparagraph (B)—

2 (A) in clause (iii), by inserting “, commu-  
3 nity resilience,” after “seismic risk”; and

4 (B) by adding at the end the following:

5 “(iv) publishing a systematic set of  
6 maps of active faults and folds, lique-  
7 faction susceptibility, susceptibility for  
8 earthquake induced landslides, and other  
9 seismically induced hazards; and”;

10 (2) in subparagraph (D), by striking “develop,  
11 operate” and all that follows through “7708),” and  
12 inserting “continue the development of the Advanced  
13 National Seismic System, including earthquake early  
14 warning capabilities”.

15 (b) AMENDMENTS RELATING TO INTERAGENCY CO-  
16 ORDINATING COMMITTEE ON EARTHQUAKE HAZARDS RE-  
17 DUCATION.—

18 (1) CLARIFICATION REGARDING MEMBER-  
19 SHIP.—Subparagraph (B) of subsection (a)(3) of  
20 such section is amended, in the matter preceding  
21 clause (i), by striking “The committee” and insert-  
22 ing “In addition to the Director, the committee”.

23 (2) REDUCTION IN MINIMUM FREQUENCY OF  
24 MEETINGS OF INTERAGENCY COORDINATING COM-  
25 MITTEE ON EARTHQUAKE HAZARDS REDUCTION.—

1 Subparagraph (C) of such subsection is amended by  
2 striking “not less than 3 times a year” and inserting  
3 “not less frequently than once each year”.

4 (3) EXPANSION OF DUTIES.—Subparagraph  
5 (D) of such subsection is amended to read as fol-  
6 lows:

7 “(D) DUTIES.—

8 “(i) GENERAL DUTY.—The Inter-  
9 agency Coordinating Committee shall over-  
10 see the planning, management, and coordi-  
11 nation of the Program.

12 “(ii) SPECIFIC DUTIES.—The duties  
13 of the Interagency Coordinating Committee  
14 include the following:

15 “(I) Developing, not later than 6  
16 months after the date of the enact-  
17 ment of the National Earthquake  
18 Hazards Reduction Program Reau-  
19 thorization Act of 2004 and updating  
20 periodically—

21 “(aa) a strategic plan that  
22 establishes goals and priorities  
23 for the Program activities de-  
24 scribed under subsection (a)(2);  
25 and

1                   “(bb) a detailed manage-  
2                   ment plan to implement such  
3                   strategic plan.

4                   “(II) Developing a coordinated  
5                   interagency budget for the Program  
6                   that will ensure appropriate balance  
7                   among the Program activities de-  
8                   scribed under subsection (a)(2), and,  
9                   in accordance with the plans devel-  
10                  oped under subclause (I), submitting  
11                  such budget to the Director of the Of-  
12                  fice of Management and Budget at  
13                  the time designated by the Director  
14                  for agencies to submit biennial budg-  
15                  ets.

16                  “(III) Developing interagency  
17                  memorandums of understanding with  
18                  any relevant Federal agencies on data  
19                  sharing and resource commitment in  
20                  the event of an earthquake disaster.

21                  “(IV) Coordinating with the Ad-  
22                  ministrator of the National Aero-  
23                  nautics and Space Administration and  
24                  the Administrator of the National  
25                  Oceanic and Atmospheric Administra-

1                   tion on data sharing and resource al-  
2                   location to ensure judicious use of  
3                   Government resources and the free-  
4                   flowing exchange of information re-  
5                   lated to earthquakes.

6                   “(V) Coordinating with the Sec-  
7                   retary of Agriculture and the Sec-  
8                   retary of the Interior on the use of  
9                   public lands for earthquake moni-  
10                  toring and research stations, and re-  
11                  lated data collection.

12                  “(VI) Coordinating with the Sec-  
13                  retary of Transportation and the Sec-  
14                  retary of Housing and Urban Devel-  
15                  opment on the effects of earthquakes  
16                  on transportation and housing stocks.

17                  “(iii) ASSISTANCE FROM SECRETARY  
18                  OF AGRICULTURE AND SECRETARY OF THE  
19                  INTERIOR.—To the extent practicable, the  
20                  Secretary of Agriculture and the Secretary  
21                  of the Interior shall expedite any request  
22                  for a permit to use public land under  
23                  clause (ii)(V).”.



