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H. R. 1261

[Report No. 116-]

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

FEBRUARY 14, 2019

Ms. DELBENE (FOR HERSELF, Mr. KILMER, Mr. CARTWRIGHT, Ms. BONAMICI, Mr. HECK, and Mr. SMITH of Washington) 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

MAY --, 2019

Reported from the Committee on Natural Resources with an amendment

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

[For text of introduced bill, see copy of bill as introduced on February 14, 2019]

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 Pre-*
5 *paredness Act”.*

6 **SEC. 2. DEFINITIONS.**

7 *In this Act:*

8 (1) *3D.*—*The term “3D” means 3-dimensional.*

9 (2) *3D ELEVATION DATA.*—

10 (A) *IN GENERAL.*—*The term “3D elevation*
11 *data” means 3D, high-resolution data obtained*
12 *using LiDAR, IfSAR, or other methods over the*
13 *United States (including territories and freely*
14 *associated states).*

15 (B) *INCLUSIONS.*—*The term “3D elevation*
16 *data” includes terrestrial and bathymetric ele-*
17 *vation data.*

18 (3) *3D ELEVATION PROGRAM.*—*The term “3D*
19 *Elevation Program” means the 3D Elevation Pro-*
20 *gram established under section 5(a).*

21 (4) *FREELY ASSOCIATED STATES.*—*The term*
22 *“freely associated states” means—*

23 (A) *the Federated States of Micronesia;*

24 (B) *the Republic of the Marshall Islands;*

25 *and*

1 (C) *the Republic of Palau.*

2 (5) *IFSAR.*—*The term “IfSAR” means*
3 *interferometric synthetic aperture radar.*

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

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

10 (A) *often fast-moving; and*

11 (B) *a hazard in watersheds downstream of*
12 *volcanic peaks.*

13 (8) *LIDAR.*—*The term “LiDAR” means light*
14 *detection and ranging.*

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

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

19 (A) *a State; and*

20 (B) *the District of Columbia.*

21 (11) *STATE OFFICE.*—*The term “State office”*
22 *means any unit of State government that handles the*
23 *identification, mapping, assessment, and research of*
24 *landslide hazards or responding to landslide events,*
25 *including—*

1 (A) a State geological survey office;

2 (B) a State department of emergency re-
3 sponse; and

4 (C) a State department of transportation.

5 (12) *TERRITORY.*—The term “territory”
6 means—

7 (A) the Commonwealth of Puerto Rico;

8 (B) Guam;

9 (C) American Samoa;

10 (D) the Commonwealth of the Northern
11 Mariana Islands; and

12 (E) the United States Virgin Islands.

13 **SEC. 3. NATIONAL LANDSLIDE HAZARDS REDUCTION PRO-**
14 **GRAM.**

15 (a) *ESTABLISHMENT.*—The Secretary shall establish a
16 program, to be known as the “National Landslide Hazards
17 Reduction Program” (referred to in this section as the “pro-
18 gram”)—

19 (1) to identify and understand landslide hazards
20 and risks;

21 (2) to reduce losses from landslides;

22 (3) to protect communities at risk of landslide
23 hazards; and

24 (4) to help improve communication and emer-
25 gency preparedness, including by coordinating with

1 *communities and entities responsible for infrastruc-*
2 *ture that are at risk of landslide hazards.*

3 *(b) DESCRIPTION OF PROGRAM.—*

4 *(1) PROGRAM ACTIVITIES.—The Secretary, in co-*
5 *ordination with the Interagency Coordinating Com-*
6 *mittee on Landslide Hazards established by subsection*
7 *(c)(1) (referred to in this section as the “Committee”)*
8 *and in coordination with existing activities of the*
9 *United States Geological Survey and other Federal*
10 *agencies, shall—*

11 *(A) identify, map, assess, and research*
12 *landslide hazards;*

13 *(B) respond to landslide events; and*

14 *(C) in coordination with State offices, units*
15 *of local government, territories, freely associated*
16 *states, and Indian tribes—*

