

**Calendar No. 183**

119TH CONGRESS  
1ST SESSION

**S. 320**

**[Report No. 119–74]**

To reauthorize the Earthquake Hazards Reduction Act of 1977, and for  
other purposes.

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IN THE SENATE OF THE UNITED STATES

JANUARY 29, 2025

Mr. PADILLA (for himself and Ms. MURKOWSKI) introduced the following bill;  
which was read twice and referred to the Committee on Commerce,  
Science, and Transportation

OCTOBER 14, 2025

Reported by Mr. CRUZ, with an amendment

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

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**A BILL**

To reauthorize the Earthquake Hazards Reduction Act of  
1977, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “National Earthquake  
3 Hazards Reduction Program Reauthorization Act of  
4 2025”.

5 **SEC. 2. MODIFICATION OF FINDINGS.**

6 Section 2 of the Earthquake Hazards Reduction Act  
7 of 1977 (42 U.S.C. 7701) is amended—

8 (1) in paragraph (1)—

9 (A) by striking “50 States, and the Com-  
10 monwealth of Puerto Rico,” and inserting  
11 “States and Tribal jurisdictions”;

12 (B) by striking “of them” and inserting  
13 “States”; and

14 (C) by adding at the end the following:  
15 “Almost half of the United States population  
16 resides in areas that are at risk or experiencing  
17 a damaging earthquake during the 50-year pe-  
18 riod beginning on the date of the enactment of  
19 the National Earthquake Hazards Reduction  
20 Program Reauthorization Act of 2025”;

21 (2) in paragraph (2)—

22 (A) by inserting after the first sentence the  
23 following: “A 2023 report by the Federal Emer-  
24 gency Management Agency and the United  
25 States Geological Survey (FEMA P-366) esti-  
26 mates the annualized earthquake losses to the

national building stock is \$14,700,000,000 per year and the total economic exposure to earthquake losses (buildings and contents) across the nation is \$107,800,000,000,000.”; and

(B) in the third sentence—

(i) by striking “and construction” and inserting “, construction, evaluation, and retrofitting”; and

(ii) by striking “and (E)” and inserting the following: “(E) inventories of buildings and infrastructure with high seismic risk, especially those that are critical to community resilience, (F) programs that require or incentivize replacement or retrofit of existing buildings and infrastructure with high seismic risk, especially those that are critical to community resilience, and (G)”;

(3) in paragraph (3), by inserting “Tribal,” after “local,”;

(4) in paragraph (4), by striking “could provide” and all that follows through the period at the end and inserting “is necessary to provide the scientific understanding needed to improve and expand the earthquake early warning system.”;

1           (5) in paragraph (8), by striking “cave-ins” and  
2       inserting “collapse”;

3           (6) in paragraph (9)—

4               (A) in the first sentence, by striking “and  
5       local” and inserting “local, and Tribal govern-  
6       ment”;

7               (B) in the second sentence, by striking  
8       “transfer knowledge and information to” and  
9       inserting “exchange knowledge and information  
10      between”; and

11              (C) in the third sentence, by striking  
12      “specifications, criteria” and inserting “guide-  
13      lines, codes, standards”;

14           (7) in paragraph (12)—

15               (A) in the second sentence—

16                   (i) by striking “When earthquakes  
17                   occur, the built environment is generally”  
18                   and inserting “Relatively newer buildings  
19                   and infrastructure have generally been”;  
20                   and

21                   (ii) by striking “and is” and inserting  
22                   “when earthquakes occur, but most are”;  
23                   and

24               (B) by adding at the end the following: “In  
25      addition, buildings and infrastructure built to

1 older codes and standards may pose significant  
 2 risk of injury, loss of life, or irreparable dam-  
 3 age. A 2021 report submitted to Congress pur-  
 4 suant to section 8(b), as amended by section 5  
 5 of the National Earthquake Hazards Reduction  
 6 Program Reauthorization Act of 2018 (Public  
 7 Law 115–307), by the Federal Emergency  
 8 Management Agency and the National Institute  
 9 of Standards and Technology (FEMA P2090/  
 10 NST SP–1254) provides recommendations for  
 11 improving post-earthquake functional recovery  
 12 time of the built environment to support com-  
 13 munity resilience goals and many of these rec-  
 14 ommendations still need to be implemented.”;  
 15 and

16 (8) in paragraph (13)—

17 (A) in the first sentence, by inserting “in  
 18 2011” after “a study”;

19 (B) in the second sentence, by inserting  
 20 “(in 2011 dollars)” after “\$300,000,000”; and

21 (C) by adding at the end the following:  
 22 “The cost of actual seismic retrofits to reduce  
 23 known risks is not included in such valuation.”.

1 **SEC. 3. MODIFICATION OF PURPOSE.**

2 Section 3 of the Earthquake Hazards Reduction Act  
3 of 1977 (42 U.S.C. 7702) is amended—

4 (1) in paragraph (1)—

5 (A) by striking “and local” and inserting  
6 “, local, and Tribal government”; and

7 (B) by striking “locations and structures”  
8 and inserting “buildings and infrastructure”;

9 (2) in paragraph (2)—

10 (A) by striking “and construction” and in-  
11 serting “, construction, evaluation, and retro-  
12 fitting”; and

13 (B) by inserting “housing and care facili-  
14 ties for vulnerable populations,” after “occu-  
15 pancy buildings”; and

16 (3) in paragraph (4)—

17 (A) by striking “and local” and inserting  
18 “, local, and Tribal government”; and

19 (B) by striking “encourage consideration  
20 of” and inserting “incorporate”.

21 **SEC. 4. MODIFICATION OF DEFINITIONS.**

22 Section 4 of the Earthquake Hazards Reduction Act  
23 of 1977 (42 U.S.C. 7703) is amended—

24 (1) in paragraph (3), by inserting “, including  
25 secondary effects such as earthquake-caused  
26 tsunamis”; and

1           (2) by adding at the end the following:

2           “(11) The term ‘Tribal government’ has the  
3           meaning given the term ‘tribal government’ in sec-  
4           tion 421 of the Congressional Budget Act of 1974  
5           (2 U.S.C. 658).