1           (4) REDUCTION IN FREQUENCY OF REPORTING  
2           BY INTERAGENCY COORDINATING COMMITTEE ON  
3           EARTHQUAKE HAZARDS REDUCTION.—

4           (A) IN GENERAL.—Subsection (a)(4) of  
5           such section is amended—

6           (i) in the paragraph heading, by strik-  
7           ing “ANNUAL” and inserting “BIENNIAL”;

8           (ii) by redesignating subparagraphs  
9           (A) through (F) as clauses (i) through (vi),  
10           respectively, and adjusting the indentation  
11           of the margin of such clauses, as so reded-  
12           ignated, two ems to the right;

13           (iii) in clause (v), as redesignated, by  
14           striking “; and” and inserting a semicolon;

15           (iv) in clause (vi), as redesignated, by  
16           striking the period at the end and inserting  
17           “; and”;

18           (v) by inserting after clause (vi), as  
19           redesignated, the following:

20           “(vii) a statement regarding whether  
21           the Administrator of the Federal Emer-  
22           gency Management Agency has lowered or  
23           waived the cost share requirement for as-  
24           sistance provided under subsection  
25           (b)(2)(A)(i).”;

1 (vi) in the matter preceding clause (i),  
2 as redesignated, by striking “The Inter-  
3 agency” and all that follows through “Sen-  
4 ate” and inserting the following:

5 “(A) IN GENERAL.—Not less frequently  
6 than once every two years, the Interagency Co-  
7 ordinating Committee shall submit to the Com-  
8 mittee on Commerce, Science, and Transpor-  
9 tation, the Committee on Energy and Natural  
10 Resources, and the Committee on Homeland  
11 Security and Governmental Affairs of the Sen-  
12 ate and the Committee on Energy and Com-  
13 merce, the Committee on Natural Resources,  
14 and the Committee on Homeland Security of  
15 the House of Representatives a report on the  
16 Program”; and

17 (vii) by adding at the end the fol-  
18 lowing:

19 “(B) SUPPORT FOR PREPARATION OF RE-  
20 PORT.—Each head of a Program agency shall  
21 submit to the Director of the National Institute  
22 of Standards and Technology such information  
23 as the Director may request for the preparation  
24 of a report under subparagraph (A) not later

1 than 90 days after the date on which the Direc-  
2 tor requests such information.”.

3 (B) EFFECTIVE DATE.—The amendments  
4 made by subparagraph (A) shall take effect on  
5 the first day of the first fiscal year beginning  
6 after the date of the enactment of this Act.

7 (c) MODIFICATION OF RESPONSIBILITIES OF NA-  
8 TIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.—  
9 Subsection (b) of such section is amended—

10 (1) in paragraph (1)—

11 (A) in subparagraph (A), by striking “and  
12 constructing,” and inserting “constructing,  
13 evaluating, and retrofitting”; and

14 (B) in subparagraph (D), by inserting  
15 “provide new and” after “research to”; and

16 (2) in paragraph (5), in the matter preceding  
17 subparagraph (A), in the first sentence, by inserting  
18 “community resilience through” after “improve”.

19 (d) MODIFICATION OF RESPONSIBILITIES OF FED-  
20 ERAL EMERGENCY MANAGEMENT AGENCY.—Paragraph  
21 (2) of subsection (b) of such section is amended to read  
22 as follows:

23 “(2) DEPARTMENT OF HOMELAND SECURITY;  
24 FEDERAL EMERGENCY MANAGEMENT AGENCY.—

1           “(A) PROGRAM RESPONSIBILITIES.—The  
2 Administrator of the Federal Emergency Man-  
3 agement Agency—

4           “(i) shall operate a program of grants  
5 and assistance to enable States to develop  
6 mitigation, preparedness, and response  
7 plans, purchase necessary instrumentation,  
8 prepare inventories and conduct seismic  
9 safety inspections of critical structures and  
10 lifelines, update building, land use plan-  
11 ning, and zoning codes and ordinances to  
12 enhance seismic safety, increase earth-  
13 quake awareness and education, and pro-  
14 vide assistance to multi-State groups for  
15 such purposes;