17 *(i) establish working groups with State*
18 *offices, units of local government, territories,*
19 *freely associated states, and Indian tribes to*
20 *identify regional and local priorities for re-*
21 *searching, identifying, mapping, and assess-*
22 *ing landslide hazards; and*

23 *(ii) develop and implement landslide*
24 *hazard guidelines for—*

25 *(I) geologists;*

1 (II) *geological and geotechnical*
2 *engineers;*

3 (III) *emergency management per-*
4 *sonnel; and*

5 (IV) *land use and other decision-*
6 *makers.*

7 (2) *NATIONAL STRATEGY.*—*Not later than 1 year*
8 *after the date of enactment of this Act, and every 5*
9 *years thereafter, the Secretary, in coordination with*
10 *the Committee, shall develop and publish a national*
11 *strategy for landslide hazards, risk reduction, and re-*
12 *sponse in the United States (including territories and*
13 *freely associated states), which shall include—*

14 (A) *goals and priorities for the program;*

15 (B) *priorities for data acquisition, research,*
16 *communications, and risk management on land-*
17 *slides and landslide hazards across relevant Fed-*
18 *eral agencies; and*

19 (C) *a detailed interagency plan, which shall*
20 *take into consideration national disaster pre-*
21 *paredness, response, and recovery frameworks, to*
22 *carry out the national strategy, including details*
23 *about the programs, projects, and budgets that*
24 *will be used to implement the national strategy.*

1 (3) *NATIONAL LANDSLIDE HAZARDS DATA-*
2 *BASE.—In carrying out the program, the Secretary,*
3 *in coordination with State offices, units of local gov-*
4 *ernment, territories, freely associated states, and In-*
5 *Indian tribes, shall develop and maintain a publicly ac-*
6 *cessible national landslide hazard and risk inventory*
7 *database to compile, maintain, standardize, and*
8 *evaluate data regarding—*

9 (A) *landslide hazards and risks;*

10 (B) *the impact of landslides on—*

11 (i) *health and safety;*

12 (ii) *the economy and infrastructure;*

13 *and*

14 (iii) *the environment;*

15 (C) *landslide hazard stabilization; and*

16 (D) *reduction of losses from landslides.*

17 (4) *LANDSLIDE HAZARD AND RISK PREPARED-*
18 *NESS FOR COMMUNITIES.—In carrying out the pro-*
19 *gram, the Secretary, in coordination with the Sec-*
20 *retary of the Army, the Secretary of Commerce, the*
21 *Secretary of Homeland Security, the Secretary of*
22 *Transportation, and the heads of other relevant Fed-*
23 *eral agencies, and in consultation with State offices,*
24 *units of local government, territories, freely associated*

1 *states, and Indian tribes, shall develop and dissemi-*
2 *nate—*

3 *(A) landslide planning and risk reduction*
4 *guidance, guidelines, maps, tools, and training*
5 *materials to help inform State, territorial, freely*
6 *associated state, local, and Tribal governments*
7 *and decisionmakers with respect to—*

8 *(i) the use and implementation of*
9 *landslide hazard assessments;*

10 *(ii) the applied use of the database de-*
11 *veloped under paragraph (3);*

12 *(iii) reducing losses from landslides;*
13 *and*

14 *(iv) resources available for commu-*
15 *nities working to improve landslide hazard*
16 *preparedness; and*

17 *(B) landslide preparedness curricula and*
18 *training modules for—*

19 *(i) State, territorial, freely associated*
20 *state, local, and Tribal officials;*

21 *(ii) Federal, State, territorial, freely*
22 *associated state, local, and Tribal emer-*
23 *gency managers; and*

24 *(iii) the National Guard.*

1 (5) *DEBRIS FLOW EARLY WARNING SYSTEM.*—*In*
2 *carrying out the program, the Secretary, in coordina-*
3 *tion with the Secretary of Commerce and the Sec-*
4 *retary of Homeland Security, shall expand the early*
5 *warning system for debris flow by—*

6 (A) *expanding the early warning system for*
7 *post-wildfire debris flow to include recently*
8 *burned areas across the western United States;*