6           “(12) The term ‘functional recovery’ means a  
7           post-earthquake performance state in which a build-  
8           ing or lifeline infrastructure system is maintained,  
9           or restored, to safely and adequately support the  
10          basic intended functions associated with the pre-  
11          earthquake use or occupancy of a building, or the  
12          pre-earthquake service level of a lifeline infrastruc-  
13          ture system.

14          “(13) The term ‘earthquake forecast’ means a  
15          statement of probabilities that 1 or more earth-  
16          quakes within a clearly specified magnitude range  
17          may occur within a specified time interval and geo-  
18          graphic region.”.

19   **SEC. 5. IMPROVEMENTS TO NATIONAL EARTHQUAKE HAZ-**  
20                   **ARDS REDUCTION PROGRAM.**

21          (a) PROGRAM ACTIVITIES.—Subsection (a)(2) of sec-  
22          tion 5 of the Earthquake Hazards Reduction Act of 1977  
23          (42 U.S.C. 7704) is amended—

24                  (1) in subparagraph (B)—

25                          (A) in the matter before clause (i)—

1 (i) by striking “and local” and insert-  
 2 ing “, local, and Tribal”; and

3 (ii) by striking “and constructing”  
 4 and inserting “, designing, constructing,  
 5 evaluating, and retrofitting”;

6 (B) by amending clause (ii) to read as fol-  
 7 lows:

8 “(ii) development of standards, guide-  
 9 lines, and voluntary standards, guidelines,  
 10 and consensus codes for earthquake haz-  
 11 ards reduction for buildings, structures,  
 12 and lifeline infrastructure, including post-  
 13 earthquake recovery-based performance ob-  
 14 jectives that address reoccupancy and  
 15 downtime of community-prioritized build-  
 16 ings, structures, and services provided by  
 17 lifeline infrastructure;”;

18 (C) in clause (iii), by striking “and haz-  
 19 ards reduction, and” and inserting “functional  
 20 recovery, and other hazards reduction topics;”;

21 (D) in clause (iv)—

22 (i) by inserting “and maintaining”  
 23 after “publishing”;

24 (ii) by inserting “in coordination with  
 25 the National Tsunami Hazards Mitigation



Program, tsunami susceptibility,” after  
 “liquefaction susceptibility,”; and

(iii) by striking “; and” and inserting  
 a semicolon; and

(E) by adding at the end the following:

“(v) subject to the availability of  
 funds, development of best practices and  
 guidelines to create an inventory of and  
 conduct seismic performance evaluations of  
 buildings, structures, and lifeline infra-  
 structure with high seismic risk, especially  
 those that are critical to community resil-  
 ience; and

“(vi) subject to the availability of  
 funds, the provision of technical assistance  
 upon request by a State, local, or Tribal  
 government regarding—

“(I) the creation of an inventory  
 of buildings, structures, and lifeline  
 infrastructure;

“(II) the performance of seismic  
 performance evaluations; and

“(III) cost-effective best practices  
 for retrofitting existing buildings;

1 structures, and lifeline infrastruc-  
 2 ture.”;

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

5 (3) by redesignating subparagraph (D) as sub-  
 6 paragraph (E); and

7 (4) by inserting after subparagraph (C) the fol-  
 8 lowing:

9 “(D) improve the understanding of—

10 “(i) the multiple hazards associated  
 11 with earthquakes, including liquefaction,  
 12 tsunamis, landslides, structural fires, and  
 13 the compounding effects of climate on  
 14 these hazards; and

15 “(ii) potential mitigation measures for  
 16 such hazards; and”.

17 (b) DUTIES OF INTERAGENCY COORDINATING COM-  
 18 MITTEE ON EARTHQUAKE HAZARDS REDUCTION.—Sub-  
 19 section (a)(3)(D)(ii) of such section is amended—

20 (1) in subclause (V), by inserting “and associ-  
 21 ated secondary hazards” before the period at the  
 22 end; and

23 (2) by adding at the end the following:

24 “(VIII) Coordinating with the  
 25 Chair of the Federal Communications

1 Commission on the timely broad-  
 2 easting of emergency alerts generated  
 3 by the earthquake early warning sys-  
 4 tem.”.

5 (c) BIENNIAL REPORT.—Subsection (a)(4)(A) of  
 6 such section is amended by striking “under paragraph  
 7 (3)(D)(i)(I)” each place it appears and inserting “under  
 8 paragraph (3)(D)(ii)(I)”.

9 (d) ADVISORY COMMITTEE.—Subsection (a)(5)(A) of  
 10 such section is amended—

11 (1) by inserting “the Chair of the Scientific  
 12 Earthquake Studies Advisory Committee and” after  
 13 “including”;

14 (2) by striking “and local government” and in-  
 15 serting “, local, and Tribal governments”; and

16 (3) by inserting “social,” after “scientific,”.

17 (e) LEAD AGENCY FOR RESPONSIBILITIES OF PRO-  
 18 GRAM AGENCIES.—Subsection (b)(1) of such section is  
 19 amended—

20 (1) in subparagraph (A)—

21 (A) by striking “and local” and inserting  
 22 “local, and Tribal governments”; and

23 (B) by striking “plan and constructing”  
 24 and inserting “planning, designing, con-  
 25 structing, evaluating, and retrofitting”;

1           (2) by redesignating subparagraphs (C) and  
2           (D) as subparagraphs (F) and (G), respectively; and  
3           (3) by inserting after subparagraph (B) the fol-  
4           lowing:

5                   “(C) improve the understanding of earth-  
6                   quake-caused fires and support the development  
7                   of engineering tools and construction methods  
8                   that mitigate the risk of fire following earth-  
9                   quakes;

10                   “(D) develop, in coordination with the Ad-  
11                   ministrator of the Federal Emergency Manage-  
12                   ment Agency, best practices and guidelines for  
13                   a State, local, or Tribal government to create  
14                   an inventory of buildings, structures, or lifeline  
15                   infrastructure that are critical to community re-  
16                   silience or otherwise have high seismic risk;

17                   “(E) provide, in coordination with the Ad-  
18                   ministrator of the Federal Emergency Manage-  
19                   ment Agency, technical assistance to a State,  
20                   local, or Tribal government requesting such as-  
21                   sistance with respect to the creation of an in-  
22                   ventory of buildings, structures, or lifeline in-  
23                   frastructure;”.

