

116TH CONGRESS  
2D SESSION

# H. R. 8810

To establish a national program to identify and reduce losses from landslide hazards, to establish a national 3D Elevation Program, and for other purposes.

---

## IN THE HOUSE OF REPRESENTATIVES

NOVEMBER 24, 2020

Ms. DELBENE (for herself, Mr. KILMER, Mr. HECK, Mr. SMITH of Washington, Mr. CARTWRIGHT, and Ms. BONAMICI) introduced the following bill; which was referred to the Committee on Natural Resources, and in addition to the Committee on Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

---

## A BILL

To establish a national program to identify and reduce losses from landslide hazards, to establish a national 3D Elevation Program, 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,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “National Landslide  
5 Preparedness Act”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

1 (1) 3D.—The term “3D” means 3-dimensional.

2 (2) 3D ELEVATION DATA.—

3 (A) IN GENERAL.—The term “3D ele-  
4 vation data” means 3D, high-resolution data  
5 obtained using LiDAR, IfSAR, or other meth-  
6 ods over the United States (including territories  
7 and freely associated states).

8 (B) INCLUSIONS.—The term “3D elevation  
9 data” includes terrestrial and bathymetric ele-  
10 vation data.

11 (3) 3D ELEVATION PROGRAM.—The term “3D  
12 Elevation Program” means the 3D Elevation Pro-  
13 gram established under section 5(a).

14 (4) FREELY ASSOCIATED STATES.—The term  
15 “freely associated states” means—

16 (A) the Federated States of Micronesia;

17 (B) the Republic of the Marshall Islands;

18 and

19 (C) the Republic of Palau.

20 (5) IfSAR.—The term “IfSAR” means  
21 interferometric synthetic aperture radar.

22 (6) INDIAN TRIBE.—The term “Indian tribe”  
23 has the meaning given the term in section 4 of the  
24 Indian Self-Determination and Education Assistance  
25 Act (25 U.S.C. 5304).

1           (7) LAHAR.—The term “lahar” means a large  
2 debris flow of mostly volcanic material that is—

3                   (A) often fast-moving; and

4                   (B) a hazard in watersheds downstream of  
5 volcanic peaks.

6           (8) LIDAR.—The term “LiDAR” means light  
7 detection and ranging.

8           (9) SECRETARY.—The term “Secretary” means  
9 the Secretary of the Interior, acting through the Di-  
10 rector of the United States Geological Survey.

11           (10) STATE.—The term “State” means—

12                   (A) a State; and

13                   (B) the District of Columbia.

14           (11) STATE OFFICE.—The term “State office”  
15 means any unit of State government that handles  
16 the identification, mapping, assessment, and re-  
17 search of landslide hazards or responding to land-  
18 slide events, including—

19                   (A) a State geological survey office;

20                   (B) a State department of emergency re-  
21 sponse; and

22                   (C) a State department of transportation.

23           (12) TERRITORY.—The term “territory”  
24 means—

25                   (A) the Commonwealth of Puerto Rico;

- 1 (B) Guam;
- 2 (C) American Samoa;
- 3 (D) the Commonwealth of the Northern
- 4 Mariana Islands; and
- 5 (E) the United States Virgin Islands.

6 **SEC. 3. NATIONAL LANDSLIDE HAZARDS REDUCTION PRO-**

7 **GRAM.**

8 (a) ESTABLISHMENT.—The Secretary shall establish

9 a program, to be known as the “National Landslide Haz-

10 ards Reduction Program” (referred to in this section as

11 the “program”)—

12 (1) to identify and understand landslide haz-

13 ards and risks;

14 (2) to reduce losses from landslides;

15 (3) to protect communities at risk of landslide

16 hazards; and

17 (4) to help improve communication and emer-

18 gency preparedness, including by coordinating with

19 communities and entities responsible for infrastruc-

20 ture that are at risk of landslide hazards.