9 (B) *developing procedures with State, terri-*
10 *torial, freely associated state, local, and Tribal*
11 *governments to monitor stormwater drainage in*
12 *areas with high debris flow risk; and*

13 (C) *identifying high-risk debris flow areas,*
14 *such as recently burned land and potential lahar*
15 *hazard areas.*

16 (6) *EMERGENCY RESPONSE ACTIVITIES.*—*In car-*
17 *rying out the program, the Secretary, in coordination*
18 *with the Secretary of Commerce, the Secretary of*
19 *Homeland Security, the heads of other relevant Fed-*
20 *eral agencies, States offices, units of local government,*
21 *territories, freely associated states, and Indian tribes,*
22 *shall establish and support emergency response proce-*
23 *dures for the rapid deployment of Federal scientists,*
24 *equipment, and services to areas impacted by a sig-*
25 *nificant landslide event—*

1 (A) to support emergency response efforts
2 and improve the safety of emergency responders;

3 (B) to improve data collection; and

4 (C) to conduct research to advance the un-
5 derstanding of the causes, impacts, and reduc-
6 tion of landslide hazards and risks.

7 (c) *INTERAGENCY COORDINATING COMMITTEE ON*
8 *LANDSLIDE HAZARDS.—*

9 (1) *IN GENERAL.—*There is established a com-
10 mittee, to be known as the “Interagency Coordinating
11 Committee on Landslide Hazards”.

12 (2) *MEMBERSHIP.—*The Committee shall be com-
13 posed of the following members (or their designees):

14 (A) *The Secretary, who shall serve as Chair-*
15 *person of the Committee.*

16 (B) *The Secretary of Agriculture.*

17 (C) *The Secretary of the Army.*

18 (D) *The Secretary of Commerce.*

19 (E) *The Secretary of Homeland Security.*

20 (F) *The Secretary of Transportation.*

21 (G) *The Director of the National Science*
22 *Foundation.*

23 (H) *The Director of the Office of Science*
24 *and Technology Policy.*

1 (I) *The Director of the Office of Manage-*
2 *ment and Budget.*

3 (3) *MEETINGS.—The Committee shall meet at*
4 *the call of the Chairperson.*

5 (4) *PURPOSE AND DUTIES.—The Committee*
6 *shall—*

7 (A) *advise and oversee the program;*

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

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

15 (i) *supporting the development of na-*
16 *tional goals and priorities for the national*
17 *strategy;*

18 (ii) *articulating Federal agency roles,*
19 *responsibilities, and resources for carrying*
20 *out the national strategy; and*

21 (iii) *overseeing the implementation of*
22 *the national strategy.*

23 (d) *ADVISORY COMMITTEE.—*

24 (1) *IN GENERAL.—The Secretary shall establish*
25 *an advisory committee, to be known as the “Advisory*

1 *Committee on Landslides*” (referred to in this sub-
2 section as the “Advisory Committee”).

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

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

9 (B) *who shall be representatives of—*

10 (i) *States, including State geological*
11 *organizations;*

12 (ii) *territories and freely associated*
13 *states, including territorial and freely asso-*
14 *ciated state geological organizations;*

15 (iii) *Indian tribes, including Tribal*
16 *geological organizations;*

17 (iv) *research institutions and institu-*
18 *tions of higher education that are quali-*
19 *fied—*

20 (I) *to provide advice regarding*
21 *landslide hazard and risk reduction;*
22 *and*

23 (II) *to represent related scientific,*
24 *architectural, engineering, and plan-*
25 *ning disciplines;*

1 (v) *industry standards development or-*
2 *ganizations; and*

3 (vi) *State, territorial, freely associated*
4 *state, local, and Tribal emergency manage-*
5 *ment agencies.*

6 (3) *RECOMMENDATIONS.—*

7 (A) *IN GENERAL.—The Advisory Committee*
8 *shall submit to the Committee recommendations*
9 *for the implementation of the program, including*
10 *recommendations regarding—*

11 (i) *landslide hazard and risk reduction*
12 *and planning;*

13 (ii) *tools for communities;*

14 (iii) *research; and*

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

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

23 (e) *GRANT PROGRAMS.—*

24 (1) *COOPERATIVE LANDSLIDE HAZARD MAPPING*
25 *AND ASSESSMENT PROGRAM.—*

1 (A) *IN GENERAL.*—Subject to appropri-
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 of
8 those governments; and

9 (ii) accept and use funds received from
10 other Federal and non-Federal partners to
11 advance the purposes of the program.