1       (f) RESPONSIBILITIES OF FEDERAL EMERGENCY  
 2 MANAGEMENT AGENCY.—Subsection (b)(2) of such sec-  
 3 tion is amended—

4               (1) in subparagraph (A)—

5                       (A) in clause (i)—

6                               (i) by inserting “and Tribal govern-  
 7 ments” after “States”;

8                               (ii) by inserting “and performance  
 9 evaluations” after “safety inspections”;  
 10 and

11                              (iii) by inserting “and improve post-  
 12 earthquake functional recovery” after  
 13 “seismic safety”;

14                       (B) in clause (ii), by inserting “, including  
 15 Tribal entities,” after “appropriate audiences”;

16                       (C) in clause (iii)—

17                               (i) by striking “of seismic resistant”  
 18 and inserting “to all appropriate audi-  
 19 ences, including Tribal governments, of”;  
 20 and

21                               (ii) by inserting “that enhance seismic  
 22 safety, improve post-earthquake functional  
 23 recovery, and reduce losses from earth-  
 24 quakes” after “and lifeline infrastructure”;

25                       (D) in clause (iv)—

1 (i) in striking “and local” and insert-  
 2 ing “; local, and Tribal”; and

3 (ii) by striking “; and” and inserting  
 4 a semicolon;

5 (E) by redesignating clause (v) as clause  
 6 (vi); and

7 (F) by inserting after clause (iv) the fol-  
 8 lowing:

9 “(v) shall provide technical assistance  
 10 to State, local, or Tribal governmental en-  
 11 tities in the creation of evacuation plans in  
 12 the event of an earthquake, landslide, tsu-  
 13 nami, or other earthquake-related hazard;  
 14 and”; and

15 (2) in subparagraph (B)—

16 (A) in the subparagraph heading, by in-  
 17 serting “AND TRIBAL” after “STATE”;

18 (B) in the matter before clause (i), by in-  
 19 serting “or Tribal government” after “State”;  
 20 and

21 (C) in clause (i), by striking “safety” and  
 22 inserting “performance, community resilience,  
 23 or public awareness”.

1       ~~(g)~~ RESPONSIBILITIES OF UNITED STATES GEOLOGI-  
 2 CAL SURVEY.—Subsection ~~(b)~~(3) of such section is  
 3 amended—

4           (1) in subparagraph (B), by striking “and  
 5 local” and inserting “; local, and Tribal”;

6           (2) in subparagraph (C), by inserting “; the  
 7 Chair of the Federal Communications Commission,”  
 8 after “Agency”;

9           (3) by redesignating subparagraphs ~~(D)~~  
 10 through ~~(K)~~ as subparagraphs (L) through (Q), re-  
 11 spectively;

12           (4) by inserting after subparagraph (C) the fol-  
 13 lowing:

14               “(D) coordinate with the Administrator of  
 15 the National Oceanic and Atmospheric Admin-  
 16 istration and the Administrator of the Federal  
 17 Emergency Management Agency on data shar-  
 18 ing and resource allocation to support a timely  
 19 response to oceanic earthquakes and tsunamis;

20               “(E) in consultation with the Chair of the  
 21 Federal Communications Commission, ensure  
 22 that earthquake alerts and early warnings are  
 23 broadcast as rapidly and reliably as possible, in  
 24 the predominant languages in the affected re-

1           gion, to ensure maximum warning time for  
2           nearby persons;

3           “(F) expand the earthquake early warning  
4           system within and to additional high risk haz-  
5           ard areas, including making improvements as  
6           practicable to improve detection and increase  
7           the time between warning messages and percep-  
8           tible ground motion;

9           “(G) coordinating with affected State and  
10          Tribal governments on earthquake early warn-  
11          ing system improvements;

12          “(H) issue earthquake forecasts, when ap-  
13          propriate, for aftershocks associated with sig-  
14          nificant earthquakes in the United States;”;

15          (5) in subparagraph (I), as redesignated by  
16          paragraph (3), by inserting “the Chair of the Fed-  
17          eral Communications Commission,” after “Agency,”;

18          (6) in subparagraph (L), as redesignated by  
19          paragraph (3), by striking “; and” and inserting a  
20          semicolon;

21          (7) in subparagraph (M), as redesignated by  
22          paragraph (3), by striking the period at the end and  
23          inserting a semicolon; and



1           (8) in subparagraph (O), as redesignated by  
 2           paragraph (3), by inserting “maps of natural haz-  
 3           ards associated with earthquakes and”.

4           (h) RESPONSIBILITIES OF NATIONAL SCIENCE  
 5 FOUNDATION.—Subsection (b)(4)(A) of such section is  
 6 amended—

7           (1) in clause (iii), by inserting “including up-  
 8           dated tsunami and liquefaction risk maps,”; and

9           (2) in clause (vii), by striking “Historically  
 10          Black Colleges and Universities and those serving  
 11          large proportions of Hispanics, Native Americans,  
 12          Asian-Pacific Americans, and other underrep-  
 13          resented populations” and inserting “institutions de-  
 14          scribed in section 371(a) of the Higher Education  
 15          Act of 1965 (20 U.S.C. 1067q(a))”.

16 **SEC. 6. SEISMIC PERFORMANCE PROPERTY STANDARDS.**

17          Section 947 of the Cranston-Gonzales National Af-  
 18 fordable Housing Act (42 U.S.C. 7704a) is amended—

19           (1) in subsection (a), by striking “safety” both  
 20           places it appears and inserting “performance”; and

21           (2) in subsection (b), by striking “shake-related  
 22           property damage” and inserting “seismic-related  
 23           property damage to improve the post-earthquake  
 24           functional recovery time”.

1 **SEC. 7. SEISMIC STANDARDS.**

2 Section 8 of the Earthquake Hazards Reduction Act  
3 of 1977 (42 U.S.C. 7705b) is amended—

4 (1) in subsection (b), by striking “under para-  
5 graph (1)” and inserting “under subsection (a)”;  
6 and

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

8 “(c) **IMPLEMENTATION OF RECOMMENDATIONS.—**

9 Each Program agency, as part of their Program respon-  
10 sibilities, shall execute research, projects, grants, and  
11 other activities that support, promote, advance, or other-  
12 wise implement the recommendations in the report sub-  
13 mitted pursuant to subsection (b) to improve the perform-  
14 ance of the built environment in terms of post-earthquake  
15 reoccupancy and functional recovery time.