21 (b) DESCRIPTION OF PROGRAM.—

22 (1) PROGRAM ACTIVITIES.—The Secretary, in

23 coordination with the Interagency Coordinating

24 Committee on Landslide Hazards established by

25 subsection (c)(1) (referred to in this section as the

1 “Committee”) and in coordination with existing ac-  
2 tivities of the United States Geological Survey and  
3 other Federal agencies, shall—

4 (A) identify, map, assess, and research  
5 landslide hazards;

6 (B) respond to landslide events; and

7 (C) in coordination with State offices,  
8 units of local government, territories, freely as-  
9 sociated states, and Indian tribes—

10 (i) establish working groups with  
11 State offices, units of local government,  
12 territories, freely associated states, and In-  
13 dian tribes to identify regional and local  
14 priorities for researching, identifying, map-  
15 ping, and assessing landslide hazards; and

16 (ii) develop and implement landslide  
17 hazard guidelines for—

18 (I) geologists;

19 (II) geological and geotechnical  
20 engineers;

21 (III) emergency management  
22 personnel; and

23 (IV) land use and other decision-  
24 makers.

1           (2) NATIONAL STRATEGY.—Not later than 1  
2 year after the date of enactment of this Act, and  
3 every 5 years thereafter, the Secretary, in coordina-  
4 tion with the Committee, shall develop and publish  
5 a national strategy for landslide hazards, risk reduc-  
6 tion, and response in the United States (including  
7 territories and freely associated states), which shall  
8 include—

9                   (A) goals and priorities for the program;

10                   (B) priorities for data acquisition, re-  
11 search, communications, and risk management  
12 on landslides and landslide hazards across rel-  
13 evant Federal agencies; and

14                   (C) a detailed interagency plan, which shall  
15 take into consideration national disaster pre-  
16 paredness, response, and recovery frameworks,  
17 to carry out the national strategy, including de-  
18 tails about the programs, projects, and budgets  
19 that will be used to implement the national  
20 strategy.

21           (3) NATIONAL LANDSLIDE HAZARDS DATA-  
22 BASE.—In carrying out the program, the Secretary,  
23 in coordination with State offices, units of local gov-  
24 ernment, territories, freely associated states, and In-  
25 dian tribes, shall develop and maintain a publicly ac-

1       cessible national landslide hazard and risk inventory  
2       database to compile, maintain, standardize, and  
3       evaluate data regarding—

4               (A) landslide hazards and risks;

5               (B) the impact of landslides on—

6                     (i) health and safety;

7                     (ii) the economy and infrastructure;

8               and

9                     (iii) the environment;

10              (C) landslide hazard stabilization; and

11              (D) reduction of losses from landslides.

12              (4) LANDSLIDE HAZARD AND RISK PREPARED-  
13       NESS FOR COMMUNITIES.—In carrying out the pro-  
14       gram, the Secretary, in coordination with the Sec-  
15       retary of the Army, the Secretary of Commerce, the  
16       Secretary of Homeland Security, the Secretary of  
17       Transportation, and the heads of other relevant Fed-  
18       eral agencies, and in consultation with State offices,  
19       units of local government, territories, freely associ-  
20       ated states, and Indian tribes, shall develop and dis-  
21       seminate—

22              (A) landslide planning and risk reduction  
23       guidance, guidelines, maps, tools, and training  
24       materials to help inform State, territorial, freely

1 associated state, local, and Tribal governments  
2 and decisionmakers with respect to—

3 (i) the use and implementation of  
4 landslide hazard assessments;

5 (ii) the applied use of the database  
6 developed under paragraph (3);

7 (iii) reducing losses from landslides;  
8 and

9 (iv) resources available for commu-  
10 nities working to improve landslide hazard  
11 preparedness; and

12 (B) landslide preparedness curricula and  
13 training modules for—

14 (i) State, territorial, freely associated  
15 state, local, and Tribal officials;

16 (ii) Federal, State, territorial, freely  
17 associated state, local, and Tribal emer-  
18 gency managers; and

19 (iii) the National Guard.