12 (B) *PRIORITY.*—

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

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

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

1 (II) that reflect the goals and pri-
2 orities of the national strategy estab-
3 lished 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 GRANTS.—

11 (A) IN GENERAL.—To advance the goals
12 and priorities of the national strategy established
13 under subsection (b)(2)(A), subject to appropria-
14 tions, the Director of the National Science Foun-
15 dation (referred to in this paragraph as the “Di-
16 rector”) may provide grants to eligible entities
17 for landslide research, including research on—

18 (i) the causes, mechanisms, triggers,
19 hydrology, and geology of landslides;

20 (ii) ways to reduce landslide hazards
21 and risks to minimize loss of life and prop-
22 erty, including landslide hazard and risk
23 communication, perception, decisionmaking,
24 tools, and technologies; and

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

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

7 (C) *REQUIREMENTS.*—In providing grants
8 under this paragraph, the Director shall—

9 (i) ensure that the grants are provided
10 on a competitive basis; and

11 (ii) consider grant applications sub-
12 mitted by eligible entities that have devel-
13 oped the application in partnership with 1
14 or more State geological surveys.

15 (f) *BIENNIAL REPORT.*—The Secretary shall submit to
16 Congress a biennial report, including a description of, with
17 respect to the preceding 2 calendar years—

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

23 (A) by agency, program, and budgetary re-
24 source; and

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

4 (2) the results of the activities of the Committee
5 under this section;

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

9 (4) the grants provided under this section during
10 the preceding 2 calendar years, including a descrip-
11 tion of—

12 (A) each activity carried out using such a
13 grant; and

14 (B) the results of those activities; and

15 (5) for each significant landslide event in the
16 United States (including territories and freely associ-
17 ated states) during the preceding 2 calendar years—

18 (A) a description of the landslide event and
19 the implications of the event on communities, in-
20 cluding life and property;

21 (B) recommendations on how the identifica-
22 tion of the landslide risk could have been im-
23 proved prior to the event;

24 (C) a description of the effectiveness of any
25 warning and risk communication, including the

1 *dissemination of warnings by State, territorial,*
2 *freely associated state, local, and Tribal partners*
3 *in the affected area;*

4 *(D) recommendations to improve risk iden-*
5 *tification, reduction, and communication to*
6 *landowners and units of local government;*

7 *(E) recommendations to improve landslide*
8 *hazard preparedness and emergency response ac-*
9 *tivities under this section; and*

10 *(F) such other findings as the Secretary de-*
11 *termines appropriate.*

12 *(g) FUNDING.—There is authorized to be appropriated*
13 *to carry out this section \$37,000,000 for each of fiscal years*
14 *2020 through 2023, of which—*

15 *(1) \$25,000,000 each fiscal year shall be made*
16 *available to the United States Geological Survey;*

17 *(2) \$11,000,000 each fiscal year shall be made*
18 *available to the National Science Foundation; and*

19 *(3) \$1,000,000 each fiscal year shall be made*
20 *available to the National Oceanic and Atmospheric*
21 *Administration.*

22 **SEC. 4. GROUND SUBSIDENCE.**

23 *As the Secretary determines to be appropriate and sub-*
24 *ject to appropriations, the Secretary, through existing pro-*
25 *grams, shall advance the identification, mapping, research,*

1 *monitoring, restoration, and mitigation of subsidence and*
2 *groundwater resource accounting, losses from subsidence,*
3 *including saltwater intrusion, particularly in areas affected*
4 *by drought and sea level rise.*

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

6 *(a) ESTABLISHMENT OF 3D ELEVATION PROGRAM.—*

7 *(1) IN GENERAL.—The Secretary shall establish*
8 *a program, to be known as the “3D Elevation Pro-*
9 *gram”—*