16 “(d) **BIENNIAL REPORTS.—**

17 “(1) **BIENNIAL REPORTS TO INTERAGENCY CO-**  
18 **ORDINATING COMMITTEE.—**No later than September  
19 30, 2025, and not less frequently than once every 2  
20 years thereafter, each Program agency shall submit  
21 to the Interagency Coordinating Committee a report  
22 on activities and progress made to support, promote,  
23 or advance the implementation of the recommenda-  
24 tions included in the report submitted pursuant to  
25 subsection (b).

1           ~~“(2) INCLUSION IN BIENNIAL REPORTS OF~~  
 2           ~~INTERAGENCY COORDINATING COMMITTEE.—The~~  
 3           ~~Interagency Coordinating Committee shall include~~  
 4           ~~the information received under paragraph (1) in~~  
 5           ~~each biennial report submitted under section 5(a)(4),~~  
 6           ~~including consideration of a prioritized work plan to~~  
 7           ~~coordinate activities among the Program agencies~~  
 8           ~~and the necessary Program budget to fully imple-~~  
 9           ~~ment the recommendations described in paragraph~~  
 10          ~~(1).”.~~

11 **SEC. 8. IMPROVEMENTS TO POST-EARTHQUAKE INVES-**  
 12                                   **TIGATIONS PROGRAM.**

13           Section 11 of the Earthquake Hazards Reduction Act  
 14 of 1977 (42 U.S.C. 7705e) is amended, in the matter be-  
 15 fore paragraph (1)—

16           (1) in the first sentence, by inserting “domestic  
 17           and international” after “investigate major”; and

18           (2) in the fifth sentence, by inserting “Federal  
 19           Emergency Management” before “Agency”.

20 **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

21           (a) **GENERAL AUTHORIZATION FOR PROGRAM.**—Sub-  
 22 section (a)(8) of section 12 of the Earthquake Hazards  
 23 Reduction Act of 1977 (42 U.S.C. 7706) is amended—

24           (1) in subparagraph (I), by striking “, and”  
 25           and inserting a comma; and

1           (2) by inserting after subparagraph (J) the fol-  
 2       lowing:

3                       “(K) \$10,590,000 for fiscal year 2024,

4                       “(L) \$10,590,000 for fiscal year 2025,

5                       “(M) \$10,590,000 for fiscal year 2026,

6                       “(N) \$10,590,000 for fiscal year 2027,

7                       and

8                       “(O) \$10,590,000 for fiscal year 2028.”.

9       (b) UNITED STATES GEOLOGICAL SURVEY.—Sub-  
 10 section (b)(2) of such section is amended—

11           (1) in subparagraph (I), by striking “; and”  
 12       and inserting a semicolon;

13           (2) in subparagraph (J), by striking the period  
 14       at the end and inserting a semicolon; and

15           (3) by adding at the end the following:

16                       “(K) \$100,900,000 for fiscal year 2024, of  
 17       which not less than \$36,000,000 shall be made  
 18       available for completion of the Advanced Na-  
 19       tional Seismic System established under section  
 20       13;

21                       “(L) \$100,900,000 for fiscal year 2025, of  
 22       which not less than \$36,000,000 shall be made  
 23       available for completion of the Advanced Na-  
 24       tional Seismic System established under section  
 25       13;

1           “(M) \$100,900,000 for fiscal year 2026, of  
 2           which not less than \$36,000,000 shall be made  
 3           available for completion of the Advanced Na-  
 4           tional Seismic System established under section  
 5           13;

6           “(N) \$100,900,000 for fiscal year 2027, of  
 7           which not less than \$36,000,000 shall be made  
 8           available for completion of the Advanced Na-  
 9           tional Seismic System established under section  
 10          13; and

11          “(O) \$100,900,000 for fiscal year 2028, of  
 12          which not less than \$36,000,000 shall be made  
 13          available for completion of the Advanced Na-  
 14          tional Seismic System established under section  
 15          13.”.

16          (e) NATIONAL SCIENCE FOUNDATION.—Subsection  
 17          (e)(2) of such section is amended—

18                 (1) in subparagraph (I), by striking “; and”  
 19                 and inserting a comma;

20                 (2) in subparagraph (J), by striking the period  
 21                 at the end and inserting a comma; and

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

23                         “(K) \$58,000,000 for fiscal year 2024,

24                         “(L) \$58,000,000 for fiscal year 2025,

25                         “(M) \$58,000,000 for fiscal year 2026,

1                   “(N) \$58,000,000 for fiscal year 2027,

2                   and

3                   “(O) \$58,000,000 for fiscal year 2028.”.

4           (d) NATIONAL INSTITUTE OF STANDARDS AND  
5 TECHNOLOGY.—Subsection (d)(2) of such section is  
6 amended—

7                   (1) in subparagraph (I), by striking “, and”  
8                   and inserting a comma;

9                   (2) in subparagraph (J), by striking the period  
10                  at the end and inserting a comma; and

11                  (3) by inserting after subparagraph (J) the fol-  
12                  lowing:

13                               “(K) \$5,900,000 for fiscal year 2024,

14                               “(L) \$5,900,000 for fiscal year 2025,

15                               “(M) \$5,900,000 for fiscal year 2026,

16                               “(N) \$5,900,000 for fiscal year 2027, and

17                               “(O) \$5,900,000 for fiscal year 2028,”.