16           “(ii) shall support the implementation  
17 of a comprehensive earthquake education,  
18 outreach, and public awareness program,  
19 including development of materials and  
20 their wide dissemination to all appropriate  
21 audiences and support public access to lo-  
22 cality-specific information that may assist  
23 the public in preparing for, mitigating  
24 against, responding to and recovering from  
25 earthquakes and related disasters;

1           “(iii) shall, in conjunction with the  
2           Director of the National Institute of  
3           Standards and Technology, other Federal  
4           agencies, and private sector groups, use re-  
5           search results to support the preparation,  
6           maintenance, and wide dissemination of  
7           seismic resistant design guidance and re-  
8           lated information on building codes, stand-  
9           ards, and practices for new and existing  
10          buildings, structures, and lifelines, aid in  
11          the development of performance-based de-  
12          sign guidelines and methodologies, and  
13          support model codes that are cost effective  
14          and affordable in order to promote better  
15          practices within the design and construc-  
16          tion industry and reduce losses from earth-  
17          quakes;

18          “(iv) shall enter into cooperative  
19          agreements or contracts with States and  
20          local jurisdictions and other Federal agen-  
21          cies to establish demonstration projects on  
22          earthquake hazard mitigation, to link  
23          earthquake research and mitigation efforts  
24          with emergency management programs, or

1 to prepare educational materials for na-  
2 tional distribution; and

3 “(v) shall support the Director of the  
4 National Institute of Standards and Tech-  
5 nology in the completion of programmatic  
6 goals.

7 “(B) STATE ASSISTANCE PROGRAM CRI-  
8 TERIA.—In order to qualify for assistance  
9 under subparagraph (A)(i), a State must—

10 “(i) demonstrate that the assistance  
11 will result in enhanced seismic safety in  
12 the State;

13 “(ii) provide 25 percent of the costs of  
14 the activities for which assistance is being  
15 given, except that the Administrator may  
16 lower or waive the cost-share requirement  
17 for these activities for a small impover-  
18 ished community, as defined in section 203  
19 of the Disaster Relief Act of 1974 (42  
20 U.S.C. 5133(a)); and

21 “(iii) meet such other requirements as  
22 the Administrator shall prescribe.”.

23 (e) MODIFICATION OF RESPONSIBILITIES OF UNITED  
24 STATES GEOLOGICAL SURVEY.—Subsection (b)(3) of such  
25 section is amended—

1           (1) in the matter preceding subparagraph (A),  
2           in the first sentence—

3                   (A) by inserting “report on significant do-  
4                   mestic and international earthquakes and” after  
5                   “Survey shall”; and

6                   (B) by striking “predictions.” and insert-  
7                   ing “forecasts.”;

8           (2) in subparagraph (C), by striking “pre-  
9           dictions, including aftershock advisories” and insert-  
10           ing “alerts and early warnings”;

11           (3) by striking subparagraph (D) and inserting  
12           the following:

13                   “(D) issue when necessary and feasible,  
14                   and notify the Administrator of the Federal  
15                   Emergency Management Agency, the Director  
16                   of the National Institute of Standards and  
17                   Technology, and State and local officials, an  
18                   alert and an earthquake warning;”;

19           (4) in subparagraph (E), in the matter pre-  
20           ceding clause (i), by striking “using” and inserting  
21           “including”;

22           (5) in subparagraph (I), by striking “; and”  
23           and inserting a semicolon;

24           (6) in subparagraph (J)—

1 (A) by inserting “and data” after “hazard  
2 maps”; and

3 (B) by striking the period at the end and  
4 inserting “; and”; and

5 (7) by adding at the end the following:

6 “(K) support the Director of the National  
7 Institute of Standards and Technology in the  
8 completion of programmatic goals.”.