10 *(A) to provide 3D elevation data coverage*
11 *for the United States;*

12 *(B) to coordinate and facilitate the collec-*
13 *tion, dissemination, and use of 3D elevation*
14 *data among Federal departments and agencies*
15 *and non-Federal entities;*

16 *(C) to produce standard, publicly accessible*
17 *3D elevation data products for the United States;*
18 *and*

19 *(D) to promote the collection, dissemination,*
20 *and use of 3D elevation data among Federal,*
21 *State, local, and Tribal governments, commu-*
22 *nities, institutions of higher education, and the*
23 *private sector through—*

24 *(i) cooperative agreements;*

1 (ii) the development and maintenance
2 of spatial data infrastructure to provide
3 quality control and deliver to the public 3D
4 elevation data products;

5 (iii) in coordination with the 3D Ele-
6 vation Federal Interagency Coordinating
7 Committee established under subsection (b),
8 States, and industry and standards bodies,
9 the development of standards and guidelines
10 for 3D elevation data acquisition to in-
11 crease accessibility to 3D elevation data in
12 a standard, easy-to-use format; and

13 (iv) the identification, assessment, and
14 adoption of emerging technologies to im-
15 prove the accuracy and efficiency of the 3D
16 Elevation Program.

17 (2) *MANAGEMENT.*—

18 (A) *IN GENERAL.*—The Secretary shall
19 manage the 3D Elevation Program—

20 (i) to ensure efficiency with respect to
21 related activities of the Department of the
22 Interior and other participating Federal de-
23 partments and agencies; and

1 (ii) to meet the needs of Department of
2 the Interior programs, stakeholders, and the
3 public.

4 (B) OTHER FEDERAL DEPARTMENTS AND
5 AGENCIES.—The head of each Federal depart-
6 ment and agency involved in the acquisition,
7 production, distribution, or application of 3D
8 elevation data shall—

9 (i) coordinate with the 3D Elevation
10 Federal Interagency Coordinating Com-
11 mittee established under subsection (b) to
12 acquire additional, enhanced 3D elevation
13 data;

14 (ii) submit to the Secretary a descrip-
15 tion of priority areas of interest for 3D ele-
16 vation data collection for use in providing
17 grants and cooperative agreements under
18 subsection (d);

19 (iii) implement policies and procedures
20 for data acquisition and sharing that are
21 consistent with standards and guidelines de-
22 veloped under the 3D Elevation Program;

23 (iv) participate in, and share the re-
24 sults and benefits of, the 3D Elevation Pro-
25 gram, in accordance with standards and

1 *guidelines developed under the 3D Elevation*
2 *Program; and*

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

5 *(I) meets 3D Elevation Program*
6 *standards; and*

7 *(II) is included in the national*
8 *holdings of those data.*

9 *(b) 3D ELEVATION FEDERAL INTERAGENCY COORDI-*
10 *NATING COMMITTEE.—*

11 *(1) ESTABLISHMENT.—The Secretary, in coordi-*
12 *nation with the Secretary of Commerce and the Sec-*
13 *retary of Homeland Security, shall establish an inter-*
14 *agency coordinating committee, to be known as the*
15 *“3D Elevation Federal Interagency Coordinating*
16 *Committee” (referred to in this subsection as the*
17 *“Committee”), to better coordinate 3D elevation data*
18 *management across the Federal Government.*

19 *(2) MEMBERSHIP.—The Committee shall be com-*
20 *posed of the following members (or their designees):*

21 *(A) The Secretary, who shall serve as Chair-*
22 *person of the Committee.*

23 *(B) The Secretary of Agriculture.*

24 *(C) The Secretary of Commerce.*

25 *(D) The Secretary of Homeland Security.*

1 (E) *The Director of the National Science*
2 *Foundation.*

3 (F) *The Director of the Office of Science*
4 *and Technology Policy.*

5 (G) *The Director of the Office of Manage-*
6 *ment and Budget.*

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

9 (3) *COORDINATION.—The Committee shall co-*
10 *ordinate, as appropriate, with the existing activities*
11 *of—*