18 **SECTION 1. SHORT TITLE.**

19           *This Act may be cited as the “National Earthquake*  
20 *Hazards Reduction Program Reauthorization Act of 2025”.*

21 **SEC. 2. MODIFICATION OF FINDINGS.**

22           *Section 2 of the Earthquake Hazards Reduction Act*  
23 *of 1977 (42 U.S.C. 7701) is amended—*

24                   (1) in paragraph (1)—

1           (A) by striking “50 States, and the Com-  
 2           monwealth of Puerto Rico,” and inserting  
 3           “States and Tribal jurisdictions”;

4           (B) by striking “of them” and inserting  
 5           “States”;

6           (C) by striking “Tennessee,,” and inserting  
 7           “, Tennessee,”; and

8           (D) by striking “A large portion of the pop-  
 9           ulation of the United States lives in areas vul-  
 10          nerable to earthquake hazards” and inserting  
 11          “Almost half of the United States population re-  
 12          sides in areas that are at risk or experiencing a  
 13          damaging earthquake during the 50-year period  
 14          beginning on the date of the enactment of the  
 15          National Earthquake Hazards Reduction Pro-  
 16          gram Reauthorization Act of 2025”;

17          (2) in paragraph (2)—

18           (A) by inserting after the first sentence the  
 19           following: “A 2023 report by the Federal Emer-  
 20           gency Management Agency and the United  
 21           States Geological Survey (FEMA P-366) esti-  
 22           mates the annualized earthquake losses to the na-  
 23           tional building stock is \$14,700,000,000 per year  
 24           and the total economic exposure to earthquake

1           *losses (buildings and contents) across the nation*  
 2           *is \$107,800,000,000,000.”; and*

3           *(B) in the third sentence—*

4                   *(i) by striking “and construction” and*  
 5                   *inserting “, construction, evaluation, and*  
 6                   *retrofitting”; and*

7                   *(ii) by striking “and (E)” and insert-*  
 8                   *ing the following: “(E) inventories of build-*  
 9                   *ings and infrastructure with high seismic*  
 10                  *risk, especially those that are critical to*  
 11                  *community resilience, (F) programs that re-*  
 12                  *quire or incentivize replacement or retrofit*  
 13                  *of existing buildings and infrastructure*  
 14                  *with high seismic risk, especially those that*  
 15                  *are critical to community resilience, and*  
 16                  *(G)”;*

17           *(3) in paragraph (3), by inserting “Tribal,”*  
 18           *after “local,”;*

19           *(4) in paragraph (4), by striking “could pro-*  
 20           *vide” and all that follows through the period at the*  
 21           *end and inserting “is necessary to provide the sci-*  
 22           *entific understanding needed to improve and expand*  
 23           *the earthquake early warning system.”;*

24           *(5) in paragraph (8), by striking “cave-ins” and*  
 25           *inserting “collapse”;*



1           (6) in paragraph (9)—

2                   (A) in the first sentence, by striking “and  
3           local” and inserting “local, and Tribal govern-  
4           ment”;

5                   (B) in the second sentence, by striking  
6           “transfer knowledge and information to” and in-  
7           serting “exchange knowledge and information be-  
8           tween”; and

9                   (C) in the third sentence, by striking “speci-  
10          fications, criteria” and inserting “guidelines,  
11          codes, standards”;

12          (7) in paragraph (12)—

13                  (A) in the second sentence—

14                          (i) by striking “When earthquakes  
15                          occur, the built environment is generally”  
16                          and inserting “Relatively newer buildings  
17                          and infrastructure have generally been”;  
18                          and

19                          (ii) by striking “and is” and inserting  
20                          “when earthquakes occur, but most are”;  
21                          and

22                  (B) by adding at the end the following: “In  
23                  addition, buildings and infrastructure built to  
24                  older codes and standards may pose significant  
25                  risk of injury, loss of life, or irreparable damage.

1       *A 2021 report submitted to Congress pursuant to*  
 2       *section 8(b), as amended by section 5 of the Na-*  
 3       *tional Earthquake Hazards Reduction Program*  
 4       *Reauthorization Act of 2018 (Public Law 115–*  
 5       *307), by the Federal Emergency Management*  
 6       *Agency and the National Institute of Standards*  
 7       *and Technology (FEMA P2090/NST SP–1254)*  
 8       *provides recommendations for improving post-*  
 9       *earthquake functional recovery time of the built*  
 10       *environment to support community resilience*  
 11       *goals and many of these recommendations still*  
 12       *need to be implemented.”; and*  
 13       *(8) in paragraph (13)—*

14               *(A) in the first sentence, by inserting “in*  
 15               *2011” after “a study”;*

16               *(B) in the second sentence, by inserting “(in*  
 17               *2011 dollars)” after “\$300,000,000”; and*

18               *(C) by adding at the end the following:*  
 19               *“The cost of actual seismic retrofits to reduce*  
 20               *known risks is not included in such valuation.”.*

21       **SEC. 3. MODIFICATION OF PURPOSE.**

22       *Section 3 of the Earthquake Hazards Reduction Act*  
 23       *of 1977 (42 U.S.C. 7702) is amended—*

24               *(1) in paragraph (1)—*

1           (A) by striking “and local” and inserting “,  
2           local, and Tribal government”; and

3           (B) by striking “locations and structures”  
4           and inserting “buildings and infrastructure”;  
5           (2) in paragraph (2)—

6           (A) by striking “and construction” and in-  
7           serting “, construction, evaluation, and retro-  
8           fitting”; and

9           (B) by inserting “housing and care facili-  
10          ties for vulnerable populations,” after “occu-  
11          pancy buildings,”; and

12          (3) in paragraph (4)—

13           (A) by striking “and local” and inserting “,  
14           local, and Tribal government”; and

15           (B) by striking “encourage consideration  
16           of” and inserting “incorporate”.

17 **SEC. 4. MODIFICATION OF DEFINITIONS.**

18          Section 4 of the Earthquake Hazards Reduction Act  
19 of 1977 (42 U.S.C. 7703) is amended—

20           (1) in paragraph (3), by inserting “, including  
21           secondary effects such as earthquake-caused tsunamis”  
22           after “earthquakes”; and

23           (2) by adding at the end the following:

24           “(11) The term ‘Tribal government’ has the  
25           meaning given the term ‘tribal government’ in section

1       421 of the Congressional Budget Act of 1974 (2  
2       U.S.C. 658).

3               “(12) The term ‘functional recovery’ means a  
4       post-earthquake performance state in which a build-  
5       ing or lifeline infrastructure system is maintained, or  
6       restored, to safely and adequately support the basic  
7       intended functions associated with the pre-earthquake  
8       use or occupancy of a building, or the pre-earthquake  
9       service level of a lifeline infrastructure system.