9 (f) MODIFICATION OF RESPONSIBILITIES OF NA-  
10 TIONAL SCIENCE FOUNDATION.—Subsection (b)(4) of  
11 such section is amended—

12 (1) in subparagraph (B), by inserting “, State  
13 agencies, State geological surveys,”;

14 (2) in subparagraph (C), by inserting “to sup-  
15 port applied science in the production of a system-  
16 atic series of earthquake-related geologic hazard  
17 maps, and” after “Survey”;

18 (3) in subparagraph (D), by striking “large-  
19 scale experimental and computational facilities of the  
20 George E. Brown Jr. Network for Earthquake Engi-  
21 neering Simulation and other institutions engaged in  
22 research and the implementation of the National  
23 Earthquake Hazards Reduction Program” and in-  
24 serting “experimental and computational facilities”;



1           (4) in subparagraph (G), by striking “; and”  
2           and inserting a semicolon;

3           (5) in subparagraph (H), by striking the period  
4           at the end and inserting “; and”;

5           (6) by adding at the end the following:

6                   “(I) support the Director of the National  
7                   Institute of Standards and Technology in the  
8                   completion of programmatic goals.”;

9           (7) by redesignating subparagraphs (A) through  
10          (I) as clauses (i) through (ix), respectively, and in-  
11          denting such clauses accordingly;

12          (8) in the matter before clause (i), as redesign-  
13          ated by paragraph (7), in the first sentence, by  
14          striking “The National Science Foundation” and in-  
15          serting the following:

16                   “(A) IN GENERAL.—The National Science  
17                   Foundation”;

18          (9) by adding at the end the following:

19                   “(B) IDENTIFICATION OF FUNDING.—The  
20                   National Science Foundation shall—

21                           “(i) to the extent practicable, note in  
22                           any notice of Program funding or other  
23                           funding possibilities under the Program  
24                           that the funds are part of the Program;

1                   “(ii) to the extent practicable, track  
2                   the awarding of Federal funds through the  
3                   Program; and

4                   “(iii) not less frequently than once  
5                   every 2 years, submit to the director of the  
6                   Program a report specifying the amount of  
7                   Federal funds awarded to conduct research  
8                   that enhances the understanding of earth-  
9                   quake science.”.

10 **SEC. 4. REVIEW OF RISKS POSED BY EARTHQUAKES TO**  
11 **THE UNITED STATES.**

12           (a) **IN GENERAL.**—As soon as practicable, but not  
13 later than such date as is necessary for the Comptroller  
14 General of the United States to submit the report required  
15 by subsection (c) in accordance with such subsection, the  
16 Comptroller General shall complete a review of risks posed  
17 by earthquakes to the United States.

18           (b) **ELEMENTS.**—The review conducted under sub-  
19 section (a) shall include the following:

20                   (1) A comprehensive assessment of—

21                           (A) the risks and hazards to the United  
22 States posed by earthquakes, including risks  
23 and hazards resulting from tsunamis and land-  
24 slides that are generated by earthquakes;

1           (B) the efforts of the Federal Emergency  
2           Management Agency and the National Institute  
3           of Standards and Technology to improve the re-  
4           silience of the United States to earthquakes and  
5           to identify important gaps in the resilience of  
6           the United States to earthquakes;

7           (C) the progress made by the National In-  
8           stitute of Standards and Technology and the  
9           Interagency Coordinating Committee to coordi-  
10          nate effectively the budget and activities of the  
11          Program agencies (as defined in section 4 of  
12          the Earthquake Hazards Reduction Act of 1977  
13          (42 U.S.C. 7703)) in advancing the plans and  
14          goals of the National Earthquake Hazards Re-  
15          duction Program and how coordination among  
16          the Program agencies can be improved;

17          (D) the extent to which the Federal Gov-  
18          ernment, States, local, and tribal governments,  
19          and the private sector are already implementing  
20          strategies to improve resilience of the United  
21          States to earthquakes; and

22          (E) the extent to which the research done  
23          during the 40 years of the Program has been  
24          applied to both public and private earthquake  
25          risk and hazards reduction.

1           (2) Identification of such legislative or adminis-  
2           trative action as may be appropriate to improve the  
3           Program and the resilience of the United States to  
4           earthquakes.

5           (c) REPORT.—As soon as practicable, but not later  
6           than 3 years after the date of the enactment of this Act,  
7           the Comptroller General shall submit to the Committee  
8           on Commerce, Science, and Transportation, the Com-  
9           mittee on Energy and Natural Resources, and the Com-  
10          mittee on Homeland Security and Governmental Affairs  
11          of the Senate and the Committee on Science, Space, and  
12          Technology, the Committee on Natural Resources, and the  
13          Committee on Homeland Security of the House of Rep-  
14          resentatives a report on the findings of the Comptroller  
15          General with respect to the review completed under sub-  
16          section (a).