12 (A) *the 3D Elevation Program Executive*
13 *Forum;*

14 (B) *the Alaska Mapping Executive Com-*
15 *mittee;*

16 (C) *the 3D Elevation Working Group;*

17 (D) *the 3D National Elevation Sub-*
18 *committee; and*

19 (E) *State offices.*

20 (4) *MEETINGS.—The Committee shall meet at*
21 *the call of the Chairperson.*

22 (5) *DUTIES.—The Committee shall—*

23 (A) *oversee the planning, management, and*
24 *coordination of the 3D Elevation Program; and*

1 (B) develop, by not later than 1 year after
2 the date of enactment of this Act, and update pe-
3 riodically thereafter—

4 (i) a strategic plan that establishes
5 goals and priorities for activities carried
6 out under the 3D Elevation Program; and

7 (ii) a detailed management plan to
8 implement the strategic plan.

9 (c) *SUBCOMMITTEE OF NATIONAL GEOSPATIAL ADVI-*
10 *SORY COMMITTEE.*—

11 (1) *ESTABLISHMENT.*—

12 (A) *IN GENERAL.*—*The Secretary shall es-*
13 *tablish, within the National Geospatial Advisory*
14 *Committee, a subcommittee (referred to in this*
15 *subsection as the “Subcommittee”).*

16 (B) *MEMBERSHIP.*—*The Subcommittee*
17 *shall—*

18 (i) *consist of not fewer than 11 mem-*
19 *bers, of whom none may be a Federal officer*
20 *or employee; and*

21 (ii) *include representatives of—*

22 (I) *research and academic institu-*
23 *tions;*

24 (II) *industry standards develop-*
25 *ment organizations;*

1 (III) units of State and local gov-
2 ernment; and

3 (IV) the private sector.

4 (2) DUTIES.—

5 (A) ASSESSMENT.—The Subcommittee shall
6 conduct an assessment of—

7 (i) trends and developments in—

8 (I) the collection, dissemination,
9 and use of 3D elevation data; and

10 (II) science and technology relat-
11 ing to 3D elevation data;

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

15 (iii) the need to revise or reorganize
16 the 3D Elevation Program; and

17 (iv) the management, coordination,
18 implementation, and activities of the 3D
19 Elevation Program.

20 (B) REPORT.—Not later than 1 year after
21 the date of enactment of this Act, and every 2
22 years thereafter, the Subcommittee shall submit
23 to the Secretary and the 3D Elevation Federal
24 Interagency Coordinating Committee established
25 under subsection (b) a report that includes—

1 (i) *the findings of the assessment under*
2 *subparagraph (A); and*

3 (ii) *recommendations of the Sub-*
4 *committee based on those findings, if any.*

5 (d) *GRANTS AND COOPERATIVE AGREEMENTS.—*

6 (1) *IN GENERAL.—The Secretary may make*
7 *grants and enter into cooperative agreements with*
8 *other Federal departments and agencies, units of*
9 *State, local, or Tribal government, institutions of*
10 *higher education, nonprofit research institutions, or*
11 *other organizations to facilitate the improvement of*
12 *nationwide coverage of 3D elevation data.*

13 (2) *APPLICATIONS.—To be eligible to receive a*
14 *grant or enter into a cooperative agreement under*
15 *this subsection, an entity described in paragraph (1)*
16 *shall submit to the Secretary an application at such*
17 *time, in such manner, and containing such informa-*
18 *tion as the Secretary may require.*

19 (3) *TERMS AND CONDITIONS.—A grant or coop-*
20 *erative agreement under this subsection shall be sub-*
21 *ject to such terms and conditions as the Secretary de-*
22 *termines to be appropriate, including making data*
23 *publically available and interoperable with other Fed-*
24 *eral datasets.*

1 *(e) AUTHORIZATION OF APPROPRIATIONS.—There is*
2 *authorized to be appropriated to carry out this section*
3 *\$40,000,000 for each of fiscal years 2020 through 2023.*