10              “(13) The term ‘earthquake forecast’ means a  
11       statement of probabilities that 1 or more earthquakes  
12       within a clearly specified magnitude range may occur  
13       within a specified time interval and geographic re-  
14       gion.”.

15   **SEC. 5. IMPROVEMENTS TO NATIONAL EARTHQUAKE HAZ-**  
16               **ARDS REDUCTION PROGRAM.**

17       (a) *PROGRAM ACTIVITIES.*—Subsection (a)(2) of sec-  
18       tion 5 of the Earthquake Hazards Reduction Act of 1977  
19       (42 U.S.C. 7704) is amended—

20               (1) in subparagraph (B)—

21                       (A) in the matter before clause (i)—

22                               (i) by striking “and local” and insert-  
23                               ing “local, and Tribal”; and

1                   (ii) by striking “and constructing”  
 2                   and inserting “, designing, constructing,  
 3                   evaluating, and retrofitting”;

4                   (B) by amending clause (ii) to read as fol-  
 5                   lows:

6                   “(ii) development of standards, guide-  
 7                   lines, and voluntary standards, guidelines,  
 8                   and consensus codes for earthquake hazards  
 9                   reduction for buildings, structures, and life-  
 10                  line infrastructure, including post-earth-  
 11                  quake recovery-based performance objectives  
 12                  that address reoccupancy and downtime of  
 13                  community-prioritized buildings, structures,  
 14                  and services provided by lifeline infrastruc-  
 15                  ture;”;

16                  (C) in clause (iii), by striking “and hazards  
 17                  reduction; and” and inserting “functional recov-  
 18                  ery, and other hazards reduction topics;”;

19                  (D) in clause (iv)—

20                   (i) by inserting “and maintaining”  
 21                   after “publishing”;

22                   (ii) by inserting “in coordination with  
 23                   the National Tsunami Hazards Mitigation  
 24                   Program, tsunami susceptibility,” after  
 25                   “liquefaction susceptibility,”; and

1                   (iii) by striking “; and” and inserting  
2                   a semicolon; and

3                   (E) by adding at the end the following:

4                   “(v) subject to the availability of funds,  
5                   development of best practices and guidelines  
6                   to create an inventory of and conduct seis-  
7                   mic performance evaluations of buildings,  
8                   structures, and lifeline infrastructure with  
9                   high seismic risk, especially those that are  
10                  critical to community resilience; and

11                  “(vi) subject to the availability of  
12                  funds, the provision of technical assistance  
13                  upon request by a State, local, or Tribal  
14                  government regarding—

15                  “(I) the creation of an inventory  
16                  of buildings, structures, and lifeline in-  
17                  frastructure;

18                  “(II) the performance of seismic  
19                  performance evaluations; and

20                  “(III) cost-effective best practices  
21                  for retrofitting existing buildings,  
22                  structures, and lifeline infrastructure.”;

23                  (2) in subparagraph (C), by striking “; and”  
24                  and inserting a semicolon;

1           (3) by redesignating subparagraph (D) as sub-  
2       paragraph (E); and

3           (4) by inserting after subparagraph (C) the fol-  
4       lowing:

5                     “(D) improve the understanding of—

6                             “(i) the multiple hazards associated  
7                             with earthquakes, including liquefaction,  
8                             tsunamis, landslides, and structural fires;  
9                             and

10                            “(ii) potential mitigation measures for  
11                            such hazards; and”.

12       (b) *DUTIES OF INTERAGENCY COORDINATING COM-*  
13 *MITTEE ON EARTHQUAKE HAZARDS REDUCTION.*—Sub-  
14 *section (a)(3)(D)(ii) of such section is amended—*

15                     (1) in subclause (V), by inserting “and associ-  
16       ated secondary hazards” before the period at the end;  
17       and

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

19                                     “(VIII) Coordinating with the  
20                                     Chair of the Federal Communications  
21                                     Commission on the timely broadcasting  
22                                     of emergency alerts generated by the  
23                                     earthquake early warning system.”.

24       (c) *BIENNIAL REPORT.*—Subsection (a)(4)(A) of such  
25 *section is amended by striking “under paragraph*

1 (3)(D)(i)(I)” each place it appears and inserting “under  
2 paragraph (3)(D)(ii)(I)”.

3 (d) *ADVISORY COMMITTEE*.—Subsection (a)(5)(A) of  
4 such section is amended—

5 (1) by inserting “the Chair of the Scientific  
6 Earthquake Studies Advisory Committee and” after  
7 “including”; and

8 (2) by striking “and local government” and in-  
9 serting “, local, and Tribal governments”.

10 (e) *LEAD AGENCY FOR RESPONSIBILITIES OF PRO-*  
11 *GRAM AGENCIES*.—Subsection (b)(1) of such section is  
12 amended—

13 (1) in subparagraph (A), by striking “and local”  
14 and all that follows through the semicolon at the end  
15 and inserting the following: “local, and Tribal gov-  
16 ernments, national standards and model building  
17 code organizations, architects and engineers, and oth-  
18 ers with a role in planning, designing, constructing,  
19 evaluating, and retrofitting buildings and lifeline in-  
20 frastructure;”;

21 (2) by redesignating subparagraphs (C) and (D)  
22 as subparagraphs (F) and (G), respectively; and

23 (3) by inserting after subparagraph (B) the fol-  
24 lowing:



1           “(C) improve the understanding of earth-  
 2           quake-caused fires and support the development  
 3           of engineering tools and construction methods  
 4           that mitigate the risk of fire following earth-  
 5           quakes;

6           “(D) develop, in coordination with the Ad-  
 7           ministrator of the Federal Emergency Manage-  
 8           ment Agency, best practices and guidelines for a  
 9           State, local, or Tribal government to create an  
 10          inventory of buildings, structures, or lifeline in-  
 11          frastructure that are critical to community resil-  
 12          ience or otherwise have high seismic risk;

13          “(E) provide, in coordination with the Ad-  
 14          ministrator of the Federal Emergency Manage-  
 15          ment Agency, technical assistance to a State,  
 16          local, or Tribal government requesting such as-  
 17          sistance with respect to the creation of an inven-  
 18          tory of buildings, structures, or lifeline infra-  
 19          structure;”.