20 (5) DEBRIS FLOW EARLY WARNING SYSTEM.—

21 In carrying out the program, the Secretary, in co-  
22 ordination with the Secretary of Commerce and the  
23 Secretary of Homeland Security, shall expand the  
24 early warning system for debris flow by—



1 (A) expanding the early warning system  
2 for post-wildfire debris flow to include recently  
3 burned areas across the western United States;

4 (B) developing procedures with State, ter-  
5 ritorial, freely associated state, local, and Tribal  
6 governments to monitor stormwater drainage in  
7 areas with high debris flow risk; and

8 (C) identifying high-risk debris flow areas,  
9 such as recently burned land and potential  
10 lahar hazard areas.

11 (6) EMERGENCY RESPONSE ACTIVITIES.—In  
12 carrying out the program, the Secretary, in coordi-  
13 nation with the Secretary of Commerce, the Sec-  
14 retary of Homeland Security, the heads of other rel-  
15 evant Federal agencies, States offices, units of local  
16 government, territories, freely associated states, and  
17 Indian tribes, shall establish and support emergency  
18 response procedures for the rapid deployment of  
19 Federal scientists, equipment, and services to areas  
20 impacted by a significant landslide event—

21 (A) to support emergency response efforts  
22 and improve the safety of emergency respond-  
23 ers;

24 (B) to improve data collection; and

1           (C) to conduct research to advance the un-  
2           derstanding of the causes, impacts, and reduc-  
3           tion of landslide hazards and risks.

4           (c) INTERAGENCY COORDINATING COMMITTEE ON  
5           LANDSLIDE HAZARDS.—

6           (1) IN GENERAL.—There is established a com-  
7           mittee, to be known as the “Interagency Coordi-  
8           nating Committee on Landslide Hazards”.

9           (2) MEMBERSHIP.—The Committee shall be  
10          composed of the following members (or their des-  
11          ignees):

12                   (A) The Secretary, who shall serve as  
13                   Chairperson of the Committee.

14                   (B) The Secretary of Agriculture.

15                   (C) The Secretary of the Army.

16                   (D) The Secretary of Commerce.

17                   (E) The Secretary of Homeland Security.

18                   (F) The Secretary of Transportation.

19                   (G) The Director of the National Science  
20                   Foundation.

21                   (H) The Director of the Office of Science  
22                   and Technology Policy.

23                   (I) The Director of the Office of Manage-  
24                   ment and Budget.

1           (3) MEETINGS.—The Committee shall meet at  
2 the call of the Chairperson.

3           (4) PURPOSE AND DUTIES.—The Committee  
4 shall—

5                   (A) advise and oversee the program;

6                   (B) facilitate communication and coordina-  
7 tion across Federal agencies in the planning,  
8 management, budgeting, and execution of land-  
9 slide activities; and

10                  (C) support the development and execution  
11 of the national strategy under subsection (b)(2),  
12 including by—

13                           (i) supporting the development of na-  
14 tional goals and priorities for the national  
15 strategy;

16                           (ii) articulating Federal agency roles,  
17 responsibilities, and resources for carrying  
18 out the national strategy; and

19                           (iii) overseeing the implementation of  
20 the national strategy.

21           (d) ADVISORY COMMITTEE.—

22                   (1) IN GENERAL.—The Secretary shall establish  
23 an advisory committee, to be known as the “Advi-  
24 sory Committee on Landslides” (referred to in this  
25 subsection as the “Advisory Committee”).