17       **SEC. 5. SEISMIC STANDARDS.**

18          Section 8 of the Earthquake Hazards Reduction Act  
19          of 1977 (42 U.S.C. 7705b) is amended to read as follows:

20       **“SEC. 8. SEISMIC STANDARDS.**

21          “(a) ASSESSMENT AND RECOMMENDATIONS.—Not  
22          later than December 1, 2019, the Director of the National  
23          Institute of Standards and Technology and the Adminis-  
24          trator of the Federal Emergency Management Agency  
25          shall jointly convene a committee of experts from Federal

1 agencies, nongovernmental organizations, private sector  
2 entities, disaster management professional associations,  
3 engineering professional associations, and professional  
4 construction and homebuilding industry associations, to  
5 assess and recommend options for improving the built en-  
6 vironment and critical infrastructure to reflect perform-  
7 ance goals stated in terms of post-earthquake reoccupancy  
8 and functional recovery time.

9       “(b) REPORT TO CONGRESS.—Not later than June  
10 30, 2020, the committee convened under paragraph (1)  
11 shall submit to the Committee on Commerce, Science, and  
12 Transportation, the Committee on Energy and Natural  
13 Resources, and the Committee on Homeland Security and  
14 Governmental Affairs of the Senate and the Committee  
15 on Science, Space, and Technology, the Committee on  
16 Natural Resources, and the Committee on Homeland Se-  
17 curity of the House of Representatives a report on rec-  
18 ommended options for improving the built environment  
19 and critical infrastructure to reflect performance goals  
20 stated in terms of post-earthquake reoccupancy and func-  
21 tional recovery time.”.

22 **SEC. 6. MANAGEMENT PLAN FOR ADVANCED NATIONAL**  
23 **SEISMIC SYSTEM.**

24       (a) PLAN REQUIRED.—Not later than 1 year after  
25 the date of the enactment of this Act, the United States

1 Geological Survey shall submit to Congress a 5-year man-  
2 agement plan for the continued operation of the Advanced  
3 National Seismic System.

4 (b) ELEMENTS.—The plan required by subsection (a)  
5 shall include the following:

6 (1) Strategies to continue the development of  
7 an earthquake early warning system.

8 (2) A mechanism for securing the participation  
9 of State and regional level earthquake monitoring  
10 entities, including those defunded by the Advanced  
11 National Seismic System in the last five years.

12 (3) A plan to encourage and support the inte-  
13 gration of geospatial data products into earthquake  
14 monitoring in regions experiencing large earth-  
15 quakes.

16 (4) A plan to ensure that there is an active,  
17 geographically diverse, management and advisory  
18 structure for the Advanced National Seismic Sys-  
19 tem.

20 **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

21 Section 12 of the Earthquake Hazards Reduction Act  
22 of 1977 (42 U.S.C. 7706) is amended—

23 (1) in subsection (a)(8)—

24 (A) in subparagraph (D), by striking  
25 “and” at the end; and

1 (B) by inserting before the language fol-  
2 lowing subparagraph (E) the following:

3 “(F) \$8,670,000 for fiscal year 2018,

4 “(G) \$8,843,000 for fiscal year 2019,

5 “(H) \$9,020,000 for fiscal year 2020,

6 “(I) \$9,200,000 for fiscal year 2021, and

7 “(J) \$9,385,000 for fiscal year 2022,”;

8 (2) in subsection (b)(2)—

9 (A) in subparagraph (D), by striking “;  
10 and” and inserting a semicolon;

11 (B) in subparagraph (E), by striking the  
12 period at the end and inserting a semicolon;  
13 and

14 (C) by adding at the end the following:

15 “(F) \$72,420,000 for fiscal year 2018, of  
16 which not less than \$30,000,000 shall be made  
17 available for completion of the Advanced Na-  
18 tional Seismic System established under section  
19 7707 of this title;

20 “(G) \$73,868,000 for fiscal year 2019, of  
21 which not less than \$30,000,000 shall be made  
22 available for completion of the Advanced Na-  
23 tional Seismic System established under section  
24 7707 of this title;

1           “(H) \$75,345,000 for fiscal year 2020, of  
2           which not less than \$30,000,000 shall be made  
3           available for completion of the Advanced Na-  
4           tional Seismic System established under section  
5           7707 of this title;