20          (f) *RESPONSIBILITIES OF FEDERAL EMERGENCY MAN-*  
 21          *AGEMENT AGENCY.*—Subsection (b)(2) of such section is  
 22          amended—

23                 (1) in subparagraph (A)—

24                         (A) in clause (i)—

1                   (i) by inserting “and Tribal govern-  
2                   ments” after “States”;

3                   (ii) by inserting “and performance  
4                   evaluations” after “safety inspections”; and

5                   (iii) by inserting “and improve post-  
6                   earthquake functional recovery” after “seis-  
7                   mic safety”;

8                   (B) in clause (ii), by inserting “, including  
9                   Tribal entities,” after “appropriate audiences”;

10                  (C) in clause (iii)—

11                   (i) by striking “of seismic resistant”  
12                   and inserting “to all appropriate audiences,  
13                   including Tribal governments, of”; and

14                   (ii) by inserting “that enhance seismic  
15                   safety, improve post-earthquake functional  
16                   recovery, and reduce losses from earth-  
17                   quakes” after “and lifeline infrastructure”;

18                  (D) in clause (iv)—

19                   (i) in striking “and local” and insert-  
20                   ing “, local, and Tribal”; and

21                   (ii) by striking “; and” and inserting  
22                   a semicolon;

23                   (E) by redesignating clause (v) as clause  
24                   (vi); and

1                   (F) by inserting after clause (iv) the fol-  
 2                   lowing:

3                   “(v) shall provide technical assistance  
 4                   to State, local, or Tribal governmental enti-  
 5                   ties in the creation of evacuation plans in  
 6                   the event of an earthquake, landslide, tsu-  
 7                   nami, or other earthquake-related hazard;  
 8                   and”;

9                   (2) in subparagraph (B)—

10                  (A) in the subparagraph heading, by insert-  
 11                  ing “AND TRIBAL” after “STATE”;

12                  (B) in the matter before clause (i), by in-  
 13                  serting “or Tribal government” after “State”;  
 14                  and

15                  (C) in clause (i), by striking “safety” and  
 16                  inserting “performance, community resilience, or  
 17                  public awareness”.

18                  (g) RESPONSIBILITIES OF UNITED STATES GEOLOGI-  
 19                  CAL SURVEY.—Subsection (b)(3) of such section is amend-  
 20                  ed—

21                  (1) in subparagraph (B), by striking “and local”  
 22                  and inserting “, local, and Tribal”;

23                  (2) in subparagraph (C), by inserting “, the  
 24                  Chair of the Federal Communications Commission,”  
 25                  after “Agency”;

1           (3) by redesignating subparagraphs (D) through  
2           (K) as subparagraphs (I) through (P), respectively;

3           (4) by inserting after subparagraph (C) the fol-  
4           lowing:

5                   “(D) coordinate with the Administrator of  
6                   the National Oceanic and Atmospheric Adminis-  
7                   tration and the Administrator of the Federal  
8                   Emergency Management Agency on data sharing  
9                   and resource allocation to support a timely re-  
10                  sponse to oceanic earthquakes and tsunamis;

11                   “(E) in consultation with the Chair of the  
12                   Federal Communications Commission, ensure  
13                   that earthquake alerts and early warnings are  
14                   broadcast as rapidly and reliably as possible, in  
15                   the predominant languages in the affected region,  
16                   to ensure maximum warning time for nearby  
17                   persons;

18                   “(F) expand the earthquake early warning  
19                   system within and to additional high risk haz-  
20                   ard areas, including making improvements as  
21                   practicable to improve detection and increase the  
22                   time between warning messages and perceptible  
23                   ground motion;

1           “(G) coordinating with affected State and  
2           Tribal governments on earthquake early warning  
3           system improvements;

4           “(H) issue earthquake forecasts, when ap-  
5           propriate, for aftershocks associated with signifi-  
6           cant earthquakes in the United States;”;

7           (5) in subparagraph (I), as redesignated by  
8           paragraph (3), by inserting “the Chair of the Federal  
9           Communications Commission,” after “Agency,”;

10          (6) in subparagraph (L), as redesignated by  
11          paragraph (3), by striking “; and” and inserting a  
12          semicolon;

13          (7) in subparagraph (M), as redesignated by  
14          paragraph (3), by striking the period at the end and  
15          inserting a semicolon; and

16          (8) in subparagraph (O), as redesignated by  
17          paragraph (3), by inserting “maps of natural hazards  
18          associated with earthquakes and” after “including”.

19          (h) *RESPONSIBILITIES OF NATIONAL SCIENCE FOUN-*  
20          *DATION.*—Subsection (b)(4)(A) of such section is amend-  
21          ed—

22          (1) in clause (iii), by inserting “including up-  
23          dated tsunami and liquefaction risk maps,” after  
24          “maps,”; and

1           (2) *in clause (vii), by striking “Historically*  
 2       *Black Colleges and Universities and those serving*  
 3       *large proportions of Hispanics, Native Americans,*  
 4       *Asian-Pacific Americans, and other underrepresented*  
 5       *populations” and inserting “institutions described in*  
 6       *section 371(a) of the Higher Education Act of 1965*  
 7       *(20 U.S.C. 1067q(a))”.*

8       **SEC. 6. SEISMIC PERFORMANCE PROPERTY STANDARDS.**

9       *Section 947 of the Cranston-Gonzales National Afford-*  
 10   *able Housing Act (42 U.S.C. 7704a) is amended—*

11           (1) *in subsection (a), by striking “safety” both*  
 12       *places it appears and inserting “performance”; and*

13           (2) *in subsection (b), by striking “shake-related*  
 14       *property damage” and inserting “seismic-related*  
 15       *property damage to improve the post-earthquake func-*  
 16       *tional recovery time”.*

17       **SEC. 7. SEISMIC STANDARDS.**

18       *Section 8 of the Earthquake Hazards Reduction Act*  
 19   *of 1977 (42 U.S.C. 7705b) is amended—*

20           (1) *in subsection (b), by striking “under para-*  
 21       *graph (1)” and inserting “under subsection (a)”;* and

22           (2) *by adding at the end the following:*

23       “(c) *IMPLEMENTATION OF RECOMMENDATIONS.—Each*  
 24       *Program agency, as part of their Program responsibilities,*  
 25       *shall implement, within the Program activities authorized*