1           (2) MEMBERSHIP.—The Advisory Committee  
2 shall be composed of not fewer than 11 members—

3           (A) of whom none may be an individual de-  
4 scribed in any of subparagraphs (A) through  
5 (F) of section 7342(a)(1) of title 5, United  
6 States Code; and

7           (B) who shall be representatives of—

8           (i) States, including State geological  
9 organizations;

10           (ii) territories and freely associated  
11 states, including territorial and freely asso-  
12 ciated state geological organizations;

13           (iii) Indian tribes, including Tribal ge-  
14 ological organizations;

15           (iv) research institutions and institu-  
16 tions of higher education that are quali-  
17 fied—

18           (I) to provide advice regarding  
19 landslide hazard and risk reduction;  
20 and

21           (II) to represent related sci-  
22 entific, architectural, engineering, and  
23 planning disciplines;

24           (v) industry standards development  
25 organizations; and

1 (vi) State, territorial, freely associated  
2 state, local, and Tribal emergency manage-  
3 ment agencies.

4 (3) RECOMMENDATIONS.—

5 (A) IN GENERAL.—The Advisory Com-  
6 mittee shall submit to the Committee rec-  
7 ommendations for the implementation of the  
8 program, including recommendations regard-  
9 ing—

10 (i) landslide hazard and risk reduction  
11 and planning;

12 (ii) tools for communities;

13 (iii) research; and

14 (iv) such other topics as the Advisory  
15 Committee determines appropriate.

16 (B) CONSIDERATION.—The Secretary and  
17 the agency heads described in subparagraphs  
18 (B) through (I) of subsection (c)(2) shall take  
19 into consideration any recommendation of the  
20 Advisory Committee submitted under subpara-  
21 graph (A).

22 (e) GRANT PROGRAMS.—

23 (1) COOPERATIVE LANDSLIDE HAZARD MAP-  
24 PING AND ASSESSMENT PROGRAM.—

1 (A) IN GENERAL.—Subject to appropria-  
2 tions, the Secretary may—

3 (i) provide grants, on a competitive  
4 basis, to State, territorial, freely associated  
5 state, local, and Tribal governments to re-  
6 search, map, assess, and collect data on  
7 landslide hazards within the jurisdictions  
8 of those governments; and

9 (ii) accept and use funds received  
10 from other Federal and non-Federal part-  
11 ners to advance the purposes of the pro-  
12 gram.

13 (B) PRIORITY.—

14 (i) IN GENERAL.—The Secretary shall  
15 consult annually with the Committee,  
16 States, units of local government, terri-  
17 tories, freely associated states, and Indian  
18 tribes to establish priorities for the grant  
19 program under this paragraph.

20 (ii) FUNDING PRIORITIZATION.—In  
21 providing grants under this paragraph, the  
22 Secretary shall give priority to projects—

23 (I) that will achieve the greatest  
24 landslide hazard and risk reduction;

1 (II) that reflect the goals and  
2 priorities of the national strategy es-  
3 tablished under subsection (b)(2)(A);

4 (III) not less than 50 percent of  
5 the total cost of which is matched by  
6 non-Federal sources; and

7 (IV) that include acquisition of  
8 enhanced elevation data consistent  
9 with the 3D Elevation Program.

10 (2) NATIONAL LANDSLIDE RESEARCH  
11 GRANTS.—

12 (A) IN GENERAL.—To advance the goals  
13 and priorities of the national strategy estab-  
14 lished under subsection (b)(2)(A), subject to ap-  
15 propriations, the Director of the National  
16 Science Foundation (referred to in this para-  
17 graph as the “Director”) may provide grants to  
18 eligible entities for landslide research, including  
19 research on—

20 (i) the causes, mechanisms, triggers,  
21 hydrology, and geology of landslides;

22 (ii) ways to reduce landslide hazards  
23 and risks to minimize loss of life and prop-  
24 erty, including landslide hazard and risk

1 communication, perception, decisionmak-  
2 ing, tools, and technologies; and

3 (iii) other goals and priorities of the  
4 national strategy established under sub-  
5 section (b)(2)(A).

6 (B) ELIGIBLE ENTITIES.—The Director  
7 shall determine whether an entity is eligible to  
8 receive a grant under this paragraph.

9 (C) REQUIREMENTS.—In providing grants  
10 under this paragraph, the Director shall—

11 (i) ensure that the grants are pro-  
12 vided on a competitive basis; and

13 (ii) consider grant applications sub-  
14 mitted by eligible entities that have devel-  
15 oped the application in partnership with  
16 one or more State geological surveys.