6           “(I) \$75,853,000 for fiscal year 2021, of  
7           which not less than \$30,000,000 shall be made  
8           available for completion of the Advanced Na-  
9           tional Seismic System established under section  
10          7707 of this title; and

11          “(J) \$78,390,000 for fiscal year 2022, of  
12          which not less than \$30,000,000 shall be made  
13          available for completion of the Advanced Na-  
14          tional Seismic System established under section  
15          7707 of this title.”;

16          (3) in subsection (c)(2)—

17                 (A) in subparagraph (D), by striking  
18                 “and” at the end;

19                 (B) in subparagraph (E), by striking the  
20                 period at the end and inserting a semicolon;  
21                 and

22                 (C) by adding at the end the following:

23                         “(F) \$55,080,000 for fiscal year 2018,

24                         “(G) \$56,181,000 for fiscal year 2019,

25                         “(H) \$57,305,000 for fiscal year 2020,



1                   “(I) \$58,451,000 for fiscal year 2021, and  
2                   “(J) \$59,620,000 for fiscal year 2022.”;  
3                   and  
4                   (4) in subsection (d)(2)—  
5                   (A) in subparagraph (D), by striking  
6                   “and” at the end;  
7                   (B) in subparagraph (E), by striking the  
8                   period at the end and inserting a comma; and  
9                   (C) by adding at the end the following:  
10                   “(F) \$5,304,000 for fiscal year 2018,  
11                   “(G) \$5,410,000 for fiscal year 2019,  
12                   “(H) \$5,518,000 for fiscal year 2020,  
13                   “(I) \$5,628,000 for fiscal year 2021, and  
14                   “(J) \$5,741,000 for fiscal year 2022.”.

15 **SEC. 8. TECHNICAL CORRECTIONS.**

16           (a) CORRECTION OF TITLE OF ADMINISTRATOR OF  
17 THE FEDERAL EMERGENCY MANAGEMENT AGENCY.—  
18 The Earthquake Hazards Reduction Act of 1977 (42  
19 U.S.C. 7701 et seq.) is amended—

20           (1) in section 5 of the Earthquake Hazards Re-  
21 duction Act of 1977 (42 U.S.C. 7704)—

22           (A) in subsection (a)(3)(B), as amended by  
23 section 3(b)(1)—

24           (i) in the matter preceding clause (i),  
25           by striking “the directors of”;

1 (ii) in clause (i), by inserting “the Ad-  
2 ministrator of” before “the”; and

3 (iii) in clauses (ii) through (v), by in-  
4 serting “the Director of” before “the” each  
5 place it appears; and

6 (B) in subsection (b)(3)(C), as amended by  
7 section 3(e), by striking “Director of the Fed-  
8 eral” and inserting “Administrator of the Fed-  
9 eral”; and

10 (2) in section 9 of such Act (42 U.S.C. 7705c),  
11 by striking “Director of the Agency” and inserting  
12 “Administrator of the Federal Emergency Manage-  
13 ment Agency” each place it appears.

14 (b) REFERENCES TO THE ADVANCED NATIONAL  
15 SEISMIC SYSTEM.—Such Act is amended—

16 (1) in section 13, in the section heading, by  
17 striking “**ADVANCED NATIONAL SEISMIC RE-**  
18 **SEARCH AND MONITORING SYSTEM**” and insert-  
19 ing “**ADVANCED NATIONAL SEISMIC SYSTEM**”;  
20 and

21 (2) by striking “Advanced National Seismic Re-  
22 search and Monitoring System” each place it ap-  
23 pears and inserting “Advanced National Seismic  
24 System”.

1           (e) INCORRECT CROSS-REFERENCES.—Paragraph  
2 (4) of section 5(a) of such Act (42 U.S.C. 7704(a)), as  
3 amended by section 3(b)(4)(A), is amended—

4           (1) in clauses (i) and (ii) of subparagraph (A),  
5 as redesignated by section 3(b)(4)(A), by striking  
6 “subparagraph (3)(A)” both places it appears and  
7 inserting “paragraph (3)(D)(i)(I)”; and

8           (2) in clause (iii), as redesignated, by striking  
9 “under (3)(A)” and inserting “under paragraph  
10 (3)(D)(i)(I)”.