1 *by this Act, the applicable recommendations in the report*  
 2 *submitted pursuant to subsection (b) to improve the per-*  
 3 *formance of the built environment in terms of post-earth-*  
 4 *quake reoccupancy and functional recovery time.*

5 “(d) *BIENNIAL REPORTS.*—

6 “(1) *BIENNIAL REPORTS TO INTERAGENCY CO-*  
 7 *ORDINATING COMMITTEE.*—*No later than September*  
 8 *30, 2025, and not less frequently than once every 2*  
 9 *years thereafter, each Program agency shall submit to*  
 10 *the Interagency Coordinating Committee a report on*  
 11 *activities and progress made to support, promote, or*  
 12 *advance the implementation of the recommendations*  
 13 *included in the report submitted pursuant to sub-*  
 14 *section (b).*

15 “(2) *INCLUSION IN BIENNIAL REPORTS OF*  
 16 *INTERAGENCY COORDINATING COMMITTEE.*—*The*  
 17 *Interagency Coordinating Committee shall include the*  
 18 *information received under paragraph (1) in each bi-*  
 19 *ennial report submitted under section 5(a)(4), includ-*  
 20 *ing consideration of a prioritized work plan to co-*  
 21 *ordinate activities among the Program agencies and*  
 22 *the necessary Program budget to fully implement the*  
 23 *recommendations described in paragraph (1).”.*

1 **SEC. 8. IMPROVEMENTS TO POST-EARTHQUAKE INVESTIGA-**  
 2 **TIONS PROGRAM.**

3 *Section 11 of the Earthquake Hazards Reduction Act*  
 4 *of 1977 (42 U.S.C. 7705e) is amended, in the matter before*  
 5 *paragraph (1)—*

6 *(1) in the first sentence, by inserting “domestic*  
 7 *and international” after “investigate major”; and*

8 *(2) in the fifth sentence, by inserting “Federal*  
 9 *Emergency Management” before “Agency”.*

10 **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

11 *(a) GENERAL AUTHORIZATION FOR PROGRAM.—Sub-*  
 12 *section (a)(8) of section 12 of the Earthquake Hazards Re-*  
 13 *duction Act of 1977 (42 U.S.C. 7706) is amended—*

14 *(1) in subparagraph (I), by striking “, and” and*  
 15 *inserting a comma; and*

16 *(2) by inserting after subparagraph (J) the fol-*  
 17 *lowing:*

18 *“(K) \$8,500,000 for fiscal year 2024,*

19 *“(L) \$8,500,000 for fiscal year 2025,*

20 *“(M) \$8,500,000 for fiscal year 2026,*

21 *“(N) \$8,500,000 for fiscal year 2027, and*

22 *“(O) \$8,500,000 for fiscal year 2028.”.*

23 *(b) UNITED STATES GEOLOGICAL SURVEY.—Sub-*  
 24 *section (b)(2) of such section is amended—*

25 *(1) in subparagraph (I), by striking “; and” and*  
 26 *inserting a semicolon;*



1           (2) *in subparagraph (J), by striking the period*  
2           *at the end and inserting a semicolon; and*

3           (3) *by adding at the end the following:*

4                   “(K) \$92,427,000 for fiscal year 2024, of  
5                   *which not less than \$36,000,000 shall be made*  
6                   *available for completion of the Advanced Na-*  
7                   *tional Seismic System established under section*  
8                   13;

9                   “(L) \$92,427,000 for fiscal year 2025, of  
10                   *which not less than \$36,000,000 shall be made*  
11                   *available for completion of the Advanced Na-*  
12                   *tional Seismic System established under section*  
13                   13;

14                   “(M) \$92,427,000 for fiscal year 2026, of  
15                   *which not less than \$36,000,000 shall be made*  
16                   *available for completion of the Advanced Na-*  
17                   *tional Seismic System established under section*  
18                   13;

19                   “(N) \$92,427,000 for fiscal year 2027, of  
20                   *which not less than \$36,000,000 shall be made*  
21                   *available for completion of the Advanced Na-*  
22                   *tional Seismic System established under section*  
23                   13; and

24                   “(O) \$92,427,000 for fiscal year 2028, of  
25                   *which not less than \$36,000,000 shall be made*

1           *available for completion of the Advanced Na-*  
 2           *tional Seismic System established under section*  
 3           *13.”.*

4           (c) *NATIONAL SCIENCE FOUNDATION.—Subsection*  
 5           (c)(2) *of such section is amended—*

6                 (1) *in subparagraph (I), by striking “, and” and*  
 7                 *inserting a comma;*

8                 (2) *in subparagraph (J), by striking the period*  
 9                 *at the end and inserting a comma; and*

10                (3) *by adding at the end the following:*

11                         “(K) \$54,000,000 for fiscal year 2024,

12                         “(L) \$54,000,000 for fiscal year 2025,

13                         “(M) \$54,000,000 for fiscal year 2026,

14                         “(N) \$54,000,000 for fiscal year 2027, and

15                         “(O) \$54,000,000 for fiscal year 2028.”.

16           (d) *NATIONAL INSTITUTE OF STANDARDS AND TECH-*  
 17           *NOLOGY.—Subsection (d)(2) of such section is amended—*

18                 (1) *in subparagraph (I), by striking “, and” and*  
 19                 *inserting a comma;*

20                 (2) *in subparagraph (J), by striking the period*  
 21                 *at the end and inserting a comma; and*

22                 (3) *by inserting after subparagraph (J) the fol-*  
 23                 *lowing:*

24                         “(K) \$5,900,000 for fiscal year 2024,

25                         “(L) \$5,900,000 for fiscal year 2025,

- 1                   “(M) \$5,900,000 for fiscal year 2026,
- 2                   “(N) \$5,900,000 for fiscal year 2027, and
- 3                   “(O) \$5,900,000 for fiscal year 2028,”.

Calendar No. 183

119<sup>TH</sup> CONGRESS  
1<sup>ST</sup> Session

**S. 320**

[Report No. 119-74]

**A BILL**

To reauthorize the Earthquake Hazards Reduction  
Act of 1977, and for other purposes.

OCTOBER 14, 2025

Reported with an amendment