17 (f) BIENNIAL REPORT.—The Secretary shall submit  
18 to Congress and publish on a publicly available website,  
19 a biennial report, including a description of, with respect  
20 to the preceding 2 calendar years—

21 (1) the goals and accomplishments of the Sec-  
22 retary and the agency heads described in subpara-  
23 graphs (B) through (I) of subsection (c)(2) in car-  
24 rying out the national strategy developed under sub-  
25 section (b)(2), expressed—



1 (A) by agency, program, and budgetary re-  
2 source; and

3 (B) by the goals and priorities of the na-  
4 tional strategy established under subsection  
5 (b)(2)(A);

6 (2) the results of the activities of the Com-  
7 mittee under this section;

8 (3) the extent to which any recommendations of  
9 the Advisory Committee under subsection (d)(3)(A)  
10 have been implemented;

11 (4) the grants provided under this section dur-  
12 ing the preceding 2 calendar years, including a de-  
13 scription of—

14 (A) each activity carried out using such a  
15 grant; and

16 (B) the results of those activities; and

17 (5) for each significant landslide event in the  
18 United States (including territories and freely asso-  
19 ciated states) during the preceding 2 calendar  
20 years—

21 (A) a description of the landslide event and  
22 the implications of the event on communities,  
23 including life and property;

1 (B) recommendations on how the identi-  
2 fication of the landslide risk could have been  
3 improved prior to the event;

4 (C) a description of the effectiveness of  
5 any warning and risk communication, including  
6 the dissemination of warnings by State, terri-  
7 torial, freely associated state, local, and Tribal  
8 partners in the affected area;

9 (D) recommendations to improve risk iden-  
10 tification, reduction, and communication to  
11 landowners and units of local government;

12 (E) recommendations to improve landslide  
13 hazard preparedness and emergency response  
14 activities under this section; and

15 (F) such other findings as the Secretary  
16 determines appropriate.

17 (g) DATA FOR SIGNIFICANT LANDSLIDE EVENTS.—

18 Not later than 1 year after a significant landslide event  
19 in the United States (including territories and freely asso-  
20 ciated states), the Secretary shall publish the data de-  
21 scribed in subsection (f)(5) regarding that event on a pub-  
22 licly available website.

23 (h) FUNDING.—There is authorized to be appro-  
24 priated to carry out this section \$37,000,000 for each of  
25 fiscal years 2021 through 2024, of which—

1           (1) \$25,000,000 each fiscal year shall be made  
2           available to the United States Geological Survey;

3           (2) \$11,000,000 each fiscal year shall be made  
4           available to the National Science Foundation; and

5           (3) \$1,000,000 each fiscal year shall be made  
6           available to the National Oceanic and Atmospheric  
7           Administration.

8   **SEC. 4. GROUND SUBSIDENCE.**

9           As the Secretary determines to be appropriate and  
10          subject to appropriations, the Secretary, through existing  
11          programs, shall advance the identification, mapping, re-  
12          search, monitoring, restoration, and mitigation of subsid-  
13          ence and groundwater resource accounting, losses from  
14          subsidence, including saltwater intrusion, particularly in  
15          areas affected by drought and sea level rise.

16   **SEC. 5. 3D ELEVATION PROGRAM.**

17          (a) ESTABLISHMENT OF 3D ELEVATION PRO-  
18          GRAM.—

19               (1) IN GENERAL.—The Secretary shall establish  
20          a program, to be known as the “3D Elevation Pro-  
21          gram”—

22                       (A) to provide 3D elevation data coverage  
23          for the United States;

24                       (B) to coordinate and facilitate the collec-  
25          tion, dissemination, and use of 3D elevation

1 data among Federal departments and agencies  
2 and non-Federal entities;

3 (C) to produce standard, publicly acces-  
4 sible 3D elevation data products for the United  
5 States; and

6 (D) to promote the collection, dissemina-  
7 tion, and use of 3D elevation data among Fed-  
8 eral, State, local, and Tribal governments, com-  
9 munities, institutions of higher education, and  
10 the private sector through—

11 (i) cooperative agreements;

12 (ii) the development and maintenance  
13 of spatial data infrastructure to provide  
14 quality control and deliver to the public 3D  
15 elevation data products;

16 (iii) in coordination with the 3D Ele-  
17 vation Federal Interagency Coordinating  
18 Committee established under subsection  
19 (b), States, and industry and standards  
20 bodies, the development of standards and  
21 guidelines for 3D elevation data acquisition  
22 to increase accessibility to 3D elevation  
23 data in a standard, easy-to-use format; and

24 (iv) the identification, assessment, and  
25 adoption of emerging technologies to im-

1           prove the accuracy and efficiency of the  
2           3D Elevation Program.

3           (2) MANAGEMENT.—

4           (A) IN GENERAL.—The Secretary shall  
5           manage the 3D Elevation Program—

6                   (i) to ensure efficiency with respect to  
7                   related activities of the Department of the  
8                   Interior and other participating Federal  
9                   departments and agencies; and

10                   (ii) to meet the needs of Department  
11                   of the Interior programs, stakeholders, and  
12                   the public.

13           (B) OTHER FEDERAL DEPARTMENTS AND  
14           AGENCIES.—The head of each Federal depart-  
15           ment and agency involved in the acquisition,  
16           production, distribution, or application of 3D  
17           elevation data shall—

18                   (i) coordinate with the 3D Elevation  
19                   Federal Interagency Coordinating Com-  
20                   mittee established under subsection (b) to  
21                   acquire additional, enhanced 3D elevation  
22                   data;

23                   (ii) submit to the Secretary a descrip-  
24                   tion of priority areas of interest for 3D ele-  
25                   vation data collection for use in providing

1 grants and cooperative agreements under  
2 subsection (d);

3 (iii) implement policies and procedures  
4 for data acquisition and sharing that are  
5 consistent with standards and guidelines  
6 developed under the 3D Elevation Pro-  
7 gram;

8 (iv) participate in, and share the re-  
9 sults and benefits of, the 3D Elevation  
10 Program, in accordance with standards  
11 and guidelines developed under the 3D  
12 Elevation Program; and

13 (v) ensure that any 3D elevation data  
14 acquired with Federal grant funding—

15 (I) meets 3D Elevation Program  
16 standards; and

17 (II) is included in the national  
18 holdings of those data.

19 (b) 3D ELEVATION FEDERAL INTERAGENCY CO-  
20 ORDINATING COMMITTEE.—

21 (1) ESTABLISHMENT.—The Secretary, in co-  
22 ordination with the Secretary of Commerce and the  
23 Secretary of Homeland Security, shall establish an  
24 interagency coordinating committee, to be known as  
25 the “3D Elevation Federal Interagency Coordinating

1 Committee” (referred to in this subsection as the  
2 “Committee”), to better coordinate 3D elevation  
3 data management across the Federal Government.

4 (2) MEMBERSHIP.—The Committee shall be  
5 composed of the following members (or their des-  
6 ignees):

7 (A) The Secretary, who shall serve as  
8 Chairperson of the Committee.

9 (B) The Secretary of Agriculture.

10 (C) The Secretary of Commerce.

11 (D) The Secretary of Homeland Security.

12 (E) The Director of the National Science  
13 Foundation.

14 (F) The Director of the Office of Science  
15 and Technology Policy.

16 (G) The Director of the Office of Manage-  
17 ment and Budget.

18 (H) The head of any other Federal depart-  
19 ment or agency, at the request of the Secretary.

20 (3) COORDINATION.—The Committee shall co-  
21 ordinate, as appropriate, with the existing activities  
22 of—

23 (A) the 3D Elevation Program Executive  
24 Forum;

1 (B) the Alaska Mapping Executive Com-  
2 mittee;

3 (C) the 3D Elevation Working Group;

4 (D) the 3D National Elevation Sub-  
5 committee; and

6 (E) State offices.

7 (4) MEETINGS.—The Committee shall meet at  
8 the call of the Chairperson.

9 (5) DUTIES.—The Committee shall—

10 (A) oversee the planning, management,  
11 and coordination of the 3D Elevation Program;  
12 and

13 (B) develop, by not later than 1 year after  
14 the date of enactment of this Act, and update  
15 periodically thereafter—

16 (i) a strategic plan that establishes  
17 goals and priorities for activities carried  
18 out under the 3D Elevation Program; and

19 (ii) a detailed management plan to  
20 implement the strategic plan.

21 (c) SUBCOMMITTEE OF NATIONAL GEOSPATIAL AD-  
22 VISORY COMMITTEE.—

23 (1) ESTABLISHMENT.—

24 (A) IN GENERAL.—The Secretary shall es-  
25 tablish, within the National Geospatial Advisory



1 Committee, a subcommittee (referred to in this  
2 subsection as the “Subcommittee”).

3 (B) MEMBERSHIP.—The Subcommittee  
4 shall—

5 (i) consist of not fewer than 11 mem-  
6 bers, of whom none may be a Federal offi-  
7 cer or employee; and

8 (ii) include representatives of—

9 (I) research and academic insti-  
10 tutions;

11 (II) industry standards develop-  
12 ment organizations;

13 (III) units of State and local gov-  
14 ernment; and

15 (IV) the private sector.

16 (2) DUTIES.—

17 (A) ASSESSMENT.—The Subcommittee  
18 shall conduct an assessment of—

19 (i) trends and developments in—

20 (I) the collection, dissemination,  
21 and use of 3D elevation data; and

22 (II) science and technology relat-  
23 ing to 3D elevation data;

1 (ii) the effectiveness of the 3D Ele-  
2 vation Program in carrying out the activi-  
3 ties described in subsection (a)(1);

4 (iii) the need to revise or reorganize  
5 the 3D Elevation Program; and

6 (iv) the management, coordination,  
7 implementation, and activities of the 3D  
8 Elevation Program.

9 (B) REPORT.—Not later than 1 year after  
10 the date of enactment of this Act, and every 2  
11 years thereafter, the Subcommittee shall submit  
12 to the Secretary and the 3D Elevation Federal  
13 Interagency Coordinating Committee estab-  
14 lished under subsection (b) a report that in-  
15 cludes—

16 (i) the findings of the assessment  
17 under subparagraph (A); and

18 (ii) recommendations of the Sub-  
19 committee based on those findings, if any.

20 (d) GRANTS AND COOPERATIVE AGREEMENTS.—

21 (1) IN GENERAL.—The Secretary may make  
22 grants and enter into cooperative agreements with  
23 other Federal departments and agencies, units of  
24 State, local, or Tribal government, institutions of  
25 higher education, nonprofit research institutions, or

1 other organizations to facilitate the improvement of  
2 nationwide coverage of 3D elevation data.

3 (2) APPLICATIONS.—To be eligible to receive a  
4 grant or enter into a cooperative agreement under  
5 this subsection, an entity described in paragraph (1)  
6 shall submit to the Secretary an application at such  
7 time, in such manner, and containing such informa-  
8 tion as the Secretary may require.

9 (3) TERMS AND CONDITIONS.—A grant or coop-  
10 erative agreement under this subsection shall be sub-  
11 ject to such terms and conditions as the Secretary  
12 determines to be appropriate, including making data  
13 publicly available and interoperable with other Fed-  
14 eral datasets.

15 (e) AUTHORIZATION OF APPROPRIATIONS.—For each  
16 of the fiscal years 2021 through 2024, there is authorized  
17 out of funds appropriated to the Secretary \$40,000,000  
18 to carry out this section.

○